AN ANALYSIS OF ATTITUDES OF FULL-TIME TEACHING FACULTY IN SIX OKLAHOMA STATE UNIVERSITIES TOWARD JUNIOR COLLEGE EDUCATION

BY

ODUS WILLIAM RICE II

Bachelor of Arts
Oklahoma State University
Stillwater, Oklahoma
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Master of Science
Oklahoma State University
Stillwater, Oklahoma
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Thesis Approved:

Richard B. Jungers
Thesis Advisor

Thomas A. Harman

John E. Stanley

Kenneth St. Clair

Norman N. Durham
Dean of the Graduate School

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Proverbs 3:5-6.

TABLE OF CONTENTS

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION

Both the role and relative importance of the two-year college in the United States have greatly changed since the first two-year colleges in this country were founded. Blocker, Plummer and Richardson (1965) have given dates for the establishment of Monticello College as 1835 and Susquehanna University as 1858. The existence of these institutions and Lasell College, which offered two years of standard collegiate instruction as early as 1852, were merely roots of the major growth which was to come at the turn of the century. As early as 1892, William Rainey Harper, president of the University of Chicago, recommended establishment of the junior college (Monroe, 1972). The motivation for creating an institution of this nature was to free the universities to concentrate on upper division and graduate work and was considered as a two-year extension of the secondary school (Thornton, 1972). Harper was instrumental in the establishment of two private colleges in the Chicago area as well as a public junior college, Joliet Junior College, in Joliet, Illinois. It is the oldest public junior college still functioning (Monroe, 1972).

Monroe (1972) credited two university educators in California as having been most instrumental in the early development of the junior college movement. These two were Alexis F. Lange, dean of the school of education of the University of California, and President David

Starr Jordan of Leland Stanford University. Lange is further credited with having been the key individual in motivating and giving direction to the junior college movement before 1910.

Early junior colleges were predominantly private institutions, and most of the junior colleges in both the New England and Southern states evolved from private academies (Bogue, 1950). Since the early 1900's the growth of the two-year colleges has been rapid. This can be attributed to their broad curricular offerings, their geographic availability and their low tuition costs. The 1973 Community and Junior College Directory listed a total of eight private two-year colleges in 1900 with a combined enrollment that totalled 100 students. In 1921, public junior college enrollments exceeded private junior college enrollments for the first time (Thornton, 1972). Public community colleges out-numbered private junior colleges for the first time in 1948 (Monroe, 1972).

The two-year college experienced a growth spurt during the great depression of the 1930's. The next jump in enrollment came after World War II and most particularly after 1960. In 1967 alone, 70 new community colleges came into being (Gleazer, 1968). The 1973 Community and Junior College Directory listed community and junior colleges, technical institutes and two-year branch campuses of four-year colleges and universities currently offering classes. Total number of these two-year institutions listed in 1972 was 1,111, but for 1973 the publication showed 1,141 institutions. Figures in a 1976 publication by The Department of Health, Education and Welfare and edited by Golladay said:

> Enrollments for degree credit have grown faster for two-year than for four-year institutions, although four-year schools still dominate in absolute numbers. Degree-credit enrollment in two-year institutions rose from 451,000 in 1960 to 2,335,000 in 1975, a more than five-fold increase. For the same period, degree-credit enrollments in four-year institutions rose from 3,131,000 to 3,993,000, somewhat more than a two-fold increase (p. 88).

Initially the two-year institutions provided only parallel programs offering the equivalent of the first two years of a four-year program. According to Blocker, Plummer and Richardson (1965) this portion of the curriculum, commonly referred to as the transfer program, is still the most popular. Some early junior college educators had the vision to anticipate a need to prepare students vocationally or occupationally for less than professional level work, and by the early 1900's a few institutions had added vocational training to their curriculum. By 1950, vocational education had become an accepted and established part of the two-year curriculum, and community college leaders have now estimated that at least 50 percent of community college enrollments should be in occupational education (Monroe, 1972). The most recent area of development in the junior college field has focused on adult or continuing education and community services. Adult education and continuing education, names often used interchangeably, refer to programs designed for fully-employed adults, the retired, and mothers of school-age children. Some courses offered to them are for credit, others are non-credit. These courses may parallel daytime courses or may be courses specially tailored for this clientele and may include broadly cultural courses and occupational courses (Thornton, 1972).

Community services implies that the junior college recognizes

that it is a part of the community and provides cultural events, meeting places, adult education, advisors and other community services, depending on the needs of the community. Many two-year colleges have provided open-door admission policies which have enabled almost anyone of college age or older to be admitted. As an augment to the open-door admission policy, a large number of these institutions have also offered remedial programs for those entering with educational deficiencies. Two-year colleges that are involved with education for transfer, occupational or vocational training, adult education, community services, an open door admissions policy and remedial education, or are involved in a majority of these, are often referred to as community colleges.

The Carnegie Commission has estimated that the community colleges will be enrolling over 4,000,000 students by 1980. The Commission also predicted that by 1980, 203 to 280 new community colleges will be needed, and that 400 to 450 new community colleges may be required if there is insufficient expansion of present colleges (Monroe, 1972). Monroe (1972) has stated that by the end of the 1970's, the public community colleges will enroll a majority of the incoming freshmen students. His estimation was that by 1980, three-fourths of all college freshmen will be enrolled in community colleges.

In Oklahoma junior college development, the "Indian University" was chartered in 1881. Its name was changed to Bacone College in 1910. The Oklahoma legislature created University Preparatory School at Tonkawa in 1901. This institution is now known as Northern Oklahoma College. Both Bacone and Northern later developed into junior colleges, and both remain in that category today. The first state-supported junior colleges were designed for special kinds of schooling

and generally served a fairly well-delineated region. The early municipal junior colleges were financed and operated through public school districts and usually were housed in facilities shared with the public schools (Nutter, 1974).

By 1919, Oklahoma had eight state-supported institutions of higher education that would become junior colleges. Today six of them function as junior colleges, and two have become four-year universities. Tonkawa's college was first to be accredited as a junior college in Oklahoma in 1920. Panhandle attained that status in 1921, and junior college work was added to Claremore in 1923, to Murray and Miami in 1924, and to Cameron, Connors and the Oklahoma School of Mines and Metallurgy in 1927 (Nutter, 1974).

The pattern of growth of Oklahoma's junior colleges during the great depression and following World War II was typical of the growth of junior colleges nationally. Likewise, the tremendous growth of the junior college in America since the 1960's has been experienced in Oklahoma. Currently, Oklahoma has 18 junior colleges; 13 are state supported, one is a locally-supported community college, and four are private church-related colleges. Enrollments in Oklahoma junior colleges for the spring of 1976 comprised 31 percent of the total enrollments in higher education in the state. For 1976, state-supported junior colleges enrolled 33,865 students, the locally supported junior colleges, 329 students, and the four private institutions, 2,678 students, according to the Oklahoma Higher Education Report, February 27, 1976 published by the Oklahoma State Regents for Higher Education.

Background of the Study

The period of rapid growth already experienced has not been without serious problems. One of these has been the articulation of students between junior and senior institutions. Blocker, Plummer and Richardson (1965) underlined this problem when they cited that registrars at four-year schools have sometimes been too exacting in evaluating transcripts of junior college students entering the senior institution. This has sometimes caused students to take additional courses consisting largely of materials previously mastered. Blocker (1966), in another publication, stressed the need for faculty in senior institutions to have wide-spread knowledge of transfer students, their abilities and problems if effective articulation is to exist. He emphasized that the greatest importance lies in the development of effective relationships and understanding among faculty members in both the junior and senior colleges along subject matter lines.

It has been predicted that more and more two-year college students will transfer to senior institutions. As this takes place, it will become increasingly more important that senior college faculty members be aware of the upper division curricular needs of these students (Beals, 1972). This need for close cooperation is further intensified by the establishment of institutions offering only upper division work in the junior and senior years and catering only to transfer students. By 1973, 25 of these upper division colleges were in operation (Kuhns, 1973).

A further problem that has involved the relationship of the two-year college and the senior college or university has been the

training of teachers for the two-year college. Brawer (1968) indicated a need for cooperation in the training of two-year college teachers and stated that if junior colleges are to attract specially trained teachers, the junior colleges must take the lead in encouraging the building of special programs by the four-year institutions. Likewise, Fields (1962) pointed out that adequate training of teachers for community colleges can be attacked only through the cooperation of community colleges and university officials.

Purpose of the Study

A knowledge of the attitudes of faculty members in the four-year colleges toward junior college education is important because

> . . . having an attitude means that the individual is no longer neutral toward the referents of an attitude. He is for or against, positively inclined or negatively disposed in some degree toward them--not just momentarily, but in a lasting way, as long as the attitude in question is operative (Sherif, Sherif and Nebergall, 1965, p. 5).

Also, consistency between attitude and action can normally be expected. Morgan and King (1966) stated that "Festinger (1957) has noted that ordinarily the attitudes held by an individual are reasonably consistent and that a person's actions are usually consistent with his attitudes" (p. 613). If attitudes of the four-year faculty member toward junior college education can be determined, then it would be possible to infer reaction of these faculty members regarding cooperation with the two-year college faculty members in such matters as establishment of new junior colleges, transfer of students from junior colleges to the four-year institutions, joint program development and professional training of staff for the two-year schools.

Medsker (1960) found that:

> certain junior college staff members may identify themselves with groups outside the college. More particularly, the attitudes of junior college teachers may reflect the educational values or attitudes of teachers in four-year colleges and universities (p. 173).

Cohen and Brawer (1972) found this same thing to be true and reported that:

> Rather than seeking to create a unique niche for themselves and their own institutions, they prefer to see themselves as 'college professors'. In fact, nearly half the instructors queried in a national survey readily admitted that they would really rather teach in a four-year college or university. Although where the junior college system is well established this figure drops (only 25 percent of the faculty in three California junior colleges gave this response). The university faculty continues to afford the reference group for many junior college people (p. 10).

Attitudes of faculty members in the four-year institution thus may affect programs and qualities of programs in the two-year colleges even before a more direct relationship occurs through transfer of the two-year college student to a four-year college.

Educators have expressed the need for closer cooperation between the two-year and four-year institutions, particularly in the areas of articulation of students and preparation of teachers for the two-year college. To bring about understanding on which mutual cooperation can be built, it would be helpful for faculty members of the two types of institutions to be as knowledgeable as possible about each other. Reports of research findings have been written describing perceptions of the junior college by faculty members in the two-year college. These include such major works as The Junior College: Progress and Prospect by Leland Medsker, Junior College Faculty: Issues and Problems by Garrison and Breaking the Access Barriers: A Profile of Two-Year

Colleges by Medsker and Tillery. Other articles and unpublished dissertations can be found dealing with attitudes of taxpayers, board members, students and parents toward the junior college, but comparatively little can be found regarding the attitudes of four-year faculty members toward junior college education. This study will broaden the information available by identifying the existing perceptions of faculty members in selected four-year institutions.

Statement of the Problem

The problem addressed in this study is to determine and analyze the attitudes of full-time faculty members in the six Oklahoma regional universities toward junior college education through the use of the instrument, the Junior College Attitude Survey.

Perceptions that are favorable to junior college education can serve as a foundation for further cooperation. Any perceptions that tend to be unfavorable to junior college education may be presented for examination by both junior and senior college faculties so that problems and potential problems may be identified and dealt with.

