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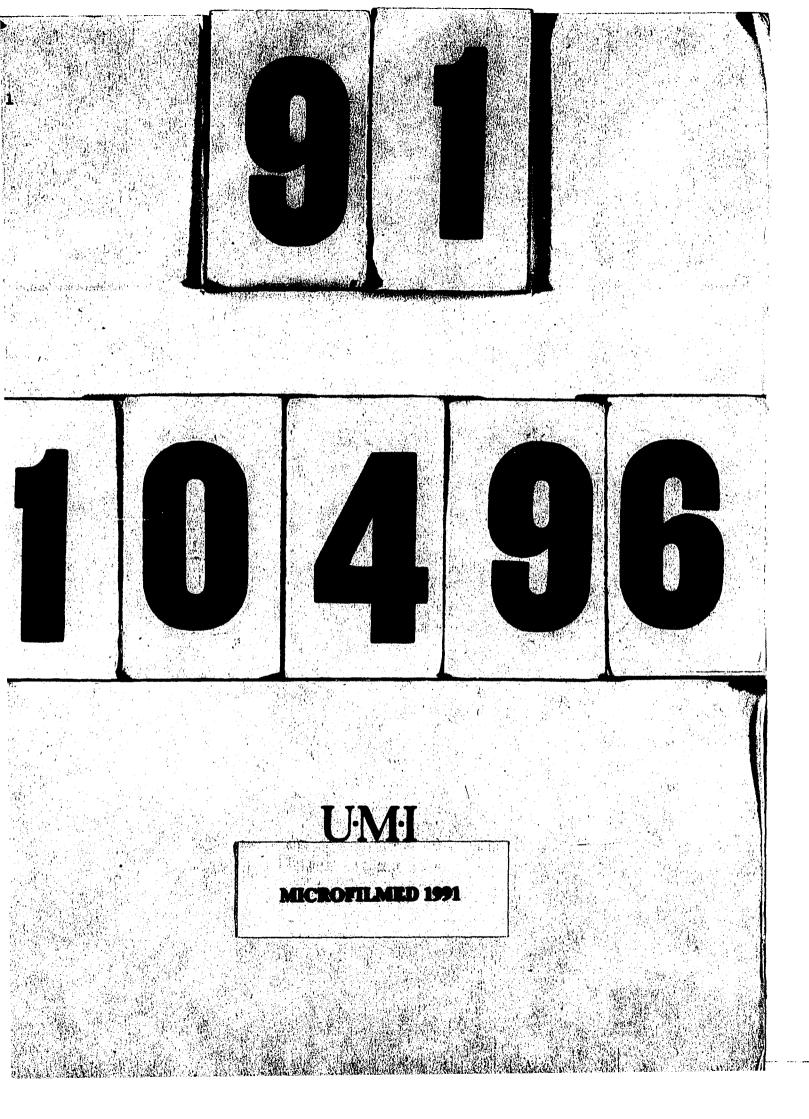
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The roles of academic deans of land-grant universities by the year 2000

Fadeyi, Gabriel Olufolahan, Ph.D.

Iowa State University, 1990



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The roles of academic deans of land-grant universities by the year 2000

by

Gabriel Olufolahan Fadeyi

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Department: Professional Studies in Education Major: Education (Higher Education)

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

- For the Major Department

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For the Graduate College

Iowa State University Ames, Iowa 1990

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DEDICATION

I dedicate this study to my darling wife

Pauline Adunni

and my very dear children

IfeOluwa, Oluwatomi, Oluwafolahan Jr. and Toluwanimi

for their perseverance and support throughout the hard times of my

graduate studies at Iowa State University.

The study is also dedicated to my loving sister

Mrs. Grace Olukemi Ogunkanmi

who was incapacitated by stroke at her prime age in 1989.

Finally, the study is dedicated to

the memory of my late niece,

Miss Adeola Fadeyi (Alias Adanri)

and my late family friend, Mrs. Duntan Oshundipe

who both lost their lives in a gruesome auto accident on Lagos/Ibadan road, Nigeria on March 17, 1990. We love you and we know that God is omniscient.

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CHAPTER 1. INTRODUCTION

Issues about academic deanship cannot be meaningfully discussed in isolation from issues of education – both are intertwined. Therefore, an examination of education at this point will be appropriate to illuminate the roles of academic deans in land-grant universities by the year 2000.

Education has been described as "the greatest opportunity for really improving one generation over another" (Kellogg Foundation, 1989, p. 72). This observation is congruent with one of the major functions of a university as propounded by Nyerere, cited in Mosha (1986). According to him, a university is "to transmit advanced knowledge from one generation to the next so that it can serve either as a basis of action or as a springboard to further research" (p. 94). Education is, therefore, a strong force shaping science and technology which change the outlook of societies and their quality of life (Joshua, 1988). In other words, education is a tool for national development and world peace.

Education has been generally compartmentalized into three major levels: the elementary, the secondary and the higher education. Julius Nyerere, cited in Mosha (1986), has defined a university (higher education institution) as an institution of higher learning, a place where peoples' minds are trained for clear thinking, for independent thinking, for analysis, and for problem solving

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at the highest level. To achieve the above, Nyerere suggests that a university has to satisfy three functions which are also crucial to its existence:

1. To transmit advanced knowledge from one generation to the next so that it can serve either as a basis of action, or as a springboard to further research;

2. To provide a center for the attempt to advance the frontiers of knowledge by concentrating in one place some of the most intellectually able people who are not preoccupied by day-to-day administrative or professional responsibilities, and making available to them good library and laboratory facilities which are necessary to support learning; and

3. To provide through its teaching for the high level manpower needs of society (p. 100).

As for Baldridge and Riley (1977), they, too, see academic organizations as "people processing institutions" to which clients with specific problems (students) are recruited, worked upon by the institution through teaching and learning, research and public service and, thereafter, marketed to the larger society as graduates. In other words, universities/academic institutions are knowledge industries where raw materials (students) are processed (teaching and learning, research and public service) and then marketed to the public at large in the form of finished products (knowledgeable graduates) for service.

The significance and roles of universities in knowledge production, and consequently, in world development and peace cannot be overemphasized. In his book, *Deaning*, Van Cleve Morris (1981) noted that even though the knowledge industry preoccupies the whole fabric of American society, the university remains as the headquarters of knowledge. It is, therefore, evident that development is inseparable from education nor education from development generally, and from higher education in particular.

Many of the earliest universities on record have existed in India as far back as between the 6th and 10th centuries, for instance, the Valabhi University (6th Century), Nalanda University (7th Century) and the Vikramasila with one Central Hall and six campuses (10th Century) (Kneller, 1986).

The feeling of ancient Indian scholars that history is better left unrecorded makes it difficult to fill in the details of time and place in the long story of higher education in India. The Chinese pilgrim Hsuan Tsang recorded details of education and of other aspects of India's civilization in the 7th century A.D. He described the university at Nalanda, where advanced studies were accessible to those who passed rigid entrance examinations (usual age, 20). Some 1500 teachers lectured to about 8,500 students, with approximately 100 lectures daily on as many subjects (Kneller, 1986, p. 685).

In the Western world, the earliest universities were established in Bologna, Italy and Hertzberg, Germany in the 11th century. In the United States, the first university, Harvard, was established in the year 1636 A.D. By that time, "the President alone could handle all the administrative affairs ..." and "would still know enough about the several academic disciplines to make reasonable assessments of the proficiency of faculty personnel" (Gould, 1964, p. 2).

With time, however, the quest for education, the proliferation of academic disciplines, the increase in university enrollment and the multiplicity of governmental and educational agencies with which the college had to deal, the president's job became impossible without additional help. Therefore, the office of the dean was created in many colleges purposely "to aid the President" and in others, it was "to meet emergency" (Gould, 1964, p. 2). Gould's claim thus authenticated Brubacher and Rudy's (1958) writing about the appointment of the first college dean by President Elliot of Harvard University in 1870. His main task, apart from teaching, they stated, was to take the burden of discipline off President Elliot's shoulders.

Since the advent of the deanship, the position has been a dynamic one and its roles have been ambiguous. They vary with time, size, type, needs, location and wealth of the institution. The deans' roles also vary with the institutions' administrative structure, the origin and history of the deanship in the institution, the character of the president and his/her attitudes towards the office. The personality, interests and ability of the dean him/herself also contribute to the variability of the deans' roles. They have been undefined for a long time and have even become more complicated.

The dynamism of the roles of the dean has long been recognized when Hawkes and Rose (1945) said "...there is no such thing as a standardized dean. There is a dean of this and that college but I never have seen any two deans who could exchange places and retain the same duties" (p. 245). This situation still persists today as was reiterated by Bowker and Lynch (1985) and Andersen and King (1987).

The following factors contributed, in part, to the non-standardization of dean's roles in the evolution of American higher education administration. The post World War II period saw an unprecedented increase in college enrollment. This is mainly because of the Government's program (the G.I. Bill, 1944) that provided war veterans with financial assistance to acquire a college education.

This situation became more complicated with time. As a result of the Sputnik space ship which was launched by the Soviet Union in 1957, the United States government set up a program of financial assistance to encourage studies in mathematics and engineering. Obviously, the program raised college enrollment further.

In the 1960s, the college enrollment rate reached an all-time peak when the Civil Rights Bill opened up access to higher education to the minorities. The Department of Health Education and Welfare quoted students enrollment in institutions of higher learning as 3,639,847 in 1959, while student enrollment in 1970 had almost tripled at 8,580,887-an increase of about 120 percent (National Center for Educational Statistics, 1988).

This new trend posed great challenges to administrators on college campuses that were expanding by leaps and bounds. The complexity of student population, new requirements for college admission, and new curriculum demands are some of the complications which necessitated subdivisions in deanship and kept the presidents farther and farther away from educational administration. According to Gould (1964), the president has had to give his attention more and more to expansion problems, fund raising and alumni and other public relations "... leaving many of his duties to the academic dean" (p. 6). No wonder, Van Cleve Morris (1981) noted in his book, *Deaning*:

Universities in the United States are now big business. Over the years they have drifted away from that precious ambiance of bucolic, ivied serenity and gradually assimilated their work to the tumble and texture of bureaucracy, American style.

With this development, in higher education, as with other organizations, managerial skill has taken on a new, more urgent visibility. **The modern university now needs a cadre of administrators** to run it quite as much as it needs an army of scholars to think and teach [emphasis, that of the researcher] (p. ix).

As quoted earlier, one of the functions of a university given by Julius Nyerere, cited in Mosha (1986), is to provide:

a center for the attempt to advance the frontiers of knowledge by concentrating in one place some of the most intellectually able people who are not preoccupied by day-to-day administrative or professional responsibilities, and making available to them good library and laboratory facilities which are necessary to support learning. [emphasis, that of the author] (p. ix).

The above two quotations imply that colleges need competent administrators to facilitate their functions. This claim was supported by the administration expenditure for all higher education in 1974 which was nineteen times greater than in 1950 while spending for academic instructions increased only fourteen times (National Center for Educational Statistics, 1988).

The enrollment trend in higher education made its administration more complex. College enrollment increased more than 40 percent between 1970 and 1980. Since then, enrollment has only increased 4 percent from 12.1 million to a record 12.5 million. In fact, the observed increase was mostly due to a rise in the part-time enrollees. From 1980 until 1987, male enrollment remained stable while female enrollment rose by 7 percent. Obviously, the enrollment rate was relatively declining. "The bottom line is decidedly simple: without students, academic programs wither and die, and professors become unemployed" (Kemerer, 1984-85, p. 29) and the headquarters of knowledge production collapses too.

Furthermore, student population structure is rapidly changing from the traditional pattern. The number of enrolled adult students has been more rapidly increasing than the number of traditional students. "Between 1970 and 1985, the enrollment of students under age 25 increased by 15 percent. During the same time period, enrollment of persons 25 and over rose by 114 percent. In the latter part of this period from 1980 to 1985, enrollments of students under 25 decreased by 5 percent while the enrollment of persons 25 and over increased by 12 percent" (Kemerer, 1984-85, p. 29).

Hodgkinson as cited in Kemerer (1984-85), in observing the demographic trends between 1985 and 1995, hints at the potential complexity of student population structure. He notes that:

1. During the 1980s, the 35 to 44 age group increases in size by 42 percent. Behind this bulge is a trough of decline, reflecting rapidly declining birth rates from 1964 to 1979.

2. The birth rate declines are almost completely Caucasian. Minority groups have not declined; some, such as Hispanics, Orientals and Mormons are growing rapidly.

3. Many States now have sizable minority public school populations. For example, the minority percentage for Texas is 46 percent, for California 42 percent, for Florida 33 percent, for New York 32 percent, and for New Jersey, Delaware, and Illinois 28 percent. For the United States as a whole, the percentage is 27. Shortly the minorities will become majorities in several states.

4. Ninety-nine percent of the work-force in 1990 is already at work. There will be a shortage of jobs during the "trough" period, thus drawing students away from higher education. It may be necessary to reinstate the draft as volunteers for the armed forces dwindle. 5. Nearly half the children born in 1980 will be raised by a single parent. These children are far less likely to persist to college (p. 6).

Hodgkinson concluded that demographic factors coupled with changing student characteristics and the presence of other forms of post secondary education will likely increase competition for students.

The above factors can be regarded as major contributors to the current student recruitment tilting toward adult and international "markets." The situation has posed new challenges to academic deans whose roles are essential to structural change. Hence, the current vogue to sustain higher education institutions is strategic planning of which the dean is a major player.

It has, so far, been demonstrated that the heart of the excellent university (which is the headquarters of knowledge) is the excellent administrative core, the heart of which is the academic dean (Van Cleve Morris, 1981). The importance of deanship was reaffirmed by Gant (1983) when he said that "... although we must recognize a definite autonomy within the profession, the chief executive is the key to the climate and the effectiveness of the organization. The dean, then, is the most important person in moving us toward SCDE (please see definition of terms) effectiveness" (p. 3).

The literature so far examined indicates that global development and peace rest on the production, nurturing and dissemination of knowledge by the "headquarters" – colleges and universities. Therefore, the inseparable relationship between the excellent institutions of higher learning and excellent administrative core is evident and, of course, there is no excellent administrative core without a versatile academic dean. As important as academic institutions have been demonstrated to be and as indispensable as the academic deanship has been proven to be for higher education, the former became a field of study in the last century (Burnett, 1973), leaving the study of higher education management and leadership (academic deanship) as an area of scholarly study until the late '60s (Cyphert and Zimpher, as cited in McCarty and Reyes 1986). No wonder, McCarty and Reyes (1986) described administrative science as an identifiable and separate field of study in higher education as relatively immature.

This position has been held as far back as 1934 when James S. Kinder conducted his study on college administration. He states that "the literature on the question was scant and unorganized" (p. 2). The inadequate attention given to the study of higher education institution administration has subsequently received the attention of a number of writers. When Finnegan wrote on the topic in 1951, he also observed that the available literature on the subject of higher education administration was very meager. Before the 1960s, educators perceived academic deanship as a pioneering position and so, they did not give an adequate attention to the subject. Even though, numerous studies have been done on college presidents and the liberal arts generally, recent studies on the academic deanship are far less numerous (Gould, 1964).

Ten years after Gould's (1964) observation, Peterson (1974) reviewed about 500 studies on higher education, and he also found that the roles, attitudes and values of college and university administrators have not been effectively investigated.

It is noteworthy that the performances of school superintendents, prin-

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cipals and other school administrators have often been studied and debated. However, investigations about the roles and behavior of the catalyst and architect of the programs (academic deans) that prepared those administrators have been neglected (Griffiths and McCarty, 1980).

These authors were so moved that they wrote as part of the "Foreward" to their work, *The Dilemma of The Deanship*:

While those who administer higher education are represented by a literature whose chief characteristic is poverty, the least among the poorest is the deanship. There has been so little theoretical, conceptual, or research literature published on the deanship as to constitute an embarrassment to both the practitioners and scholars of higher education (p. v).

The authors were still in search of a base for research and theoretical work with a view to having a body of knowledge on which the deanship could rest. Hitherto, "the classical writings, with a few exceptions, are not based on empirical research but on individual judgements supported by the personal experiences and the ideological beliefs of the authors" (McCarty and Reyes, 1987, p. 2).

In his contribution to Griffiths and McCarty's (1980) work, Arthur Colardaci (1980), a dean at Stanford University wrote about his personal experience in "Some Notes on Deans as Individuals and the Role of the Dean." He said:

Accordingly, in the guilty realization that I was assuming a role for which I was most unprepared, I set about to locate and study the accumulated knowledge and wisdom bearing on employment as dean of a school of education. I found, with Adamic surprise, that the literature addressing the honorable estate could be read comfortably between a late breakfast and an early lunch-and that the dearth in volume was not compensated for by substance (p. 125).

With all the early hues and cries, even as recent as 1986, McCarty and Reyes still had evidence to remark that "research studies regarding the roles of the academic deans in governance are scarce" (p. 2). Colardaci's "Adamic" surprise of 1980 is about the injustice that has always bedeviled the study of the academic deanship and is still valid today.

Statement of the Problem

As evident from the literature that has been examined, no relatively adequate attention has been given to the investigation of the position of academic dean in general. In particular, when it comes to the study of the land-grant system of higher education, researchers tend to forget its uniqueness which demands greater investigation. The systems's uniqueness has aided the fulfillment of the American dream. As articulated in the Morrill Act, cited by Brunner (1962), the overall objective of land-grant universities is the promotion of liberal and practical education of the masses in the several pursuits and professions in life. The pursuit of this objective has helped to transform America and the world in general. An examination of the history and development of the land-grant institutions revealed that they have advanced to their contemporary status through thick and thin. More recent problems are the universities' experience during the war and post-war era of the 1940s. The Vietnam war and the students' unrest of the 1950s and 1960s, the retrenchment of the 1970s and, currently, the struggle for the dwindling high school graduates to fill the college classrooms. (The land-grant university is a topic for detailed discussion in the next chapter of this report.) Most scholars that have touched on the college administration problems have neglected the land-grant institutions. Such studies would have assisted those institutions during their problem times.

The open access to higher education has been made possible through the land-grant universities. Their missions are different from the pioneering universities. Therefore, their teaching and research efforts have relatively contributed more to national and world transformation than any other system of higher education. However, empirical studies into the administration and other problem areas of these unique institutions of higher learning are lacking and long overdue.

This study is, therefore, designed to investigate the perceptions of deans and faculty members at land-grant universities regarding the activities and roles of academic deans by the Year 2000 as well as their need for formal preparation.

Statement of Purpose

The purpose of this study was to look into the future (that is the Year 2000) of the administration of land-grant universities through the perceptions of the two major constituencies on campus – the Administration (Academic Deans) and the Faculty members.

Specifically, the purpose of this study is divided into five major aspects:

1. To identify what activities and roles will be important for academic

deans as members of the administrative team of land-grant universities by the year 2000. Also, to examine the order of importance of such roles.

- 2. To relate the perceptions of the deans themselves with those of the faculty members regarding selected activities and roles of deans by the year 2000.
- 3. To investigate what effect (if any) the faculty ranks, academic discipline, college size, institutional size and predominant student gender will have on the importance of those roles.
- 4. To investigate if there would be a need for formal training for academic deans in the future, and
- 5. To investigate the extent to which this perception may be dependent on status (Deans/Faculty members), academic ranks (professor, associate professor and assistant professor) and the highest degree attained.

Significance of the Study

Apart from the need for investigation into the administration of landgrant universities, a number of researchers have made specific calls for research into academic deanship. This study will, hopefully, constitute a valuable response. For example, Marks (1980) made two recommendations in her study that:

Faculty and administration should periodically review the roles of the dean at the school/college level to determine whether or not it is consistent with the needs of the school (p. 149); and that higher education should provide for and render support to deans' involvement in training and development programs designed for academic administrators which assist deans in dealing effectively with their changing responsibilities. The findings of this study should provide insight to meet Marks' recommendation in 1980 and should be useful, by serving as a resource for the development of such programs for academic deans. A positive response has recently been given to this call by the Harvard School of Education by pioneering a training scheme for new Presidents of Universities (Bolman, 1990).

Presidents, deans and faculty members differ in their perceptions and expectations regarding the roles and functions of the dean (Al-Abideen, 1979). Such disagreement about role perceptions have been identified as one of the barriers to understanding (Hampton et al., 1975).

From the researcher's further readings and lessons of personal experience as a university administrator in the United States and Nigeria, subtle disunity between college administration and faculty members have been known to be a common occurrence. Mooney (1988) in an article in the *Chronicle of Higher Education*, stated that faculty relations is the area that gives most deans the most problems. She declared:

When a group of about 40 mostly novice deans got together here recently to discuss the challenges of the academic deanship, the first item on the agenda was faculty relations. It was also the last item (pp. A15 and A19).

Recently, too, Provost Milton Glick (1989) of the Iowa State University observed "communication between faculty and administration is a major concern for both sides" (p. 3). Be that as it may, the dean's real power lies in the faculty. The stronger the power, the greater is the ability of the dean to affect the institution and educational process. According to Dupont (1956), the academic dean's office should be the center of unity and the source of concerted action. He claimed that if it were not so, there would be no one, except the president to establish and maintain this necessary unity. "If the President is away frequently, if he must concern himself with development projects and public relations, if he gets out of touch with faculty and students, he cannot perform the function of coordination successfully. He must, therefore, appoint a subordinate to do it; and the logical choice is the dean "(Dupont, 1956, p. 15). Therefore, if there is congruence in the perceptions of academic deans and faculty members, minimum conflict possible may be expected in the university environment. In contrast, if there is dissonance (disagreement), then conflict should be expected. The severity of such dissonance will be manifested according to the degree of differences among the different categories.

The findings of this study should reveal the areas of disagreement and misunderstanding with implications for remedial action in land-grant universities and other institutions of higher education as well. They should also reveal the commonalities among the different responding categories with a view to recognizing and strengthening them. This way, a much needed unity of purpose and peace can be achieved within and between the American landgrant and other universities of the future.

Furthermore, the findings of this study should have a significance for academic deans and faculty members. Information about the various perceptions regarding the future roles of academic deans of land grant universities can serve as a resource for self-examination, gap-bridging and goal-setting. Moreover, the information may be of interest to faculties who work with Deans, deanship aspirants, students, deans' search committee, affirmative action officers, and university central administrators, and it can even govern faculty in evaluating deans.

Finally, it is hoped that the findings of the study will provide a guide source for potential academic deans who need to have a glimpse of what their roles would be. It should also give some awareness to veteran deans about the future of their roles as well as their ambiguous nature.

Assumptions of the Study

This study was designed and executed under the following basic assumptions:

- 1. That land-grant universities will continue to share common characteristics by the year 2000.
- 2. That the Faculty members will still be responsible to the academic deans through the chairpersons by the year 2000.
- 3. That an exposition of any differences will enhance efforts to resolve or reduce conflict and roles ambiguity to a minimum.
- 4. That management of conflicts at college level will radiate to the university system to bring about unity of purpose.

- 5. That the group of land-grant institutions is representative of medium and large American universities and will continue to be so by the year 2000.
- 6. That land-grant universities are so large that their organizational structures place academic deans at the head of a school/college – the sum total of which make up a university. It is assumed that the situation will remain so by the year 2000.

Research Questions

This study sought to answer the following research questions covering two main areas of investigation, the academic deans' roles and the need for their formal training in higher education administration by the year 2000.

- 1. Are the perceptions of the deans and faculty members of land-grant universities greater than the "neutral" perceptions (3 on a 5-point Likerttype scale) regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000?
- 2. Are the perceptions of the deans and faculty members of land-grant universities greater than the "neutral" perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000?
- 3. Is the distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 dependent on academic ranks?

- 4. Is there a significant difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected **activities** of academic deans of land-grant universities by the year 2000?
- 5. Is there a significant difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?
- 6. Is there a difference in the average perceptions of respondents in different academic ranks regarding the importance of academic deans of landgrant universities by the Year 2000?
- 7. Is there a difference in the average perceptions of the respondents in different academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?
- 8. Is there a difference in the average perceptions of the respondents grouped in different college sizes regarding the importance of academic deans of land-grant universities by the Year 2000?
- 9. Is there a difference in the average perceptions of the respondents grouped in different University sizes regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?
- 10. Is there a difference in the average perceptions of the respondents among the college gender representations regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?

- 11. Is the ratio of deans to faculty members the same for "Yes" and "No" responses regarding the need for formal training of academic deans of land-grant universities by the Year 2000?
- 12. Is the distribution of professors, associate professors and assistant professors the same for "Yes" and "No" responses regarding the need for formal training of academic deans of land-grant universities by the Year 2000?
- 13. Is there a relationship between the perceptions of the master's degree holders and those of the Ph.D. degree holders regarding the need for formal training of academic deans of land-grant universities by the Year 2000?

Null Hypotheses

Null Hypothesis 1

The mean perception of the deans and faculty members of land-grant universities are NOT significantly greater than the "neutral" perception (3 on a 5-point Likert-type scale) regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000.

Null Hypothesis 2

The mean perception of the deans and faculty members of land-grant universities are **not** significantly greater than the "neutral" perception (3 represents "neutral" on a 5-point Likert-type scale) regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000.

Null Hypothesis 3

There is no significant difference in perception between academic deans and faculty members regarding the importance of selected **activities** of academic deans by the Year 2000.

Null Hypothesis 4

There is no significant difference in perception between academic deans and faculty members regarding the importance of selected **roles** of academic deans by the year 2000.

Null Hypothesis 5

There are no significant differences in the average perceptions of respondents in the various academic ranks regarding the importance of academic deans by the Year 2000.

Null Hypothesis 6

There are no significant differences in average perceptions among the six academic disciplines regarding the importance of the selected roles of academic deans by the Year 2000.

Null Hypothesis 7

There are no significant differences in average perceptions among the various sizes of college student population regarding the importance of the selected roles of academic deans by the Year 2000.

Null Hypothesis 8

There are no significant differences in average perceptions among the various sizes of universities regarding the importance of the selected roles of academic deans by the Year 2000.

Null Hypothesis 9

There are no significant differences in average perceptions among the college gender representations regarding the importance of the selected roles of academic deans by the Year 2000.

Null Hypothesis 10

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of their status – Deans and Faculty.

Null Hypothesis 11

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of academic ranks.

Null Hypothesis 12

There is no significant relationship between the mean perceptions of the master's degree holders and that of the Ph.D. degree holders regarding the need for formal training of academic deans of land-grant universities by the Year 2000.

Limitation of the Study

Economic resource is a big constraint in this study. The researcher, therefore, had limited the sample size to those land-grant universities that indicated a willingness to participate while ensuring that an acceptable minimum level was obtained.

The instrument was distributed and collected by mail. Therefore, the study is limited by the problems associated with mail questionnaire.

General Procedure of the Study

The following procedures were adopted in conducting this study:

- 1. An area of interest for this study was identified.
- 2. The literature was searched to get more grounded in the basics of the research topic.
- 3. The proposal was written.
- 4. A list of the land-grant universities was obtained.