Definition of Terms

The terms, junior college, two-year school and community college will be used interchangeably in this study to designate institutions authorized to offer courses no higher than sophomore level. These two-year programs normally would be expected to include transfer, vocational, remedial and adult education. The terms, senior college, four-year college, regional university, and university will be used synonymously. The term, the six state regional universities, will

refer to Central State University, East Central Oklahoma State University, Northeastern Oklahoma State University, Northwestern Oklahoma State University, Southeastern Oklahoma State University, and Southwestern Oklahoma State University. All of these institutions are governed by a single board of regents and have somewhat similar functions and programs. The definition of attitude given by Allport in the Handbook of Social Psychology, Vol. 1 edited by Lindzey (1954) will be used. That definition is as follows:

> An attitude is a mental and neural state of readiness organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (p. 45).

Significance of the Study

Through a study of the expressed attitudes of faculty in Oklahoma's six state universities, additional knowledge will be available to faculty and administration, governing boards and others engaged in or interested in similar research. The information developed could also aid in creating a greater understanding of the strengths and weaknesses of the two types of institutions. From this understanding could come a closer cooperation between the two types of institutions extending from articulation of students to development and maintenance of graduate programs of preparation for junior college teaching. Further cooperation could take the form of shared use of facilities. Knoell and McIntyre (1974) examined financial benefits of increased access without expanding facilities when junior and senior institutions located within reasonable proximity engage in cooperative working relationships.

Scope of the Study

This study will be limited to those institutions which are under the control of the Board of Regents for Oklahoma Colleges. These institutions are Central State University, East Central Oklahoma State University, Northeastern Oklahoma State University, Northwestern Oklahoma State University, Southeastern Oklahoma State University, and Southwestern Oklahoma State University. Only faculty teaching full-time in these institutions will be included. This study will be limited to identification and analysis of attitudes.

Assumptions of the Study

1. It is assumed that response to the questionnaire items reflects the actual attitudes of favorableness--unfavorableness to junior college education.
2. It is assumed that the sample of full-time teaching faculty members of the six regional universities studied is a representative sample of the total population.
3. Use of the Likert-type scale items assumes monotone items--items having the characteristic that the more favorable the individual's attitude toward an item, the higher his expected score for the item.

Design of the Study

Chapter I, Introduction, presented an orientation and background to the study, purpose of the study, the statement of the problem, the definition of terms, the assumptions of the study and the design of the study.

Chapter II, Survey of the Literature, will present pertinent studies and research concerning the relationships of the two-year and four-year institutions. It also will be concerned with the research dealing with the concept of attitude, attitude development and attitude assessment.

Chapter III, Methods of Investigation, will describe the sample and sampling process, give information concerning the development of the research instrument, the Junior College Attitude Survey, used in this study, the method and collection of data, statistical procedures to be used, and the presentation of the research questions to be tested.

Chapter IV, Presentation and Analysis of Data, will describe the respondents included in the study. The research data will be statistically analyzed and will present the findings of the tested research questions.

Chapter V, Summary and Conclusions, will present a summarization of the research findings, draw conclusions from the completed research and will make recommendations for further or related studies.

CHAPTER II

SURVEY OF THE LITERATURE

Junior college education has received a great deal of attention in print in recent years. Books and periodicals have dealt with the junior college in many of its aspects, but only a few of those writings have touched on the relationship of the two-year college to the four-year college and university. The subjects discussed that have involved both two-year and four-year institutions have included funding, the transfer of students, instruction, the quality of the students attending the two-year institution, and preparation of teachers for the junior college.

Dating back to its very beginning, the two-year colleges have had a close relationship with the four-year colleges and universities. Henry P. Tappan, president of the University of Michigan, has been credited with being the first American educator to recommend shifting the obligation for the first two years of college to the high school. Consequently, the junior college became an upper extension of the high school (Monroe, 1972). Fields (1962) also pointed out that university people fostered the development of the junior college. However, faculty, administrators and supporters of the four-year institutions have also, at times, retarded the growth of the two-year college.

Funding

One impediment to the growth of the junior college came in the area of funding. Wattenbarger and Cage (1974) explained that traditionally the community colleges have depended on local support. This has placed them in a position of competing with elementary and secondary schools for funding. The present shift toward state funding has put them in competition with four-year colleges and universities. Thornton (1972) reiterates the same idea stating that the two-year college often is forced into a weak bargaining position since the local community college usually serves fewer students than the number served in the public schools. In competing with the four-year colleges and universities, the junior college lacks the prestige and statewide appeal that the four-year institutions enjoy. Monroe (1972) pointed out that as long as state universities feared that the community colleges might be allocated some of the funds that they had been receiving, state legislators were not inclined to pay heed to junior college pleas for state aid.

Regarding junior colleges in Ohio, McConnell (1962) stated that what the state universities most feared about the movement to establish two-year colleges was the diffusion of the state's financial support for higher education. Gleazer (1968) also recognized the problem of competitive funding, saying that older institutions of higher education were anxious about what effect greater state financial support of the two-year college might have on the senior institutions. Aley (1969) wrote that the American two-year college was resisted by the higher education community because people in the four-year colleges

imagined the two-year institution to be a threat to the existence of the four-year college or university. Corcoran (1973) took the position that junior colleges were potentially limited in the education they could provide because of their financial resources and their locations, since, on a per student basis, community colleges receive substantially less financial support than do four-year institutions. Blocker, Plummer and Richardson (1965) stated that most university administrators viewed junior colleges as being a necessary part of the state system. However, these same administrators had reservations if they felt that the two-year colleges were being set up at the expense of state supported four-year institutions.

A study by Cheit (1971) revealed a number of junior college presidents who felt that their type of institution should have a higher priority in funding than should other types of institutions. They stressed a need to improve their educational image and improve the quality of their programs in order to put themselves in a better position for bargaining on funding. These presidents did not feel that the importance of the the two-year college has been recognized. Jencks and Riesman (1968) accused most legislatures of having spent huge sums of money to establish or expand state colleges and junior colleges in order to provide for the academic rejects, since unpromising students have been barred from the universities.

Transfer of Students

Blocker, Plummer and Richardson (1965) referred to the transfer function as "the oldest and most revered" of the two-year college programs. In a national study of two-year colleges, Medsker (1960) found

that about two-thirds of the students in the junior colleges at that time were enrolled in programs designed to prepare them for transfer to a four-year institution. His findings showed that only half of the students who expected to transfer actually did so. Gleazer (1968) wrote that approximately one student out of three enrolled in the community college would continue his work in a four-year institution. Monroe (1972) reported that 75 percent of the typical community college students chose the transfer program. He noted, however, that only 25 percent or fewer actually do transfer. In an Oklahoma study of junior colleges conducted for the Regents for Higher Education, Wattenbarger and Martorana (1970) found that on a state-wide basis, approximately four of every five students enrolled in Oklahoma junior colleges were enrolled in transfer programs.

In the early stages of the development of the junior college, the universities were ready to accept credit from the two-year colleges and to give credit for work completed. The majority of independent colleges also were willing to accept student transfers from approved junior colleges and to extend credit by transfer (Fields, 1962). Koos (1925), in a report of an early study dealing with transfer students, reported that universities, particularly in the West and Middle West, tended to accept work done in approved junior colleges and to favor the development of junior colleges. He mailed an inquiry to the registrars of a large number of randomly selected colleges. Of 168 responses, 108 reported having received applications for advanced standing from junior college students. All but four of these registrars stated that their institution had allowed transfer students from junior colleges to be admitted to advanced standing. Most of

these institutions did so on the basis of an hour-for-hour transfer of credit, or the transfer of credit for courses open only to freshmen and sophomores in the institution to which the application had been made.

Writing in 1962, Fields said that at one point it appeared that the problem of the transfer of credit had been solved. Programs of the junior colleges and the first two years of the four-year institutions were similar enough to make for ease of transfer. With the development of the multiple community college functions in later years, however, new problems developed.

Reynolds (1965) said that the four-year colleges more often were accepting equivalent courses to substitute for specific courses and were becoming less rigid in their transfer requirements. The four-year institutions were also moving more and more specialized courses out of the freshman and sophomore years. Generally, the senior institutions were found to be fairly generous in their evaluation of junior college courses transferred to the four-year institution. Most would accept an amount equal to about half of the number of hours required for the baccalaureate degree. At the same time, however, very few of the four-year institutions gave students credit for grades earned in the junior college when they applied retention standards or when determining graduation requirements. Some institutions disallowed courses taken at the junior college for which the grade of D was earned. The general trend observed, however, was toward a liberalization of the policies governing the evaluation of transfer credit (Knoell and Medsker, 1965). Although the general trends in transfer of credit appeared favorable for the junior-college transfer student, there were occa-

sional problems when four-year institutions made unannounced changes in course requirements. When situations of this nature have arisen, both the two-year and the four-year schools have suffered because of the negative responses evoked from both parents and students (Blocker, Plummer and Richardson, 1965).

In later writings, Reynolds (1969) noted a gradual relaxation by senior colleges of the somewhat rigid transfer requirements imposed in 1937, in that there has appeared to be an increased use of the principle of equivalency. He reported that students were experiencing less insistence on an exact match of courses offered at the freshman and sophomore level in the junior college for transfer to the four-year schools. In Florida, junior colleges were assured that if general education programs were developed, they would be accepted by four-year colleges and universities as a substitute for the senior institutions' requirements although the courses might not appear to be an exact match.

Honhenstein (1976) cited the great variation among four-year institutions and even within four-year institutions and urged that there be much more flexibility in dealing with courses transferred in from a two-year college. His argument was that there is no greater difference between courses at two-year colleges and four-year colleges than there is in approach of different faculty within a four-year institution to a particular course. In the past, there have been problems in determining what constitutes upper-level and lower-level courses. The four-year institutions are unable to agree on what should be taught at the upper level, and since the strict system of prerequisites has collapsed, this problem has largely faded away.

Blocker, Plummer and Richardson (1965) warned that the lack of clear-cut administrative controls as well as the imposition of unrealistic requirements for junior college students transferring into the four-year institutions could well result in legislative efforts to provide for higher education. In another publication, Blocker (1966) stated that the reluctance of administrators in higher education to develop mutually compatible definitions of roles may lead to policy decisions being handed down by state government.

In many institutions the freshman class had very little in common with the senior class since 50 percent or more of those who graduated had transferred in at some time, according to Dunham (1969). Because of this, he viewed the relationship of the four-year college with the two-year college as a major problem. Eurich (1968) stressed that articulation between the two-year colleges and the four-year institutions is as important as articulation between high schools and two-year colleges. He maintained that there still exists much feeling that a college must maintain traditional barriers to protect themselves. The four-year institutions have continued to favor new freshmen as clients of their schools. Student service programs have been geared largely to the freshmen, and transfer students have been left to fend for themselves (Knoell and Medsker, 1965).

It has been claimed by Blocker, Plummer and Richardson (1965) that university people do not understand the need for technical, vocational, adult education and community enrichment programs in the two-year colleges. Instead, they have focused on the transfer programs.

In turn, university professors have claimed that faculty members in the two-year colleges have been guilty, through inexperience, of

mixing sub-college materials with college materials in courses designated for transfer. The professors felt that because of this practice, they have had no control over dilution of content in courses transferred to the four-year college. Other complaints have been that the two-year college faculty members have not consulted with four-year institution faculty members in the development of transfer courses, and that two-year colleges have relied on informal communication between community college professors and university professors rather than between counselors or other designated persons with a specialty in articulation. Further criticisms have been that the two-year colleges have failed to offer prerequisites for courses normally regarded as specialized or intermediate, or if prerequisites have been determined, they have not mentioned them in requests for recognition of the course. The university professors have blamed the junior college professors for having failed to accurately describe course content; for having failed to let students know the sub-college and vocational courses which do not transfer; and for not having provided sufficient information concerning the transfer of credit to students either through counseling personnel or in print (Kintzer, 1973).

Because of problems students sometimes faced when transferring from a junior college to a four-year college, and also because of a desire for understanding and cooperation, some institutions worked out articulation agreements with other institutions. Sometimes the agreements were between individual institutions within a state. Knoell and Medsker (1964) said that by 1964, fairly extensive programs of articulation with junior colleges in their states had been worked out by the Universities of California, Illinois, Michigan and

Washington. At the beginning of the Knoell and Medsker (1964) study, the major state universities were the institutions primarily concerned with the articulation of students from the two-year to the four-year institutions, although formal coordination was fairly new at that time. By 1964, all institutions which admitted sizeable numbers of transfer students had become concerned with articulation. In some states, leadership in articulation came from individual four-year institutions. The major state universities particularly were apt to take responsibility for articulation since the junior colleges often patterned their programs after those of the state universities.

In 1975, the Oklahoma State Regents for Higher Education adopted an articulation agreement for the transfer of students among institutions in the state system of higher education. The purpose of the agreement was to allow students to complete two years of work at a two-year college, then transfer into the same curriculum in a four-year institution and still be allowed to complete their work within the normal four semesters or two years (Hobbs, 1976). Even prior to Oklahoma's current articulation agreement, Wattenbarger and Martorana (1970) reported that since all Oklahoma schools were accredited by either the North Central Association or the Oklahoma State Regents for Higher Education, there were no fundamental problems in the transfer of students among the state's institutions.

Because of the transfer of students, the two-year and four-year schools are very closely related. If the two-year institution increases the retention rate of its transfer programs, then upper-division opportunities must be increased in the four-year schools. Limit enrollments in the four-year institutions, and more students

of necessity turn to the two-year college (Gleazer, 1973). In a spirit of cooperation, some of the four-year institutions have attempted to supply the two-year colleges with first semester grades for all new transfer students who had come from their particular junior college. Others have provided even more detailed studies which they reported back to the two-year college from which the student had transferred. In other cooperative efforts, universities in Washington and elsewhere have published lists of courses offered by each junior college in their area. These lists indicated whether their courses are equivalent or parallel to those in the four-year institution and which courses may be used to satisfy various degree requirements (Knoell and Medsker, 1964).

O'Connell (1968) favored close cooperation between the two-year and four-year colleges. He said that the state universities are very happy for the junior colleges to screen freshmen and sophomores so that the universities can concentrate on upper division and graduate work. In return, the University of Massachusetts reserved spaces in its programs for junior college students who will be transferring. Robert Gordon Sproul, former president of the University of California, in praise of his state's junior colleges, said that the University of California could not have established and maintained its high standards of admission and graduation had it not been for the development of excellent junior colleges (Blocker, Plummer and Richardson, 1965).

The greatest obstacle the community colleges have faced in their varied enrollments has been their dominance by four-year institutions (Gleazer, 1968). Blocker, Plummer and Richardson (1965) agreed and stated that the strongest influences on the community college curricu-

lum have been university curriculum requirements and state legislation. The two-year college transfer curriculum is dictated by the four-year colleges and universities to which junior college students transfer. As an example, in California, junior college students who plan to enter the state university in their junior year must follow a course of study specified by the university (Hillway, 1958). In his major study of the junior college, Medsker (1960) found that some four-year institutions were reluctant to accept courses in the same field but different from the specific ones that they required from two-year college transfers. This kind of policy has forced the two-year colleges to conform to a pattern set by the four-year institution. The decision not to offer transfer programs carefully articulated with the four-year institutions is not a viable option open to the community college. However, obligations to meet transfer requirements of the four-year institutions has tended to stifle the two-year college and has retarded experimentation in curricula that otherwise might have developed. This dominance by the four-year institutions has also made it difficult to adequately provide transfer students with career counseling and lower-division occupational education (Knoell and McIntyre, 1974).

Reverse Transfer

Reverse transfers, the transfer of students from four-year schools to two-year schools, now exist in sufficient number to deserve comment. In North Carolina, 15 percent of in-state transfer for 1970 was from four-year institutions to two-year colleges. For the state of Washington, the figure was 23 percent (Gleazer, 1973). Kuhns (1973)

stated that in Illinois more students are transferring into the junior colleges than are transferring out of them. In Iowa, 315 students who transferred from four-year institutions into two-year colleges were surveyed. These students listed the following as reasons for their transfer from the four-year institutions into the two-year colleges:

1. More time is given to student discussion in two-year college classes than in four-year college classes.
2. Four-year college instructors are more interested in their students in an academic sense than in a personal sense as compared to two-year college instructors.
3. Two-year college instructors do a better job of letting students know what they expect from them than do four-year college instructors.
4. Two-year college instructors ask more questions in class than do four-year college instructors.
5. Two-year college instructors do a better job of telling students how well they are meeting the instructors' expectations than do four-year college instructors.
6. Two-year college instructors seem to really like their students more than do four-year college instructors.
7. Student participation in classwork is more important in two-year classwork than in four-year classwork.
8. More two-year college instructors seem to want to keep track of the student's progress on current assignments than do four-year college instructors.
9. Instructors in two-year colleges are more willing to help students answer difficult questions than are instructors in four-year colleges (Kuznik, Maxey and Anderson, 1974, p. 26).

Two-Year Senior Colleges

So many students have elected to attend a junior college, then after two years transfer to a four-year institution, that a new type of institution has come into being. Baskin (1965) wrote about this new type of institution when he described Florida State University as a senior college providing only the upper two years of undergraduate work plus graduate work. Florida State University was designed specifically for students who had completed their first two years of col-

lege either in a two-year college or in another four-year college or university. By 1973, Kuhns (1973) had counted 25 upper-division colleges offering only upper-division or upper-division and graduate work. Jencks and Riesman (1968) talked about the prophecies that some community college advocates had made predicting that eventually virtually all high school seniors that begin college would get their start in a junior college. These same junior college advocates stated their expectations that the undergraduate colleges would discontinue their freshman and sophomore classes and would recruit students from the junior colleges. Jencks and Riesman said that if this happened, that senior colleges might well de-emphasize their bachelors degrees and enroll students in three and four-year masters degree programs. McConnell (1962), fearing that too many of the four-year institutions might drop their freshman and sophomore courses, warned that the selective universities should not abandon their lower divisions entirely because many of the most able students need the stimulus of a cosmopolitan and academically challenging environment with its advanced courses, research opportunities and individual study.

Success After Transfer

Students who compiled a grade point average at the junior college lower than 2.5 (C+) were somewhat unlikely to make satisfactory progress in many of the state universities. Students with minimally acceptable grades in junior college were more likely to meet with success in colleges that placed a major emphasis on teacher training than in other types of institutions (Knoell and Medsker, 1965).

Lynes (1966) found that most of the two-year students who transfer

to a four-year college or university do as well as the average four-year college student, and a few are top students wherever they transfer. Most do not transfer to colleges for which there is stiff competition such as Harvard or Yale. One dean of curriculum in California whom Lynes interviewed said that the good junior college students measure up well when they transfer, but are likely to get swamped in such universities as Berkely or U.C.L.A. Most two-year college transfers seek admission to teachers colleges, technical schools and small liberal arts colleges after they leave the two-year institution. In comparison with other students, those of high intelligence are more likely to enter universities than four or five-year colleges, but are more apt to enroll in the four or five-year colleges than junior colleges. Two-thirds of the students entering private universities and approximately one-half of the students entering public universities were in the top fifth of ability, but about one-fourth of the students entering junior colleges were in that category also (Feldman and Newcomb, 1970).

Views of the Junior College

Negative and Positive

Many faculty members in four-year institutions have been dogmatic in rejecting junior college transfer students as being inferior to students at the same level who entered the university as freshmen. The attitudes of these four-year college faculty members generally indicated that they classify the two-year college as a second-rate institution staffed by faculties less qualified than in the four-year institutions and offering educational opportunities sub-standard to

those of the four-year institutions. These writers placed the blame for the image university personnel hold of the two-year colleges on the prejudices of some four-year college faculty members and the inferior preparation of some two-year college students. Also, some university faculty members believe that public two-year institutions offering a comprehensive curriculum including other than collegiate courses must be inferior to four-year institutions of a more traditional nature (Blocker, Plummer and Richardson, 1965).

Established four-year college and university faculty members have sometimes questioned the quality that newly developing two-year colleges would have. Four-year college faculty members did not know whether the two-year institutions would have high enough standards that students transferring to the four-year institutions would do well academically. These senior-college faculty members also questioned the competence of two-year college faculty and how soon the new institutions might be able to satisfy accreditation requirements (Gleazer, 1968).

Kelly and Wibur (1970) noted that often the four-year college professors judged the two-year college teachers to be less able or competent than his four-year college or university counterpart at the school to which the two-year college students would transfer. In a study of articulation of biology students from the two-year to the four-year college, Hertig (1973) found that the four-year institutions' faculty members often assumed the two-year college faculty members to be inferior--an attitude that the two-year college biologists themselves often shared. Some of the four-year college biology professors would not accept introductory biology courses in transfer for

majors coming from the two-year college. Hertig suggested that four-year college faculty members should acknowledge their two-year college counterparts as professionals who, although perhaps lacking in preparation for more specialized courses, are very competent to teach general biology.

Blocker (1966) wrote of the expressed feelings of some university faculty members that the two-year institutions are inferior to four-year institutions in terms of quality of educational programs. These reactions have too often been colored by personal bias. Blocker argued that many four-year institutions still believe that the only repository for all knowledge is the university, and that these institutions can supply all the educational needs of all students.

Despite the growth of junior college enrollments and the increased role that the junior college has continued to take in higher education, there have remained many skeptics of the two-year college as an institution, of its faculty and of the men and women who comprise its student body. Knoell and Medsker (1964) expressed the opinion that the general public, including the parents of high school students, tend to view the two-year college as an institution for those incapable academically of attending a four-year institution, and those unable to afford to attend a four-year institution. The public has failed to accurately value the contribution that the junior college has made. These citizens are the same ones who have voted for establishment of new junior colleges and have supported these colleges with their tax dollars. Lynes (1966) reported in a popular magazine that the junior college:

> . . .has been looked down upon by holders of the B.A. degrees as a refuge for the stupid, and it has been avoided as a place to teach by most serious scholars as having no academic status and offering no intellectual companionship (pp. 59-60).

Bogue (1950) briefly catalogued several misconceptions and misunderstandings of junior colleges that have occurred in the past. One state governor delivered a commencement address at a junior college and continuously referred to it as a junior high school. A liberal arts college president denounced the junior college movement as a passing fad; a college president said that his state had no need for junior colleges since it had an abundance of degree granting institutions; and an educational researcher remarked that if the high school did its work well, there would be no need for junior colleges.

Another example of the disregard for the two-year college is in the lack of prestige accorded to two-year college administrators. Chief administrative officers in four-year colleges have automatically been listed in Who's Who in America, however, chief executive officers of two-year colleges have not been included as a matter of course, regardless of the size of their institution, budgets or educational services rendered (Blocker, Plummer and Richardson, 1965).

Disdain for the two-year college, its faculty and students has come from other sectors of higher education. Aley (1969) said that resistance to the two-year colleges was from the higher education community on the grounds that two-year colleges were not academically respectable. Sutton (1970) stated that it is not uncommon to hear university professors argue that students should begin their education in four-year colleges so that they may avoid the problem of transfer, and so that they may study under a staff paid well enough that they

can devote all of their time to academic endeavors. Professors in these institutions have proposed that few people of mediocre talent survive for long on a university campus either as faculty members or as students.