- 5. A random selection was made from the list of all the land-grant universities.
- 6. An instrument was developed for data collection.
- 7. The proposal was presented to the researcher's Graduate Committee for approval.
- 8. The instrument for the study was validated using the researcher's Graduate Committee members and other experts.
- 9. The instrument was revised based upon the recommendations of the investigator's Graduate Committee and the other experts.
- 10. The proposal was presented to the researcher's Graduate Committee and was approved.
- 11. The instrument was pilot-tested with a local sample of academic deans and faculty members.
- 12. The instrument was revised based on the results of the pilot test. The revision was approved by the chairperson of the researcher's Graduate Committee.
- 13. Approval was obtained from the Committee on Human Subjects in Research of Iowa State University.
- 14. A random selection of participating colleges was made.
- 15. A random sample was selected from the randomly selected land-grant colleges.

- 16. A detailed list and addresses of respondents was compiled.
- 17. The questionnaires were mailed out to the subjects.
- 18. A number of follow-up letters and questionnaires was sent out.
- 19. A number of follow-up telephone calls was made.
- 20. The data were collected and coded.
- 21. The data were analyzed using the Statistical Package for the Social Sciences (SPSSx) (1988) program of the Iowa State University Computation Center in Ames, Iowa.
- 22. The report was written, and conclusions and recommendations were drawn based on the findings from the study.
- 23. The completed dissertation was presented to the researcher's Graduate Committee for final examination and acceptance.

Definition of Terms

In order to provide a common interpretation and understanding of terminology used in this study, the terms are, hereby, defined.

- PERCEPTION: is a selective process in which persons tend to see things as they fit into their past experience.
- ACADEMIC DEAN: is a full-time head of either a school or a college within a university. Such dean is not the head of a graduate school.

- DEAN(S): Used interchangeably to refer to Academic Deans in the study.
- DEPARTMENTAL CHAIRPERSON: is a faculty member who in addition to performing the usual duties of teaching and research in a department, has been designated to preside over staff meetings and to carry on certain administrative duties involved in managing the affairs of the department (Good, 1973, p. 172).
- FACULTY MEMBERS: all full-time teaching and/research staff regardless of their sex, academic rank, degree earned, or nationality. They may be full, associate or assistant professors.
- COLLEGE: refers to a separate and semi-independent unit of a university that is headed by a dean and governed within the university limits. In this study, the Graduate College will not be applicable.
- ROLE: According to Sargent (1951), the role of the individual is defined as "A pattern or type of social behavior which seems situationally appropriate to him in terms of the demands and expectations of those in his group" (p. 360).
- PERCEPTION: Awareness of objects and relationships as a result of sensory stimulation and understanding of the objects and relationships (Good, 1973, p. 413).
- HIGHER EDUCATION: In this study refers to four years of formal education beyond the twelve grade. The term is used interchangeably with UNIVERSITY.

- ADULT STUDENTS: Higher education institution students who are 25 years of age or above on enrollment.
- TRADITIONAL STUDENT: Higher education institution students who are under 25 years of age on enrollment.
- SCDE: Schools, Colleges and Departments of Education (Gant, 1983).

CHAPTER 2. REVIEW OF THE LITERATURE

The review of literature was done to synthesize pertinent issues about land-grant colleges, the historical background of the title, dean, the evolution of the roles of deans, concepts of role theory and perceptions regarding the future perspectives in American higher education and its administration. It is intended to provide a strong base, sequence and meaning for this study.

The Land-grant Colleges/Universities

The land-grant colleges/universities of the United States were born out of a high estimate of education as an instrument of individual and social progress. They were born with a broad concept of the many different kinds of abilities human beings possess and the value of cultivating them all to the utmost. They have been committed from their beginning in 1862 to the wide dissemination and use of knowledge. They were born from faith in the American people and their great destiny (Caldwell, 1962, p.11).

In the colonial days, higher education in the United States was only available to a priviledged few who belonged to the special classes of the society, the government leaders and members of the professions (Brunner, 1962) Moreover, the education could be obtained only from the few institutions of higher learning that were then available such as Harvard, Yale, and William and Mary which were predominantly privately controlled.

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Though this system of private control worked for the Europeans, it proved to be unsuitable for a predominantly democratic and pioneering people of America. The Government publication explained further that the basic curriculum concentrations of those early colleges were on classics and professions without any attempt at agriculture and mechanics.

By the middle of the nineteenth century, therefore, as was reported, great agitations ensued among the people especially the agricultural areas in the United States. The domineering colleges and universities were not responsive to the concerns of the people. Consequently, during the early part of the second half of the nineteenth century, "the Congress debated the issue and finally passed the Morrill Act of 1859" (Brunner, 1962, p. 2) which was vetoed by President Buchanan on the basis that the control of education belonged to the States. On July 2, 1862, "the Morrill Act was passed again and was signed by President Lincoln" (Brunner, 1962, p. 2).

Purpose of Land-grant Colleges/Universities

The purpose of this Act was to endow, support and maintain at least one college with the primary object of teaching curriculum relating to agriculture and the mechanic arts including military tactics. By the Act, the purpose was to be realized in such manner as the State legislatures may direct. While capitalizing on agriculture, mechanic arts and military science, the Act did not exclude other scientific and classical studies from being disseminated. The overall objective was the promotion of liberal and practical education of the masses in the several pursuits and professions in life (Brunner, 1962).

In 1887, after the Act had existed for a quarter of a century, Mr. Morrill (cited in Brunner, 1962) addressed a group of people at the Massachusetts Agricultural College and gave the following as his views regarding the general purpose of the Morrill Act:

The land-grant colleges were founded on the idea that a higher and broader education should be placed in every state within the reach of those whose destiny assigns them to or who may have the courage to choose industrial vocations where the wealth of nations is produced; where advanced civilization unfolds its comforts, and where a much larger number of the people need wider educational advantages, and inpatiently await their possession It would be a mistake to suppose it was intended that every student should become either a farmer or a mechanic when the design comprehended not only instruction for those who may hold the plow or follow a trade, but such instruction as any person might need – with 'the world all before them were to choose' – and without the exclusion of those who might prefer to adhere to the classics (p. 2).

One year after, in 1888, Mr. Morrill, cited in Brunner, 1962, once again expressed his views on his purpose of Morrill Act in his speech before the Vermont Legislature and he said:

Only the interest from the land-grant fund can be expended, and that must be expended, first – without excluding other scientific and classical studies – for teaching such branches of learning as are related to agriculture and the mechanic arts – the latter as absolutely as the former. Obviously not manual, but intellectual instruction was the paramount object. It was not provided that agricultural labor in the field should be practically taught, any more than that the mechanical trade of a carpenter or blacksmith should be taught. Secondly, it was a liberal education that was proposed. Classical studies were not to be excluded, and, therefore, must be included. The Act of 1862 proposed a system of broad education by colleges, not limited to a superficial and dwarfed training, such as might be supplied by a foreman of a workshop or by a foreman of an experimental farm. If any would have only a school with equal scraps of labor and of instruction, or something other than a college, they would not obey the national law

The fundamental idea was to offer an opportunity in every State for a liberal and larger education to larger number, not merely to those destined to sedentary professions, but to those much needing higher instruction for the world's business, for the industrial pursuits and professions in life (pp. 2-3).

In summary, the main purposes of land-grant colleges/universities as distilled from the Act itself and from Hon. Justin W. Morrill's statements quoted above, are:

- 1. A protest against the then characteristic dominance of the classics in higher education.
- 2. A desire to develop, at the college level, instruction relating to the practical activities of life.
- 3. An attempt to offer to those belonging to the industrial classes preparation for the "professions of life" (Works and Morgan, 1939, p. 11).

Characteristics of Land-grant Colleges/Universities

Considering the student enrollment, off-campus, instruction and technical assistance, or even research of basic value to human welfare, the land-grant colleges have "made the Morrill Act probably the most significant single piece of social legislation in the United States history" (Caldwell, 1962, p. 11).

One important characteristic of the land-grant colleges which are the direct offshoot of the Morrill Act is their democratic nature. They broke away totally from the conservative characteristic of the early colleges and universities which were inaccessible to the common person. Through those colleges, higher education became an achievable dream of many, irrespective of position, intellect, or money. "They have assumed on the other hand that as the nation grew, as knowledge expanded, as the range of competencies required by the society was extended, it was their job to serve these expanded needs of the people" (Caldwell, 1962, p. 11). This view persists even today.

The Colleges have always been very close to the environment which they serve as well as kept abreast of the needs which have nurtured their growth This is a characteristic unique to the land-grant colleges.

While commenting on the characteristics of the land-grant colleges, Caldwell, the 1962 President of North Carolina State College, noted that the realization of the Morrill Act was an illustration of the responsibility which the people, through their legislative representatives, have for the advancement of their knowledge and their education. This factor is evident by the enthusiastic support given to the land-grant colleges by the public.

The dividends that do generate from these public investments in higher education through the land-grant colleges cannot be overestimated. As Caldwell said in 1962, "... indeed, the United States today would be immeasurably poorer but for this imaginative federal action ... and its continued support in partnership with the States" (p. 11).

These colleges have pursued excellence by consistently taking up the challenges of the time. For instance, as a way of developing high standards and excellence, they have adopted counselled admissions and placements, honors programs, more demanding curricula, strengthened faculties, and deepened research commitments. While doing so in pursuit of excellence, the land-grant universities have all along been conscious of **academic freedom** – freedom for the mind. "They know now, as intelligent men have always known and as free men must always know, that the risks of freedom to think and write and learn and speak are fewer and less dangerous than the risks of suppression" (p. 11). Thus, democracy, service to the environment and academic freedom are characteristics that have been instrumental to the achievement of excellence by the land-grant colleges/universities.

The achievements of the Morrill Act and land-grant colleges and universities

The achievements of the land-grant colleges and universities were succinctly summarized in a paper by the Land-Grant Centennial Office of the American Association of State Universities and Land-Grant Colleges in November of 1960 under the caption "Contributions of Land-Grant Universities and Colleges." The contributions were summarized as follows:

Morrill Act is significant because by endowing at least one college in every state, controlled by the state, it brought to life democratic idea of equality of educational opportunity. "Open door" to college for all who had the will and ability to learn was unprecedented in world history. One hundred years ago one young American in 1,500 went to college compared with one in three today. The land-grant system has become the nation's largest single source of trained and educated manpower. Morrill Act is described in a report of National Manpower Council as 'The most important single government step ... in the training of scientific and professional personnel.' A second reason for fundamental significance of Morrill Act is because for the first time colleges were brought to the people [emphasis by the researcher]. Teaching and research were not limited to confines of campuses. Throughout states they serve, landgrant people conduct special classes, they go to factories and farms to test research results, they seek solutions to economic, social, physical ills that beset their fellow citizens.

Land-grant universities and colleges today enroll 20% of country's college population and grant 40% of all doctorate degrees; confer approximately 50% of doctorates in sciences, engineering, the health professions; all of those in agriculture, and 25% in arts and languages, in business and commerce, in education itself.

Further testifying to quality of teaching, research, and service by these institutions is the fact that 20 of 38 living American Nobel Prize winners who went to college in this country have earned degrees from land-grant institutions.

They train almost half of all regular and reserve officers entering the armed forces through the military training programs of civilian institutions [emphasis by the researcher].

Value to American people of land-grant research contributions alone exceeds by many times the total amount expended on these colleges since they came into being. Following are only a few of hundreds of outstanding research achievements of these institutions: [emphasis by the researcher].

- Discovery of streptomycin for treatment and control of tuberculosis.
- Development of anti-coagulant, dicoumarol, for use against blood clots; open heart surgery, and new methods of repairing defects of heart; use of radio isotopes for medical therapy and diagnosis.
- Development of the television tube, the transistor, the first cyclotron, and production of pure uranium.

- Research in space, satellite tracking, rockets and rocket fuels, special foods for spacemen.
- Basic work on fatigue of metals, isolation of helium and separation of helium from natural gas.
- Control of botulism for canning industry, process for making acetyline gas from textile waste, findings responsible for beginnings and growth of ceramics, wood pulp, soybean processing industries.
- Development of hybrid corn, disease resistant bread wheats, controlled storage of fruits, butterfat test for milk.

Land-grant colleges form the heart of the country's amazing system of farm research extension education which put the results of experiments to use. Thus modern American agriculture permits one farm worker to produce enough food for himself and 23 persons – an efficiency ratio without parallel throughout the world [emphasis is that of the researcher].

People in agricultural research and education, and in industry, have joined with farmers to bring their total capacity to bear on problems of food and fiber production, handling, processing, and distribution. The result is ever-mounting quantities of food and clothing for a growing population at lower cost to consumers.

For example, it takes an American industrial worker only 15 minutes of labor to earn a dozen eggs today, whereas it took an hour just 30 years ago. [The emphasis is that of the researcher.] The amount of working time required to earn a quart of milk has been cut in half as is the case with bread and also potatoes (pp. 1-2).

As of today, the land-grant colleges and universities that are the fruit of Morrill's Act of 1862 have still not relented. They are still living more closely than before with the busy world which they have helped to create. "Nuclear reactors, radio telescopes, mass spectrometers, experimental swine shelters, greenhouses, nursery schools, art studies, language laboratories, television stations, theaters, computers, filmed documents – the full range of human knowledge, curiosity, and endeavors, mark the educational system" (The Land-Grant Centennial Office, American Association of State Universities and Land-Grant Colleges, 1960).

By its excellent purpose, characteristics and achievements, the American land-grant colleges have revolutionized higher education and the general human race – not just in the United States but in the world at large.

The Historical Background of the Title, Dean

Having examined some aspects of the land-grant colleges/universities, it is now appropriate to examine the historical background of the major player (independent variable) in this study – the dean. Buchen (1974) observed that "to assess what is going on (and what is going to happen) in higher education, we should examine what has been happening to college deans in longitudinal portraiture" (p. 497).

This section examined relevant literature regarding the derivation of the title "Dean" in higher education as well as traced the evolution of academic deans' roles. It also includes several works that have been done on the future of academic deans and managers in general. Both the descriptive/expository and research works were reviewed.

Hodges and Hodges (1975) hinted that the word dean has been used in

various ways making it "difficult to derive a proper definition for it or to know precisely what it means" (p. 39). In the article, "The Role of the Graduate Dean", the authors examined the derivation of the word "dean" in an attempt to investigate why the dean has such a wide range of responsibilities. The word "dean" had its origin in 386 A.D. when it was being used by the Romans to mean a military grade in the Army. This was related to the number ten. The general assumption was that this might refer to someone in command of ten men, officers, companies, or battalions.

Also, in the times of Justinian (483-565 A.D.) and during the Theodosius era (484-526 A.D.), it was reported that the dean was an officer in the Roman and Byzantine civil government. The Anglo-Saxons were also said to have adopted such a name for their public servants. No wonder, about the year 400 A.D., Jerome, in the Vulgate, defined a 'dean' as one who has authority over ten (Hodges and Hodges, 1975).

The Catholic church derived the word Deacons for the Bible from the word 'dean'. Then, a *deacanus* was said to have been appointed to control the educational and religious life of ten monks in the monasteries. With time, the *deacanus* became a director of admissions as well as a counselor to Catholic church schools.

Hodges and Hodges (1975), therefore, reasoned that the fact that the early schools were owned by the Catholic church must have been responsible for the church's term finding its way into the schools. Since such schools were inseparable from the universities, in the mid-twelve centuries, the word, "deacanus" was used in the universities too. It, however, took a new meaning in the academic structure of the Universities – the dean of faculties.

This university structure grew into an organizational hierarchy as the universities expanded rapidly. Some deans were given more authority and power over and above others and such became the nucleus of what was known as the graduate dean. Ever since, their duties/functions varied in relation to their mission, character, location and administrators' characteristics. Hence, Gould's statement of 1964 is an historical fact which is still valid today, that "there is no such thing as a standardized dean" (p. 9). For example, a graduate dean could be alumni director, fund raiser, public relations person, professor or senior dean. S/he could also serve as a liaison between the deans of the various schools in the universities and the president.

Evolution of the Roles of Academic Dean

In order to put the roles of academic deans into perspective, for the purposes of this study, the researcher has adopted Naugle's (1980) approach by classifying the roles of academic deans into four main periods in this study. (1) 1869 to 1900, (2) 1901 to 1939, (3) 1940 to 1959 and (4) 1960 to 1990. The setting during each period as well as the dean's functions were discussed and the changes occurring from one time segment to another were specified.

1869 to 1900

The roles of academic deans in the administration of American Colleges and Universities did evolve from two sources. The first one was through the establishment of separate and relatively independent professional schools. In this connection, the first such American deans appeared in the early nineteenth century. The second source of American deanship evolved to aid the president and relieve him, mainly, of administrative functions which were becoming impossible for him to perform. This fact was manifested in the reason given by President Eliot of Harvard College on the establishment of the Dean's office in 1869. The following excerpt clarifies the reason:

The discussion which preceded and accompanied the last election of President of the University showed clearly that both the Governors and the Alumni thought that the President had too much to do, and that he should be relieved of the immediate charge of the college administration. To carry into effect this universal opinion, the Corporation and overseers, in the months of January and February, 1870, concurred in adopting a new statute creating the new office of Dean of the College Faculty, and defining the duties of the Dean (Ward, 1934, p. 103).

In his own book, *The Problems of Administration in the American Colleges*, DeFerrari (ed.) (1956) noted that "the office of the dean was created in many colleges to aid the President. In others, it came into being to meet an emergency, such as the illness, resignation or death of the president. Sometimes, it came about through the reorganization of the college, and sometimes, it was created outright at the opening of the college" (p. 55). Ward (1934) then clarified the the functions of the pioneer dean as follows:

... it is his duty to preside at the meetings of the faculty in the absence of the President; to administer the discipline of the College; to take charge of all petitions from undergraduates to the faculty; to keep records of admission and matriculation; to furnish such list of students as may be required by the faculty or the several teachers; to prepare all scales of scholarship, and preserve the records of conduct and attendance; to submit each year to the faculty lists of persons to be recommended for scholarships and beneficiary and, likewise, a list of those who appear from the returns made to his office, to have complied with all the regular conditions for the degree of Bachelor of Arts; and in general, to superintend the clerical and administrative business of the college (Ward, 1934, p. 24).

More light was shed on this subject of the roles of the pioneering academic deans of nineteenth century by Brubacher and Rudy (1958) in their work, *Higher Education in Transition: An American History*,1636-1956. They commented, that:

Harvard in 1870 appointed Professor Ephraim Gurney as what might be termed the first college "dean." Professor Gurney was primarily an "academic dean." He did little counseling. His main task, apart from teaching, was to take the burden of discipline off President Eliot's shoulder (p. 322).

They went on with their comment that:

In 1890, a Board of Freshmen Advisers was set up at Harvard and the deanship was divided into two offices. This involved essentially a division of labor between an academic dean and a dean of student affairs. LeBaron Russell Briggs, who became a Harvard dean in 1890, came increasingly to perform the latter roles and, anticipating the later personnel movement, took on many functions besides purely disciplinary ones (p. 322).

As late as 1964, authorities were still writing about the purpose of academic deanship. Gould (1964) said in his book, *The Academic Deanship*, that the office of the dean was created largely to assist an over worked college or university president.

From the foregoing, it was evident that the basic purpose of the establishment of the Dean's position was a concern for the conservation of the president's time for the execution of his/her primary roles. At that point, in the history of American higher education, the president's roles was perceived as an educator and, therefore, no administrative responsibilities was to be allowed to divert his/her (President's) attention from this primary roles. Hence, the establishment of the Dean's office.

A comparative study of Harvard's Dean's functions vis-a-vis the contemporary academic deans revealed that there has been a great (if not total) diversion from the initial functions of the academic work of the dean multiplied as a result of student population increase from 563 to 776. The dean's office could not help but seek relief. The result was the establishment of the College Registrars Office which took over part of the Academic Dean's functions including student records. Similar to the President's position, the Corporation (similar to the Board of Regents) perceived that the Dean's roles was too large "for a professor, actively engaged in teaching" (Ward, 1934, p. 19). This confirmed that the Dean was also regarded as an academician and his roles as such was, therefore, protected by passing some of his roles to the Registrar's office.

To summarize the responsibilities of the pioneer dean, 1869 to 1900, it was evident from Ward's statement that his roles were basically student oriented. Only one area related to faculty, another one related to administration, while the remaining four groupings were student related.

1900 to 1939

As stated previously, in the early days of American Colleges when student populations were small, the president alone could handle all problems of both faculty and students. However, with the rapid growth of enrollments, the president's functions multiplied and he/she became more involved in making contacts and raising funds. The result of this was the need to delegate more and more responsibilities to faculty members and to working committees. More notably was the institution of deanship in many colleges which was "to aid the president" (Dibden, 1968, p. 9). During this period too, except in colleges of less than one hundred students, the dean's functions had changed from being predominantly student oriented to being a combination of students and academic responsibilities. This fact was attested to by many sources in the literature on academic deans noting reduction in student-related functions in favor of more academic-related ones.

For example, notable works done on the roles of academic deans were those of

Reeves and Russell which were completed in the years 1929 and 1932 respectively. The 1929 study surveyed the condition in 16 colleges under the direction of the Disciples of Christ and a number of other public and private institutions. The second survey (1932) examines the administrative duties in 35 colleges that were related to the Methodist Episcopal church. Both studies listed 13 functions most frequently assigned to the dean and the lists were identical in both studies. They are:

1. to direct the educational activities of the College;

- 2. to act as chief **adviser** to the president in matters of college policy, particularly in academic affairs;
- 3. to formulate educational policies and to present them to the president and faculty for consideration;
- 4. to direct the attention of faculty members to changing educational thought and practice, particularly as they affect higher education;
- 5. to transmit to the president the budget recommendation;
- 6. to make reports relating to the work of the college;
- 7. to supervise curriculum, courses, and methods of instruction;
- 8. to cooperate with heads of departments in the nomination of new members for the teaching staff, and to make suggestions to the president regarding the promotion, demotion and dismissal of members of the faculty;
- 9. to serve as a member of the administrative council;
- 10. to classify students and assign them to classes;
- 11. to study the progress and academic welfare of students;
- 12. to serve as chief disciplinary officer of the college; and
- 13. to represent the college at meetings of educational institutions (Reeves and Russell, 1929, pp. 73-74).

In the 1932 study, Function No. 9, was replaced with "to assist in the recruiting of students" (Reeves and Russell, 1932, p. 87). A break down of the above 13 functions as listed in the 1929 study shows academics dominating with four functions; three were student-oriented, two were related to departmental responsibility, and one each was faculty, policy administration and institutional oriented, respectively.

A study was also conducted by Kinder which was published in 1934. This study surveyed the administrative practices of 90 liberal arts colleges. The findings revealed that 50 of the surveyed institutions were yet to define the dean's functions. In the study, the deans were asked to indicate the roles incumbent who was responsible for each of 60 administration activities. The result showed that both the president and the dean shared the student responsibilities. For instance, while the president handled scholarship and loan funds, the dean monitored class attendance and supervised all student discipline.

Another important study was conducted in the same year (1934) by Ward whose finding was congruent with Kinder's (1934) as well as Lubbers' (1932). Ward surveyed the roles of the dean in 391 colleges and universities and found that 330 schools (84%)already had deans. Lubbers' (1932) also showed 127 of the 180 colleges he studied (71%) having deans already. Even though Wards (1934) did not find any function different from what was known already, he emphasized the increase in the scope of the deans' functions as well as the shift from his student responsibilities to academic area. This is evident in the following statement: In institutions where the office of dean has existed for a considerable period of time, its duties have generally increased in scope. Expansion, indeed, has been so great that some of the duties performed earlier by the dean are now being delegated to new or subordinate officers as additional vital responsibilities present themselves at the dean's door.

The dean of the faculty is in a strategic position in relation to many of the major problems in higher education today. Increasingly, he is becoming the head of college instructional administration (p. 27).

The last study reviewed for this period 1900-1939, was Clyde A. Milner's TheDean of the Small College which was published in 1936. Milner studied the data submitted by 100 small colleges from 35 states of the union. The result of that study also corroborated those of previously reviewed studies covering this period.

Based on the findings of the literature reviewed, this period (1900-1939) was noteworthy for two major changes: first, that the the dean's position became universal during this period; and second, that a shift from studentoriented functions to academic-oriented ones became more evident.

1940 to 1959

The first relevant action taken to examine the roles of deans during the period under review was at the North Central Association workshop at the University of Chicago in August 1945. Twenty-one educators attended the workshop using the thirteen functions listed by Reeves and Russell (1932) as their basis for dicussion (see page 41). They did delete from, add to and did modify these functions according to their experiences since 1932. Therefore, at the end of their deliberations, there emerged a new list of functions for a college dean. The new list comprised two categories of functions that were added to Reeves and Russell's (1932) list – one, by the majority and the other by the minority. The majority agreed that the following be added:

- To carry out the educational policies determined by the board and the faculty under the president, who is the chief executive officer of the board.
- To organize recommendations beginning in departments or divisions, and initiate others in regard to instruction, personnel, and educational matters so that they clear through the dean and then are made by him to the president.
- To act as the representative for the president in his absence.
- To have general supervision of personnel procedures. In view of the fact that student data in the registrar's and personnel offices are an integral part of the dean's academic program, they are either under his supervision, or closely related, or they are made easily accessible to him. Whatever the arrangement, close coordination and harmonious relationships are highly essential. If there is a personnel director, this is naturally changed.

The minority additions included the following:

- To assist the registrar in preparing the new catalog.
- To prepare the agenda for faculty meetings and review the faculty minutes before they are distributed to the faculty.

- To preside at faculty meetings.
- To be an advisory member on the student council or the student senate.

There was a unanimous agreement at the workshop to delete the following from the Reeves and Russell's list.

- To assist in the recruiting of students.
- To classify students and assign them to classes.

It is noteworthy that half of the representatives delegated their function as college disciplinarian to either their deans of men or women while the remaining half still retained the function (Emme, 1946).

From the foregoing, it was evident that by the year 1945, new functions in the area of academic activities had been added to the dean's roles while some functions that were student-oriented had been eliminated. Sister Mary Frances (1947) gave the following reasons for these changes:

- 1. The institution of the registrar's position as well as the emergence of the deans of men and women offices;
- 2. The establishment of the student personnel office;
- 3. The growing demand and pressure on the presidents for other administrative and public relations activities (e.g., expansion problems, fund raising, alumni and other pressures separated him/her from the original academic activities;

4. The above factors led to the delegation of the academic responsibilities to the dean which in turn forced the dean to delegate student responsibilities to other officers like the dean of men and/or of women (pp. 86-87).

In 1946, there was another study conducted by Ruth Higgins as cited by Naugle (1980). She surveyed 404 college deans and had a return of 161 questionnaires. Having studied the returned questionnaires, Higgins confirmed that the 1934 and 1936 studies by Ward and Milner, respectively, sufficiently represented the range of academic dean's responsibilities. The survey, in addition, showed that the position of academic deans in most of the 161 cases had become supervisory or coordinative regarding the student-related activities. At the same time, in some of the institutions, the students' responsibility had been dropped off the deans' responsibilities in some institutions.

In another study involving the Catholic institutions of higher education, Frances (1947) identified discipline as the only student-related function which was not clearly assigned to either the dean or the student personnel officer. She confirmed, among others, that the main responsibilities of the academic dean had to do with the organization and administration of the scholastic program such as supervision of curricula, courses of study, and scheduling (p. 20). Earl J. McGrath, the former United States Commissioner of Education, wrote an article when he was Dean of the College of Liberal Arts at the State University of Iowa in 1947. In the article, he pointed out the excellent general academic roles and reputation of deans despite their position as administrators. He, however, lamented that the burdens of the war and post war years had been sapping off their efforts. The effect of this situation was described

as follows:

More than any other administrative officer, the dean, until very recently, could be considered *primus inter pares*. Now, however, even in the smaller liberal arts colleges, this officer is rapidly ceasing to be an intellectual leader. More and more he is devoting his time and energy to managerial duties, public-relations activities, and the minutiae of routine administration (p. 41).

He likened this development in the dean's roles to that of the President in the early 1900s when he was forced to abandon teaching as well as close relations with faculty and students in favor of non-academic functions. He warned that the dean, too, was already ceasing to be an intellectual leader which should be. It was saddening to see that the academic leadership that the dean just assumed was already eluding so fast.

The 1950s era saw student personnel services take over the remaining student related function of the dean – discipline administration. This was evident in Finnegan's (1951) study of 34 Catholic male colleges. Though Finnegan did not find any significant difference from the findings of the earlier studies, he, however, found that the majority of his respondents delegated their responsibility for discipline. Either the dean of men or an assistant dean got this responsibility. The responsibilities for records, credits, transcripts, and similar work were given to the Registrar.

As a result of his investigation of the liberal arts colleges, Sheffield (1951) reported that the dean's major responsibilities included student personnel services, public relations and community service, as well as business and finance. It was possible to infer from this study, too, that even though the dean was not directly involved in the student personnel area, he oversaw the area. The same study revealed also that some of the colleges surveyed had appointed certain individuals to take charge of student personnel functions in their institutions such as the "director of student personnel services" (p. 240). According to Sheffield (1951), the position became common in most of the large colleges.

The more the president became more pressured and absent from campus the more the dean became more involved in institution-wide responsibilities. The dean's increasing involvement in such responsibilities brought about the evolution of the student personnel services. The second factor that led to the institution of the student personnel services was the emergence of the trained student personnel officers who started to replace the paternalistic dean of men and women respectively (Henderson, 1957). Henderson (1957) summed up the relationship between the dean and the president in the administration of a college as that of a team in which the dean served as a junior member.

To conclude the review of the literature on the period 1940 to 1959, two more dissertations were examined: Cole's (1955) dissertation corroborated the functions of the dean as were found in earlier studies while Craig (1958) contradicted the findings. He found that the dean was still heavily saddled with student-related functions. Of the ten deans who responded to his questionnaires, five were still involved with admission, nine approved student programs, six were student counselors, and three were discipline officers. Only one dean had little or no involvement with admissions while one had little or no involvement with discipline function. This dissonance sounds strange and may be due to the small size of the sample – ten deans only. In summary, the changes/characteristic of/in the dean's roles during 1940 and 1959 are that:

- all student-related aspects of the dean's functions have been taken over by subordinate officers such as registrar, dean of men, dean of women and student personnel officer;
- student discipline was the last student-related function of the dean. This also was delegated in the 1950s;
- consequently, the dean has become the academic leader of the college serving as the junior member (to the President) of the two-member leadership team; and unfortunately;
- an alarm had to be sounded regarding the external pressures upon the dean's office which was quickly eroding the academic leadership position.

1960 to 1989

A brief background of this period will be useful to illuminate the development of academic dean's roles during the three decades of 1960s through the 1980s. The decade of the '60s was characterized by two principal events: (1) an unprecedented enrollment increase and (2) unprecedented student unrest. Harold Perkin (1984-85) said "For the 1960s was the age of human-capital theory, when every kind of human problem was to be solved by the magic potion of investment in people, in the production of bright young graduates trained to build a better world" (p. 10). These two great phenomena resulted in diversified academic programs (curriculum) and agitations by the students and faculty members for a say in the administration of the colleges. This situation was attested to by Conant (1967) when she declared that "the position of the academic dean has grown to include far more than ancillary duties" (p. 276). She said that at the decade of the '60s, the academic dean was or was supposed to be a leader, and that what he did or what he might do were not independent questions. She asserted that many of the highest goals of an educational enterprise were articulated by the dean, whose mission and powers involved daily accommodation of theory and goals "to practice and reality".

Just as Conant (1967) expressed that the academic deanship has grown "out of ordinary", so also Brown (1969) made it clear that administrative leadership in a college or university was a peculiar brand of leadership based on the nature of an educational institution. He emphasized that the college's leadership must operate through response rather than command.

The 1970s came with its own peculiarity. It was a period of retrenchment which was brought about by end of the Vietnam war, the draft and unemployment. College education had lost its attraction. The result was a decline in enrollments despite the proliferation of programs and facilities. Besides, too, faculty and staff continued to increase. These posed great challenges to the college administrative team of which the academic dean was an indispensable member. Legal and legislative structures proliferated also and public esteem was on the decline.

The challenge posed by the '70s gave birth to the issue that characterized the 1980s – enrollment management and strategic planning. Enrollment management, according to Kemerer et al. (1982), "is an umbrella term covering a number of interdependent activities" (p. 5). Kemerer (1984-85) discussed in his article "The Role of Deans, Department Chairs, and Faculty in Enrollment Management" that such interdependent activities included clarification of institutional mission, long-range planning, academic program development, marketing, recruiting, admissions, financial aid, orientation, registration, retention, and career planning and placement.

A good number of the available literature covering these difficult decades of the '60s, '70s and '80s recognized the dean as responsible for giving academic directions to the college. For example, Miller (1974) said that "the academic dean, sometimes called the vice-president for academic affairs, is directly responsible for the overall educational program which is the raison d'etre of a university's existence" (p. 231). Roaden (1978) confirmed this also in his description of the dean's function. He described the dean as "giving academic leadership to his college" (pp. 23-32).

As earlier noted, the dean still remained the junior partner in the college administration team where the President was the senior. However, though the dean was mostly regarded as the academic leader during the period under review, his office soon became a less enviable one. No wonder, the uncooperative responses given and reasons adduced by a number of academic deans caused Buchen to conclude in his research report in 1974, that the deans' schedules were horrendous. He stated further: "According to it, the dean is really a monk in at least two respects: (1) He is constantly fasting and, although he may be married and have children, for all practical purposes he is celibate" (p. 498). As for the present-day dean, he is observed as running a

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'pathmark' schedule. "One of the most difficult positions in higher education these days is the job of the academic dean" (McDaniel, 1978, p. 358). Dill (1980) also regretted that the contemporary dean's office is no more a president's satellite office but has become an uneasy middle management position "with political overtones". Wolotkiewicz, in the same year (1980), described the dean as the executive officer of his college. In 1985, Palm conducted research about the ideal functions of the academic dean as perceived by experienced deans in selected colleges accredited by the American Association of Bible Colleges. His three-round Delphi series identified seven role functions that were agreed as ideally important for academic deans to perform. They were to (1) lead in faculty personnel decisions, (2) promote faculty morale and team spirit, (3) provide for faculty development, (4) prepare and supervise budget, (5) conduct long- and short-range plannings, (6) direct academic programs, and (7) communicate spiritual values and philosophical ideals. Of these seven role functions, three were faculty affairs-related, one each was financial affairs, administrative affairs-, academic affairs- and spiritual affairs-related. By 1987, McCarty and Reves called the dean "a symbolic figure who facilitates rather than leads" (p. 2).

The challenges of the '80s still linger on and a look at the current trends and the future poses greater challenges and fears. Even though there have been reports of increased applications at many institutions, Kemerer (1984-85) warned that the demographic factors coupled with the improving economy did not augur well for higher education as a whole. He suggested that the volume of applications being received by different institutions might, in fact, be from a smaller number of students but filing more multiple applications. Despite these emanating problems of the college administrators, they are still faced with faculty-related problems. "Most deans believe that they have more responsibilities than power" whereas "many faculty members believe that the deans hold far too much power" and, even use it capriciously (Conant, 1967, p. 278). The views are divergent regarding the roles of deans and the situation creates a need for unity of purpose among the different college constituencies.

Future Challenges/Perspectives

The challenges of the past three decades could be aggravated in the decade of the '90s if Skippers' and Hodgkinson's observations of 1976 and 1984-85 respectively, as cited in Kemerer (1984-85) are accurate. Skippers (1976) warned that "as College and University leaders look ahead to the 1980s and a declining college age population and increasing competition for students from technical and proprietary schools, the demand for high level leadership will be greater than before, even greater than in the growth period of the 1960s because the 1980s, by contrast, will be a period of retrenchment when difficult decisions on resources, programs, and personnel must be made" (p. 138). Hodgkinson's observations are discussed in Chapter 1.

Carolyn J. Mooney (1988) also warned that the number of high school graduates is expected to decline 25% by 1994. Citing the census figures as her authority, she predicted a scramble to fill classrooms. In the same article, Mooney observed that institutions must also cope with the changing make-up of the college age population, which has been projected by some educators to be one-third minority by the end of the year 2000, and changing academic interests among students. She also observed that adult students have enrolled in increasing numbers – and that this development has affected teaching, counseling and learning.

When Buchen (1974) considered the trends of events in higher education by 1978 and projected into the future, he concluded that the dean of the future should have as his academic discipline that of futurism, predicated on a wholistic view.

Role Theory

Role norm has been defined as "specific observable behaviors which an office holder is apt to exhibit when facing a particular recurrent situation" (Dejnozka, 1978, p. 85).

Getzels (1958) an organizational theorist, claims that the behavior of a leader is the result of two factors: the idiographic and the nomothetic. According to him, the idiographic factor is the **personal** dimension which is a totality of the role incumbent's personality and needs disposition while on the contrary, the nomothetic factor is the organizational dimension which is made up of role and role expectations that are associated with a given position. In other words, the theory implies that the way in which the two factors interact determines the way in which an observed organizational behavior is performed.

Researchers have been using social systems theory to explain educational organizations since 1950. The theory recognizes two types of systems – the

open and the closed. Social systems (or organizations) that belong to a closed system operate independent of their environments while those of an open system cannot operate independent of their environment.

In view of the above, the open educational system is the only one that can adequately describe educational organizations. This is because of the dependence of such organizations on their environment (Owens, 1970).

A university, or any educational organization, according to the criteria above description and as indicated under 'characteristics of land-grant colleges', belongs to the open system. It is closely related to its environment which is a conglomeration of the various suprasystems of the university as well as its subsystems. Some examples of the subsystems are the community, the Federal and State governments, the accreditation bodies as well as the university's own constituencies. According to Owens (1970), it is important to understand the suprasystems to be able to define the boundaries of the organization in relation to its external environment. This review will not delve more on the suprasystems since it is not pertinent to the present study.

As stated above, the environment contains the university subsystems. It is from these subsystems that the behavior of individuals can be analyzed along with the factors which influence those behaviors. In order to associate an individual with an organization, his/her position in the "global" set of relationships that make up the organization has to be determined first. The instrument through which the location can be done is the "office." The office can be described as a relational concept that defines one position in terms of its relationship to others in the organization and also to the social system as a whole. To each office that exists is attached a set of "activities" which are characterized as potential behaviors. These "activities" constitute the "roles" to be performed or, in principle, to be the responsibility of any person who may occupy that office (Khan et al., 1964).

Raven and Rubin (1983) have defined "role" as "a pattern of behavior that characterizes and is expected of a person who occupies a certain position in a group or social organization " (p. 737). Therefore, according to Robert Owens (1970), the formal structure of an organization comprises a "fabric of roles" (Owens, 1970). Getzels and Guba (1957) also describe the organization as a social system which features a hierarchical role structure.

In "Methods for Determining Patterns of Leadership Behavior in Relation to Organization Structure and Objectives," Stogdill and Shartle (1948) describe the organization as a social group in terms of performance, interaction and expectations of its members. In summary, the social system theory recognizes the organization as a series of interrelated roles.

It is not surprising, then, that the role theory has been used by academicians to explain and predict individual and organizational behavior. The theory, according to Owens (1970), has been relatively well developed and its language is rather specialized.

One of the basic postulates of role theory, as expounded by a number of early theorists such as Newcomb (1950), Parsons (1951) and others is that a person's attitudes will be influenced by the roles that he occupies in a social system. Seymour Lieberman (1956) also conducted a study of the effects of changes in roles on the attitude of role occupants. He found that there are relationships between attitudes and roles. That is, different attitudes are held by people who occupy different roles. However, the attitude of each actor (role incumbent) is determined by the interpretation which s/he gives to his/her roles. Such interpretation is also dependent to some extent on the personality of the role occupant and also on what s/he brings to the position (Owens, 1970).

Having, hitherto, established that there is a relationship between roles and attitudes, it is necessary to examine a few of the common terms in role theory – Role expectation, role perception, role conflict and role congruence.

Role Expectation

Every social system is made up of several members (or observers). Each observer has certain expectations of how the incumbent of each position/role will behave. Hence, one can expect the role expectations for a position to be as numerous as there are observers/members. Getzels (1958) said of role expectations:

Roles are defined in terms of role expectations. A role has certain normative obligations and responsibilities, which may be termed "role expectations," and when the role incumbent puts these obligations and responsibilities into effect, he is said to be performing his roles. The expectations define for the actor, whoever he may be, what he should or should not do as long as he is the incumbent of that particular role (p. 153).

In their own work, Gross et al. (1958) spoke of expectations as evaluative standards applied to an incumbent of a position. The expectations are considered with what **should** be the person's behavior rather than with what

it will be. Lonsdale (1964) too referred to role expectation as an anticipation of a behavior or set of evaluative standards that may include personal attributes desired in the role incumbent. As earlier mentioned, role expectations can be as numerous as there are organization members but they can be categorized into three main groups. The first is institutional role expectation (Owens, 1970) which includes a person's location/position in the chain of command, the amount of authority associated with the position, and the person's specific functions and duties. Such role expectations are organizationally stipulated and are related to the position/office rather than the individual incumbent. Second, the role incumbent has expectations of his/her role behavior. Such self-perception of his/her role is influenced by many factors, such as background, social class, values, attitudes and self-concept (Gibson et al., 1982). The third and final category of role expectations is that which each and every-one in the social system has of the incumbent. Many of those will be subordinates while others will be super-ordinates of the incumbent.

Role Perception

As defined earlier, role norm is said to be "specific observable behavior which an office holder is apt to exhibit when facing a particular recurrent situation" (Dejnozka, 1978, p. 85). In this context, it follows that different individuals can have different perceptions of the behavior associated with a given role. It has been suggested that there is a relationship between job performance and the accuracy of role perception (Szilagyi, 1977). The concept of role perception is more complex in an organization because there may be three different perceptions of the same role – the individual's, the group's and the formal organization's role perceptions (Gibson et al., 1982).

The Individual: The individually defined perception is a factor of one's values and attitudes which are determined by one's background and social class.

The Group: Group perceptions may be formal or informal and they develop with time. The perceptions may not corroborate with the organization's definition. Such role relationships do develop with time and they relate individuals to the various groups to which they belong (Gibson et al., 1982).

The Organization: The formal organization is a conglomeration of a number of offices/positions for which the organization has defined roles. This would include the position in the chain of command, the amount of authority that goes with the position, and the functions and duties of the position. These roles are defined irrespective of any individual member of the organization.

Role Conflict

According to Gross et al. (1958), role conflict can be defined as "any situation in which the incumbent of a focal position perceives that he is confronted with incompatible expectations..." (p. 248). A number of scholars have identified several types of role conflict which are said to inhibit optimum performance by the role incumbent. Some of the sources of such role conflict are conflicting role expectations and role perception toward the incumbent. Such differences about role expectation and perceptions may pervade the whole rank and file of an organization leading to confusion for the role incumbent, who may find it impossible to align the expectations and perceptions of the role with those of the observers (Owens, 1970).

Another type of role conflict emanates when role requirements contradict the needs, values, attitudes and/or personality of the role incumbent. This is referred to as person-role conflict (Gibson et al., 1982).

The third type of role conflict is called intra-role or intra-sender conflicts. This refers to a situation where different individuals expect different behaviors from the role incumbent (Kahn et al., 1964). For example, the University Provost may expect closer supervision of the faculty whereas the faculty expects to have the "almighty" academic freedom. This category of role conflict has been identified as a major cause of the complex nature of educational institutions (Carroll, 1974).

The last type of role conflict to be discussed here is the inter-role conflict. This arises as a result of two or more roles needing to be fulfilled simultaneously – a result of the dean "wearing many hats." For example, the dean may be needed at the University Budget meeting while the College student body needs him/her to resolve an urgent faculty-student disagreement (Kahn et al., 1964). The various role conflicts have been proved to be prevalent in various organizations (Gibson et al., 1982) and they cause tensions and uncertainties that go with inconsistent organizational behavior (Owens, 1970).

Kahn et al. (1964) did a good job of reporting examples (from past research) of consequences emanating from role conflict. They are:

- that the people who experienced role conflict lost confidence in those who inflicted the pressure. The sufferers reduced their interaction with the members who imposed the pressure, and they held them in lower esteem as well as lost part of their own effectiveness;
- 2. that the emotional costs involved caused low job satisfaction, low confidence in social group and carried with it a high degree of job related tension; and
- 3. that those who have suffered role conflict have reacted negatively by withdrawal from or avoidance of those who imposed/caused the role conflict.

Evan (1962), too, reported that sufferers of role conflict, especially those caught between conflicting expectations, often experience stress. Finally, Melvin Seeman (1953) also reported that role conflict was a significant problem in decision making in organizations.

Role Congruence

Role congruence exists between a college faculty member's expectations and his/her perceptions when, for example, the faculty member perceives an academic dean as behaving according to the way he/she feels the dean should behave. Many studies have been conducted that have indicated positive significant relationship between such role congruence and faculty and/or staff satisfaction. It also exists between role congruence and high faculty morale.

Chase (1953) conducted a study on Professional Leadership and Teacher

Morale. The study involved more than 2000 teachers. He found that there were more than 70% chances that teachers would be enthusiastic about teaching in a school where their expectations of the roles of the principal were fulfilled. In another study conducted by Campbell (1959), fifteen principals and 284 teachers were studied in eight elementary schools in Wisconsin and seven secondary schools in Illinois. The purpose was to observe what happens when the principal's role expectations were congruent with the teachers' wants and needs. It was found that (1) the teachers expressed a higher level of job satisfaction, (2) the principal rated the teachers as more effective, and (3) the teachers expressed a higher level of confidence in the principal's leadership.

Bidwell (1955) found that when teachers' expectations of an administrator are not perceived as being fulfilled, they do not know how to predict the administrator's behavior. He also found that teacher satisfaction was related to their expectations and perceptions.

Summarily, studies on role theory can be classified into three major dimensions: (1) Role expectation, studies which seek to identify the role by describing the activities characteristic of the role; (2) role conflict; studies which seek to document the roles disagreement due to conflicting expectations between respondents/observers; and (3) roles discrepancy, studies which seek to demarcate the extent of the difference between real and ideal roles perceptions (Lipham, 1964).

Some of the concepts in this roles theory are relevant to this research and were, therefore, applied. The dean is the role incumbent while the faculty members, comprising the full, associate and assistant professors, are the subordinates. The various categories of the faculty members responded to what they perceived would be the deans' functions by the year 2000. This applied the first role study dimension. Apart from this, the differences between the responses of all the respondent categories were studied. The findings of these differences served as indicators of existing role conflicts which are in keeping with the second role study dimension. Rather than apply the third role study dimension, which seeks to determine the extent of the difference between real and ideal role perceptions, this study examined the other side of the second role study dimension. It studied the similarities between the responses of all the respondent categories. The findings of the similarities served as an indicator of the existing role congruence which can be attributed to the second role study dimension.

To meet an objective of this study, efforts have been made to "spy" the future through extrapolation from the past and current trends as well as through empirical study. All these culminated in the provision of information which will prepare college administrators, Academic Deans especially, for the problems of the '90s.

This chapter has examined the literature and has provided a strong base for understanding this study. Through this review of the literature, the researcher has traced the evolution of the land-grant colleges and universities, the historical background of the title, dean, and the development of the role of the academic dean from its inception to the present. As a tool for understanding this study also, the researcher has also provided some pertinent concepts of role theory. To synthesize the past and the present trends and thereby extrapolate the academic dean's roles by the year 2000, the researcher has facilitated a glance at the future challenges/perspectives through the literature and the empirical data in the subsequent chapters of this study.

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CHAPTER 3. METHODOLOGY

This chapter describes the methods and procedures used in executing this study. It is presented in five sections:

- The description of the population and sample for this study;
- The development of the data collection instrument;
- Validation and pilot-testing;
- Data collection; and
- Research design and data analysis methods.

The Population

The population for this study is comprised of the academic deans and faculty members of all land-grant universities in the United States of America. A current list of the land-grant universities was obtained directly from the National Association of State Universities and Land-grant Colleges (1989) based in Washington, D.C. This list contained the college names and addresses. Though the list did not show the names and addresses of the individual deans and faculty members, it served as a guide to identify those colleges and universities that finally produced the sample for the study.

Sample

Since the population of all deans and faculty members of land-grant universities was so large, the researcher first decided to choose subjects from all land-grant universities that had not changed presidents during the past five years. This criterion resulted in a very small sample. Therefore, an alternative route was explored. The researcher decided to first limit the geographical area to the contiguous United States as well as Alaska in view of the fact that most early land-grant universities would be found there. Also, it was the researcher's view that there would be greater commonalities of the environmental and demographic conditions addressed in Chapters 1 and 2 among the colleges in the contiguous USA. The Iowa State University was eliminated since it was used for the pilot test. With Guam, Hawaii, Puerto Rico and Iowa eliminated, there remained 48 states and the District of Columbia with 68 land-grant universities on the list. The sample list was drawn up from these universities. In order to have an even representation of each state, it was decided to limit the sample to just one university from each state. A list of the universities in states that have more than one land-grant institution was compiled and numbered alphabetically according to their states. Three by five index cards were numbered in the same order and whichever number was picked first from each state list was chosen to represent that state. Appendix B is a map of the United States showing the location of the universities that were finally chosen to participate.

Having chosen these universities, the next assignment was to determine which school/college was to present each university's sample. The researcher subjectively chose five major schools/colleges including two that are traditionally of land-grant universities – agriculture and engineering. Others are arts and science, business, education, and social sciences which are found in most contemporary land-grant universities.

The forty-nine universities were listed alphabetically and on each of six 3" x 5" index cards was written a college discipline (e.g., Engineering). These cards were drawn out one after another. Whichever college discipline was drawn first was the college to be represented by the first eight universities on the alphabetical list. The second college discipline that was drawn was for the next eight land-grant universities and the college discipline on the last card drawn was to be represented by the last ten universities.

At this stage the names and addresses of the Deans were compiled from each university's catalogue. The faculty members were randomly selected from the faculty list of each college/school that was selected. Seim-Cassady's (1985) random selection method was adopted by placing numbered index cards in a rotating drum and pulling out a numbered card each time a faculty member was to be selected. The number would represent the place that the faculty member's name appeared on the roster of his/her college. For example, if number 4 was pulled out from the drum, then the fourth faculty member in that college/school (depending upon how the roster was arranged) would be selected to participate in the survey. There would be a redraw when the department chairperson's number was drawn or when the number drawn was higher than there were faculty members in the category being considered. The HEP 1990 Higher Education Directory provided the addresses of those selected faculty members.

Finally, a list of 196 samples was compiled representing 49 universities from 48 states and the District of Columbia. One dean, one full professor, one associate professor and one assistant professor were selected from each participating university.

Development of Data Collection Instrument

The use of a questionnaire was considered to be the most appropriate method of collecting data for this survey bearing in mind the wide expanse of geographical coverage of the sample. The questionnaire was developed by the investigator guided by the ideas from the review of the literature. Basically, the questionnaire was developed around 8 roles of academic deans, 5 of which are considered traditional. The other three are contemporary areas which the dynamism of deans' roles has bestowed on academic deanship. The roles are:

- Academic Affairs
- Administrative Affairs
- Faculty Affairs
- Financial Affairs
- Students Affairs
- Enrollment Management Affairs
- Global Education/Awareness Affairs; and

• Institutional Political Affairs

The core items of the investigation were in Parts II and III of the questionnaire. As stated earlier, Part II of the instrument contained 66 items regarding the activities of deanship. These activities were grouped under the eight roles stated above. For example, nine items each were administrative, academic, faculty and financial related, respectively; eight items each were students and global education related respectively while seven items each were enrollment management and institutional politics related. The number of items under each unit is of no significance because the researcher generated more items until he felt that the items were enough to address the content questions within each role.

Respondents were requested to rate the activities of academic deans to the extent that they agreed/disagreed that the selected activities would be important by the Year 2000. They were to do this on a 5-point Likert-type scale. The responses and weight placed on them were:

- Strongly agree5
- Agree.....4
- Neutral......3
- Disagree.....2
- Strongly Disagree.....1

In Part III of the questionnaire, the deans and faculty members were asked to rank the eight selected major roles of academic deans in the order of importance that they might be in academic deanship by the Year 2000. Number (1) was to be the role of most importance while number (8) was to be of the least importance. This provided information on how consistent the respondents were in their ratings of deans' activities and in their ranking of the deans' roles. It also provided information on relative consistency between the deans' perceptions and those of faculty members.

Part IV was asking for the respondents' perception about the need for formal training of academic deans by the Year 2000. It also left an open space for free comments and suggestions from respondents. These comments are recorded in Appendix A for the readers' benefit.

Finally, Part I of the questionnaire contained the demographic questions. The respondents were to react to questions about their gender, age, highest degree attained, academic discipline, present academic rank and years in present position. Questions 8 and 9 were to be answered by the Deans only. They were asked about their college and institutional sizes (by head count). They were also asked about the dominant gender of their college student population. Since the deans are custodians of such information being asked, they could dependably represent their school/colleges' faculty members in those areas. The demographic information were useful in analyzing and/or manipulating the data to answer the hypotheses of this study.

Validity and Reliability of the Instrument

In validating the instrument used for this study, the initial draft was given to four colleagues in the Department of Professional Studies in Education at the Iowa State University in Ames, Iowa. The four colleagues represented three different specialized areas in education: higher education administration, education administration and research and evaluation. This was done deliberately to get diversified views and suggestions. The tasks given to the colleagues were to check for errors and readability. They were also to comment on the extent to which the items were measuring what they were supposed to measure, and, of course, to give their own suggestions for improving the standard of the instrument. These tasks were accomplished and a revision of the questionnaire was done accordingly.

The revised version was presented to the researcher's five-member Graduate Committee for review and comments. Based on the committee's suggestions, the instrument was again revised a number of times before a final draft was produced.

The final draft was pilot-tested with all the deans and three selected faculty members from each college/school of the Iowa State University. The faculty members were randomly made up of one full professor, one associate and one assistant professor. Seim-Cassady's (1985) randomization method was used to select the individual participants. The researcher went to this length with the pilot testing so as to have a practical picture of what was coming and to have productive comments and suggestions from various disciplines, ranks and status.

The data collected from the pilot-test was analyzed with the reliability program of the Statistical Package for Social Sciences (SPSSx) (1988) of the Iowa State University Computation Center in Ames. The analysis produced a reliability index (alpha) detailed below. The reliability was run on the core section of the instrument (the 66 Likert-type items) in Part II.