College and university professors have considered community college teachers inferior in the areas of scholarship and research, and therefore, they have regarded the two-year college teachers as lacking in academic depth (Monroe, 1972). Axelrod (1967) wrote that the purpose of the existence of the junior college was to provide the inferior student at least some college training, according to some other segments of higher education. Education professors particularly have been accused of thinking of the two-year college professors as inferior. Consequently, new teachers recruited out of graduate programs to teach in two-year colleges are unprepared for what they find (Menefee, 1973).

Devall (1968) in an article titled "Community College: A Dissenting View," pictured the community college as a cheap imitation of traditional four-year colleges. He said, "Community colleges, instead of being organizations of the future, are organizations of the past; and it is a false hope to expect them to fill the gaps in higher education in this country (p. 172)". He termed the community college a "bugaboo" in American education and stated that, "It is my belief that the community college movement, far from being a blessing, may indeed further distort and dilute post high school education in America (p. 168). Hillway (1958) cited the well-informed American educator, James Bryan Conant, as thinking of the junior college as an institutions for those that cannot succeed in a four-year college. Hillway said that

this kind of misconception has come from two attitudes on the part of American educators. The first, he said, is snobbery by the long established institution toward the two-year new-comers. The other attitude came from the idea that every person should have as much education as his mental ability would permit.

Blocker, Plummer and Richardson (1965) blamed the college professors' lack of knowledge of the two-year school for contributing to the public school teachers' lack of knowledge of the junior college, since values acquired in college distort their evaluations of the potential of the two-year college after they have begun teaching. Part of the problem has stemmed from the differences between the four-year college teacher who has tended to become a subject matter specialist, and the community college teacher who has tended to be a generalist.

The teaching personnel in four-year institutions have been indifferent, and at best, patronizing in their attitude toward the junior college teachers (Venuto, 1972). Moore (1970) described the attitude of four-year faculty members as one of tolerance toward junior college education. He said:

> Actually, the university has frequently responded to the community college as though the relationship was illicit; the latter being assigned the role of mistress--all right to woo but not to wed (p. 14).

Newsweek (1967) quoted a university leader who had indicated that all that is required for a junior college is the construction of a building. The article also mentioned that technical and vocational programs in the junior colleges have drawn snide remarks from four-year college educators. Most of the misunderstanding of the two-year college by educators in four-year institutions can be attributed to the multiple functions of the two-year schools (Thornton, 1972).

Other educators have praised the instructional programs of the junior college. Eurich (1968) lauded the junior college as being student centered. He commented that teaching is done by full-time teachers and is not left to graduate assistants. Dr. B. Lamar Johnson, professor of higher education at the University of California, stated in a speech that the American junior college has enmeshed itself in excellent teaching. He referred to the junior college as the most dynamic unit in American education (Block, 1970).

Identification with Senior College Faculty

Several writers have discussed the tendency of the two-year institution teachers to identify with the four-year or university teachers. Part of the motivation to emulate their four-year counterpart has come from a desire for status. Monroe (1972) stated that community college teachers are hopeful of attaining recognition as professionals on a par with four-year college faculty. He felt that this status would be attained only when two-year colleges have become established as educational institutions divorced from public school systems and when the two-year schools have been funded on the same per capita basis as four-year institutions. Moore (1970) pointed to attempts by faculty members in the community colleges to mimic university faculty. The two-year college instructors have wanted the same privileges as faculty members in the universities but without the responsibilities of writing, research and advanced study. Kelly and Wibur (1970) said that community junior college faculty members deemed themselves as worthy of the title "professor" as faculty members teaching lower division courses in four-year colleges and universities. Problems have

arisen when two-year college instructors have viewed themselves as potential lower division university professors whose task it is to eliminate from their campuses all students who are not university material. This attitude can be particularly disastrous in courses designed for non-transfer students.

Some two-year colleges have identified themselves so closely with a four-year institution that they have organized their courses and taught them precisely as they are taught in a particular four-year college. Attitudes of junior college teachers may reflect attitudes and values of teachers in four-year institutions (Medsker, 1960). Medsker surveyed a large number of two-year college instructors through use of a questionnaire, and his study reflected that one-half of the respondents indicated that if all conditions were equal, they would prefer teaching in a four-year college or university. About 46 percent said they preferred the junior college, and two percent listed the high school as their preference. A majority of these same two-year college faculty members indicated in the survey that the two-year college should disregard tradition in higher education in order to develop less orthodox programs than those in the four-year college.

A study by Cohen and Brawer (1972) also showed that nearly half of the junior college instructors responding to a national survey readily admitted that they would prefer to teach in a four-year college or university. Where the junior college system has become well established, the figure dropped.

Medsker and Tillery (1971) reported that in a national study of 57 community colleges, 33.8 percent of the responding faculty members indicated that they preferred teaching in the community college; 26.7

percent preferred teaching in a four-year college, and 17.7 percent specified that they preferred to teach in a university. Those teachers that responded with a preference for teaching in a four-year college or university were more likely to be opposed to remedial and occupational programs. Medsker and Tillery have questioned the ability of two-year colleges to maintain a non-traditional structure if they mimic the four-year institutions by adopting such practices as the traditional four-year professorial ranking system. Cohen and Brawer (1972) noted an increase in the adoption of the university-type academic senates by two-year colleges.

Hillway (1958) cited the potential dangers posed to junior colleges in the temptation to expand to traditional four-year college status and to allow undue influence of universities on the curriculum. Few institutions are content to be what they are. The technical institute wants to become a community college, the community college seeks four-year college status, and the four-year college desires to become a university (Dressel, 1968). Eurich (1968) reported that some communities and some junior college faculties have viewed the junior college as being an institution waiting to grow into a four-year college. Consequently, the traditional academic program is apt to be strongly emphasized, and technical and developmental programs have suffered.

Clark (1960) presented the likelihood that many public school teachers would look at junior college teaching as a desirable step up while persons with experience in or orientation toward the four-year college or university would consider it a step down. In discussing San Jose City College in California, McConnell (1962) found that teachers who had only public school experience adhered more closely to edu-

cational attitudes and policies characteristic of public secondary education than did those who had experience in four-year institutions. Teachers with experience in the four-year institutions were more likely to consider admission requirements to be too low, to agree that the junior college is too "high schoolish," to believe that students are over-counseled and to criticize the educational quality of the student body than were teachers with high school teaching experience. O'Connell (1968) commented that teachers who have come to the two-year college from a background of secondary school teaching are unable to bring to the campus the "controversial, combustible yeasty effect" on the community that should be expected from a college.

Studies have shown that teachers in two-year institutions who have had the highest academic preparation were the most dissatisfied with their institutions, identifying instead with four-year colleges. Female teachers and teachers of applied subjects with five or more years of experience in their fields have tended to adopt the community college concept. "High potential" instructors in transfer programs have supported college norms and the traditional programs (Cohen and Associates, 1971).

Preparation of Junior College Teachers

The preparation of teachers for the two-year college has presented new relationships between the two-year and four-year institutions. Hillway (1958) wrote that most teachers in junior colleges had been trained for the secondary schools and had had some experience in teaching at that level. A small number of junior college teachers came from four-year colleges and universities, but very few had

trained specifically for the junior college. By 1967, more than 200 colleges and universities had indicated an interest in preparing college teachers, and many of these institutions intended to establish programs especially designed to train junior college instructors (Medsker and Tillery, 1971). Thornton (1972) said that in the ten year period from 1960-1970, over 100 four-year colleges and universities began programs to train people to teach in the two-year college. Venuto (1972) reported on a prescription by Roger Garrison for the training of junior college teachers. Garrison had outlined a broad-based masters program of from 15 months to two years duration including a minimum of 10 graduate level courses in the subject matter discipline with at least half of those courses being inter-disciplinary in content. Garrison also recommended a supervised teaching experience and a graduate professional seminar meeting during the entire span of the training program. Brawer (1968) warned that if junior colleges are going to attract specially trained teachers, the two-year colleges must take the lead in encouraging four-year institutions to build special programs. The adequate preparation of teachers for community colleges can only be brought about through cooperative ventures by community college and university officials (Fields, 1962).

The Need for Cooperation

One theme that has been seen throughout the literature concerning the relationship between two-year and four-year institutions has been the plea for cooperation. Blocker (1966) said that it is imperative that cooperative relationships be developed. Lines of communication must be maintained between two and four-year colleges if there is to

be a meaningful continuity of education when students transfer from the junior college to the four-year institution. Gleazer (1968) stated that two-year and four-year colleges need to know each other better than they ever have before. Close associations with the rest of higher education are necessary. These relationships can be accomplished legally through state law, but more desirably through voluntary, coordinated activities within and between types of institutions in the systems of higher education (Kelly and Wibur, 1970). A part of the responsibility for helping the public understand the junior college role must be assumed by the four-year institutions (Knoell and Medsker, 1965).

Knoell and Medsker (1964, p. 81) told of the benefits of visits and conferences between two-year and four-year institutions. These authors related that, "Several respondents reported that more favorable attitudes toward junior college instruction were resulting from visits involving faculty members from both types of colleges." These authors predicted that conferences and visits may well result in better attitudes toward the junior college and its students as faculty members from the four-year institutions find that they share many common professional interests with the junior college faculty members. Much more information is needed concerning the relationship of four-year and two-year institutions (Hayes, 1969). Reynolds (1969) expressed surprise that more cooperation between two-year and four-year institutions had not taken place in curricular matters, since both types of institutions would stand to gain.

Gleazer (1968) called for university people to work with people from both the community colleges and the occupational fields to devise

new and improved curriculums. He stated that in some parts of the country, universities and clusters of community colleges have joined in continuing relationships to work on institutional research, curriculum and staff preparation, to the benefit of both types of schools.

Wattenbarger and Martorana (1970) pointed to possibilities for cooperation in Oklahoma between two and four-year institutions. In addition to cooperation in articulation, if a two-year college is unable to adequately provide for a need existing in its community for on-campus adult education, the junior college may make arrangements with a four-year institution to provide it.

Attitude Defined

A very limited amount of material has been available dealing specifically with the attitudes of faculty members in the four-year institutions toward junior college education. However, research by social psychologists has resulted in the amassing of extensive literature concerning a variety of areas under the major heading of attitude.

Many definitions of attitudes have been given by authors in the field. Shaw and Wright (1967, pp. 2-3) reported several of the following definitions. Allport has defined attitude as:

> . . . a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.

English and English defined attitude as "An enduring learned predisposition to behave in a consistent way toward a given class of objects", and Cardno gave this definition:

> Attitude entails an existing predisposition to respond to social objects which, in interaction with situation and other dispositional variables, guides and directs the overt behavior of the individual.

Isaacson, Hutt and Blum (1967) stated:

> By attitudes we mean the beliefs, feelings, and action tendencies of an individual or group of individuals toward objects, ideas, and people. An action tendency refers to a disposition to respond in a certain way toward an object or person (p. 777).

Dunn (1972) expressed himself very similarly when he said: "I'd like to suggest that an attitude is simply an individual's readiness as a result of experience to make certain types of responses to stimuli (p. 35). Fishbein and Ajzen (1975) elaborated somewhat when they stated that:

> Attitude is typically viewed as a latent or underlying variable that is assumed to guide or influence behavior. One immediate implication of this view is that attitudes are not identical with observed response consistency. Indeed, attitudes cannot be observed directly but have to be inferred from observed consistency in behavior (p. 8).