1.	Administrative Affairs Role	(0.72)
2.	Academic Affairs Role	(0.80)
3.	Faculty Affairs Role	(0.78)
4.	Student Affairs Role	(0.77)
5.	Financial Affairs Role	(0.75)
6.	Enrollment Management Role	(0.80)
7.	Global Education/Awareness Role	(0.87)
8.	Institutional Political Affairs Role	(0.83)
9.	Composite Reliability Alpha	(0.93)

A closer study of the Item-Total statistics (that is "Alpha if Item Deleted" column) showed that the items in each of the scale were tightly clustered. The farthest outlyer was only 0.02 away. Therefore, the researcher decided to let all the items remain. Consequently, the review, at this stage, focussed on the comments and suggestions of the pilot study participants. That revised copy formed the final copy of the instrument that was used to collect the data for this study.

It is the Iowa State University's policy that the proposal and instrument of any research that involves the use of human subjects be reviewed and approved by the Committee on the Use of Human Subjects in Research. This was to ensure that the investigator provides proper supervision of the project and that the rights and welfare of the human subjects involved are adequately protected. The proposal and instrument for this study were accordingly subjected to the Committee's scrutiny and they were approved.

Before going to the Press, the investigator chose to have the questionnaire printed in booklet form with color identification. The deans' copies were printed in cream color, full professors' in light grey, associate professors' in grey and the assistant professors' were printed in gold. This facilitated easy and fast identification and references throughout the research process. With the instrument printed, it was time to go into the field for data collection.

Data Collection

The questionnaires were sent to the respondents by mail having identified that method as the most efficient and cost effective with such a sample as widely spread geographically.

The 196 questionnaires were mailed out during the first week of February, 1990, with return postage paid. The subjects were advised to return the questionnaires whether or not they were interested in participating in the study. This was to avoid unnecessarily bothering those who might choose not to participate in the study for one reason or another.

By the sixth week after postage, only 80 (40.8%) of the questionnaires despatched had been returned. Follow-up letters were sent out to the appropriate participants with another copy each of the questionnaire included. This was in case the subjects had lost or misplaced their first copies. A copy of the follow-up letter is in Appendix F. Economic constraints limited the follow-up efforts to mailing as telephone calls to out-of-state locations were too expensive.

As a result of the follow-up effort, 37 more returns were received. This increased the number of questionnaires returned to 117 (59.7%). Of that number, 103 (52.6%) were useable. Six of the unuseable ones were returned blank (assumedly because they preferred not to participate). Two deans replied that they had too tight schedules, two were sent back because the addressees had changed bases and the remaining four were not used because of errors in completion. Therefore, the 103 (52.6%) useable instruments supplied the data for this study. With the data thus collected, the analysis was embarked upon.

Analysis of the Data

The returned questionnaires were examined individually as they arrived for correctness and completeness. Whichever was found useable was coded and key-punched into the computer by the researcher. The Statistical Package for the Social Sciences (SPSSx) (1988) was used to analyze the data.

As earlier stated, this is a survey study in which data were collected about the perceptions of the respondents regarding many items centering around the roles of academic deanship of land-grant universities by the Year 2000. There were a number of variables to be investigated.

Independent Variables

Five independent variables were examined. It was of interest to the researcher to investigate the variations existing in the perceptions of the respondents based on the following six main independent variables: (1) Status (Deans and Faculty), (2) Academic Rank (3) Academic Discipline, (4) College size, (5) Institutional Size, (6) College students' dominant gender.

Dependent Variables

On the other hand, there were two major dependent variables being studied in this research. First was the perceptions of the respondents regarding the roles of academic deans of land-grant universities by the Year 2000. This dependent variable which formed Part II of the questionnaire, was broken down into 66 subvariables put in the form of deans' activities (items). Part III of the instrument consolidated the investigation into eight broad dependent variables of roles. This was to allow for reaffirmation of the respondents' perceptions as expressed through the ratings of the 66 activities of the dean in Part II. The eight broad dependent variables are:

- Administrative Affairs Role
- Academic Affairs Role
- Faculty Affairs Role
- Student Affairs Role
- Financial Affairs Role
- Enrollment Management Affairs Role
- Global Education/Awareness Affairs Role
- Institutional Political Affairs Role

The mean of the respective scores on each of the 66 items formed the resulting perception on that item. Also, the total mean average of each unit formed the perception regarding that role. Similarly, the average mean rank of each of the eight selected roles in Part III formed the perception regarding that role or the dependent variable.

The other dependent variable was the need for formal training in higher education administration for the deans of land-grant universities by the Year 2000. This formed the core of Part IV of the instrument. That dependent variable was responded to by a "yes" or a "no" coded 1 or 2 respectively. Three of the independent variables (status, academic rank and highest degree attained) were also used to verify this dependent variable of formal training for the academic deans.

Overall, there were six independent and 75 dependent variables. Sixtysix of these were possible deans' functions expressed in the form of activities. These sixty-six activities were classified into eight main roles of academic deans in Part III. Further details on this will be discussed in Chapter 4.

Research Questions

This study sought to answer a number of questions including the following specific ones:

1. Are the perceptions of the deans and faculty members of land-grant universities greater than the "neutral" perceptions (3 on a 5-point Likerttype scale) regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000?

- 2. Are the perceptions of the deans and faculty members of land-grant universities greater than the "neutral" perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000?
- 3. Is there a difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000?
- 4. Is there a difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000?
- 5. Is there a difference in the average perceptions of respondents in different academic ranks regarding the importance of the selected eight roles of academic deans of land-grant universities by the Year 2000?
- 6. Is there a difference in the average perceptions of the respondents in different academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?
- 7. Is there a difference in the average perceptions of the respondents grouped in different college sizes regarding the importance of academic deans of land-grant universities by the Year 2000?
- 8. Is there a difference in the average perceptions of the respondents grouped in different University sizes regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?

- 9. Is there a difference in the average perceptions of the respondents among the college gender representations (mostly female, mostly male and equal male-female representation) regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?
- 10. Is the ratio of deans to faculty members the same for "Yes" and "No" responses regarding the need for formal training of academic deans of land-grant universities by the Year 2000?
- 11. Is the distribution of professors, associate professors and assistant professors the same for "Yes" and "No" responses regarding the need for formal training of academic deans of land-grant universities by the Year 2000?
- 12. Is there a relationship between the perceptions of the master's degree holders and those of the Ph.D. degree holders regarding the need for formal training of academic deans of land-grant universities by the Year 2000?

In order to provide answers to the above research questions, the following null hypotheses were generated for testing. Following the hypotheses, too, are procedures used to test these hypotheses which provided answers to the research questions.

Null Hypothesis 1

The mean perception of the deans and faculty members of land-grant universities are **not** significantly greater than the "neutral" perception regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000 (Ho: $\mu \leq 3$).

For any of the selected activities or roles of academic deans to be regarded as of potential importance for the 1990s (to the Year 2000) the researcher set a criterion that it must have an average mean perception that is significantly greater than 3 (3 represents the "neutral" point on a 5-point Likert-type scale).

A 1-tail paired t-test procedure of the Statistical Package for the Social Sciences (SPSSx) (1988) was utilized to analyze the data and for testing the hypothesis. Whichever activity or role had ≤ 3 was classified as of no importance in the academic deanship of the 1990s. The significance level was $\alpha = .05$.

Null Hypothesis 2

The mean perception of the deans and faculty members of land-grant universities are NOT significantly greater than the "neutral" perception regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000 (Ho: $\mu \leq 3$).

Null Hypothesis 2 was treated as the Null Hypothesis 1. The roles were placed under the same criterion and the data analyzed with the 1-tail paired t-test of the SPSSx while the hypothesis was tested with the same procedure at the same significance level.

Null Hypothesis 3

There is no significant difference in perception between academic deans and faculty members regarding the importance of selected activities of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2$).

A two-tail t-test of independent samples program on SPSSx was used to test this hypothesis on each of the selected sixty-six **activities** of the academic deans of land-grant universities by the Year 2000. The $\alpha = .05$ level was set for the significance.

Null Hypothesis 4

There is no significant difference in perception between academic deans and faculty members regarding the importance of the eight selected **roles** of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2$).

Similar to null hypothesis 3, a two-tail t-test of independent samples program on SPSSx was also used to test this hypothesis on each of the selected eight broad roles of the academic deans of land-grant universities by the Year 2000. The $\alpha = .05$ level was again set for the significance.

Null Hypothesis 5

There are no significant differences in the average perceptions of respondents in the various academic ranks regarding the importance of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2 = \mu_3$).

A one-way Analysis of Variance (ANOVA) of the SPSSx was the procedure used to test this assumption on each of the eight selected roles. If there was a significant difference in the mean scores, a post-hoc analysis using Scheffé's multi-range test was executed to identify the disciplines that were significantly different in their perceptions. The Scheffé's multi-range test was chosen because of its conservatism.

Null Hypothesis 6

There are no significant differences in average perceptions among the six academic disciplines regarding the importance of the selected roles of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2 \dots = \mu_6$).

This assumption was also tested with one-way Analysis of Variance (ANOVA) procedure of the SPSSx. As it was with hypothesis 2, whenever there was a significant difference, a post-hoc analysis was carried out using the Scheffé's multi-range test.

Null Hypothesis 7

There are no significant differences in average perceptions among the various sizes of college student population regarding the importance of the selected roles of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2 = \mu_3$).

As with hypotheses 2 and 3, a One-way Analysis of Variance (ANOVA) procedure of the SPSSx was also used to test this hypothesis. The Scheffé's multi-range test was incorporated in the procedure for a post-hoc analysis to identify college sizes that were significantly different in their perceptions.

Null Hypothesis 8

There are no significant differences in average perceptions among the various sizes of universities regarding the importance of the selected roles of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2 \dots = \mu_4$).

A One-way Analysis of Variance (ANOVA) of the SPSSx was used to test this hypothesis too. The Scheffé's multi-range test procedure was also incorporated in the One-way program for possible significant difference analysis.

Null Hypothesis 9

There are no significant differences in average perceptions among the college gender representations regarding the importance of the selected roles of academic deans by the Year 2000 (Ho: $\mu_1 = \mu_2 = \mu_3$).

A One-way Analysis of Variance (ANOVA) procedure of the SPSSx was again used to analyze the scores to test hypothesis 8 too. The post-hoc analysis was also done by using the Scheffé's multi-range test. This test identified the dominant gender groups that were different in perceptions – mostly female, mostly male, or equal female-male representation.

Null Hypothesis 10

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of their status – Deans and Faculty.

In keeping with Borg and Gall's (1983) advice, when scores are dichotomous or in the form of categories or ranks, one of the non-parametric statistics should be used for data analysis. The research data for this and the next two hypotheses were in the dichotomous or categorized forms. They were also of nominal scale. Therefore, a non-parametric test of chi-square (χ^2) was used to test independence between the various categories.

To determine the prevalent perception of respondents regarding the need for formal training of academic deans of land-grant universities by the Year 2000, the Frequency procedure of the SPSSx was utilized to get the counts for "Yes" and "No" responses.

Null Hypothesis 11

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of academic ranks.

The same procedure described under hypothesis 9 applied here.

Null Hypothesis 12

There is no significant relationship between the mean perceptions of the master's degree holders and that of the Ph.D. degree holders regarding the need for formal training of academic deans of land-grant universities by the Year 2000 (Ho: $\mu = 0$)

The chi-square non-parametric procedure of the SPSSx was used to analyze the data and test this hypothesis too.

CHAPTER 4. DATA ANALYSES AND FINDINGS

In this chapter, the results and findings of this study are presented. There are three sections in the chapter: (1) a short section summarizing the responses and rate of return of questionnaires, (2) another short section devoted to demographic analysis and (3) a larger section devoted to the hypotheses testing.

Survey Responses

Position of Recipient	Number Mailed	Number Returned	%	Number Useable	%	Number Unuseable	%
Deans	49	37	75.5	32	65.3	5	10.2
Professors	49	34	69.4	29	59.2	6	12.2
Associate Professors	49	22	44.9	19	38.8	3	6.1
Assistant Professors	49	26	53.1	23	46.9	3	6.1
TOTAL	196	119	60.7	103	52.6	17	8.7

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 Table 4.1:
 Frequency distribution of questionnaires based on Academic Positions

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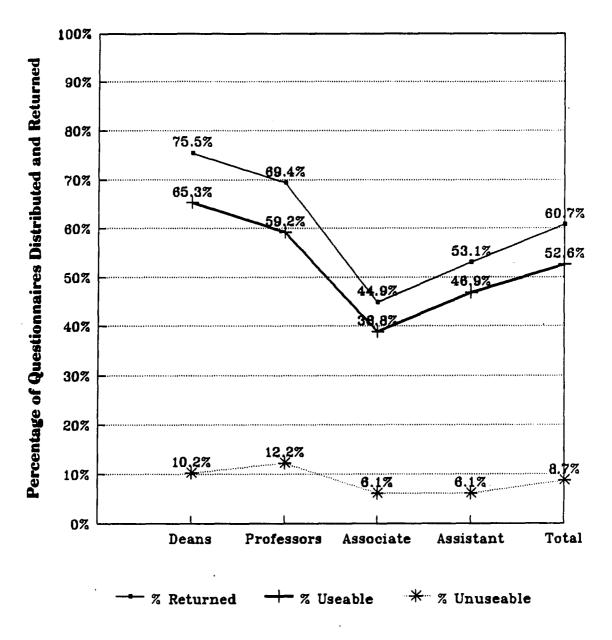
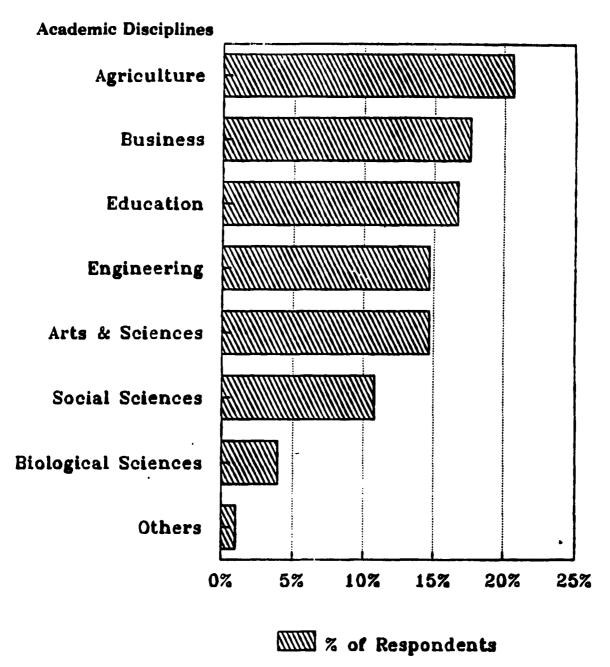


Figure 5.3: Perception means of respondents in different academic ranks regarding the importance of the selected **Roles** of academic deans of land-grant universities by the Year 2000





The questionnaire was mailed to 49 academic deans and 147 faculty members representing the three regular academic ranks in a university community – full, associate and assistant professors – during the second week of February, 1990. As presented in Table 4.1 and illustrated in Figure 4.1, the number of questionnaires returned by the deans, full, associate and assistant professors were 37, 34, 22 and 26 respectively. Of that number, 32, 29, 19 and 23, respectively, were found useable, leaving sixteen questionnaires. When the returns were further analyzed by academic discipline, the agriculture discipline topped the list with 21 returns and the other disciplines followed in the following order: business (18), education (17), engineering (15), arts and science (15), social sciences (11), biological sciences (4) and others (1). Figure 4.2 presents this order. The five responses from Deans that were unuseable could be categorized as follows: two who indicated their inability to participate in the study due to pressure of work, and three others who could not participate for personal reasons.

In the full professors' group, six questionnaires were returned uncompleted. One was because the addressee was out of the country, two had moved and their forwarding addresses were unknown and the other three full professors preferred not to participate.

The Associate and Assistant Professors were alike in the number of unuseable returns with three in each group. One questionnaire from each of these two groups was incorrectly completed while two addressees from each of the two groups chose to opt out for personal reasons.

In total, out of the 196 copies of the questionnaire that were distributed,

103 (53.0%) were usable and these supplied the data that were analyzed.

Demographic Analyses

A study of the data revealed that 23 (22.5%) of the respondents were female while 79 (77.5%) were male. When categorized according to their academic ranks, 60 (58.9%) were of full professorial rank, 19 (18.6%) were of Associate Professorial rank, while 23 (22.5%) were of the assistant professorial rank. Of the 60 full professors, 32 were academic deans. That is, 31.4% of the total number of respondents were academic deans while 70 (68.6%) were faculty members.

Most of the respondents, 94.2%, had attained Ph.D. degrees in various disciplines while only 6 (5.8%) reported master's as their highest degrees attained.

Seven main disciplines were represented by the respondents. Twentyone (20.6%) of them had their highest degrees in agriculture, 15 (14.7%) in arts and sciences, four (3.9%) in biological sciences, 18 (17.6%) in business, 17 (16.7%) in education, 15 (14.7%) in engineering and 11 (10.8%) in social sciences.

The academic deans were asked to provide the sizes of their colleges, that of the universities to which their colleges belong as well as the gender representation of their college student population. The information from their responses revealed that the colleges could be grouped into 5 size cells. A summary of all the demographic responses is presented in Table 4.2.

Variable	Number of Respondents	Percentage of Respondents
GENDER		
Female	23	22.5
Male	79	77.5
AGE GROUP		
31-40 Years	21	20.6
41-50 Years	37	36.3
51-60 Years	36	35.3
61 Years and Over	8	7.8
HIGHEST DEGREE OBTAINED		
master's	6	5.9
Ph.D.	89	87.3
Others	7	6.9
ACADEMIC DISCIPLINE		
Agriculture	21	20.6
Arts & Science	15	14.7
Biological Sciences	4	3.9
Business	18	17.6
Education	17	16.7
Engineering	15	14.7
Social Sciences	11	10.8
Others	1	1.0
ACADEMIC RANK		
Professor	60	58.9
Associate Professor	19	18.6
Assistant Professor	23	22.5

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Table 4.2: Summary of demographic data in numbers and percentages

Table 4.2(Continued)

Variable	Number of Respondents	Percentage of Respondents
STATUS		
Deans	32	31.4
Faculty	70	68.6
YEAR IN PRESENT POSITION		
1-4 Years	31	30.7
5-9 Years	27	26.7
10-14 Years	11	10.9
15-20 Years	17	16.8
21 Year and Over	15	. 14.9
Missing	1	0.0
COLLEGE SIZE (Enrollment)		
Under 500	2	6.3
500-1499	5	15.6
1500-1999	7	21.9
2000-2499	4	12.5
Over 2500	12	37.5
PREDOMINANT COLLEGE GENDER		
Female	11	34.4
Male	17	53.1
Equal Representation	4	12.5
INSTITUTIONAL SIZE (Enrollment)		
Under 10000	4	12.5
10000-19999	13	40.6
20000-29999	9	28.1
30000-39999	4	12.5
40000 and Over	2	6.3

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Null Hypotheses Testing

In this section, each research question will be restated as well as the null hypothesis that was tested in an attempt to answer the research question. Then the finding on that test will be presented.

Research Question 1:

Are the perceptions of the deans and faculty members greater than the "neutral" perceptions (3 on a 5-point Likert-type scale) regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 1

The perceptions of the deans and faculty members of land-grant universities are significantly greater than the "neutral" perception regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000. Table 4.3: Means, Standard Deviations and t-test results of the means of perceptions of respondents regarding the importance of selected **activities** of academic deans by the Year 2000 compared with rank 3/neutral on a Likert-type scale

ID	Selected Activities	Mean	Standard	t-	1-Tail
No ^a			Deviation		Prob
1.	Insuring that decisions made by the university management are properly executed.	4.22	0.83	15.00 ⁶	.01
2.	Developing a vision and/or long-range goals for his/her college.	4.65	0.61	27.66 ^b	.01
3.	Formulating and enforc- ing written policies for his/her college.	4.08	0.88	12.40 ^b	.01
4.	Formulating strategies for achieving college goals.	4.44	0.72	20.17 ^b	.01
5.	Establishing college objec- tives.	4.30	0.77	17.26 ^b	.01
6.	Advising the President about college affairs and recommending to him/her the general policy of the college.	4.36	0.77	18.03 ^b	.01
7.	Developing/reviewing job descriptions for faculty and staff positions.	3.70	1.10	6.44 ^b	.01
8.	Providing facilities for teaching, learning and research.	4.19	0.92	13.19 ^b	.01

^aIdentification number of each activity.

^bDenotes significant t-value.

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Table 4.3 (Continued)

ID No		Mean	Standard Deviation	t- Value	1-Tail Prob
9.	Acting as liaison between the faculty and the uni-	4.15	1.04	11.15 ^b	· · · · · · · · · · · · · · · · · · ·
10.	versity management. Playing an active role in the development of cur- riculum and development.	3.46	1.14	4.08 ^b	.01
11.	Formulating and direct- ing the academic policies of the college.	3.71	1.12	6.44 ^b	.01
12.	Planning and monitoring active research.	3.15	1.07	1.38	.09
13.	Serving on all academic committees.	2.23	1.15	-6.78	.99
14.	Assisting in creating and maintaining an academic environment for the im- provement of standards.	4.33	0.71	19.13 ^b	.01
15.	Getting involved in re- search and publications.	2.90	1.13	-0.87	.81
16.	Studying and solving the academic problems that face the various depart- ments of the college.	3.67	1.04	6.52 ^b	.01
17.	Attending the meetings of the department to which he is related.	2.68	1.19	-2.73	.99
18.	Teaching a course during an academic year.	2.86	1.23	-1.12	.97
	Coordinating the acquisi- tion and retention of qual- ity faculty and staff in all areas of his/her responsi- bility.	4.18	0.80	15.00 ^b	.01

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Table 4.3 (Continued)

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ID	Selected Activities	Mean	Standard	t-	1-Tail
No			Deviation		
20.	Being responsible for fac- ulty improvement pro- grams.	4.06	0.84	12.81 ^b	.01
21.	Encouraging creativity and research among fac- ulty.	1	0.74	18.75 ^b	.01
22.	Maintaining an open door to faculty with sugges- tions and performance of faculty member.		0.96	12.94 ^b	0.01
23.	Evaluating the academic performance of faculty members and their effec- tiveness in teaching.	3.53	1.16	4.67 ^b	.01
	Resolving differences and disputes that occur among faculty members.	3.20	1.11	1.87	.06
	Recommending the aca- demic promotion of fac- ulty members.	4.08	0.92	11.95 ^b	.01
	Recommending faculty for tenure.	4.08	0.94	11.68 ^b	.01
	Involving faculty mem- bers in the appointment of a department chairper- son.	4.40	0.72	19.74 ⁶	.01
	Provide funds for research/teaching assistantships.	4.11	0.79	14.20 ^b	.01
	Providing financial assistance to students for participation in conferences and professional meetings.	3.66	0.89	7.51 ^b	.01

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Table 4.3 (Continued)

	Selected Activities	Mean	Standard	T-	1-Tail
No	·		Deviation		Prob
30.	Providing students with mini-grants to conduct re- search projects.	3.59	0.94	6.37 ^b	.01
31.	Chairing the committees for student discipline.	2.53	1.15	-4.13	.99
3 2 .	Organizing orientation programs for new students.	2.84	1.09	-1.44	.92
33.	Encouraging, stimulating and supporting student activities.	3.73	0.85	8.65 ^b	.01
34.	Maintaining an open door to students with sugges- tions and complaints.	3.59	1.08	5.57	.34
35.	Paying occasional visits to students during classes.	2.84	1.16	-1.44	.92
36.	Securing and allocating fiscal resources for and within his/her college re- spectively.	4.60	0.62	26.40 ^b	.01
37.	Coordinating the develop- ment of his/her college's/ school's budget.	4.64	0.54	30.86 ^b	.01
38.	Recommending faculty salary increases.	4.50	1.03	10.77 ^b	.01
39.	Delegating some financial authority to his/her as- sistants and departmen- tal chairpersons.	4.36	0.77	18.03 ^b	.01
40.	Approving the purchase of various items.	3.31	1.25	2.52^{b}	.01
41.	Approving faculty travel expenses.	2.97	1.29	-0.23	.59

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 Table 4.3 (Continued)

ID	Selected Activities	Mean	Standard	t-	1-Tail
No			Deviation	Value	Prob
42.	Providing necessary financial support for faculty to attend conferences and professional meetings.	4.00	1.01	10.05 ^b	.01
43.	Giving financial commit- ment to the improvement of the quality instruction.	4.19	0.84	14.41 ^b	.01
44.	Approving the expenses needed to accommodate visiting professors.	3.67	0.96	7.05 ^b	.01
45.	Monitoring enrollment trends in the college.	4.17	0.81	14.73 ^b	.01
46.	Researching enrollment strategies.	3.65	1.08	6.10 ^b	.01
47.	Involving faculty in en- rollment management in his/her college.	4.13	0.81	14.07 ^b	.01
48.	Initiating and supporting enrollment management activities.	3.97	0.83	11.82 ^b	.01
49.	Monitoring recruitment and placement strategies.	3.71	0.96	7.52 ^b	.01
50.	Planning class offerings and schedules for tradi- tional students.	2.53	1.15	-4.10	.99
51.	Planning class offerings and schedules for non- traditional students.	2.60	1.15	-3.52	.99
52.	Encouraging interna- tional perspective in curriculum development.	4.50	0.85	13.16 ^b	.01

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Table 4.3 (Continued)

ID	Selected Activities	Mean	Standard		1-Tail
No		i 	Deviation		Prob
53.	Encouraging interna- tional students' enrollment and active participation.	3.82	0.81	10.17 ⁶	.01
54.	Allocating resources to support global education activities.	3.71	0.93	7.78 ^b	.01
55.	Encouraging interna- tional students exchange program.	3.91	0.72	12.95 ^b	.01
56.	Supporting the English- as-a-second language program.	3.08	1.15	0.68	.25
57.	Encouraging and support- ing international faculty exchange.	4.03	0.80	13.09 ^b	.01
58.	Encouraging and support- ing the Students Abroad program.	3.89	0.78	11.64 ^b	.01
59.	Encouraging/supporting the Students/Faculty Re-entry orientation program.	3.50	0.93	5.42 ^b	.01
30 .	Articulating the needs of the College to the Univer- sity administration and to outside groups.	4.70	0.50	34.37 ^b	.01
31.	Practicing institutional/ community public relations.	4.44	0.68	21.41 ^b	.01
32.	Practicing coalition build- ing and related public ser- vice activities.	4.25	0.79	16.12 ^b	.01

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Table 4.3 (Continued)

ID No	Selected Activities	Mean	Standard Deviation	t- Value	1-Tail Prob
63.	Being competent in lobby- ing strategies.	4.20	0.83	14.67 ^b	.01
64.	Being competent in policy development.	4.36	0.74	18.67 ^b	.01
65.	Communicating and pro- jecting an articulate posi- tion for the College and for education generally.	4.50	.71	21.44 ^b	.01
66.	Recognizing and taking advantage of the role and function of mass media in shaping and forming opin- ions.	4.14	.90	12.85 ^b	.01

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Hypothesis 1 was tested using a dependent t-test¹ of the Statistical Package for the Social Sciences (SPSSx). The respondents' mean perceptions on each of the selected activities was subjected to this test. The results are presented on Table 4.3. The table presents the total number of respondents, each activity with its average scores, the standard deviation, the t-value and the one tail probability.

When analyzed for significance at $\alpha = .05$ level, the respondents perceived 52 (78.8%) of the 66 activities positively to be potentially important by the Year 2000. They had negative perceptions of the remaining 14 (21.2%) activities as to their importance by the Year 2000. That is, the respondents' perception means were significantly greater than 3 (neutral perception) at α = .05 level on 52 of the 66 selected activities while they were equal to or significantly lower than 3 (neutral perception) on the remaining 14 activities at the same alpha level. The hypothesis was, therefore, rejected on the 52 items while it was retained on the remaining 14. Table 4.3 presents the details.

Research Question 2:

Are the perceptions of the deans and faculty members of land-grant universities greater than the "neutral" perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000?

¹t-test are made by subtracting 2 means and dividing by the standard error of the difference of the 2 means. If the first of the 2 means is smaller than the second, then the t-value will have a negative significance. In the following analysis, a negative t-value indicates that the tested mean was significantly less than 3'neutral" on a 5-point Likert-type scale

Null Hypothesis 2

The perceptions of the deans and faculty members are not significantly greater than the "neutral" perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000.

Table 4.4:Means, Standard Deviations and t-test results of av-
erage perceptions of the respondents regarding the
importance of selected roles of academic deans by the
Year 2000 compared with 3/neutral on a 5-point Lik-
ert-type scale

Selected Roles	Mean	Standard Deviation	t-value	1-Tail Prob.
Administrative Affairs	4.23	0.48	26.26 ^a	.01
Academic Affairs	3.22	0.68	3.29 ^a	.01
Faculty Affairs	3.97	0.60	16.44 ^a	.01
Student Affairs	3.36	0.62	5.91 ^a	.02
Financial Affairs	3. 98	0.55	18.1 0 ª	.01
Enrollmt. Mgmt. Affairs	3.54	0.66	8.29 ^a	.01
Global Education Affairs	3.75	0.64	11.93 ^a	.01
Institutional Pol. Affairs	4.37	0.52	26.59 ^a	.01

^aDenotes significant t-value.

Hypothesis 2 was similarly tested using a dependent t-test of the SPSSx.

Table 4.4 reveals that the respondents' mean perceptions were significantly greater than 3 on all the eight selected roles of academic deans. The significant t-values ranged between 3.29 and 26.59 with academic affairs role as the lowest and the institutional political affairs as the highest. The Table 4.4 presents the detailed results of the test. The null hypothesis was rejected on each of the eight Role variables.

Research Question 3:

Is there a significant difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected **activities** of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 3

There is no significant difference in perceptions between academic deans and faculty members regarding the importance of selected **activities** of academic deans of land-grant universities by the Year 2000.

A two-tail t-test of independent samples program of the SPSSx was used to test the hypothesis on each of the selected activities at $\alpha = .05$ level of significance. The null hypothesis that there was no significant difference in perceptions between academic deans and faculty members regarding the importance of selected activities of academic deans by the Year 2000 was rejected on 16 of the 66 activities. It was, however, retained on the remaining 50 activities. The results of the analysis are presented in Table 4.5. The 14 activities where differences occurred are presented below in descending order of difference magnitude.

1. Developing/reviewing job descriptions for faculty and staff. 2. Formulating and directing the academic policies of the college. 3. Planning and monitoring active research. 4. Playing an active role in the development of curriculum and programs. 5. Encouraging international perspective in curriculum development. 6. Planning offerings and schedules for non-traditional students. 7. Allocating resources to support global education activities. 8. Recommending the academic promotion of faculty members. 9. Encouraging international students' enrollment and active participation. 10. Recommending faculty for tenure. 11. Planning class offerings and schedules for traditional students. 12. Approving faculty travel expenses. 13. Approving the purchase of various items 14. Encouraging international students exchange program. 15. Advising the President about college affairs and recommending to him/her the general policy of the college. 16. Evaluating the academic performance of faculty members and their ef-

fectiveness in teaching.

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Table 4.5:	Means, Standard Deviations and t-test results of the
	average perceptions of respondents on the impor-
	tance of the selected activities of deans by the Year
	2000 based on Status – Deans and Faculty

STATUS	Dea	ins	Faculty			
	N=	32	N=	N = 69		
ID No ^a	Mean	SD^b	Mean	SD	t- Value	2-Tail Prob
1.	4.28	0.92	4.17	0.79	0.60	.55
2.	4.72	0.52	4.62	0.64	0.73	.47
3.	4.28	0.77	3.99	0.93	1.56	.12
4.	4.53	0.57	4.41	0.79	0.91	.37
5.	4.50	0.62	4.20	0.82	1.83	.07
{ }						
6.	4.38	0.79	4.35	0.76	0.16	.87
7.	4.00	0.86	3.55	1.18	2.01 ^c	.05
8.	4.06	0.95	4.25	0.91	-0.93	.36
9.	4.28	0.89	4.07	1.12	0.93	.36
10.	4.13	0.94	3.12	1.08	4.55 ^c	.01
						}
11.	4.31	0.74	3.42	1.17	4.65 ^c	.01
12.	3.69	0.64	2.88	1.12	4.56 ^c	.01
13.	2.28	1.17	2.17	1.11	0.44	.66
14.	4.31	0.59	4.33	0.76	-0.14	.89
15.	3. 06	0.80	2.81	1.26	1.21	.23
16.	3.78	0.98	3.58	1.08	0.84	.41
17.	2.69	0.90	2.71	1.31	-0.10	.92
18.	3.16	1.14	2.68	1.23	1.85	.07
19.	4.38	0.75	4.09	0.82	1.69	.08
20.	4.25	0.62	3.96	0.92	1.89	.06

^aID numbers correspond to those in Table 4.3.

 b SD = Standard Deviation. ^cDenotes significant t-value.

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	STATUS	Dea	uns	Facu	ilty		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	51111 00			1	-		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ID No	Mean	SD	Mean	SD	t- Value	2-Tail Prob
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	21.	4.47	0.51	4.32	0.83	1.12	.27
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	22.	4.38	0.71	4.13	1.06	1.37	.17
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	23.	3.84	1.05	3.36	1.19	1.96 ^c	.05
26. 4.44 0.67 3.90 1.00 3.19^c $.01$ 27. 4.34 0.70 4.42 0.74 -0.49 $.62$ 28. 4.06 0.67 4.13 0.86 -0.40 $.69$ 29. 3.66 0.79 3.65 0.95 0.02 $.98$ 30. 3.75 0.72 3.48 1.01 1.55 $.13$ 31. 2.44 1.12 2.54 1.16 -0.40 $.69$ 32. 2.75 0.92 2.88 1.13 -0.59 $.56$	24.	3.03	1.26	3.25	1.02	0.91	.36
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	25.	4.47	0.62	3.90	0.99	3.52^{c}	.01
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					i		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	26.	4.44	0.67	3.90	1.00	3.19 ^c	.01
29. 3.66 0.79 3.65 0.95 0.02 .98 30. 3.75 0.72 3.48 1.01 1.55 .13 31. 2.44 1.12 2.54 1.16 -0.40 .69 32. 2.75 0.92 2.88 1.13 -0.59 .56	27.	4.34	0.70	4.42	0.74	-0.49	.62
30. 3.75 0.72 3.48 1.01 1.55 .13 31. 2.44 1.12 2.54 1.16 -0.40 .69 32. 2.75 0.92 2.88 1.13 -0.59 .56	28.	4.06	0.67	4.13	0.86	-0.40	.69
31.2.441.122.541.16-0.40.6932.2.750.922.881.13-0.59.56	29.	3.66	0.79	3.65	0.95	0.02	.98
32. 2.75 0.92 2.88 1.13 -0.59 .56	30.	3.75	0.72	3.48	1.01	1.55	.13
32. 2.75 0.92 2.88 1.13 -0.59 .56				1			
	31.	2.44	1.12	2.54	1.16	-0.40	.69
22 201 020 262 022 156 12	32.	2.75	0.92	2.88	1.13	-0.59	.56
33, 3,31 0,07 3,02 0,02 1,00 1,12	33.	3.91	0.89	3.62	0.82	1.56	.12
34. 3.63 1.16 3.57 1.06 0.26 .80	34.	3.63	1.16	3.57	1.06	0.26	.80
35. 2.91 0.89 2.83 1.27 0.36 .72	35.	2.91	0.89	2.83	1.27	0.36	.72
36. 4.66 0.48 4.58 0.67 0.65 .52	36.	4.66	0.48	4.58	0.67	0.65	
37. 4.72 0.46 4.61 0.57 0.95 .34	37.	4.72	0.46	4.61	0.57	0.95	
38. 4.19 0.97 4.03 1.07 0.71 .48	38.	4.19	0.97	4.03	1.07	0.71	.48
39. 4.47 0.62 4.30 0.83 1.00 .32	39.	4.47	0.62	4.30	0.83		.32
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40.	3.78	1.21	3.06	1.21	2.79 ^c	.01
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	41.	3.47		2.68			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	42.	4.22	0.87	3.90			.14
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		4.38					
44. 3.66 1.00 3.67 0.97 -0.05 .96	44.	3.66	1.00	3.67			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	45.	4.06	0.80	4.22	0.82	-0.89	.38
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 Table 4.5 (Continued)

STATUS	Dea	ans	Fact	Faculty		
l	N=	32	N=	N=69		
ID No	Mean	SD	Mean	SD	t- Value	2-Tail Prob
46.	3.63	0.94	3.67	1.16	-0.18	.86
47.	4.22	0.83	4.07	0.81	0.84	.41
48.	4.09	0.78	3.88	0.85	1.18	.24
49.	3.94	0.88	3.62	0.97	1.56	.12
50.	3.03	1.12	2.29	1.10	3.13 ^c	.01
F1	9 10	1.00	0.00	1.00	0.750	. 01
51.	3.19	1.09	2.32	1.08	3.75 ^c	.01
52.	4.50	0.57	3.88	0.88	4.21 ^c	.01
53.	4.16	0.72	3.62	0.79	3.24 ^c	.01
54.	4.09	0.64	3.49	0.96	3.71 ^c	.01
55.	4.13	0.66	3.81	0.73	2.06 ^c	.04
56.	3.31	1.03	2.93	1.18	1.59	.12
57.	4.22	0.70	3.94	0.84	1.62	.11
58.	4.13	0.66	3.77	0.81	2.18^{c}	.03
59.	3.56	0.80	3.43	0.98	0.65	.52
60.	4.78	0.42	4.67	0.53	1.07	.29
61.	4.50	0.76	4.41	0.65	0.64	.52
62.	4.38	0.79	4.17	0.79	1.19	.24
63.	4.22	0.71	4.20	0.90	0.09	.93
64.	4.47	0.67	4.30	0.77	1.04	.30
65.	4.59	0.56	4.46	0.78	0.95	.34
66.	4.16	0.81	4.12	0.95	0.21	.84

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Table 4.5(Continued)

Research Question 4:

Is there a significant difference between the perceptions of the deans and those of the faculty members regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 4

There is no significant difference in perceptions between academic deans and faculty members regarding the potential importance of selected **roles** of academic deans of land-grant universities by the Year 2000.

Hypothesis 4 was tested on each of the eight selected roles of academic deans by the use of a two-tail t-test of independent samples program of the SPSSx. The level of significance was set at $\alpha = .05$. The null hypothesis that there was no significant difference in perceptions between academic deans and faculty members regarding the importance of the selected broad roles of deans by the Year 2000 was rejected on five of the roles (i.e. academic, faculty, global education/awareness, financial and enrollment management affairs roles). It was retained on the other three (i.e. student, institutional political and administrative affairs roles). The results of the analysis are presented in Table 4.6.

Research Question 5:

Is there a difference in the average perceptions of respondents in different academic ranks regarding the importance of the eight **roles** of academic deans of land-grant universities by the Year 2000?

STATUS	Deans		Faculty			
	N=	32	N=	69		
ROLE	Mean	SD^a	Mean	SD	t- Value	2-Tail Prob
Student Affairs	3.39	.50	3.34	.67	0.37	.71
Institutional Pol. Affairs	4.44	.49	4.33	.55	0.96	.34
Administrative Affairs	4.33	.41	4.18	.50	1.52	.13
Enrollment Mgmt. Affairs	3.74	.66	3.44	.64	2.14 ^b	.04
Financial Affairs	4.17	.49	3.88	.56	2.50 ^b	.01
Faculty Affairs	4.16	.44	3.86	.64	2.69 ^b	.01
Global Ed./AwarenessAffairs	4.01	.49	3.61	.66	3.06 ^b	.01
Academic Affairs	3.49	.49	3.08	0.72	3.35 ^b	.01

Table 4.6:Means, Standard Deviations and t-test results of the perceptions of re-
spondents regarding the potential importance of the selected roles of
deans by the Year 2000 based on Status—Deans and Faculty

 a SD=Standard Deviation.

^bDenotes significant t-value.

Null Hypothesis 5

There are no significant differences in the average perceptions of respondents in the various academic ranks regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000.

This Null hypothesis was tested using a single classification analysis of variance procedure. The analysis produced no significant difference between the average perceptions of all the three academic ranks on any of the selected roles of academic deans of land-grant universities by the Year 2000. The N (number of respondents), means, standard deviations and the ANOVA results of the tests are presented in Table 4.7. The null hypothesis was retained.

Research Question 6:

Is there a difference in the average perceptions of respondents in different academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 6

There are no significant differences between average perceptions among the six academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the year 2000.

A single classification analysis of variance procedure was also used to test the hypothesis that there are no significant differences in average perceptions among the six academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000. The analysis produced a significant difference between the average perceptions of Table 4.7:Means, Standard Deviations and ANOVA results of the perceptions of the respondents regarding the importance of the 8 selectedRoles of academic deans by the Year 2000 based on AcademicRank

ACADEMIC RANK	Assist	Prof.			Professor		
	N =	:16	N=	24	N=63		
Selected Roles	Mean	\mathbf{SD}^{a}	Mean	SD	Mean SD	F-Ratio	F-Prob.
Administrative Affairs	4.19	.46	4.31	.40	4.21 .51	0.16	.86
Academic Affairs	3.25	.54	3.15	.66	3.24 .73	1.90	.16
Faculty Affairs	3.73	.65	3.91	.41	4.05 .63	2.72	.07
Student Affairs	3.68	.68	3.25	.46	3.33 .64	0.21	.81
Financial Affairs	3.95	.40	3.93	.55	4.01 .59	1.76	.17
Enrollment Mgmt. Affairs -	3.68	.54	3.33	.66	3.58 .68	1.93	.15
Global Education Affairs	3.92	.74	3.55	.54	3.79 .64	1.24	.29
Institutional Pol. Affairs	4.46	.42	4.48	.47	4.31 .56	0.44	.64

 a SD=Standard Deviation.

the respondents in the category of enrollment management role. Additional analysis using the Scheffé Multiple Range Test revealed that difference was between engineering scholars' perceptions and those of the social scientists. The engineers' average perception was 3.98 while that of the social scientists was 3.11 on the importance of the enrollment management role. Therefore, the null hypothesis was retained for seven of the eight selected roles of academic deans while it was rejected on the category of enrollment management

role at $\alpha = p < .05$. The results of perceptions on each of the eight roles are summarized in Table 4.8. The Table gives a summary of Ns (number of respondents from each discipline), mean perceptions, standard deviations, and the analysis of variance results.

Research Question 7:

Is there a difference in the average perceptions of the respondents grouped in different college sizes regarding the importance of selected roles of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 7

There are no significant differences in average perceptions of respondents grouped in different college sizes regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000.

This null hypothesis was tested with the one-way analysis of variance (ANOVA) procedure of the SPSSx, followed with the Scheffé's Multiple Range Test procedure also incorporated for post hoc analysis. The analysis produced no significant differences, therefore, the null hypothesis was retained. The Ns (number of colleges in each size group), means, standard deviations and a summary of the analysis of variance results are presented in Table 4.9.

Research Question 8:

Is there a difference in the average perceptions of the respondents grouped in different university sizes regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?

ACADEMIC DISCIPLINE	Agi	ric	Arts	& Sc	Busin	ness	Educa	ation	Engi	nrg	Soc.	Sc.		
	N=	21	N=	19	N=	18	N=	17	N=	16	N=	12		
Selected Roles	Mean	SD^a	Mean	SD^a	Mean	SD ^a	Mean	SDª	Mean	SDª	Mean	SD ^a	F-Ratio	F-Prob
Administrative Affairs	4.27	.41	4.19	.54	4.11	.56	4.23	.45	4.27	.46	4.38	.44	.53	.77
Academic Affairs	3.12	.59	3.35	. 6 3	2.91	.78	3.35	.58	3.44	.67	3.19	.83	1.45	.22
Faculty Affairs	3.94	.40	4.00	.62	3.83	.71	3.78	.60	4.19	.59	4.14	.67	1.20	.32
Student Affairs	3.36	.56	3.40	.76	3.23	.83	3.56	.35	3.55	.44	2.98	.49	1.78	.12
Financial Affairs	3.91	.61	3.94	.57	3.88	.67	4.10	.33	4.00	.47	4.15	.62	.58	.72
Enrollment Mgmt. Affairs	3.59	.58	3.44	.65	3.35	.79	3.67	.56	3.98	.43	3.11	.68	3.37 ⁶	.01
Global Ed. Affairs	3.72	.51	3.78	.70	3.53	.84	3.94	.52	3.81	.58	3.78	.70	.77	.57
Institutional Pol. Affairs	4.52	.40	4.23	.53	4.15	.67	4.45	.50	4.44	.49	4.30	.50	1.23	.30

 Table 4.8:
 Comparison of the perceptions regarding the importance of the 8 selected roles of academic deans based on Academic Discipline

^aStandard Deviation.

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^bDenotes significant t-value.

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COLLEGE SIZE	Under N=		1000- N=		1500-2 N=		Over : N=			
Selected Roles	Mean	SD ^b	Mean	·	Mean	·	Mean		F- Ratio	F-Prob.
Administrative Affairs	4.21	.47	4.37	.29	4.25	.44	4.40	.45	0.39	.76
Academic Affairs	3.37	.49	3.41	.41	3.62	.45	3.54	.55	0.41	.75
Faculty Affairs	4.13	.38	4.11	.39	4.21	.57	4.18	.44	0.09	.97
Student Affairs	3.54	.33	3.61	.22	3.30	.33	3.21	.69	1.32	.29
Financial Affairs	4.14	.63	4.06	.34	4.30	.40	4.22	.57	0.29	.84
Enrollment Mgmt. Affairs	3.90	.56	3.76	.73	3.67	.97	3.75	.57	0.13	.94
Global Ed. Affairs	3.64	.44	3.91	.33	4.20	.34	4.17	.55	2.55	.08
Institutional Pol. Affairs	4.39	.44	4.53	.49	4.31	.5 9	4.46	.49	0.27	.85

 Table 4.9:
 Comparison of the perceptions regarding the importance of the 8 selected roles of academic deans based on College Size

^aNumber of colleges in each group.

^bStandard Deviation.

Null Hypothesis 8

There are no significant differences in average perceptions among the various sizes of participating universities/institutions regarding the importance of the selected roles of academic deans by the Year 2000.

INSTITUTIONAL SIZE	Under 20000		20000	& Above		
	N=	= 17	N=16			
Selected Roles	Mean	SD	Mean	SD	t-Value	t-Prob
Administrative Affairs	4.31	0.37	4.33	0.46	-0.18	.86
Academic Affairs	3.48	0.36	3.51	0.59	-0 .18	.86
Faculty Affairs	4.29	0.38	4.02	0.46	1.82	.08
Student Affairs	3.54	0.27	3.22	0.62	1.90	.07
Financial Affairs	4.29	0.43	4.08	0.55	1.27	.21
Enrollment Mgmt. Affairs	3.73	0.72	3.80	0.64	-0.31	.76
Global Education Affairs	4.02	0.42	3.99	0.55	0.18	.86
Institutional Pol. Affairs	4.39	0.49	4.47	0.49	-0.51	.62

Table 4.10:Comparison of perceptions regarding the importance of the
8 selected roles of academic deans of land-grant universities
by the Year 2000 based on Institutional Size

The hypothesis that there are no significant differences in average perception among the various sizes of participating universities/institutions regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000 was also tested using the one-way ANOVA procedure. This analysis also produced no significant difference of perceptions on

any of the selected roles of academic deans. Table 4.10 presents the number of institutions that fall in the same categories, the mean perception of each category for each role, the standard deviation, and the ANOVA results. The null hypothesis was retained on all selected roles.

Research Question 9.

Is there a difference in the average perceptions of the respondents among the three college gender representations regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 9

There are no significant differences in average perceptions among the college gender representations regarding the importance of the selected roles of academic deans by the Year 2000.

A single classification Analysis of Variance (ANOVA) procedure was used to test this hypothesis too. The Scheffé multi-range test was again incorporated to identify any differing groups - mostly female, mostly male and equal gender representation.

Table 4.11 presents the results of this test. A significant difference surfaced in the average perception scores of, at least, two of the groups regarding, at least, one role. The Scheffé multi-range test revealed that of the three groups stated above, the predominantly female colleges and the predominantly male colleges differed significantly on their perceptions of the future importance of administrative role of academic deans of land-grant universities. The null hypothesis was rejected and the alternate was accepted on the Table 4.11:Means, Standard Deviations and test results of the average per-
ceptions regarding the importance of the selected roles of aca-
demic deans of land-grant universities by the Year 2000 based
on College Gender Predominance

COLLEGE GENDER	Mostly	Female	Mostly	Male	Equal	Rep.		
PREDOMINANCE	N=	=11	N=	17	N =	=5		
Selected Roles	Mean	SD^a	Mean	SD	Mean	SD	F-Ratio	F-Prob.
Admin. Affairs	4.54	.32	4.12	.38	4.51	.43	4.94 ^b	.01
Academic Affairs	3.61	.49	3.35	.44	3.71	.54	1.62	.21
Faculty Affairs	4.25	.59	4.06	.32	4.30	.37	0.97	.39
Student Affairs	3.18	.70	3.54	.22	3.30	.51	1.93	.16
Financial Affairs	4.22	.47	4.11	.46	4.38	.71	0.58	.57
Enrollment Mgmt. Affairs	3.64	.89	3.73	.53	4.17	.51	1.15	.33
Global Ed. Affairs	3.94	.57	3.97	.39	4.28	.58	0.91	.41
Institutional Pol. Affairs	4.35	.54	4.44	.49	4.57	.37	0.35	.71

^aStandard Deviation.

 b Denotes significant t-value.

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perceptions regarding administrative role. The null was retained for the other categories. The means, standard deviations and ANOVA summary statistics for the major roles are presented in Table 4.11.

Tests on Need for Formal Training of Academic Deans

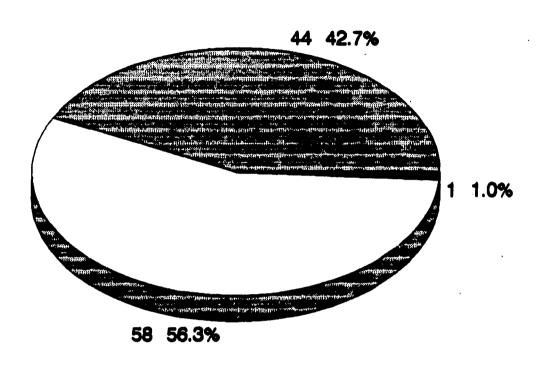
Hypotheses 10 to 12 dealt with the second issue of focus in this research. That issue is the need for formal training of academic deans of land-grant universities by the Year 2000.

As presented in Table 4.12, the frequency tabulation revealed that 44 (42.7%) of the respondents answered "Yes" to the question of whether there would be need for formal training of academic deans of land-grant universities by the Year 2000. Fifty eight (56.3%) responded "No." One person did not give an opinion. Figure reftrain4 presents these frequencies pictorially.

Table 4.12:	Frequencies distribution of re-
	spondents' perceptions regarding
	the need for formal training of
	deans of land-grant universities
	by the Year 2000

Response	No of Respondents	Per Cent
YES	44	42.7
NO	58	56.3
MISSING	1	1.0
TOTAL	103	100.0

This question followed by additional inquiries was as follows:



Total Respondents = 103



Figure 4.3: Frequencies distribution of respondents' perceptions regarding the need for formal training of deans of land-grant universities by the Year 2000 **Research Question 10:**

Is the ratio of deans to faculty members the same for "Yes" and "No" responses regarding the need for formal training of academic deans of landgrant universities by the Year 2000?

Null Hypothesis 10

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of their status - Deans or Faculty.

Because of the dichotomous or categorized nature of the data to be analyzed for null hypotheses 10, 11 and 12, which are on the nominal scale, the non-parametric procedure of chi-square was utilized to test the null hypotheses of independence between the various categories. Table 4.13 presents the frequencies and percentages of the respondents regarding the two possible perceptions as well as the chi-square (χ^2) value and accompanying probability. Among each of the two groups – deans and faculty members – those who perceived that there would be need for formal training were fewer than those who perceived that there would be no need. Fourteen (43.8%) of the deans and 29 (42%) of the faculty members respectively perceived that formal preparation would be necessary for academic deans of land-grant universities by the Year 2000. On the other hand, 18 (56.3%) and 40 (58.0%) of the deans and faculty members, respectively, perceived that such a training would have no place in the deanship of land-grant universities by the Year 2000.

In view of the χ^2 produced, one can conclude that both groups (deans and

faculty members) perception of this question. The hypothesis that the distribution of respondents is independent of the respondents' status was retained at $\alpha = .05$ level of significance.

and Faculty Members "									
	Yes	No	Total						
STATUS	Number ^b	Number	Number						
Deans	14 ^b	18 ^b	32 ^b						
Faculty Members	29 ^b	40 ^b	69b						
TOTAL	43 ^b	58 ^b	101 ^b						

Table 4.13:Perception leanings regarding
the need for formal training of
academic deans by the Year
2000 based on Status-Deans
and Faculty Members a

 $a_{\chi}^2 = .53$, df = 2, (p<0.77).

^bNumber of Respondents.

Research Question 11

Is the distribution of professors, associate professors and assistant professors the same for "Yes" and "No" responses regarding the need for formal training of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 11

The distribution of respondents in the two possible responses of "yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of academic ranking.

Like null hypothesis 9, the data being on the nominal scale, a chi-square procedure of the SPSSx was again utilized for the analysis to test the hypothesis of independence. An examination of Table 4.14 reveals that the frequencies of "No" outnumbered those of "Yes" across all academic ranks. That is, the 8 Assistant Professors (53.3%) felt there was a need versus 10 (41.7%) in favor of "no-need" while the full Professors were 35 (57.1%) versus 27 (42.9%). In view of the result of the analysis and the χ^2 value produced, the hypothesis that the perceptions of respondents were independent of their academic ranks was retained.

Table 4.14:Perception leanings regarding the
need for formal training of aca-
demic deans by the Year 2000
based on Academic Rank a

	Yes	No	Total
ACADEMIC RANK	Number ^b	Number	Number
Assistant Professor	76	8 ⁶	15 ^b
Associate Professor	10 ^b	14^b	24 <i>b</i>
Professor	27^b	36 ^b	63 ^b
TOTAL	44 ^b	58 ^b	102 ^b

 $a\chi^2$ =3.50, df=4, (p<0.48). ^bNumber of Respondents.

Research Question 12

Is the ratio of the master's degrees holders to the Ph.D. degrees holders the same for the two responses of "Yes" and "No" regarding the need for formal training of academic deans of land-grant universities by the Year 2000?

Null Hypothesis 12

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of their highest degree attained.