Sherif, Sherif and Nebergall (1965) concurred, having used this similar definition:

> An attitude cannot be observed directly. It denotes a variable within the individual that affects his behavior in a pertinent situation together with other motives operative at the time and the properties of the situation itself. We infer an attitude from an individual's behavior, his words and deeds. Specifically, attitudes are inferred from characteristics or consistent patterns of behavior toward objects, or more usually, classes of objects (p. 19).

Social Psychologist Sherif (1976) phrased her definition somewhat differently in her current book, stating that:

> Attitude is a concept referring to psychological processes inside the person that a social psychologist infers from that person's behavior in relevant situations. Thus, when we speak of attitudes, we are talking about 'internal' factors in the total frame of reference for studying behavior (p. 233).

One element seen in most of the definitions of attitude has been the readiness or predisposition to act. If it can be determined whether faculty members in the four-year institutions are predisposed to act favorably or unfavorably toward the junior college, it should be possible to infer to some degree whether or not they are likely to be cooperative in such areas as regard for junior college students, transfer of credits, joint planning of curriculum, sharing of facilities and cooperative ventures in the training of two-year college teachers.

The social psychologists have emphasized that attitude is directional. McDavid and Harari (1968) pointed out that attitudes organize behavior in avoiding some objects, people or events or in approaching some objects, people or events. Fishbein (1967) affirmed that attitude is the affect either for or against a psychological object. Sherif, Sherif and Nebergall (1965) acknowledged this directionality stating that having an attitude means that the individual no longer is neutral toward the referents of an attitude. He is either for or against, favorable or negatively disposed to some degree. Sherif (1976) was very definite in stating that person-object relationships in attitudes are not neutral but are directional. She emphasized that precision is gained when the acceptable range of an attitude is articulated with its associated latitude of rejection and latitude of noncommitment. Fishbein and Ajzen (1975) concurred that attitude should be measured by some procedure which locates the subjects on a bi-polar continuum with regard to a given object, thereby acknowledging directionality.

Attitudes are learned largely through interaction with other peo-

ple and by exposure to printed and spoken words, according to Sherif, Sherif and Nebergall (1965). Silverman (1971) said that attitudes usually are based on the accumulation of a person's experiences. Some are learned from direct contact with an event, person or object while others are adopted through association with groups or individuals who already possess the attitude. McDavid and Harari (1968) attributed formation of attitudes in part to indirect or vicarious experiences. Many of the attitudes held by an individual were acquired through indirect experiences related to them by parents, teachers, preachers, etc. It is not uncommon for people to hold fairly strong attitudes toward individuals or groups with whom they have had no direct contact. Fishbein and Ajzen (1975) agreed that attitudes are learned, and in another publication, Fishbein (1967) acknowledged that this is a belief held by almost all writers in social psychology. However, Sherif (1976, p. 234) made the statement that, "Despite what you may have read to the contrary in tests or in popular magazines, there is no generally accepted theory of learning that adequately accounts for attitude formation."

Attitude Change

Although attitudes can be changed, most attitudes are characterized by stability. McDavid and Harari (1968) pointed out that attitudes are relatively stable. They are not so rapidly changing as to be unpredictable nor so fixed and rigid as to be unchangeable. Isaacson, Hutt and Blum (1967) have linked the stability of an attitude to its extremity in that the more extreme an attitude is, the less likely it would be to change. Morgan and King (1966) reasoned

that attitudes tend to be preserved because they alter the way new experiences are perceived. Facts that fit existing attitudes are emphasized, and facts contrary to existing attitudes are de-emphasized. Silverman (1971) elaborated on this, listing three means individuals use to preserve their attitudes: (1) Selective Perception, (2) Avoidance, and (3) Group Support. Selective perception tends to give stability to attitudes in that the individual tends to emphasize data and experiences compatible with his own attitudes. Most social experiences can be interpreted in a variety of ways, and they can be made consistent with the person's attitude. The individual looks for evidence confirming his attitudes but avoids information contradictory to his attitudes whenever he can. Memberships in social groups with persons who possess the same attitudes also produce stability in the individual's attitudes.

Since attitudes are relatively stable, it would be beneficial for students at the graduate level to gain initial favorable perceptions of the junior college. Professors in graduate schools can contribute to establishing favorable attitudes toward the junior college by the ways in which they present information in their classrooms concerning junior college education.

Their own overall attitude toward junior college personnel and transfer students from two-year colleges may also influence their students. Although attitudes tend to be rather stable, they can and do change. When attitudes are changed, Silverman (1971) said it generally has been because an individual has changed his group affiliation or has had direct and prolonged contact with the individual, object or group around which the attitude was originally formed. Persuasion

sometimes has changed attitudes if the communication and the message appeal to the audience. Although propaganda techniques may sometimes stimulate sales or create support for programs or people, they rarely overcome the attitudinal influence of the social group with which the audience is connected. Isaacson, Hutt and Blum (1967) said that attitude change really is a change in intensity or direction, and that the change most readily obtained is a change in the intensity of a pre-established attitude. The more extreme an attitude, the more difficult it is to change. In complex attitudes it is much easier to achieve a change in intensity than a change in direction.

Since attitudes are products of accumulated experience, as long as a person is able to accumulate additional experience with an object, his attitude toward that object will be susceptible to some degree of change. The greater the amount of accumulated experience, the less likely that the attitude is to change with each new single experience (McDavid and Harari, 1968). As long as a person's attitudes agree with those of his associates, he is likely to secure their approval. If he expresses attitudes contrary to theirs he risks their disapproval. He both consciously and unconsciously wants to believe the same things his friends do (Morgan and King, 1966).

When an individual adopted new friends who held attitudes different than he had held, but consistent with new information he received, Ostrom (1968) said the individual gave up his old beliefs and adapted attitudes held by his new acquaintances. In some cases, individuals even became militantly opposed to positions they previously had held. As an example, Ostrom compared college students who valued and maintained contact with their parents and hometown friends with students

who became very involved in the college community and established close contacts with other students and faculty. Those students maintaining close home ties were very resistant to a liberal college atmosphere while the students who established identity with the college community relinquished their more conservative beliefs and adopted the more liberal views of their new reference group. Aronson (1976) used the following example in dealing with attitude change:

> Suppose that Sam is an ardent liberal and humanist who swears by Ralph Nader. Accordingly, Sam is influenced by everything Nader uncovers about cars, safety, government abuse, the military-industrial complex, and so on. But suppose, for example, that Nader conducted an exhaustive study that indicated that, in terms of intelligence, blacks were genetically inferior to whites. Would this be likely to affect Sam's opinion? Because the issue is rooted in an emotional complex, it is likely that such a statement by Nader would not influence Sam as easily or as thoroughly as a statement by Nader about cars, sealing wax, cabbages or kings. Individuals resist having their attitudes changed; thus, direct communications that challenge existing attitudes tend to be less influential (pp. 82-83).

Sherif (1976) expressed doubts that anyone ever singlehandedly changes anyone else's attitude. She said that at some point the individual himself must collaborate in the effort. The only way to tell that a person has changed an attitude is by behavior. She stated that it is futile to talk about attitude changes apart from changes in the way the person acts.

Measurement of Attitude

Attitudinal study has held a prominent place in social psychology for more than 50 years, and the measurement of attitude has been a much discussed process (Shaw and Wright, 1967). Numerous attempts have been made to develop reliable means of identifying and analyzing

the attitudes of individuals and groups of individuals toward other persons, groups and objects. Shaw and Wright (1967) noted that there seem to be few major advances or developments in attitude scale construction since the Likert and Thurstone methods were developed. The Guttman Scales were different in approach, but according to Shaw and Wright they had some serious disadvantages in comparison with the Thurstone or Likert techniques. Proposed scaling techniques such as Lazarsfeld, and Coombs have been promising, but have not been fully developed. Shaw and Wright expressed the need for scales or techniques to measure such aspects of attitude as specificity, multiplexity, interconnectedness, centrality and consistency.

An attitude scale is made up from half-a-dozen to two dozen or more attitude statements. The respondent is asked to agree or disagree with these. Oppenheim (1966) gave more importance to how the attitude statements have been selected and put together statistically than the number of items involved. Fishbein (1967) pointed out that it should be possible to make four types of description using an attitude scale. These are (1) the issue being examined (2) the range of opinion acceptable to the individual (3) the relative popularity of each attitude of the scale for a particular group as illustrated by the frequency distribution for that group and (4) the degree of homogeneity or heterogeneity in the attitudes of a designated group on an issue as shown by the dispersion of its frequency distribution.

Sherif, Sherif and Nebergal (1965) listed the following minimum requirements for an adequate technique for assessing attitudes:

(1) Indicators of the range of position toward the object of the attitude that is encompassed by the individual's evaluative categories (acceptable or objectionable, in some degree).

(2) Indicators of the degree of the individual's personal commitment to his own stand toward the object; that is, of the degree of his ego involvement with the issue.
(3) Ways and means to ensure that the individual responds in terms of his attitude toward the object rather than with what he thinks the investigator or other persons conceive as a socially desirable response. The most obvious way to avoid the latter is, of course, to use procedures that elicit attitudes without the subject's awareness (pp. 20-21).

The most commonly used scales for attitude measurement, according to Shaw and Wright (1967) have been those developed by Thurstone, Likert and Guttman. These scales all require the subject to indicate his agreement or disagreement with a set of statements about the attitude object. In the Thurstone method of scale construction, judges weight statements for the degree to which the statement expresses a favorable or unfavorable attitude. In other methods, items are written by the individual constructing the scale for the purpose of expressing items which can be evaluated as negative or positive regarding the object. The attitude toward the object is inferred from evaluative statements agreed with or disagreed with by the respondent. Scales of this nature measure only the positivity or negativity of the effective reaction.

Oppenheim (1966) recommended the Likert type attitude scale for studies of attitude patterning or for exploration of the theories of attitude. To study attitude change, the Guttman method might be preferred, and for studying group differences the Thurstone technique was favored.

Thurstone attempted to devise an attitude scale by having people compare a pair of attitude statements and judging which of each two statements was more positive or negative. Oppenheim (1966) referred to this as the Paired-Comparisons Technique. This technique becomes

very cumbersome when more than fifteen or twenty items are involved, and so Thurstone developed a less precise, but also less laborious method of scaling known as The Method of Equal Appearing Intervals. Shaw and Wright (1967) said that after a process in which judges sort a large number of items concerning the object of the attitude in question, a small number of items are selected for a final scale and are spread somewhat evenly along an attitude continuum. The respondent in using the scale, is asked to check each item with which he agrees. The respondent's score is the median of the scale values of all the items he has checked.

The Likert attitude scales are frequently referred to as the Method of Summated Ratings. In this process, the respondent reacts to statements by indicating one of five ratings: strongly agree, agree, undecided, disagree and strongly disagree. Values of 5, 4, 3, 2, 1 have been assigned these positions. The values are simply reversed for negatively worded items. The more favorable an individual's attitude is toward the attitude object, the higher his expected score for the item.

The Scalogram-Analysis was designed by Guttman and his associates. Items on the attitude scale are arranged in such an order that an individual who responds positively to any item in particular also has responded positively to all lesser ranked items.

Shaw and Wright (1967) criticized methods used by the majority of researchers in recent years stating that the investigators too frequently ask unevaluated questions and then assume that attitudes have been reliably and validly measured.

Reliability for attitude scales most commonly has been estimated

by using internal consistency determined by the split-half method according to Shaw and Wright (1967). These authors have found that the attitude scales they examined left much to be desired in the area of validity. Many authors have provided no evidence of validity. Oppenheim (1966) said simply that at present there is no way to make sure that an attitude scale is valid.