This hypothesis was tested with the chi-square procedure of the SPSSx which is appropriate to handle data of dichotomous form at nominal scale to which these data belong. A close examination of the information presented in Table 4.15 indicated that all (100.0%) respondents with master's degrees answered "Yes". They agreed that there would be need for formal training for academic deans of land-grant universities by the Year 2000. Of the Ph.D. degree holders, 57 (55.3%) of the total 97 (100.0%) respondents perceived that such formal training would be unnecessary for the academic deans by the Year 2000. However, when all the responses were considered together, the "no-need" responses outnumbered the "yes" responses. Fifty-seven (55.3%) of the total 103 (100.0%) respondents perceived that the academic deans of land-grant universities would not need any formal training by the Year 2000 while the remaining 46 (44.7%) perceived that there would be the need. In consideration of the result, the null hypothesis could not be rejected at $\alpha =$.05 level of significance. (χ^2 = 4.30, df = 2, p < 0.12). The conclusion is that the responses given by the respondents were independent of the level of their

highest degree attained.

 Table 4.15:
 Perception leanings regarding the
 need for formal training of academic deans by the Year 2000 based on Highest Degree Attained a

	Yes	No	Total
HIGHEST DEGREE	Number ^b	Number ^b	Number ^b
master's Degree	6 ^b	06	6 ⁶
Ph.D. Degree	40 ^b	57 ^b	976
TOTAL	46 ^b	57 ^b	103^{b}

.....

 a_{χ}^2 = 4.30, df = 2, (p<0.12). ^bNumber of Respondents.

CHAPTER 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary, the conclusions, discussions as well as recommendations based on the findings of this study. It also includes a section on the implication of the findings on African countries – the case of Nigeria.

Restatement of the Problem

This study was designed to investigate the perceptions of deans and faculty members of land-grant universities regarding the activities and roles of academic deans of land-grant universities by the Year 2000 as well as their need for formal preparation.

Restatement of Purpose

The primary purpose of this study was to look into the future (that is the Year 2000) of the administration of land-grant universities through the perceptions of the two major constituencies on campus – the Academic Deans and the Faculty members.

- 1. To identify what activities and roles will be important for academic deans as members of the administrative team of land-grant universities by the Year 2000. The order of importance of such roles will also be examined.
- 2. To relate the perceptions of the deans themselves with those of the faculty members regarding selected activities and roles of deans by the year 2000.
- 3. To investigate what effect (if any) the faculty ranks, academic discipline, college size, institutional size and predominant student gender will have on the importance of those roles.
- 4. To investigate if there would be a need for formal preparation for academic deans of land-grant universities in the future, and
- 5. To investigate the extent to which these perceptions may be influenced by status (Deans/Faculty members), academic ranks (professor, associate professor and assistant professor) and the highest degree attained.

Summary

This dissertation has been presented to include:

- 1. An introduction which formed the background that gave rise to the problem, research questions, the null hypotheses, clarification of the significance and the procedures.
- 2. A detailed review of the literature to facilitate familiarity and understanding of past work done on related topics. These include: (1) the

Morrill Acts of 1869 and 1890 and the institution of the land-grant colleges, (2) the history of the title "Dean", (3) the evolution of the roles of deans, and (4) the role theory.

- 3. A description of the methodology and statistical procedures used to analyze the data and test the null hypotheses.
- 4. A presentation of the analysis and test results.

Conclusions and Discussions

This chapter will present the major conclusions drawn from Chapter 4. It will also present a brief discussion on each of the statistically significant findings and recommendations will be provided based on the findings of this research. Recommendations will also be provided, for future research.

The following conclusions were made as a result of this study:

Restatement of Null Hypothesis 1

The perceptions of the respondents are not significantly greater than 3 (which represents "neutral point on a 5-point Likert-type scale) regarding the importance of the selected activities of academic deans of land-grant universities by the Year 2000.

Conclusion: The researcher decided that for an academic dean's activity or role to be deemed potentially important for the future in this study, it must have received a rating that statistically significantly higher than 3 on a Likert-type scale. Based on such a decision and considering the data presented in Table 4.3, it was concluded that the mean perceptions of the academic deans and faculty members of land-grant universities were significantly greater than the "neutral" perceptions regarding 52 (78.8%) of the 66 selected activities. Therefore, the null hypothesis was rejected on those 52 activities. The deans and faculty members perceived that the following activities of deans of land-grant universities will be important by the Year 2000. This list is presented in order of their perceived importance starting with the activity of most importance to that of the least importance.

- 1. Articulating the needs of the college to the university administration and to outside groups.
- 2. Developing a vision and/or long-range goals for his/her college.
- 3. Coordinating the development of his/her college's/school's budget.
- 4. Securing and allocating fiscal resources for and within his/her college respectively.
- 5. Communicating and projecting an articulate position for the college and for education generally.
- 6. Encouraging international perspective in curriculum development.
- 7. Recommending faculty salary increases.
- 8. Practicing institutional/community public relations.
- 9. Formulating strategies for achieving college goals.

- 10. Involving faculty members in the appointment of a department chairperson.
- 11. Encouraging creativity and research among faculty.
- 12. Being competent in policy development and policy maintenance skills.
- 13. Advising the President about college affairs and recommending to him/her the general policy of the college.
- 14. Delegating some financial authority to his/her assistants and departmental chairpersons.
- 15. Assisting in creating and maintaining an academic environment for the improvement of standards.
- 16. Establishing college objectives.
- 17. Practicing coalition building and related public service activities.
- 18. Insuring that decisions made by the university management are properly executed.
- 19. Being competent in lobbying strategies.
- 20. Giving financial commitment to the improvement of the quality instruction.
- 21. Providing facilities for teaching learning and research.
- 22. Coordinating the acquisition and retention of quality faculty and staff in all areas of his/her responsibility.

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- 23. Monitoring enrollment trend in the college.
- 24. Acting as liaison between the faculty and the university management.
- 25. Recognizing and taking advantage of the role of mass media in shaping and forming opinions.
- 26. Involving faculty in enrollment management in his/her college.
- 27. Providing funds for research/teaching assistantships.
- 28. Formulating and enforcing written policies for his/her college.
- 29. Recommending the academic promotion of faculty members.
- 30. Recommending faculty for tenure.
- 31. Being responsible for faculty improvement programs.
- 32. Encouraging and supporting international faculty exchange.
- 33. Providing necessary financial support for faculty to attend conferences and professional meetings.
- 34. Initiating and supporting enrollment management activities.
- 35. Encouraging international students exchange program.
- 36. Encouraging and supporting the Study Abroad program.
- 37. Encouraging international students enrollment and active participation.
- 38. Encouraging, stimulating and supporting student activities.

39. Allocating resources to support global education activities.

- 40. Monitoring recruitment and placement strategies.
- 41. Formulating and directing the academic policies of the college.
- 42. Developing/reviewing job descriptions for faculty and staff positions.
- 43. Approving the expenses needed to accommodate visiting professors.
- 44. Studying and solving the academic problems that face the various departments of the college.
- 45. Providing financial assistance to students for participation in conferences and professional meetings.
- 46. Researching enrollment strategies.
- 47. Providing students with mini-grants to conduct research projects.
- 48. Maintaining an open door to students with suggestions and complaints.
- 49. Evaluating the academic performance of faculty members and their effectiveness in teaching.
- 50. Encouraging/supporting the Students/Faculty Re-entry Orientation program.
- 51. Playing an active role in the development of curriculum and programs.
- 52. Approving the purchase of various items.

The following is a list of the activities the perceptions of which were found to be of no significant difference from "neutral" (3) perceptions regarding their potential importance by the Year 2000. The list is also presented in the order of their perceived importance with the highest scored activity being listed first and the lowest scored being listed last.

- 1. Maintaining an open-door to students with suggestions and complaints.
- 2. Resolving differences and disputes that occur among faculty members.
- 3. Planning and monitoring active research.
- 4. Supporting the English-as-a-second language program.
- 5. Approving faculty travel expenses.
- 6. Getting involved in research and publications.
- 7. Teaching a course during an academic year.
- 8. Organizing orientation programs for new students.
- 9. Paying occasional visits to students during classes.
- 10. Attending the meetings of the department to which he is related.
- 11. Planning class offerings and schedules for non-traditional students.
- 12. Chairing the committees for student discipline.
- 13. Planning class offerings and schedules for traditional students.
- 14. Serving on all academic committees.

Discussion: The following three activities were among those that were perceived as having no potential importance – their mean perceptions being less than or equal to 3 ("neutral" perception).

- Planning and monitoring active research.
- Teaching a course during an academic year.
- Paying occasional visits to students during classes.

It is noteworthy that the activities that formed the basis of the pioneering deans' responsibilities will lose more of their importance on the deans' list of responsibilities by the Year 2000.

For instance, teaching a course during an academic year has been perceived to be of no potential importance as an activity of a dean of land-grant university by the Year 2000. The perceptions for this activity was tested in view of the academic leadership of the dean and also to facilitate academic community's reaction to Doyle's (1984) idea of having administrators teach. Though Doyle focussed on high schools, the current study tested the idea at the college level. The activity received a perception mean of 2.86 on a criterion of 3/"neutral" and the null hypothesis was, therefore, retained.

Restatement of Null Hypothesis 2

The perception means of the respondents are not significantly greater than 3 (3 represents "neutral" on a 5-point Likert-type scale) regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000. **Conclusion:** As presented in Table 4.4, it is concluded that the perceptions of the academic deans and faculty members of land-grant universities are significantly greater than 3/neutral perception regarding the importance of all the eight selected roles of academic deans of land-grant universities by the Year 2000. Therefore, this null hypothesis was rejected on all the eight roles. Those roles are presented hereafter in the order of their perceived importance. The role with the highest mean perception is listed first while the one with the lowest perception mean is listed last. Figure 5.1 also gives a visual presentation of the findings.

- **1. Institutional Political Affairs**
- 2. Administrative Affairs
- 3. Financial Affairs
- 4. Faculty Affairs
- 5. Global Education/Awareness Affairs
- 6. Enrollment Management Affairs
- 7. Student Affairs
- 8. Academic Affairs

Discussion: Though all the eight selected roles of academic deans of land-grant universities were perceived as having potential importance by the Year 2000, yet the order of perceived importance cannot be overlooked. The Institutional Political Affairs (newly introduced for testing) topped the list while student and academic affairs role (traditional roles) came last. The trend is that student and academic affairs role will be of less importance on the list of academic deans' responsibilities by the Year 2000.

According to Hodgkinson's, as cited in Kemerer (1984-85), and Levine et al.'s (1989) predictions, the future of enrollment in American as well as European colleges is very discouraging. It may be pertinent to interject here that Europe, too, is already getting worried about the decline in the number of their college students resulting from the regions' decline in birth rate which was described as the lowest since 1960s (Green, 1989). The realities of those predictions precipitated Kemerer et al.'s (1982) study which indicated that enrollment management had become one of the most important roles of deans. The present study has also found that by the Year 2000, Institutional Political Affairs would top the academic deans' roles list. This may be because at that time, the effect of the predicted decrease in high school graduates, decrease in the enrollment rate of adult and international students (Levine et al., 1989) would have weighed so heavily that land-grant universities would have to divert more attention to research activities. This would require more active political activities on the part of academic deans that they will have little or no time for students and academic affairs. Most of these may have to be delegated to the associate deans, assistant deans, Head of Departments and/or student personnel officers.

2. The finding from these two hypotheses corroborates with the findings of a number of earlier studies: Ward (1934), Frances (1947), McGrath (1947),

Cole (1955), Craig (1958), Gould (1964), Hunt (1977), and Kemerer (1984-85). All these scholars have found, at different times, causes to uphold the belief that there is no standardized deanship. At different point in time, these researchers have found the deans' roles changing with the institutional structure, time, location, individuals, political, social, and economic factors. DeThomasis (1990) recently reconfirmed that "academy exists in a milieu that has been shaped by the immense economic and political changes around the world which no one predicted even a year ago" (p. 19). The finding here illustrates another point that the already dwindling attention of deanship on students and academe is likely to be at its lowest ebb by the turn of the century. Academic deans' role will continue to be volatile/dynamic as long as the issues/problems in education, and the world in general, continue to be fluctuating/active.

3. Another noteworthy finding is that Global Education and Awareness Affairs is perceived to be of greater potential importance than students and academic on the deans' role list in the future. This is a point, too, that Americans' attention which has never before been focussed on the "Global Village" as it does now, is going to be gradually catching the attention of the deanship, especially of land-grant universities. Since the ideas of global education and foreign language are initiated by the Federal Government, and since the enrollment crunch is expected to be biting deeper in the early 1990s (and it is not expected to return to the present level by the Year 2000), and since higher education institutions will be forced to scramble to fill their classrooms (Wilson, 1990), it cannot be reasonably extrapolated that Government will attach some Global Education strings to some of its projects' research funds. The State Governments are now getting more and more sensitive about the Global Village and colleges are getting more and more involved in internationalizing their curriculum. The knowledge of a foreign language is increasingly becoming a requirement for college admissions, and for enhancing employability. These are some of the justifications for Global Education affairs occupying an increasingly more important place in the deans' responsibilities.

4. Any discussion of deans' roles cannot leave out the financial and faculty affairs. These still ranked high in importance in this study. They were perceived as of potential importance behind institutional political affairs and administrative affairs roles. Just as the Universities cannot operate without money, and/or students, neither can they exist without the faculty. It is relevant to note here that since the inception of academic deanship in the 18th century, faculty affairs, especially, has been steady on the list of important roles of academic deans. The finding of this study has again provided support to this role that by the year 2000, faculty affairs will still be occupying a high position on the list of academic deans' responsibilities in land-grant universities. Figure 5.1 presents a picture of the mean perceptions of the respondents regarding the various 8 selected roles.

Restatement of Null Hypothesis 3

There is no significant difference in average perception between academic deans and faculty members regarding the importance of selected activities of academic deans of land-grant universities by the Year 2000.

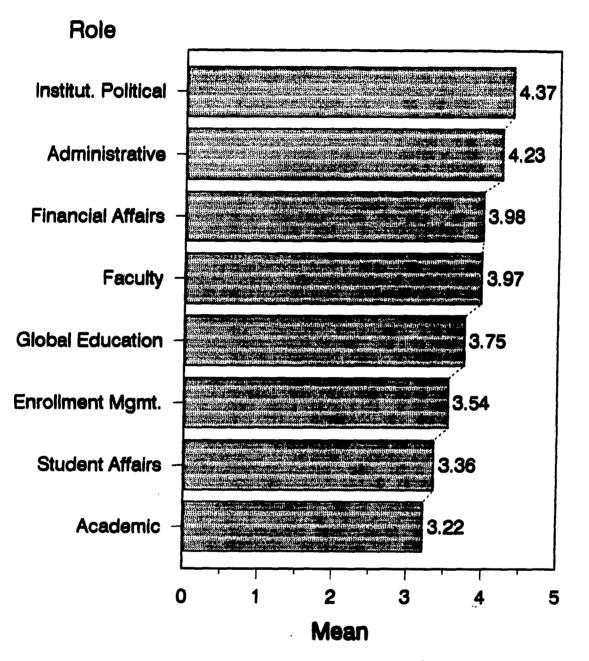


Figure 5.1: General Mean perception of respondents – both **Deans and Faculty** members of land-grant universities – regarding the importance of selected **roles** of academic deans of land-grant universities by the Year 2000 **Conclusion:** On the basis of the data presented in Table 4.5, it is concluded that there was a significant difference between the average perceptions of the academic deans and those of the faculty members regarding the importance of 16 of the 66 selected activities. This null hypothesis was, therefore, rejected on those 16 activities. The following is a list of the activities on which there were significant differences in deans' and faculty members' perceptions. The activity on which there was the least disagreement was listed first while the one with the most disagreement was listed last.

- 1. Developing/reviewing job descriptions for faculty and staff positions.
- 2. Formulating and directing the academic policies of the college.
- 3. Planning and monitoring active research.
- 4. Playing an active role in the development of curriculum and programs.
- 5. Encouraging international perspective in curriculum development.
- 6. Planning offerings and schedules for non-traditional students.
- 7. Allocating resources to support global education activities.
- 8. Recommending the academic promotion of faculty members.
- 9. Encouraging international students' enrollment and active participation.

- 10. Recommending faculty for tenure.
- 11. Planning class offerings and schedules for traditional students.

- 12. Approving faculty travel expenses.
- 13. Approving the purchase of various items
- 14. Encouraging international students exchange program.
- 15. Advising the President about college affairs and recommending to him/her the general policy of the college.
- 16. Evaluating the academic performance of faculty members and their effectiveness in teaching.

Discussion: A breakdown of the 16 activities on which the deans and faculty members perceived significantly different revealed that differences existed only in the levels of their support for the potential importance of the 16 activities. The two groups' perceptions can be described as effectively significantly different only in six activities. The deans supported the following as of potential importance while the faculty members were not in agreement. These activities will be listed in decreasing order of the magnitude of disagreement.

- Approving faculty travel expenses.
- Approving the purchase of various items.
- Planning class offerings and schedules for traditional students.
- Planning class offerings and schedules for non-traditional students.
- Playing an active role in the development of curriculum and programs.
- Planning and monitoring active research.

Two of the above activities concern curriculum development (academic), two concern approval of purchases and travel expenses (financial), while the remaining two concern planning course offerings for traditional and nontraditional students (enrollment management).

The curriculum development issues seem to be similar to the course offerings activities. The faculty members might have seen these as issues needing a collegial handling. This is a pointer for academic deans that this area cannot be unilaterally handled if they want to succeed. Curriculum development is one of the areas requiring great input from the faculty and decisions taken with the faculty. As advised by DeThomasis (1990), regardless of position, collegiality empowers each to share in the responsibility for governance. For curriculum of any college to succeed, for new programs to be established and grow, collegiality has to be given a place. The researcher cautions deans of the 1990s in DeThomasis' words: "Collaboration vs. confrontation; participation vs. patronization; discussions vs. decisions; committees vs. commands - whatever the form, whatever the explanation, - an essential consideration for any effective and relevant future for the world of academe, as a new millenium is about to be formed, is *collegiality*" (p. 19). While the dean should pursue collegiality, s/he should place priority on the pursuit of the college and/or university mission.

As for the significant difference regarding approval of various purchases and faculty travel expenses, even though the deans see these as potential activities of deanship by the Year 2000 the faculty members feel that they will not occupy any important place. While the deans may be looking forward to a future of more stringent financial control relative to the problems of enrollment, the faculty members may feel that the deans' time would be so taken up by other political and administrative problems that these approvals would have to be delegated to subordinate officers like the Heads of Departments.

Restatement of Null Hypothesis 4

There is no significant difference in average perception between academic deans and faculty members regarding the importance of selected **roles** of academic deans of land-grant universities by the Year 2000.

Conclusion: On the basis of the data presented in Table 4.6, it is concluded that there was a significant difference between the average perceptions of the academic deans and those of the faculty members regarding the importance of the following five of the eight selected roles: academic, global education/awareness, faculty, financial and enrollment management affairs roles. Therefore, the null hypothesis was rejected on those roles. It was, however, retained on the following three: student, institutional political and administrative affairs roles. Figure 5.2 presents these results in graphic form.

Discussion: Generally, the deans were more positive than the faculty members in their perceptions regarding the potential importance of each of the eight selected roles. Figure 5.2 presents the differences in the perceptions of the deans and faculty members regarding the potential importance of the eight roles. This figure is similar to Figure 5.1 which presented the general perception of the respondents regarding all the roles. Though, further analy-

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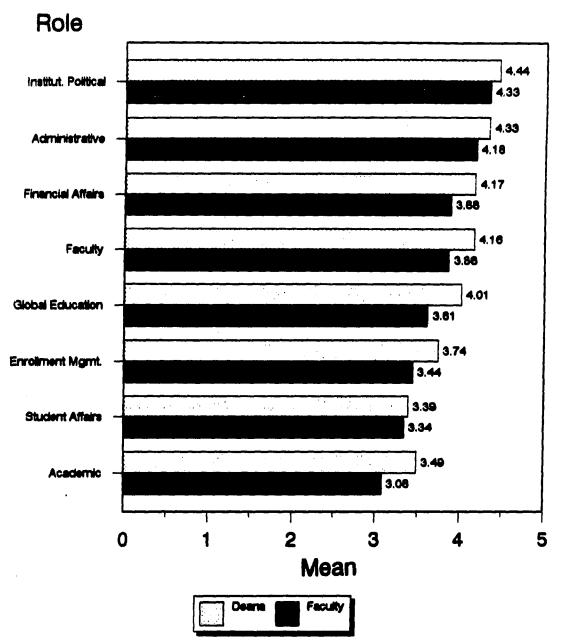


Figure 5.2: General Mean Perception of respondents regarding the importance of selected **roles** of academic deans of land-grant universities by the year 2000 based on Status – **Deans and Faculty** sis revealed significant difference in the perceptions of the deans and faculty members in five roles, yet the general fluctuation of their perceptions are alike. The priorities are alike for all the roles except the last two – academic and student affairs. While the deans perceived student affairs to be of least potential importance, academic affairs was the role which the faculty members placed last. It may be extrapolated that while the deans find it difficult to accept the reality that their other responsibilities would deprive them of their basic academic functions, the faculty members appear to be viewing the future more objectively. As the deans become more of resources winners and managers, they may have to delegate more of their original functions to their lieutnants.

A comparison was made between the role findings of this study and the present day roles of academic deans as collected from the "Bulletin Board" of the Chronicle of Higher Education during the months of July and August, 1990. The comparison showed that most that potential of the roles perceived to be of importance by the year 2000 are already being incorporated in the deans' job descriptions of today. The exceptions are the global education/awareness and the enrollment management. In keeping with the finding of this study too, student affairs was hardly mentioned in the recent advertisements that the researcher examined. The indication here is that some of the expectations for the future of academic deans' roles are already in effect.

Though, not a factor of study in this research, yet, it is worthwhile to note that the fulfillment of affirmative action was an important role that was prominent in recent advertisements for deans positions in contemporary landgrant universities. The place of this role in the future of academic deans' role may be part of future investigation.

Restatement of Null Hypothesis 5

There are no significant differences in the average perceptions of respondents in the various ranks regarding the importance of academic deans of land-grant universities by the Year 2000.

Conclusion: Based on the ANOVA results reported in Table 4.7 and Figure 5.3, the null hypothesis was not rejected. Thus it can be stated that there was no significant difference among the perceptions of the three academic ranks regarding the importance of the roles of academic deans of land-grant universities by the Year 2000.

Restatement of Null Hypothesis 6

There are no significant differences in the average perceptions among the six academic disciplines regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000.

Conclusion: The data analyzed in Table 4.8 and illustrated in Figure 5.4 revealed that a significant difference exists in the perceptions of the engineering and social science disciplines regarding the importance of the enrollment management role of academic deans of land-grant universities by the Year 2000. The hypothesis was, therefore, rejected on the enrollment

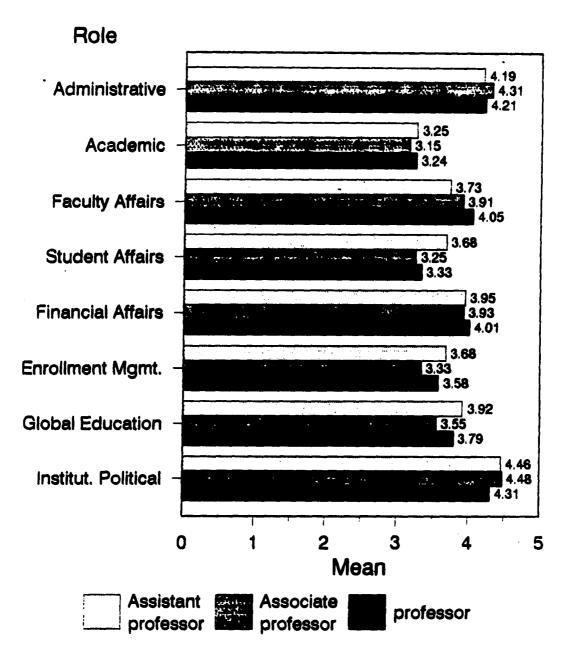


Figure 5.3: Perception means of respondents in different academic ranks regarding the importance of the selected Roles of academic deans of land-grant universities by the Year 2000 management role at $\alpha < .01$ level. Figure 5.4 also presents the results of the hypothesis testing.

Discussion: The finding and conclusion of this hypothesis is very revealing. One can quickly extrapolate that one of the reasons behind the significant difference of these two disciplines' perceptions about the future is influenced in their experiences of the present. The engineering scholars perceived that enrollment management would occupy an important position on the academic deans' role list by the Year 2000; but the social scientists were somewhat sceptical. The engineering colleges have long found it difficult to recruit enrollees while the situation has not been so precarious for the social sciences.

The uncertainties of the future regarding demographic trends and related college enrollment problems may hit the engineering programs more than the social sciences. Therefore, this finding brings about a logical conclusion about the future expectations from both disciplines. The warning should be sounded, however, that the conclusions related to the earlier hypothesis make it attract the attention of all disciplines to join hands together with their deans in collegiality to be able to successfully deal with academic challenges of the future. The fact should be remembered, without colleges/universities, there are no faculty members and colleges/universities exist because there are students. If there are no students, colleges/universities will close their doors to faculties. It will be mutually beneficial for all the constituencies of university campuses to recognize this fact and work in harmony with their academic deans in their role of enrollment management.

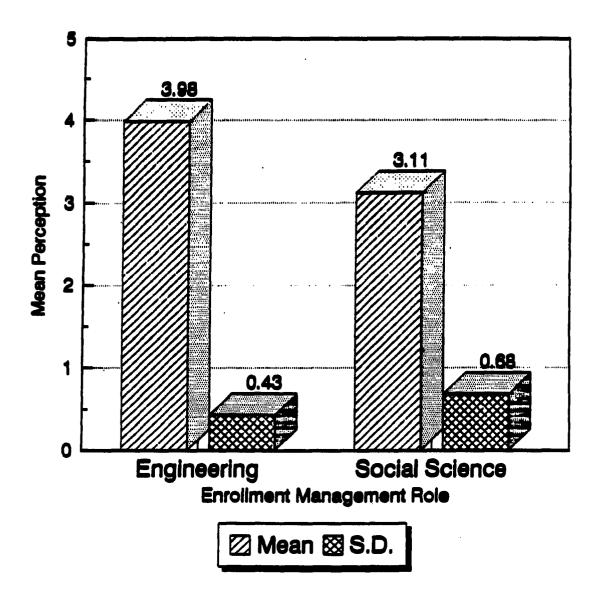


Figure 5.4: Means and Standard Deviations of the significantly different perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000 based on **academic disciplines**

Restatement of Null Hypothesis 7

There are no significant differences in average perceptions of respondents grouped in different college sizes regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000.

Conclusion: Based on the results of the ANOVA in Table 4.9, the null hypothesis was retained. The perceptions of the deans and faculty members from various college sizes did not differ significantly on the potential importance of the selected roles of deans of land-grant universities by the Year 2000.

Restatement of Null Hypothesis 8

There are no significant differences in average perceptions among the various sizes of participating universities/institutions regarding the importance of the selected roles of academic deans by the Year 2000.

Conclusion: Judging from the ANOVA results presented in Table 4.10, the null hypothesis was retained. Therefore, it was concluded that there were no significant differences in average perceptions among the various sizes of universities/institutions regarding the potential importance of selected roles of deans by the Year 2000.

Restatement of Null Hypothesis 9

There are no statistically significant differences in average perceptions among the three college gender representations regarding the importance of the selected roles of academic deans of land-grant universities by the Year 2000.

Conclusion: As is evident from Table 4.11 and Figure 5.5, there is a significant difference between the average perceptions of the predominantly female colleges and predominantly male colleges regarding the importance of the Administrative Affairs role of academic deans of land-grant universities by the Year 2000. Though they both perceived that the role will be important, the degrees of their agreement with the particular role differ significantly. The predominantly female colleges placed greater premium on this role with an average mean of 4.54 (more of strong agreement) while the respondents from the predominantly male student population felt the importance would not be as great. Their average mean perception was 4.12 (just agreed). The null hypothesis that there are no significant differences in average perceptions among the gender representations (the predominantly female, the predominantly male and the equal representation) was rejected on the administrative affairs role at $\alpha < .01$ level.

Discussion: One can only infer from the results of this study that the respondents from the predominantly female colleges anticipate that there would be greater administrative needs for their colleges in the future. This may be in the form of supervision, security, counseling and other special services. On the other hand, though the respondents from the predominantly male colleges also recognized the importance of administration but just at a standard level. The deans of predominantly female colleges especially should take note of this and be ready to meet the administrative demands of their colleges even if institutional political affairs role saps much of their efforts.

Restatement of Null Hypothesis 10

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of their status – Deans or Faculty.

Conclusion: Based on the results of χ^2 in Table 4.12, relating to hypothesis 9, χ^2 value = .53, df = 2 and p = .77. The null hypothesis was retained based on alpha = .05 significance level. It was concluded that the distribution of deans and faculty members to the responses of "Yes" and "No" regarding the future need for formal training of academic deans was independent of their status – deans or faculty members.

Restatement of Null Hypothesis 11

The distribution of respondents in the two possible responses of "Yes" and "No" regarding the need for formal training of academic deans by the Year 2000 is independent of academic ranks.

Conclusion: Similar to the conclusion on hypothesis 10, Table 4.14 presents the χ^2 results of hypothesis 11 testing. The results showed that the distribution of the respondents – deans and faculty members – in the two possible responses of "Yes" and "No" regarding the future need for formal

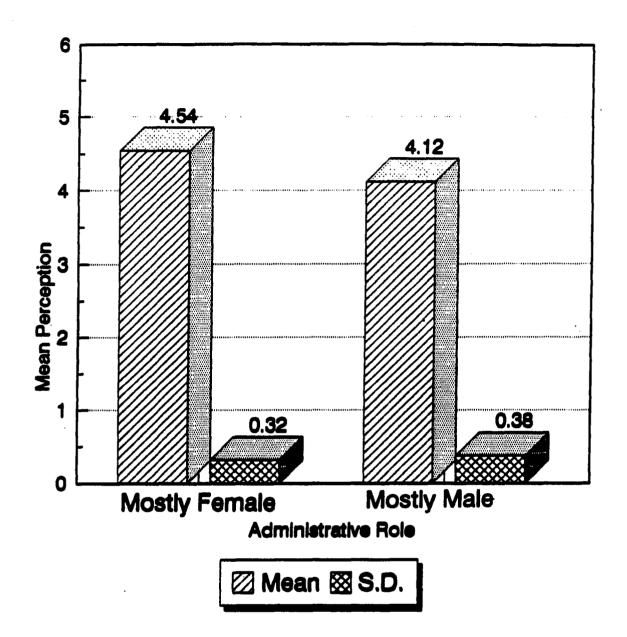


Figure 5.4: Means and Standard Deviations of the significantly different perceptions regarding the importance of the selected **roles** of academic deans of land-grant universities by the Year 2000 based on **predominant gender of college student population** training of academic deans was independent of academic ranks. The null hypothesis was, therefore, not rejected.

Restatement of Null Hypothesis 12

There is no significant relationship between the perceptions of the master's degree holders and those of the Ph.D. degree holders regarding the need for formal training of academic deans by the Year 2000.

The frequency count revealed that of the 103 respondents, 58 answered "No" to the question of need for formal training of academic deans of landgrant universities by the Year 2000 while 44 answered "Yes". One was neutral. Table 4.15 presents the detailed frequency distribution showing this fact.

Conclusion: When the null hypothesis was tested with the chi-square procedure, it revealed that all the 6 master's degree holders perceived that the deans would need to be formally trained in the future while 57 of the 97 Ph.D. degree holders perceived that there would be no need for that type of training. When the χ^2 was taken on all respondents, it revealed no significance. The chi-square value=4.30, df=2, (p<0.12). Therefore, the hypothesis was retained. There was no significant relationship between the master's degree holders' perception and those of the Ph.D. degree holders. Table 4.15 presents the details. The reader should be aware that the samples in this chi-square cells are disproportionate. While there were only 6 master's degree holders, we had 97 Ph.D. degree holders. So, even if all the 6 were positive about formal training for academic deans, their number is significantly lower than

their counter-part - the Ph.D. degree holders.

Discussion: As revealed in the returns, all the deans have Ph.D. degrees as their highest degrees. The deans and other Ph.D. degree holders have the greater probability of knowing the demands and training needs of academic deanshiea deansmmortmore the deanship more than the master's degree holders. Some might have acted for the deans one time or another while some might have been associate or assistant deans themselves. They, therefore, have inside knowledge of the training needs of academic deans. In their opinion, and contrary to that of the master's degree holders, formal training is not what the deans would need. One can infer that the Ph.D. degree holders see solution to the deans' training needs in short seminars, summer workshops and refresher courses. They may not necessarily need to go for formal training in higher education administration.

Though, the finding of this study concludes that the deans of land-grant universities would not need any formal preparation by the year 2000, this is contrary to Cyphert and Zimpher's (1980) argument that deanship requires formal preparation in view of its increasing responsibilities. They declared: "It seems unreasonable to continue to assume that persons who come to these leadership positions will be able to respond to the demands of the role without the opportunity for job-specific training" (p. 92). It is also contrary to the recommendation in Hunt's (1977) study which favors training in formal education programs for academic deans. Sagaria and Krotseng (1986) also observed that the majority of persons who become deans do so with minimal formal management training. This is suggestive of a recognition for the need of formal preparation of academic deans.

Current developments are indicators that some sort of training are being recognized and will be necessary for academic deans and other senior administrators of higher education institutions now and in the future (Harvard Graduate School of Education, Institute for Educational Management and Baden, 1989 and 1990 respectively). In 1989, the Harvard Graduate School Institute for Educational Management announced a four-week residential program for senior administrators in higher education and it provided "a comprehensive grounding in management and leadership issues" (p. 2). In 1990 summer, a new institute was announced for beginning college presidents. Cliff Baden (1990), director of Programs in Professional Education at Harvard stated that "the new program will focus on a unique time period – the transition to the new presidency" with a goal "to ensure a successful start for the person and for the institution" (p. 4).

It is expected that the training need that had been so recognized will not end with 1990. There is greater probability that the need will become greater in the future and various other similar courses would be organized for academic deans and other senior administrators of higher education institutions. As has been found from this study, the future training needs for academic deans of land-grant universities will not be of a formal type. However, the trend of responses to and attendance at the Harvard Graduate School of Education summer programs suggest the acceptance of a need for short courses, seminars and/or workshops.

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General Recommendations

On the basis of the conclusions presented above, the researcher recommends the following courses of action:

1. Academic deans of land-grant universities should be aware that their perceptions and those of the faculty members regarding the future activities and roles/responsibilities of academic deans may be congruent most of the time. Therefore, they should take advantage of such common understandings and involve the faculty members in planning for the future of land-grant universities.

2. Academic deans should also be sensitive to possible differences that may exist between their perceptions and those of the faculty members regarding either their present or future activities and/or roles. They should perceive faculty members' differences as a fountain of ideas from where to draw for institutional planning and collegial strength. The more diversified the ideas available to the dean, the greater the potential for institutional growth and the more dynamic the college may be in the pursuit of the institution's mission. One of Chen's (1990) findings should be considered here. He found that education administrators who scored high in both task and relationship behavior have higher school climate mean scores. Those administrators also displayed good communication and leadership skills. Chen observed that the leadership style of such administrators appeared to be the most effective for encouraging togetherness in educational institutions. Deans should acquire good communication and relationship skills to derive the best in diversity.

3. It is also recommended that search committees for future deans should

consider ideas from the findings of this study in developing the deans' job description. As earlier mentioned in this Chapter, the contemporary deans' job descriptions have not yet incorporated a number of the roles that this study has found to be of potential importance. (For instance, enrollment management and global education/awareness.) This should be gradually infused and reviewed as subsequent research findings may recommend.

4. Based on the findings of this study, it is recommended that the searches for deans of the '90s should de-emphasize academic and student affairs roles. Competent assistants should be empowered to take over those burdens progressively from the academic deans. It is recommended that deans should place more emphasis on resource management, global education/awareness and institutional political affairs roles of academic deans. As was evident from the examination of recent advertisement for academic deans of landgrant universities, it is also recommended that affirmative action fulfillment be emphasized by the deans of the '90s for as long as it is legal for land-grant universities.

5. In view of the finding that formal training will not be needed for academic deans of land-grant universities by the Year 2000, it is also recommended that short courses, seminars and/or workshops be arranged for academic deans and other senior administrators of land-grant universities so as to provide suitable settings for them to share problems and solutions and also to discuss current trends in higher education administration. It is hoped that such short courses, workshops and/or seminars as are now being instituted at Harvard would enhance the deans' and administrators' performances. 6. As has been revealed through the literature reviewed for this study, the roles of academic deans of land-grant universities cannot be standardized. It is a changing one. Therefore, to keep abreast of changes and to enhance capability to direct the change process (Walker and Vogt, 1987), research into the institution of deanship should be a continuous exercise. As Hunt (1977) observed, only through constant study of the roles of academic deans will it be possible to maintain an improved picture of what constitutes leadership in higher education institutions.

Perhaps the sense of this research regarding the activities and roles of academic deans of land-grant universities by the Year 2000 will best be conceived by A.G. Wells' observation in Balk (1990): He said:

There will be no day of days...when a new world order comes into being. Step by step and here and there it will arrive, and, even as it comes into being it will develop fresh perspectives, discover unsuspected problems, and go on to new adventure (Balk, 1990, Opening page).

Suggestions for Future Research

- 1. The need for formal training has been treated in this study as a joint issue for investigation. It is suggested that it be made a primary topic on itself so as to identify the need for training generally - be it formal, informal, long-term, and short-term.
- 2. This study could be replicated, separating the pluralized items on the instrument so as to give the respondents a chance to respond to individual issues.

- 3. Studies could be conducted to determine the effect of graduate programs which offer courses in governance and/or leadership behavior on institutional and administrative functioning.
- 4. Studies could be conducted on the effect of workshops, seminars or refresher courses on leader behavior and performance.
- 5. This study may be replicated on the future roles of academic deanship of all state colleges and universities.
- 6. Similar study could be carried out on the roles of each of the other administrators of higher education institutions.
- 7. Studies could be carried out to compare the roles of academic deanship in private and public institutions of higher education.
- 8. Studies could also be conducted comparing academic deanship in American public universities and academic deanship in a developing country.

The Need for Locally-based Research in African Development: The Case of Nigeria

Nigeria is a "developing" nation. It is also generally referred to as a "third world" country. It is a federation of twenty-one states and a Federal Capital territory (Joshua, 1988). Recently, however, two more states were carved out of the country – one from the North and the other from the East – increasing the number of states to twenty-three plus the Federal Capital territory.

Nigeria is situated within longitudes 4 and 14 degrees North of the Equator, and between latitudes 3 and 15 degrees East of Greenwich. "It occupies an area of 924,000 square kilometers (356,669 square miles)" (Joshua, 1988, p. 101). Nigeria is about three-and-a-half times the size of the United Kingdom, and it occupies one-seventh of the total mainland of West Africa.

This African country has the greatest population on the continent which is, in fact, greater than the population of all the other West African countries put together. By the 1963 census, Nigeria's population was 55,670,000, but it has recently been estimated at 100 million Williams-Russell (ca. 1987). The population is highly heterogeneous comprising about 250 cultural and linguistic groups. It is an agricultural society, basically producing cattle, goats, poultry, fish, and a variety of food and cash crops (Iloeje, 1972; Taiwo, 1980). Some examples of Nigeria's cash crops are cocoa, rubber, ground-nut, palm oil, and timber, though the production of these products has dwindled in recent times. Nigeria is also an oil producing country with membership in the OPEC (Organization of Petroleum Exporting Countries). A school of thought has argued that the reduction in agricultural exports from Nigeria was caused by the oil discovery. However, the validity of this argument is beyond the scope of this research.

With the foregoing background information about Nigeria, the country can be considered as representative of the African continent. An extrapolation of the relevance of the findings of the current research to African countries (the example of Nigeria) should be more comprehensible.

In a study by Joshua (1988), it was found that out of 34 aspects of the

United States technology education programs selected, 32 were considered as transferable to Nigeria. Those 32 aspects were recommended to be adopted in Nigeria through the Technical Teachers Training Program participants.

Nigerians have been studying in the United States for years and the effect of American education on the Nigerian social and educational systems is enormous and apparent. The indigenous culture is giving way to foreign ones and this practice is inimical to the patriotic ego that is needed for the progress of the country.

In the year 1960, Nigeria became politically independent from the British colonialism but embedded the parliamentary system of government. Not long after independence, this system failed. The second republic sprang up. In search of an alternative, the Federal Government of Nigeria decided to copy the Presidential system of government which has benefited America so long. After four years, the Presidential system collapsed in Nigeria again.

In 1977, the Federal Government of Nigeria came up with a "National Policy on Education" which, among others, recommended a switch to the American system – the 6-3-3-4 system of education. This means 6 years of elementary education, 3 years of junior high, 3 years of senior high and 4 years of higher education. With the daily increase of American educated graduates in Nigeria, the reason for the shift to the American system of education is not far-fetched. The whole society is so much permeated by American culture that the trend is "if it is American, it's got to be good for Nigeria"!

The findings from this study and from other similar ones of the past have revealed that Americans believe in continuous search for knowledge. They invest very highly in research. From the researcher's experience, it is evident that America will pay any amount to "import" knowledge (if necessary) for investigation and development, R & D. This is an important base of American advanced development. Unfortunately, this is an area which is still waiting to be emulated by Nigeria.

As has been found out from the current research, the roles of academic deanship in American universities have been highly adaptable since its inception. For a long time, it was left unresearched. But as early as 1929, Ward and Russell did some work on the roles of academic deans and this investigation is still alive today. It is through such research that American college and university administrations have survived the turbulence of changes. American higher education started on the patterns of European ones, but through investigations and adaptations, the higher education system is where it is today.

Research and development is an on-going process and part of American public and private life. This makes it difficult, and in fact impossible, for the country to remain stagnant. The progress is an ongoing process. It has been found from this research that deanship which American land-grant universities started in the 19th century has changed direction and focus many times. It has been further revealed through this study that academic deanship is still changing and will continue to change by the Year 2000. Similarly, the lower levels of American education are dynamic. For instance, the much adored 6-3-3-4 system of education which Nigeria has recently plugged into her system as the panacea for her educational problem has started to receive modification

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and changes in America, its original home!

Nigeria has to realize that the different systems – political, educational, social, and economic – being practiced by the attractive developed countries were designed by and for the people of those countries. As long as cultures differ, people differ, climate, and other factors differ, Nigeria has to conduct research to evolve unique solutions that specifically focus her various problems; albeit, the advanced countries' systems can provide the necessary springboards.

Nigeria should cooperate with other African countries in Research and Development as well as other economic ventures to develop locally-based systems as well as other tangible products for the benefit of Nigerians and Africans in general.

The Nigerian Government should start to appropriate funds for Research and Development. The Nation should take advantage of her abundant human resources, involve other African countries to research into new products with local materials as well as research into solutions to other common problems of politics, education, poverty, diseases, housing, and sanitation. Foreign intellectuals could be invited to the country to conduct research in areas of expertise that are locally scarce. The products of such investment from both local and foreign researchers should be patented by Nigeria, having paid the researchers reasonably for it.

The bottom line is that this research has shown that no system is stagnant in a progressive nation like the USA. Research is a strong tool by which a nation can keep pace with the constant world of changes. Therefore, Nigeria should direct her effort towards Research and Development that are locally based and driven. Rather than continue to copy educational systems (both higher education and K-12) which do not really serve the local conditions, Nigeria should redirect her educational and other policies and get involved in educational, ethical, political, religious, sociological, economical, agricultural and other research efforts. This will get the country on the path of concrete development.

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BIBLIOGRAPHY

- Al-Abideen, Mustafa Zain. (1979). A Comparative Study of the Perceptions and Expectations of Deans and Faculty Members Regarding the Functions of the College Dean at the University of Basra. Doctoral dissertation, George Peabody College for Teachers.
- Andersen, Dale G. and King, J. P. (1987, Sept./Oct.). "The Dean of Education: A Demographic Analysis." Journal of Teacher Education 38(5), 9-12.
- Baden, Cliff. (1990, Spring). "New Institute Designed for Beginning College Presidents." Alumnibulletin, 34(2), 4.
- Baldridge, J. Victor, and Riley, Gary L. (1977). *Governing Academic Organizations*. Berkeley, California: McCutchan Publishing Corporation.
- Balk, Alfred. (1990). The Myth of American Eclipse. New Brunswick: Transaction Publishers.
- Bidwell, Charles E. (1955, Sept.). "The Administrator's role and satisfaction in Teaching." Journal of Educational Sociology, 29(1), 41-47.
- Bolman, Lee. (1990, Spring). "The Nature of Leadership." Alumnibulletin, 34(2), 2.
- Borg, W.R. and Gall, M.D. (1983). *Educational Research. An Introduction* (4th ed.). White Plains, New York: Longman Incorporated.
- Bowker, Lee H. and Lynch, David M. (1985). What Every Departmental Chair Should know about the Dean. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago,

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Illinois, March 31-April 4.

- Brown, Douglas J. (1969). The Liberal University: An Institutional Analysis. New York: McGraw-Hill Book Company.
- Brubacher, John S. and Rudy, Willis. (1958). *Higher Education in Transition: An American History*, 1636-1956. New York: Harper and Row.
- Brunner, Henry S. (1962). Land-Grant Colleges and Universities 1862-1962. Washington, D.C.: U.S. Department of Health, Education, and Welfare.
- Buchen, Irving H. (1974, Summer). "The Swinging Monk or the Dean of the Future." Intellect 102(2358), 497-500.
- Burnett, Collins. (1973, Winter). "Higher Education as a Specialized Field of Study." Journal of Research and Development in Higher Education, 6(2), 22.
- Caldwell, John T. (1962, Feb. 1). "The Land-grant Colleges: 'Powerful Thrust of Democracy." The Christian Science Monitor, Section 2, p. 11.
- Campbell, Merton V. (1959, Feb.). "Teacher-principal agreement on the Teacher Role." Administrators Notebook, 7, 1-4.
- Carroll, Archie B. (1974, Spring). "Role Conflict in Academic Organizations: An Exploratory Examination of the Department Chairpersons Experience." Educational Administration Quarterly, 10(2), 51-64.
- The Centennial Office, American Association of Land-Grant Colleges and State Universities. (1960). "Contributions of Land-Grant Universities and Colleges." Washington, D.C.: Author.
- Chase, Francis S. (1953, March). "Professional Leadership and Teacher Morale." Administrator's Notebook, 1, 2-3.
- Chen, Ming-Tung. (1990). Relationship Between Principals' Leadership styles and School Climate in Senior Industrial High Schools in Taiwan, The Republic of China. Doctoral dissertation, Iowa State University, Ames, Iowa.

- "Bulletin Board." (1990, July 11). The Chronicle of Higher Education 36(43), B28-B29.
- "Bulletin Board." (1990, July 18). The Chronicle of Higher Education 36(44), B33-B36.
- "Bulletin Board." (1990, July 25). The Chronicle of Higher Education 36(45), B28-B30.
- "Bulletin Board." (1990, August 1). The Chronicle of Higher Education 36(46), B32-B38.
- "Bulletin Board." (1990, August 8). The Chronicle of Higher Education 36(47), B28-B30.
- "Bulletin Board." (1990, August 15). The Chronicle of Higher Education 36(48), B32-B36.
- Colardaci, Arthur. (1980). "Some Notes on Deans as Individuals and the Role of the Deans." In E. Griffiths and D. J. McCarty (Eds.), *The Dilemma of the Deanship* (pp. 125-132). Danville, Illinois: Interstate Printers and Publishers, Inc.
- Cole, Thomas W. (1955). Duties of Academic Deans in Selected Methodist Church-related Colleges. Doctoral dissertation, University of Texas.
- Conant, Miriam B. (1967, Summer). "The Academic Dean as a Subversive Bureaucrat." *Educational Record*, 48(3), 276-284.
- Craig, Mack W. (1958). The Role of the Academic Dean in Selected Church-related Colleges. Doctoral dissertation, George Peabody College for Teachers.
- Cyphert, F.R. and Zimpher, N.L. (1980). "The Educational Deanship: Who Is The Dean?" In Daniel E. Griffiths and Donald J. McCarty (Eds.), The Dilemma of the Deanship (pp. 91-122). Danville, Illinois: The Interstate Printers and Publishers, Inc.

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DeFerrari, R. J. (ed.). (1956). The Problems of Administration in the

American College. Washington, D.C.: The Catholic University of America Press.

- Dejnozka, E. L. (1978, Sept/Oct.). "The Dean of Education: A Study of Selected Role Norms." Journal of Teacher Education, 29(5), 81-84.
- DeThomasis, Brother Louis. (1990, Spring). "The Academic Leader: Considerations In a Collegial Model of Management." *Network*, 9(3), 19-22.
- Dibden, A. J. (1968). The Academic Deanship in American Colleges and Universities. Carbondale, Illinois: Southern Illinois University Press.
- Dill, William R. (1980). "The Deanship: An Unstable Craft." In E. Griffiths and D. J. McCarty (Eds.), *The Dilemma of the Deanship* (pp. 261-284). Danville, Illinois: Interstate Printers and Publishers, Inc.
- Doyle, Robert. (1984, June). "Want a Meaningful Staff Development Program for Your Administrators? Have Them Teach!" Thrust for Educational Leadership 13(7), 22.
- Emme, Earle E. (1946, May). "What Deans and College Presidents Might Do." Journal of Higher Education, 17, 265-267.
- Evan, William M. (1962). "Role Strain and the Norm of Reciprocity in Research Organizations." *American Journal of Sociology*, 18(3), 346-354.
- Finnegan, Darrell F. (1951). The Function of the Academic Dean in American Catholic Higher Education. Washington, D.C.: The Catholic University of America Press.
- Frances, Sister Mary. (1947). "The Office of the Dean of Studies." In R. J. DeFerrari (ed.), College Organization and Administration (pp. 125-132). Washington, D.C.: The Catholic University Press.
- Gant, J. L. (1983). Effective Schools, Colleges and Departments of Education: The Dean is the Key. President's address presented at the Annual Meeting of the American Association of Colleges for Teacher Education, Detroit, Michigan, Feb. 22-25.

- Getzels, Jacob W. (1958). "Administration as Social Process." In A. Halpin (Ed.), Administration Theory in Education (pp. 150-165). Chicago: Administration Center, University of Chicago.
- Getzels, Jacob W. and Guba, Egon G. (1957, Winter). "Social Behavior and the Administrative Process." School Review 65(4), 423-441.
- Gibson, James L., Ivancevich, John M. and Donnelly, James H., Jr. (1982). Organizations: Behavior, Structure, Processes. Plano, Texas : Business Publications, Inc.
- Glick, Milton. (1989). Iowa State Daily (Ames, Iowa) p. 3, Sept. 14.
- Good, Carter V. (Ed.). (1973). *Dictionary of Education*. 3rd edition. New York, N.Y.: McGraw-Hill Book Company.
- Gould, John W. (1964). *The Academic Deanship*. New York: Bureau of Publications, Teachers College, Columbia University.
- Green, Diana. (1989). "Higher Education and the Challenge of the Single European Market." In Christopher Ball and Heather Eggins (Eds.), *Higher Education into the 1990s, New Dimensions (pp. 124-132).* Stony Stratford: Society for Research into Higher Education and Open University Press (SRHE).
- Griffiths, E. and McCarty, D.J. (Eds.). (1980). The Dilemma of the Deanship. Danville, Illinois: Interstate Printers and Publishers, Inc.
- Gross, Neal, Mason, Ward S. and McEachern, Alexander W. (1958). Explorations in Role Analysis: Studies of The School Superintendent Role. New York: John Wiley and Sons.
- Hampton, David R., Price, Karl F. and Belanco, James A. (1975). Management Today. New York: Wiley & Sons.
- The Harvard Graduate School, Institute for Educational Management. (1989, Spring). Alumnibulletin 33(2), 2.
- Hawkes, Herbert E. and Rose, Anna L. (1945). Through A Dean's Open Door. New York: McGraw-Hill Book Company.

Henderson, Algo D. (1957, Oct.). "The Dean is Busy." The North Central

Association Quarterly 32(2), 179-185.

- Higher Education Publications, Inc. (1990). The HEP 1990 Higher Education Directory. (1990). Washington, D.C.: Author.
- Hodges, R. and Hodges, L. (1975, Winter). "The Role of the Graduate Dean." *Educational Record* 56(1), 39-41.
- Hunt, Larry W. (1977). A Study of The Perceptions of Presidents and Academic Deans Regarding Role Expectations and Decision-making Styles of Academic Deans in Texas Community Colleges. Doctoral dissertation, Northern Texas State University.

Iloeje, N. P. (1972). A New Geography of Nigeria. Ikeja, Nigeria: Longman.

- Joshua, Monday T. (1988). Nigerian Students' Perceptions regarding transferability of selected aspects of U.S.A. technology education programs to Nigeria. Master's thesis, Iowa State University.
- Kahn, Robert L., Katz, Daniel and Adams, J. (eds.). (1964). Organizational Stress: Studies in Role Conflict and Ambiguity. New York: John Wiley and Sons.
- Kellogg Foundation. (1989, Sept. 29). "Research Funding Opportunities." University News 36(6), 72.
- Kemerer, Frank R. (1984-85, Winter). "The Role of Deans, Departmental Chairs and Faculty in Enrollment Management." *The College Board Review* (134), 4-8, 28-29.
- Kemerer, Frank R., Baldridge, J. Victor, and Green, Kenneth C. (1982). "Strategies for Effective Enrollment Management." Washington, D.C.: American Association of State Colleges and Universities.
- Kinder, James S. (1934). The Internal Administration of the Liberal Arts College. Contributions to Education No. 597. New York: Bureau of Publications, Teachers College, Columbia University.
- Kneller, George F. (1986). "Post-Secondary Education." The Encyclopedia Americana, International Edition. Vol. 24. Danbury, Connecticut: Grolier Inc., International Headquarters.