Discussing assessment of individual attitudes, Shaw and Wright (1967) said:

> In a preceding section of this chapter we noted that the scales in this book are adequate for research purposes but not necessarily for the assessment of individual attitude. This point needs clarification. In most experimental investigations comparisons are made between attitudes held by groups of individuals. Errors of measurement may be assumed to be randomly distributed about the mean, so that with a sizable number of subjects in each group the obtained mean attitude score approximates the true mean of the population. Consequently, an attitude scale that measures individual attitude imperfectly may yield a reliable and valid measure of the mean attitude held by members of the group (p. 565).

However, these authors held that generally the attitude scales they reviewed have been shown to be satisfactory for most research purposes.

In the measurement of attitude, certain assumptions must be made. Shaw and Wright (1967) said that it must be assumed that the evaluation of individuals constructing the scales correspond to those persons whose attitudes are being measured. This may or may not be true for certain specific items, but for the total set of statements, the error should be small. According to Fishbein (1967) the researcher must also be aware that the respondent may consciously hide his true attitude or that he really has been made to believe what he expresses because of the social pressures of the situation. All that can be done is to measure the attitude actually expressed. Fishbein further

pointed out that the measurement of attitudes expressed by an individual is not necessarily a prediction of what he will do. Fishbein and Ajzen (1975) stated that attitudes cannot be observed directly, but must be inferred from observed consistency of behavior.

CHAPTER III

METHODS OF INVESTIGATION

This chapter will discuss the selection of the survey instrument, the Junior College Attitude Survey and its development, the selection of the sample, the procedure for the collection of data, the statistical techniques used to analyze the data, and the research questions to be tested in Chapter IV.

The Junior College Attitude Survey

In the search of the literature relating to both the study of attitudes and the junior college, Dissertation Abstracts yielded a doctoral study completed at the University of Illinois by James (1969). One of the primary purposes of the James study was to develop an instrument suitable for assessing attitudes toward junior college. His study dealt particularly with attitudes of high school counselors toward the junior college, but the instrument was so designed that it could be used in the attitude assessment of many different groups including the faculties of four-year colleges and universities. The instrument which resulted from the James study was a Likert-type attitude scale.

Edward and Kenney (1967) compared the two most commonly used methods of attitude scaling, the Thurstone and Likert techniques, and found the Likert method to be a much simpler method of assessment than

Thurstone's method of equal appearing intervals. The Likert method avoids the difficulties involved in using judges to construct the scale. At the same time, the Likert method yields reliabilities as high as those gained by other techniques while including fewer items. The results obtained using the Likert method are comparable to those using Thurstone's technique. Edward and Kenney reported evidence that there is no reason to doubt that scales constructed using the summated ratings method developed by Likert and containing fewer items will give reliability coefficients as high or higher than those obtained with scales constructed in accordance with the Thurstone method. Shaw and Wright (1967) credited the Likert method with the capability of yielding moderately reliable scales, but stated that validity was dependent on the particular scale in question. Likert score interpretation is based on the distribution of sample scores, with the scores having meaning only relative to the scores of others in the sample.

Oppenheim (1966) noted that the Likert-type scales provide respondents with a wider range of responses. The number of items may be quite small, and the reliability of these scales tends to be good. Edwards (1957) raised the question of interpreting middle scores on a Likert-type test if the primary interest is in describing an individual as having either a favorable or an unfavorable attitude toward the object being considered. However, if research interests are directed toward comparing mean attitude scores of two or more groups, this can be done as well with the summated-rating scales as well as with equal-appearing interval scales. If the mean of the group is used as the starting point, then each individual attitude score can be expressed as a deviation from this origin point. Since it may be assumed that

the mean represents the average attitude of the group, then scores falling higher than the mean can be interpreted as scores that are more favorable than the average for the group. The reverse would also hold true so that scores that are lower than the mean can be interpreted as scores that are less favorable than the average.

Because neutral or midpoint scores can indicate either a lack of attitude or of knowledge on the part of subjects toward the junior college, James (1969) took care in the selection of discriminating items to use subjects in the pilot studies who were familiar with junior college programs. His stated assumption was that people counseling seniors in high school on their college choices should have some attitude toward the junior college. Thus, he felt that neutral or undecided scores should not be of significant concern in his study. Because the junior college is a part of higher education and has been a vital component of higher educational systems since at least 1960 in most states, four-year faculty would be assumed to be knowledgeable enough of two-year college programs that the neutral or undecided score would not be a matter of major concern in a study of the attitudes of four-year institution faculty members toward junior college education.

The Likert-type scale used in this study was constructed by James from a large pool of items compiled from beliefs, opinions and attitudes about the junior college which were garnered from the literature; interviews with school counselors, administrators and faculty; comments and attitudes expressed to James during his experience as a junior college educator; and essays written by University of Illinois graduate students concerning their perceptions of junior college education, according to James (1969).

The large pool of items was administered as a pilot study to two groups of high school and junior college counselors who attended National Defense Education Act Institutes for Guidance and Counseling at the University of Hawaii and Los Angeles State College. An analysis was made of the clarity and reliability of these items in order to determine favorableness or unfavorableness to the junior college using criteria suggested in the writings of such experts as Thurstone and Chave, Likert, and Edwards and Kilpatrick. The attitude statements were edited by a panel of judges, and from the large pool of items, 92 were selected to be given in the third and final pilot study.

A group of 132 junior college students at an Illinois public junior college served as the sample for the third pilot study. These students responded to the 92 items selected. Data from the third pilot study were statistically analyzed to determine the most discriminating items, as to favorableness-unfavorableness toward the junior college, for inclusion in the final instrument.

A total score for each subject was recorded by summing the responses to the 92 individual items. The response, "strongly agree", for favorable statements was given a weight of five (5), the "agree" response a weight of four (4), the "undecided" response a weight of three (3), the "disagree" response a weight of two (2), and the "strongly disagree" was given a weight of one (1). For unfavorable statements about the junior college, the scoring was reversed with a "strongly agree" response being given a weight of one (1), "agree" response a weight of two (2), the "undecided" response a weight of three (3), "disagree" response a weight of four (4), and "strongly disagree" a weight of five (5).

After the total attitude scores were obtained, they were plotted to produce a frequency distribution of scores. Twenty-five percent of the subjects with the highest total scores and 25 percent of the subjects with the lowest total scores made up two criterion groups from which to evaluate the individual statements. The "t" statistic for difference between group means was used to evaluate the responses of the high and low groups to the individual statements. The "t" statistic was the measure of the extent to which a given statement differentiated between the high and low groups. The statements that are the most differentiated can be chosen by determining the "t" value for each statement and then arranging the statements by rank order according to the "t" value. James chose a "t" statistic of 2.74, the value of the one percent level of significance for difference between means with 31 degrees of freedom. This constituted the lowest value acceptable for his inclusion in the final Likert-type instrument. From the original 92 items, 39 items were selected as a result of the rank ordering of the "t" values. These values are shown in Appendix A.

James (1969) utilized an item analysis method to correlate the total score and item scores over all the people to further validate the discriminating power of the 39 items. The 39 items chosen did show a substantial correlation (Appendix B) with the total score, indicating that different responses were elicited for those who score high, and for those who score low on the total test. The substantial correlation coefficient and the high "t" statistic indicate that the questionnaire is internally consistent, or that every item is related to the same general attitude.

The items selected to comprise the Junior College Attitude Survey

in James' study were found to be applicable for use in a study of the attitudes of full-time teaching faculty members toward junior college education. Two minor changes were made to the instrument which did not alter the intent or direction of the attitude statements involved. The first change altered the original attitude statement, item number one, which originally read, "Students get the same quality of education in a junior college as they get in a four-year college or university," to the following, "Students get a lower quality of education in a junior college than they get in a four-year college or university." This change was made to insure the directionality intended for this study. The other item which was altered was the item numbered 37 both in the original and in the instrument revised for this study. That item was worded in the original as follows: "Faculty members in the junior college are better qualified for academic advising than are the counselors." In the revised instrument, item number 37 is as follows: "Faculty members in the junior college are better qualified for academic advising than are four-year college faculty members. In the original statement, the word "counselors" referred to high school counselors. In order to make this statement pertinent and meaningful when the questionnaire was administered to four-year institution faculty members, it was necessary to make this change.

Instructions for marking the questionnaire carefully point out that there are no right or wrong answers (Appendix C). Each person receiving the questionnaire was asked to respond to the statements according to his own beliefs and attitudes.

Personal data items for the respondents to complete were included on the last page of the instrument (Appendix C). These items were in-

cluded to collect information about the respondents themselves and to provide an indication of their knowledge of and relationship with junior college education. Group analysis was based on this data.

In the instructions for marking responses to the Junior College Attitude Survey, respondents were asked to attach an extra sheet at the end of the questionnaire for any comments they should care to make regarding junior colleges or the questionnaire.

Selection of the Sample

The sample for this study included 400 full-time faculty members selected by random sample from Oklahoma's six regional universities. These universities are Central State University located at Edmond, East Central Oklahoma State University at Ada, Northeastern Oklahoma State University at Tahlequah, Northwestern Oklahoma State University at Alva, Southeastern Oklahoma State University at Durant, and Southwestern Oklahoma State University at Weatherford. The total population from which the sample was drawn numbered 955.

The lists of names from which the samples were drawn were obtained by telephoning academic vice-presidents, deans of colleges or presidents of each of the institutions and making requests of lists of full-time teaching faculty. Selection of full-time teaching faculty in the four-year institutions, instead of another group such as counselors or administrators, was based on the premise that members of the teaching faculty would spend more hours with the two-year college transfer students and generally would have a longer and more intimate relationship with these students than would advisors, counselors, admissions officers or other members of the administrative staff. Another reason for

choosing full-time teaching faculty was because of the strong identification two-year faculty members often show with faculty members of the four-year institutions.

TABLE I

DISTRIBUTION OF THE POPULATION BY INSTITUTION

Institution	Number of Full-Time Faculty Members	Percentage of Total Population
Central State	266	28%
East Central	108	11%
Northeastern	188	20%
Northwestern	68	7%
Southeastern	120	13%
Southwestern	205	21%
Totals	955	100%

In addition to influences on junior college teachers who look to them as a reference group, senior college teachers also exercise some control affecting the junior college transfer students since they serve on curriculum committees and councils for their own institutions and recommend additions, changes and requirements. Members of the teach-

ing faculty also are sometimes called on to evaluate transcripts of transfer students to determine the acceptance of credits.

After the faculty lists were obtained from the six institutions included in the study, the total list of names was put on cards, one name to a card, alphabetically, and then numbered. Using the method recommended by Edwards (1967), 40 cards from a bridge deck were numbered from 00 through 39. The deck was shuffled, and the cards turned up until one of the two-digit numbers 01, 02, 03, 04, or 05 appeared. The first of these numbers to appear selected the block to enter in the random numbers table in the back of the book. This process was repeated for a two-digit number to give the row of the block, and then again to obtain a two-digit number for the column in the table of random numbers. When a random number matched a number assigned to the alphabetized name of an individual in the total population from which the sample was to be drawn, that name was included in the sample. This was continued until 400 names were obtained.

Of the 400 full-time faculty members drawn for inclusion in the study were 103 from Central State University, 48 from East Central Oklahoma State University, 74 from Northeastern Oklahoma State University, 27 from Northwestern Oklahoma State University, 52 from Southeastern Oklahoma State University and 96 from Southwestern Oklahoma State University.

TABLE II

DISTRIBUTION OF THE SAMPLE
BY INSTITUTION

University	Number Included	Percentage of Total Sample
Central State	103	26%
East Central	48	12%
Northeastern	74	18%
Northwestern	27	7%
Southeastern	52	13%
Southwestern	96	24%
Totals	400	100%

Data Collection Procedures

Because of the number of people included in the sample, it was decided that a mail survey would be the best method to use to obtain the data. Oppenheim (1966) discussed advantages and disadvantages of the mail questionnaire. The chief advantage of the mail questionnaire is that it is less expensive than most other means of data gathering. This method also makes it possible to sample a much greater number of people than would be possible using an interview technique. The processing and analysis of data obtained by mail questionnaires is usually simpler and cheaper than for data obtained by interviews.

Since an interviewer is not present, the questionnaire must be

simpler, and instructions must be clear and concise. The fact that no interviewer is present may eliminate interviewer bias. It is possible, however, that the respondent may introduce other biases since he, in essence, is interviewing himself. The largest disadvantage of mail questionnaires is their usual low response rate. For respondents without a special interest in the subject matter of the questionnaire, a rate of return of 40 to 60 percent is typical. It is rare, according to Oppenheim, that a return exceeds 80 percent. The problem resulting from a poor return of questionnaires is that the responses invariably are not representative of the original sample drawn.

The physical design of the questionnaire itself was planned for ease of mailing, since it could easily be folded to fit into a business envelope. The questionnaire was printed on sheets of 17" x 11" stock so that with a single fold it was a complete four-page questionnaire with no separate pages to lose or to fail to include either in mailing out or in return mailing. A number was printed in the upper right-hand corner of the first page of each questionnaire. This number was recorded next to the name of the person to be mailed the questionnaire on a master list in order to avoid asking the respondent for a name or signature (Oppenheim, 1966). Numbers printed on the questionnaires began with 001 and continued consecutively. For ease of the grouping of the questionnaires after they were returned, individuals to be sampled were listed alphabetically by institutions with numbers listed consecutively for each of those individuals. Numbers for individuals from Central State University were assigned from 001 through 103 so that questionnaires returned could be easily checked off on the master sheet. This procedure also simplified the

second mailing to non-respondents.

In the first mailing, the questionnaire, a letter (Appendix D) explaining the study and asking for the cooperation of respondents, and a self-addressed, stamped, business-size envelope were included. All of these items were stuffed in a business size envelope and placed in the mail. The mailing could have been greatly simplified by using a greeting on the letter such as "Dear Colleague", but it was decided that typing in each person's name, department and institution might increase responses. Likewise, it would have been possible to greatly decrease the amount of effort involved in the mailings by using mailing labels produced by the computer for each person in the sample. Again, it was decided that the personalization of typed names and addresses on the envelopes might increase the rate of response. In addition, each letter was personally signed in ink.

A decision had to be made as to whether or not to mention that the data was being requested for inclusion in a doctoral study. It could be argued that other faculty members would respond to help a colleague who was working on a doctorate. It could also be argued that busy professors might tend to be more cooperative for a study of a different nature. Deciding in favor of the latter, the letter simply stated that the study would analyze attitudes of faculty members in Oklahoma's six regional universities toward junior college education.

A decision also had to be made concerning the letterhead on which the letters would be printed. Since it was feared that letterhead stationery from the Office of the Vice President for Academic Affairs might bias respondents, it was decided to use letterhead stationery from the School of Education with use of the academic rank after the

name in the complimentary close. The letters were mailed in School of Education envelopes. Stamps were applied individually to these envelopes as well as to the envelopes for enclosure. The enclosed envelopes were imprinted with the name of the initial sender, School of Education, Central State University, Edmond, Oklahoma 73034 as both the address and return address so that there could be no mistake in return mailings. Mailings to Central State faculty members were sent through the campus mail with return envelopes addressed to go through the campus mail also.

Oppenheim (1966) cited a study by Christopher Scott of the British Government Social Survey which reported that stamped, self-addressed envelopes yield a higher response rate than business reply envelopes. Ferris (1951), also stated that stamped return envelopes help.

The 400 questionnaires were placed in the mail on Tuesday, April 6, and two weeks later 290, or 73%, of them had been returned. A second mailing was sent to non-respondents. The same materials sent in the first mailing were included with the exception of the letter. For this second mailing, a different letter was included (Appendix E) which stated that since there was a possibility that the first questionnaire had been lost in the mail or mislaid that another was included. A separate series of numbers printed on the questionnaire allowed immediate recognition that the questionnaire was from the second mailing and from what particular institution. Two weeks after the second mailing, the total return had reached 347, or 87%. It was decided, because of the exceptionally high rate of return, not to request further assistance from the non-respondent sample.

Statistical Procedures

The statistical techniques chosen for testing the research questions of the study are the point-biserial and biserial correlations. Bruning and Kintz (1968, p. 163) said, "The point-biserial correlation is used when a coefficient of relationship is desired between one measure that is continuous and another that is dichotomous." For this study, the continuous measure is the score on the Junior College Attitude Survey, and the dichotomous measures are the personal data items included in the questionnaire.

Guilford and Fruchter (1973) advised:

> When one of the two variables in a correlation problem is a genuine dichotomy, the appropriate type of coefficient to use is the point-biserial r. Examples of genuine dichotomies are male versus female, being a farmer versus not being a farmer, owning a home versus not owning one, living versus dying, living in Boston versus not living in Boston, and so on. Bimodal or other peculiar distributions, although not representing entirely discrete categories, are sufficiently discontinuous to call for the point-biserial rather than the biserial r (p. 298).

McNemar (1962) made the following statement regarding the appropriate use of the biserial coefficient:

> If it can be assumed that underlying the dichotomy there is a continuous variable, we can obtain a measure of correlation which is an estimate of what the product moment correlation would be in case the dichotomous variable were measured in such a way as to produce a normal distribution (p. 189).

In a further statement concerning the assumptions involved in the use of the biserial coefficient, McNemar (1962) explained:

> In the derivation of r, it is assumed not only that a normal distribution underlies the dichotomy, but also that the regressions would be linear if the dichotomized variable were measured. The latter assumption cannot be checked; it is apt to hold for ability variables but may be violated for personality traits. The former assumption has troubled

> many. Actually, the main issue is the question of continuity. Consider the pass-fail dichotomy; it is obvious that failing a test item represents anything from a dismal failure up to a near pass, whereas passing the item involves barely passing up to passing with the greatest of ease. Such a line of reasoning is certainly presumptive evidence for continuity, and a similar argument can be advanced as regards yes-no, like-dislike, and similar categories. Given a continuous trait, it is usually (if not always) possible to construct a test thereof which yields a normal distribution, and consequently we need not worry about the mathematical assumption of normality when using r_b (pp. 190-191).

The point biserial statistic was chosen to test the research questions dealing with the following dichotomous variables:

1. Sex of the respondent.
2. Whether or not respondents had visited a junior college.
3. Whether or not respondents had been a student at a junior college.
4. Whether or not respondents had taken a course dealing primarily with junior college.
5. Whether or not respondents had taught in a junior college.

The biserial statistic was judged to be appropriate to test the remaining research questions:

1. Whether the respondent's institution is located more than 20 miles or less than 20 miles from the nearest junior college.
2. Whether the respondent's teaching assignment is primarily lower division or upper division and/or graduate.
3. Whether the respondent is 40 years of age or older or less than 40 years of age.

Research Questions to be Tested

Research questions to be tested are as follow:

1. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members have had teaching experience in a junior college?
2. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members have attended a junior college?
3. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members have had a course dealing primarily with junior colleges?
4. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members teach in an institution located less than 20 miles from the nearest junior college?
5. Is there a significant relationship between total score on the Junior College Attitude Survey and sex of the senior college faculty member?
6. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member is under 40 years of age?
7. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member has visited a junior college?

8. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member teaches primarily lower division courses.

Silverman (1971) said that attitudes usually are based on an accumulation of the individual's experiences rather than on any single situation. If a four-year college faculty member has had an accumulation of pleasant experiences involving the junior college, whether through attending a junior college, teaching in a junior college, taking a course dealing with the junior college in a positive manner, in visits to junior colleges or through interaction with junior college teachers, administrators or students, his attitudes are more apt to be positive. For this reason, research questions based on whether or not the four-year college faculty member has had teaching experience in a junior college, has attended a junior college, has had a course dealing primarily with the junior college, teaches in an institution located less than 20 miles from the nearest junior college, or has visited a junior college, were included. Favorable attitudes not only may be developed by an accumulation of experiences, but according to Silverman, contact with unfamiliar situations will often change negative attitudes to positive ones. Ignorance is a breeder of negative attitudes.

The research question dealing with the relationship of the attitude toward the junior college and the sex of the four-year college faculty member was included, since nothing in the literature indicated whether a relationship was likely to exist.

The research question to determine if age of the four-year faculty member is correlated to the attitude the four-year college faculty member holds toward the junior college was included because the major

thrust of the two-year college has come since 1960, and individuals in the age group under 40 would be more likely to have attended a junior college or have a familiarity with the junior college. The American College Testing Program in 1969 reported that since 1961 nearly 200 two-year colleges have been established, and junior college enrollments nearly doubled.

The four-year college faculty member who teaches primarily upper division courses may deal more closely with junior college transfers than the four-year college faculty member who teaches primarily lower division courses. This may affect attitude. There also exists the possibility that four-year college faculty members teaching primarily lower-division courses may feel more kinship with the two-year college instructor than would a four-year college faculty member teaching primarily upper-division courses. Because of a lack of information in these areas, the research question dealing with whether the senior college faculty member teaches primarily lower-division courses was included.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

In this chapter the data collected through the use of the Junior College Attitude Survey will be used to describe the full-time faculty members who returned questionnaires. The data will also be analyzed statistically in relation to the research questions of the study.

At the conclusion of the four weeks for collection of the data through the use of mailed questionnaires, 353, or 88%, of the 400 full-time faculty members, randomly selected for inclusion in the study from the six regional universities, had responded. Five questionnaires were returned too late for inclusion. Counting these five late responses, the number of questionnaires returned totaled 358, or 90%, of the original sample.

A number of questionnaires were not included in the study. In addition to the five late questionnaires previously mentioned, 50 respondents answered item 41 of the survey by indicating that they fit some category other than full-time teaching and thus were not included in the study. Seven questionnaires arrived with the identifying numbers removed, so that it was impossible to group them with a particular institution. Two respondents returned blank questionnaires with attached notes stating that they preferred not to be included in the study. The total of those not included, for reasons stated above, was 64, leaving a total of 294, or 74%, of the original sample of 400 se-

lected for the study.

The 294 respondents were divided among the institutions as follows: Central State University, 90; East Central Oklahoma State University, 31; Northeastern Oklahoma State University, 55; Northwestern Oklahoma State University, 14; Southeastern Oklahoma State University, 31; and Southwestern Oklahoma State University, 73.

TABLE III

A PERCENTAGE COMPARISON OF RETURN OF USEABLE QUESTIONNAIRES BY INSTITUTION

Institution	Number Sent	Number Returned	Percentage Returned
Central State University	103	90	87%
East Central Oklahoma State University	48	31	65%
Northeastern Oklahoma State University	74	55	74%
Northwestern Oklahoma State University	27	14	52%
Southeastern Oklahoma State University	52	31	60%
Southwestern Oklahoma State University	96	73	76%
Totals	400	294	74%

Almost three-fourths, 217, of the respondents were males, one-fourth females, 74, and three individuals failed to respond to the

item indicating sex. Faculty members holding the doctors degree comprised the largest group by academic degree, numbering 192. Seventy-seven individuals indicated they had masters degrees, 11 had bachelors degrees, and 13 indicated specialist as their highest degree. One individual failed to respond to the item identifying the highest earned degree.