- Levine, Arthur and Associates. (1989). Shaping Higher Educations's Future Demographic Realities and Opportunities 1990-2000. San Francisco: Jossey-Bass Publishers.
- Lieberman, Seymour. (1956). "The Effects of Changes in roles on on the Attitudes of the Role Occupants." *Human Relations* 9(4), 385-402.
- Lipham, James M. (1964, Oct.). "Organizational Character of Education: Administrative Behavior." *Review of Educational Research*, 34(4), 438.
- Lonsdale, Richard. (1964). "Maintaining the Organization in Dynamics Equilibrium." *Behavioral Science and Education Administration*. Sixty-third Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press.
- Lubbers, I. J. (1932). College Organization and Administration. Evanston, Illinois: Northwestern University Press.
- Marks, Carolyn A. (1980). Changes in The Role of Deans Since the Advent of Faculty Collective Bargaining in Selected Institutions of Higher Education in Pennsylvania. Doctoral dissertation, Temple University, Philadelphia.
- McCarty, D. J. and Reyes, P. (1986). Governing Academic Organizations: The Academic Dean and The President review the current state of College Governance. Paper presented at the Annual Meeting of the American Education Research Association, San Francisco, CA, April 16-20.
- McCarty, D. J. and Reyes, P. (1987, Sept./Oct.). "Organizational Models of Governance: Academic Deans' Decision Making Styles." *Journal of Teacher Education 38*(5), 2-8.
- McDaniel, Thomas R. (1978, July). "On The Dean and His Office: Reflections of a Department Chairman." *Peabody Journal of Education* 55(4), 358-363.
- McGrath, Earl J. (1947). "The Office of The Academic Dean." In Norman Burns (Ed.), *The Administration of Higher Institutions under Changing Conditions* (pp. 43-47). Chicago, Illinois: The University of Chicago Press.

- Miller, Richard I. (1974, Jan.). "The Academic Dean." Intellect, 102(2354), 231-234.
- Milner, Clyde A. (1936). The Dean of The Small College. Boston: The Christopher Publishing House.
- Mooney, Carolyn J. (1988, Jan. 27). "Where Are All Those Faculty Curmudgeons Who Never Met A Dean They Liked?" *The Chronicle of Higher Education*, A15 and A19.
- Morris, Van Cleve. (1981). Deaning: Middle Management in Academe. Urbana, Chicago: University of Illinois Press.
- Mosha, H. J. (1986). "The Role of African Universities In National Development: A Critical Analysis." *Comparative Education*, 22(2), 95-109.
- National Association of State Universities and Land-Grant Colleges. (1989). FACTS BOOK: National Association of State Universities and Land-grant Colleges. Washington, D. C.: Author.
- National Center for Educational Statistics. (1988). Directory: Colleges and Universities. Washington, D.C.: United States Department of Health, Education and Welfare.
- Naugle, Ray A. (1980). The Actual and Ideal Functions of the Academic Deans. Doctoral dissertation, Temple University.
- Newcomb, T. M. (1950). Social Psychology. New York: Holt, Rinehart and Winston.
- Owens, Robert G. (1970). Organizational Behavior in Schools. Englewood Cliffs, New Jersey: Prentice-Hall.
- Palm, Edward C. (1985). The Ideal Functions of the Academic Deans as Perceived by Experienced Deans in Selected Colleges Accredited by the American Association of Bible Colleges. Doctoral dissertation, University of Cincinnati, Ohio.

Lawrence and the second

Parsons, T. (1951). The Social System. New York: The Free Press of Gilancoe.

- Perkin, Harold. (1984-85, Winter). "Redesigning the University for the 1980s and Beyond: An International Perspective." *The College Board Review* (134), 10-18.
- Peterson, Marvin W. (1974). "Organization and Administration in Higher Education: Sociological and Social-psychological Perspectives." In T. Kerlinger and J. Carroll (Eds.), *Review of Research In Education*, 2 (pp. 296-347). Itasca, Illinois: F.E. Peacock.
- Raven, Bertram H. and Rubin, Jeffrey Z. (1983). Social Psychology (2nd edition). New York: Wiley & Sons.
- Reeves, Floyd W. and Russell, John D. (1929). College Organization and Administration. Indianapolis: Board of Education Disciples of Christ.
- Reeves, Floyd W. and Russell, John D. (1932). *The Liberal Arts College*. Chicago: The University of Chicago Press.
- Roaden, Arliss L. (1978). "Remaining an Academic Leader and Being President." In Sandi Ralston (Ed.), *The Contemporary College President: Pressures and Challenges.* Washington, D.C.: American Association of State Colleges and Universities.
- Sagaria, Mary Ann D. and Krotseng, Marsha V. (1986, Summer). "Deans' Managerial Skills: What They Need and What They Bring to a Job. Journal of the College and University Personnel Association 37(2), 1-7.
- Sargent, Stanfeld S. (1951). "Conceptions of Role and Ego in Contemporary Psychology." In J. H. Rohrer and Sheriff Muzafar (Eds.), Social Psychology at the Crossroads (pp. 355-370). New York: Harper and Brothers.
- Seeman, Melvin. (1953). "Role Conflict and Ambivalence in Leadership." American Sociological Review 18(4), 373-380.
- Seim-Cassady, Shelley. (1985). The importance and Implementation of Management Functions and Activities in English Department at Four-year, State-supported Colleges and Universities. Doctoral dissertation, Iowa State University, Ames.

Sheffield, Edward F. (1951, Jan.). "The Allocation of Administrative

responsibilities in the Liberal Arts College." College and University, 26(2), 236-246.

- Stogdill, Ralph M. and Shartle, C. L. (1948). "Methods for Determining Patterns of Leadership Behavior in Relation to Organization Structure and Objectives." Journal of Applied Psychology, 32(3), 286-291.
- Statistical Package for the Social Sciences (SPSSx). (1988). Third Edition. Chicago, Illinois: SPSSx Incorporated.
- Szilagyi, A. D. (1977, Autumn). "An Empirical Test of Causal Inference between Role Perceptions, Satisfaction with Work, Performance and Organizational Level." *Personnel Psychology 30*(3), 375-388.
- Taiwo, C. O. (1980). The Nigerian Education System: Past, Present and Future. Ikeja, Nigeria: Thomas Nelson.
- Walker, T. L. and Vogt, J. F. (1987). "The School Administrator as change Agent: Skills for the Future." NASSP Bulletin 71(502), 41-48.
- Ward, Merle S. (1934). Philosophies of Administration Current in the Deanship of the Liberal Arts College. New York: Bureau of Publications, Teachers' College, Columbia University.
- Williams-Russel, G. T. (Ed.). (ca. 1987). NIGERIA: Background Information (External Publicity Series). Ikoyi-Lagos: External Publicity Department, Federal Ministry of Information and Culture.
- Wilson, Robin. (1990). "Colleges Scramble to fill Openings in Freshman Classes." The Chronicle of Higher Education 36(40), A1, A34-35.
- Wolotkiewicz, Rita J. (1980). College Administrator's Handbook. Boston: Allyn and Bacon, Inc.
- Works, George A. and Morgan, B. (1939). The Land-Grant Colleges. The Advisory Committee on Education, Staff Study No. 10. Washington, D. C.: US Government Printing Office.

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APPENDIX A. RESPONDENTS' GENERAL COMMENTS

For information and future guidance, the general comments from the respondents to this survey are reproduced hereunder *unedited*.

Deans' Comments:

If you send me a questionnaire asking me what I do, or what I think a dean *should* do in 1990, I can answer it. You're asking me here to be a prophet – I'm not. I'm an academic dean – this questionnaire is about politics. I'm not a politician.

I received your note regarding the questionnaire for your doctoral dissertation. Unfortunately, you sent the questionnaire at an extremely busy time. Currently, I am working over 100 hours a week on university responsibilities. Therefore, I just can't find the time to complete your questionnaire. If my workload decreases in the next two or three months, I would be pleased to complete your questionnaire at that time.

Time to be involved in prof. activities would be great. I've had to give up a research program to provide adequate time to run this college which also includes a large Cooperative Ext. Service. Having such training available would be helpful – 'professional development' opportunities for academic administrators seem terribly neglected – yet as managers with a *very* challenging charge, a commitment to continued training should be implicit.

Training in higher education administration should include and emphasize the skills of working with and managing people in the academic environment.

The greatest problem that will face the administrative head of agriculture will be effectively coordinating teaching, research, and extension in agriculture and natural resources. National policies and perceptions are tending to send research, teaching, and extension on divergent paths.

The committee system should continue to play a dominant role in college administration.

Answers are for dean *only*, not for his/her office or staff.

Have not stressed the role of the dean as fund raiser – clearly an important task.

The section on students does not include the type of questions, e.g. advising and career planning, that we hope to address. The items included are the responsibilities of other units at this institutions – Graduate School, Student Affairs, etc.

Several of your questions are 2 part questions – with some parts that would be answered different ways.

Professors' Comments:

Institutions and their relationship to the state are changing – Deans ought to resist rapid change, but be flexible. Any one appointed should at least have been a chair – not an assistant dean. Some training in management and in fiscal affairs should be required – too often scholarly ability alone leads to disaster.

Choosing a dean based solely on success in obtaining external funding, and choosing a dean who won't put in the time necessary to learn about disciplines outside his/her educational experience, is asking for disaster.

Most institutions do not provide academic deans or faculty sufficient orientation regarding policies, procedures, administrative relationships. Training and increased service is needed at this level – unique to institution.

Academic Deans should have had experience in the institution he serves or in a similar one as a professor and probably as a dept. chairman. Probably should not have had a distinguished research program.

Do not encourage deans to have formal training in higher education administration. A prob. with the U.S. educ. system itself is that we have evolved into having bureaucrates who know too little about any discipline. I believe yes or no answers would not be appropriate for most comments. The Dean should be the leader and policy maker, not a day to day administrator involved in details. Student guidance, Faculty evaluation, etc. should be left to the Departments.

Test prospective dean candidates for *HONESTY* – I've seen too many liars.

The dean does everything.

Associate Professors' Comments:

The reason I answered "no" above (question about need for formal training for deans) is that I believe the selection process will identify those candidates with the appropriate strength (and weaknesses) and select accordingly. Certainly a person selected as a Dean is going to be a Manager – by training or experience.

Deans will do what is necessary to raise money and that is all.

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Assistant Professors' Comments:

The questions are difficult to answer because while the Dean is responsible to see that virtually all the mentioned items are accomplished, s/he does not personally get involved in the details and the execution. Leadership, guidance, motivation, direction and interfacing with university administration, legislators and support groups are the Dean's primary functions.

Faculty members can do the job.

I wish our dean were more politically conscious. May be by the year 2000

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APPENDIX B. GEOGRAPHICAL LOCATIONS OF PARTICIPATING LAND-GRANT UNIVERSITIES

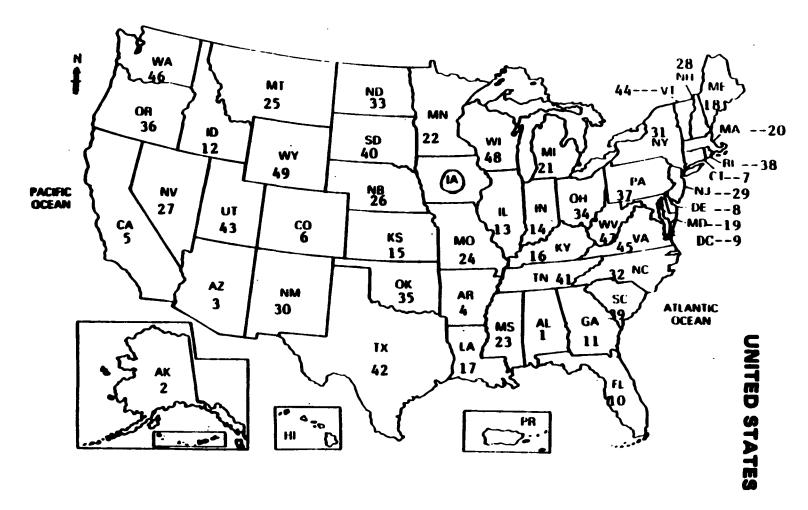


Figure B.1: Geographical Locations of Participating Land-grant Universities

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APPENDIX C. A LIST OF PARTICIPATING LAND-GRANT UNIVERSITIES

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- 1. Alabama A&M University
- 2. University of Alaska Statewide System
- 3. University of Arizona
- 4. University of Arkansas, Fayetteville
- 5. University of California, Systemwide
- 6. Colorado State University
- 7. University of Connecticut
- 8. University of Delaware
- 9. University of the District of Columbia
- 10. University of Florida
- 11. University of Georgia
- 12. University of Idaho

- 13. University of Illinois
- 14. Purdue University
- 15. Kansas State University
- 16. University of Kentucky
- 17. Louisiana State University System
- 18. University of Maine
- 19. University of Maryland
- 20. University of Massachusetts
- 21. Michigan State University
- 22. University of Minnesota
- 23. Mississippi State University
- 24. University of Missouri
- 25. Montana State University
- 26. University of Nebraska
- 27. University of Nevada, Reno
- 28. University of New Hampshire
- 29. Rutgers, The State University of New Jersey

- 30. New Mexico State University
- 31. Cornel University, N.Y.
- 32. North Carolina State University
- 33. North Dakota State University
- 34. Ohio State University
- 35. Oklahoma State University
- 36. Oregon State University
- 37. Pennsylvania State University
- 38. University of Rhode Island
- 39. South Carolina State College
- 40. South Dakota State University
- 41. University of Tennessee
- 42. Texas A&M University System
- 43. Utah State University
- 44. University of Vermont
- 45. Virginia State University
- 46. Washington State University

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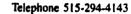
- 47. West Virginia University
- 48. University of Wisconsin-Madison
- 49. University of Wyoming

APPENDIX D. COVER LETTER THAT ACCOMPANIED SURVEY QUESTIONNAIRE

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College of Education Professional Studies N243 Lagomarcino Hall Ames, Iowa 50011



IOWA STATE UNIVERSITY

February 16, 1990

Dear Survey Participant:

In an effort to add to the literature on the roles of academic deans, we are conducting a survey of deans and faculty regarding the selected roles of the academic deanship in land grant universities by the year 2000. The roles of academic deans cannot be static while issues in higher education continue to be dynamic, diverse and numerous. The findings of this study, therefore, will hopefully be significant in forward planning for the administration of, not only the changing land grant universities, but also forward planning for the administration of all higher education institutions of the future.

The survey will be based on the perceptions of the academic deans themselves as well as those of their faculty members comprising a cross section of the academic ranks. Your opinion and cooperation are, therefore, very important to the success of this study.

Please spare a few minutes of your busy schedule to assist in this endeavor. The questionnaire will take approximately 20 minutes to complete. Your individual responses will be kept in strictest confidence and the study will not reveal the identity of any institution, dean or faculty member. All information will be reported by categories only. The coding on the survey forms is to ensure that our follow-up actions go to the appropriate people only. Upon the receipt of the questionnaires, all code numbers will be removed and destroyed. In fact, all questionnaires will be destroyed after the data have been coded.

As soon as you have completed the questionnaire, please scotch tape the open end and deposit it in any U.S. Post Box--the postage is prepaid. Please return the questionnaire by March 1, 1990. If you do not wish to participate in the study, please return the blank questionnaire--the postage is prepaid, too. We appreciate your understanding and cooperation in this important study. Thank you.

Sincerely,

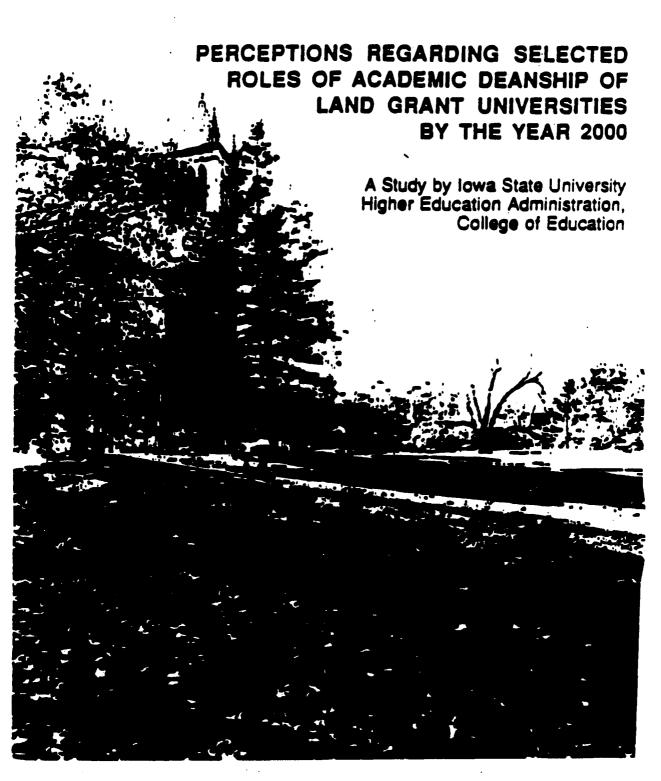
William D. Wolansky / Professor, Higher Education Adm. & Ind. Ed. & Technology

Gabriel O. Fadevi

Research Assistant

APPENDIX E. SURVEY QUESTIONNAIRE

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A SURVEY OF PERCEPTIONS REGARDING SELECTED ROLES OF ACADEMIC DEANSHIP OF LAND GRANT UNIVERSITIES IN THE YEAR 2000

PART I: General Information

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Please circle a number for each question/statement to indicate your reaction and/or its relevance to yourself.

1. Are you male or female?	Female 1 Maie2
2. What is your age group?	21-30 years 1 31-40 years 2 41-50 years 3 51-60 years 4 61 years and over 5
3. Highest degree attained.	Masters
4. Academic field of highest degree.	Agriculture1Arts & Sciences2Biological Sciences3Business4Education5Engineering6Social Sciences7Others (please specify)8
5. Present academic rank.	Assistant Professor
6. Years in present position.	1-4 years 1 5-9 years 2 10-14 years 3 15-20 years 4 21 and over 5

:

7. Are you an Academic Dean?	Yes1 No2 (If "NO", go to Part II)
8. You are a Dean in:	
(a) Which size of COLLEGE?	Under 500 1
(head count)	500-999
	1000-1499
	1500-1999
	2000-2499
(how many)	Over 25006
(b) Which size of INSTITUTION?	Under 10,000 1
(head count)	10.000-19.9992
	20,000-29,999
	30,000-39,9994
(how many)	Over 40,000
	· · · · · · · · · · · · · · · · · · ·
9. Approximate gender representation	Female%
of your college:	Male%

PART II:

The following statements describe possible functions of an academic dean in a land grant university. Please rank to what extent you agree/disagree that these functions will be applicable by the year 2000. Assign a rating of five (5) if you STRONGLY AGREE that the item will be applicable and one (1) if you STRONGLY DISAGREE. The ratings of two (2), three (3), and four (4) should be assigned to Intermediate responses of "DISAGREE", "NEUTRAL", and "AGREE", respectively.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

By the year 2000 an Academic Dean's functions/activities in land grant universities will include:

A. ADMINISTRATIVE AFFAIRS

1. Insuring that decisions made by the 1 2 3 4 5 university management are property executed.

	1	2	3		4		5	
	igree	Disagree	Neutral		Agree		trongly Agree	
univers	By the sities will	year 2000 an A l'include:	cademic Dean	i's func	tions/act	ivities il	n land ç	grant
2. De . go	veloping als for h	a vision and/or is/her college.	long-range	1	2	3	4	5
3. Fo po	rmulatin licies for	g and enforcing his/her college.	written	1	2	3	4	5
	rmulatin liege goa	g strategies for a Lis.	chieving	1	2	3	4	5
5. Es	tablishin	g college object	liv es.	1	2	3	4	5
aff	airs and	e President abo recommending t I policy of the co	to him/her	1	2	3	. 4	5
7. De fac	veloping uity and	vreviewing desc staff positions.	riptions for	1	2	3	4	5
	oviding fi d resear	acilities for teach ch.	ning, learning	1	2	3	4	5
		aison between t iversity manage		1	2	3	4	.5
B. AC								
		active role in the riculum and proj		1	2	3	4	5
		g and directing the college.	he academic	1	2	3	4	5
3. Pi	unning a	nd monitoring ac	tive research.	1	2	3	4	5
4. Se	rving on	all academic col	mmittees.	1	2	3	4	5

	1	2	3		4	1	5	
	Strongly Disagree	Disagree	Neutral		Agree		itrongly Agree	
un	By the iversities will	year 2000 an A Linclude:	cademic Dean	's fund	ctions/acti	vities i	n land ç	grant
5 .	an academ	n creating and m lic environment (ent of standards.	ior the	1	2	3	4	5
6.	Getting invo publication	olved in researc Is.	h and	1	2	3	4	5
7.		nd solving the a hat face the vario he college.		1	2	3	4	5
8.	Attending to ment to whi	he meetings of t ich he is related.	the depart-	1	2	3	4	5
9.	Teaching a year.	course during a	n academic	1	2	3	4	5
C.	FACULTY	AFFAIRS	•					
1.	tion of qualit	g the acquisition ty faculty and str /her responsibili	aff in all	1	2	3	4	5
2.	Being respo ment progra	onsible for facul Erne.	ly improve-	1	2	3	4	5
3.	Encouragin among facu	g creativity and lity.	research	1	2	3	4	5
4.	Maintaining with sugget	an open door to itions and comp	o f aculty plaints.	1	2	3	4	5
5.	Evaluating to of faculty miness in tead	the academic pe embers and the ching.	ir effective-	1	2	3	4	5

1	2	3	4	5
Strongly Disagree	Disagree	Neutrai	Agree	Strongly Agree

By the year 2000 an Academic Dean's functions/activities in land grant universities will include:

6.	Resolving differences and disputes that occur among faculty members.	1	2	3	4	5
7.	Recommending the academic promotion of faculty members.	1	2	3	4	5
8.	Recommending faculty for tenure.	ť	2	3	4	5
9.	Involving faculty members in the appoint- ment of a departmental chairperson.	1	2	3	4	5
D.	STUDENT AFFAIRS					
1.	Providing funds for research/teaching assistantships.	1	2	3	4	5
2.	Providing financial assistance to students for participation in conferences and professional meetings.	1	2	3	4	5
3.	Providing students with minigrants to conduct research projects.	1	2.	3	4	5
4.	Chairing the committees for student discipline.	1	2	3	. 4	5
5.	Organizing orientation programs for new students.	1	2	3	4	5
6.	Encouraging, stimulating and supporting student activities.	1	2	3	4.	5
7.	Maintaining an open door to students with suggestions and complaints.	1	2	3	4	5
8.	Paying occasional visits to students during classes.	1	2	3	4	5

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· 1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

By the year 2000 an Academic Dean's functions/activities in land grant universities will include:

E. FINANCIAL AFFAIRS

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1.	Securing and allocating fiscal resources for and within his/her college respectively.	1	2	3	4	5
2.	Coordinating the development of his/ her college's/school's budget.	1	2	3	4	5
3.	Recommending faculty salary increases.	1	2	3	4	5
4.	Delegating some financial authority to his/her assistants and departmental chairpersons.	1	2	3	4	5 ,
5.	Approving the purchase of various items.	1	2	3	4 ·	5
6.	Approving faculty travel expenses.	1	2	3	4	5
7.	Providing necessary financial support for faculty to attend conferences and professional meetings.	1	Ż	3	4	5
8.	Giving financial commitment to the improvement of the quality of instruction.	1	2	3	4	5
9.	Approving the expenses needed to accommodate visiting professors.	1	2	3	4	5
F.						
1.	Monitoring enrollment trends in the college.	1	2	3	4	5
2.	Researching enrollment strategies.	1	2	3	4	5
3.	involving faculty in enrollment manage- ment in hia/her coilege.	1	2	3	4	5

	1	2	3	1	4	1	5	
	Strongly Disagree	Disagree	Neutral		Agree		itrongiy Agree	,
wi	By the Il include:	year 2000 an A	cademic Dear	n's acti	ivities in la	and gra	ent coll	eges
4 .		nd supporting er ent activities.	nrollment	1	2	3	4	5
5.	Monitoring strategies.	recruitment and	placement	1	2	3	4	5
6.		ass offerings an al students.	d schedules .	1	2	3	4	5
7.		lferings and sch Inal students.	edules for	1	2	3	4	5
G.	GLOBAL	EDUCATION	AWARENES	3 S				
1.	Encouragin tive in curri	ig international p culum developm	berspec- lent.	1.	2	3	4	5
2.		g international s and active partic		1	2	3	4	5
3.	Allocating r education a	esources to sup activities.	port global	1	2	3	4	5
4.	Encouragin exchange p	g international s program.	students	1	2	3	4	5
5.	Supporting Language p	the English-as- program.	a-Second-	1	2	3	4	5
6 .		g and supportin y exchange.	g interna-	1	2	3	4	5
7.		g and supporting ad program.	g the	1	2	3	4	5
8.		g/supporting the entry Orientation		1	2	3	4	5

....

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

By the year 2000 an Academic Dean's activities in land grant colleges will include:

H. INSTITUTIONAL POLITICAL AFFAIRS

۰ 1 .	Articulating the needs of the College to the University administration and to outside groupe.	1	2	3	4	5
2.	Practising institutional/community public relations.	1	2	3	4	5
3.	Practising coalition building and related public service activities.	1	2	3	4	5
4.	Being competent in lobbying strategies.	1	2	3	4	5
5.	Being competent in policy development and policy maintenance skills.	1	2	3	4	5
6.	Communicating and projecting an articu- late position for the College and for education generally.	1	2	3	4	5
7 .	Recognizing and taking advantage of the role and function of mass media in shaping and forming opinions.	1	2	3	4	5

PART III:

Please rank from 1 to 8 the following responsibilities described by items ·listed in PART II as to what you perceive the order of importance should be in the administration of your College by the year 2000. One (1) would indicate a responsibility which you believe to be most important and eight (8) would indicate the one which you believe to be the least important. Use a rank, 1, 2, 3, 4, 5, 6, 7 or 8 only once.

	SELECTED RESPONSIBILITIES	RANKING IN PERCEIVED ORDER OF IMPORTANCE
1.	Academic	
2.	Administration	
3.	Enrollment Management	
4.	Faculty	
5.	Financial	
6.	Giobal Education/Awareness	·
7.	Institutional Politics	
8.	Students	

PART IV:

1. Do you believe that an Academic Dean should have specific formal training in higher education administration before holding such a position by the year 2000?

____ YES ____ NO

2. Kindly put any additional comment/suggestion(s) here.

3. Would you like to receive a copy of an abstract of this study?

_____YES _____NO

MANY THANKS FOR YOUR TIME AND COOPERATION

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APPENDIX F. FOLLOW-UP LETTER

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College of Education Professional Studies N243 Lagomarcino Hall Ames, Iowa 50011

IOWA STATE UNIVERSITY

Telephone 515-294-4143

Dear Dean/Professor:

About four weeks ago, we mailed a questionnaire to you and requested your assistance in completing and returning same to us. Our records indicate that the questionnaire mailed to you has not yet reached us. We suspect that it may have been lost in the mail.

If you did receive the questionnaire, however, and have not had time to complete it, we would like to request again your cooperation in doing so and returning it to us. If you have since completed and mailed the questionnaire, please disregard this communication.

In case the one mailed to you initially did not reach you, please find enclosed another copy of the questionnaire for your kind and immediate attention. Please complete, and scotch tape the open end and then drop it in any U.S. public Mail Box. The postage is prepaid.

If for any reason you choose not to participate in this study, please return the questionnaire to us so that we may not bother you any longer.

We appreciate your cooperation in sparing of your precious time to contribute to the success of this study.

Yours sincerely,

Dr. William D. Wolansky

Professor in Charge of Study

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Research Assistant

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