A majority of the respondents, 242, had visited a junior college, while 49 indicated that they had not. Three individuals did not respond to the item indicating whether or not they had visited a junior college. Only 61 respondents had attended a junior college as students, and 233 had not. Likewise, only a small number of the respondents, 52, indicated that they had taken a course dealing primarily with the junior college. A majority, 242, indicated that they had not had such a course.

In answer to the question concerning the current teaching assignment of the full-time teachers included in the study, only 82 indicated that their teaching assignment was lower division, while a much larger number, 211, indicated their major teaching assignment to be primarily upper division and/or graduate. One individual did not respond to the item indicating the major teaching assignment. The large number of respondents reporting their major teaching assignment as upper division and/or graduate seemed to be somewhat disproportionate as compared with enrollments in the six institutions included in the study. It is possible that faculty members preferred to think of themselves as primarily teaching upper division and for this reason indicated the upper division response. Enrollment figures for the combined six institutions for the same time period, spring term, 1976,

as reported by the Oklahoma State Regents for Higher Education showed 13,137 students enrolled in lower division work, with a full-time equivalency enrollment of 11,508 as compared to an upper division/ graduate enrollment of 17,095 students, with an enrollment of 12,751 full-time equivalent students.

The average age of the respondents was 42.51. The ages reported ranged from a low of 24 years to a high of 66 years of age. Six respondents chose not to indicate their ages. The range in years of teaching experience in Oklahoma reported by respondents was from one year to 45 years, with an average of 12.57 years of teaching experience in Oklahoma. The average number of total years teaching experience was 15.31, with a range from one year to 45 years of total teaching experience. One individual did not respond to the item dealing with total years of teaching experience.

For the 39 items on the questionnaire, mean attitude scale scores range from a high of 133.64 at Northwestern to a low of 120.23 at Southwestern. The mean attitude scale score for all institutions was 126.26. The mean attitude scale score for each of the institutions indicated that the faculty members were slightly favorable to junior college education.

Each of the eight research questions was dependent upon one of the personal data items on the questionnaire in order to group respondents into categories. Five of the research questions were analyzed by the point biserial statistical technique, and the other three research questions were suitable for using the biserial technique. An independent t test was used to determine significance among means at the .05 level of confidence. Tables IV, V, VI, VII, and VIII show the results

of the point biserial tests.

Research Questions Tested Using Point Biserial

Table IV shows the comparison of attitude scale scores of men and women faculty members. Each of the institutions exhibited low correlations between the attitude of males and females toward junior college education. These correlations ranged from a low of .05 at Southwestern to a high of .33 at East Central. The t ratios were also low and ranged from .20 at Northwestern to 1.85 at East Central. None of the t scores were significant at the .05 level. Thus, the statement that there is no significant difference between full-time faculty men and women in the six regional universities studied in their attitudes toward junior college education has substantial empirical support. Means of all groups displayed at least slightly favorable attitudes toward junior college education, with the exception of female faculty members from East Central who had a mean score of 113.67. Any means falling below 117.00 are negative. For all institutions, the 217 males had a mean score of 126.66, and the 74 females a mean score of 125.22; for 289 degrees of freedom, $t(289)=.47$ $p>.05$. A t ratio of .47 is not significant at the .05 level.

The comparison of attitude scale scores for faculty members who had visited a junior college and those who had not is shown in Table V. Two hundred and forty two of the faculty members reported having visited a junior college, and 49 faculty members indicated that they have not visited a junior college. Those faculty members who had visited a junior college had a mean attitude scale score of 128.18 as compared to a slightly unfavorable mean score of 116.59 for those faculty mem-

TABLE IV

A COMPARISON OF ATTITUDE SCALE SCORES OF MALE AND FEMALE FACULTY MEMBERS

Institution	Sex	Number	Mean	Standard Deviation (Continuous Variable)	Point Biserial Correlation Coefficient	t
Central	Males	59	130.51	19.65	.06	.56
	Females	30	128.00			
East Central	Males	25	129.68	19.43	.33	1.85
	Females	6	113.67			
Northeastern	Males	42	129.05	22.22	.12	.86
	Females	13	122.92			
Northwestern	Males	10	133.20	12.45	.06	.20
	Females	4	134.75			
Southeastern	Males	25	123.32	36.19	.06	.32
	Females	5	129.20			

TABLE IV (Continued)

Southwestern	Males	56	119.80	21.16	.05	.45
	Females	16	122.56			
All Institutions	Males	217	126.66	22.61	.03	.47
	Females	74	125.22			

TABLE V

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHO HAD VISITED A JUNIOR COLLEGE WITH THOSE WHO HAD NOT

Institution	Visitors vs. Non-Visitors	Number	Mean	Standard Deviation (Continuous Variable)	Point Biserial Correlation Coefficient	t
Central	Visitors	67	131.25	19.68	.15	1.43
	Non-Visitors	20	124.10			
East Central	Visitors	26	128.62	19.43	.24	1.32
	Non-Visitors	5	116.00			
Northeastern	Visitors	49	128.00	22.22	.05	.38
	Non-Visitors	6	124.33			
Northwestern	Visitors	13	133.46	12.45	.05	.18
	Non-Visitors	1	136.00			
Southeastern	Visitors	24	134.04	35.67	.48	**2.97
	Non-Visitors	7	92.86			

**$p < .01$

TABLE V (Continued)

Southwestern	Visitors	63	121.56	21.08	.16	1.34
	Non-Visitors	10	111.90			
All Institutions	Visitors	242	128.18	22.59	.19	**3.33
	Non-Visitors	49	116.59			

**$p < .01$

bers who had not visited a junior college. The point biserial correlation coefficient was .19, and the t test yielded a ratio of 3.33, which for 289 degrees of freedom, $t(289)=3.33$ $p<.01$, is significant at the .01 level of confidence, thus showing that having visited a junior college resulted in a significantly more favorable attitude toward junior college education for faculty members included in this study.

The mean scores for faculty members who had visited a junior college were above the score of 117.00, the score which would result if a constant undecided were checked for all 39 items in the attitude scale. These mean scores ranged from a low of 121.56 at Southwestern to a high of 134.04 at Southeastern. Faculty members who had not visited a junior college had mean attitude scale scores that ranged from the low of 92.86 at Southeastern to a high of 136.00 at Northwestern. Faculty members at East Central, Southeastern and Southwestern had mean attitude scale scores that were unfavorable to junior college education.

In a comparison of visitors and non-visitors, only one of the six institutions, Southeastern, had a t ratio that is significant at the .01 level. The mean score for the 24 faculty members who had visited a junior college was 134.04, which was the highest for all of the institutions on this item. The non-visitors at Southeastern had the lowest mean score, 92.86, of all the institutions on this item. The point biserial coefficient for Southeastern was .48, and the t ratio was 2.97, with 29 degrees of freedom, $t(29)=2.97$ $p<.01$.

The comparison of attitude scale scores of faculty members who had attended a junior college with those who had not is shown in Table VI. Only 61 of the faculty members included in the study had attended a junior college; the majority, 233, had not. Mean attitude scale

TABLE VI

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHO ATTENDED A JUNIOR COLLEGE AND THOSE WHO DID NOT

Institution	Attenders Vs. Non-Attenders	Number	Mean	Standard Deviation (Continuous Variable)	Point Biserial Correlation Coefficient	t
Central	Attenders	18	133.89	19.55	.11	1.04
	Non-Attenders	72	128.53			
East Central	Attenders	7	126.57	19.43	.00	.01
	Non-Attenders	24	126.58			
Northeastern	Attenders	14	138.36	22.22	.28	2.15
	Non-Attenders	41	123.93			
Northwestern	Attenders	1	149.00	12.45	.34	1.26
	Non-Attenders	13	132.46			
Southeastern	Attenders	5	134.80	35.67	.12	.67
	Non-Attenders	26	122.81			

TABLE VI (Continued)

Southwestern	Attenders	16	124.44	21.08	.11	.90
	Non-Attenders	57	119.06			
All Universities	Attenders	61	131.92	22.53	.13	*2.21
	Non-Attenders	233	124.78			

*$p < .05$

score for those faculty members that had attended a junior college was 131.92, as compared with a mean score of 124.78 for those who had not attended. A point biserial correlation coefficient of .13 was obtained, and the t ratio of 2.21 with 292 degrees of freedom, $t(292)= 2.21$ $p<.05$, was significant at the .05 level. It may be said that faculty members in the six regional universities who attended a junior college have attitudes toward junior college education significantly different from those who have not. All of the faculty members at the different institutions in the study had mean scores above 117.00, reflecting favorable attitudes toward the junior college. The lowest mean attitude scale score of 119.06 was reflected for non-attenders at Southwestern, and the highest mean score was 149.00 for the one faculty member in the sample from Northwestern who had attended a junior college. The next highest mean attitude scale score was 134.80 for faculty members from Southeastern who had attended a junior college. Although the mean attitude scale scores for each of the institutions for this item indicated favorable attitudes toward junior college education, only one of the institutions showed a significant difference in attitude toward junior college education between those faculty members who had attended a junior college and those who had not; that institution was Northeastern. The point biserial correlation coefficient for that institution was .28, and the t ratio of 2.15, with 53 degrees of freedom, $t(53)=2.15$ $p<.05$, was significant at the .05 level.

Table VII compares attitude scale scores of faculty members who had a course dealing primarily with junior college education with faculty members who did not have such a course. Fifty-two of the fac-

TABLE VII

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHO HAD A COURSE DEALING PRIMARILY WITH JUNIOR COLLEGE EDUCATION AND THOSE WHO DID NOT HAVE SUCH A COURSE

Institution	Course Vs. No Course	Number	Mean	Standard Deviation (Continuous Variable)	Point Biserial Correlation Coefficient	t
Central	Have Had	13	139.46	19.55	.21	1.99
	Have Not Had	77	127.94			
East Central	Have Had	4	123.00	19.43	.07	.38
	Have Not Had	27	127.11			
Northeastern	Have Had	15	134.67	22.22	.20	1.45
	Have Not Had	40	124.95			
Northwestern	Have Had	5	134.60	12.45	.06	.20
	Have Not Had	9	133.11			
Southeastern	Have Had	4	141.25	35.67	.18	.98
	Have Not Had	27	122.30			

TABLE VII (Continued)

Southwestern	Have Had	11	132.09	21.08	.24	*2.06
	Have Not Had	62	118.13			
All Institutions	Have Had	52	134.92	22.53	.18	**3.09
	Have Not Had	242	124.40			

*$p < .05$
**$p < .01$

ulty members included in the study had taken such a course, and 242 had not. The mean attitude scale score for all of the sample that had taken a course dealing primarily with junior college education was 134.92, compared to a mean score of 124.40 for those faculty members who had not taken such a course. The point biserial correlation coefficient was .18, and the t ratio was 3.09, which for 292 degrees of freedom, $t(292)=3.09$, $p<.01$, was significant at the .01 level. This allows the statement to be made that there is a significant difference in attitude toward junior college education between faculty members in the six regional state universities who have had a course dealing primarily with junior college education and those faculty members who have not taken such a course.

All of the mean attitude scale scores, including those of both faculty members who have taken a course dealing primarily with junior college education and those faculty members who have not had such a course were favorable to some degree. These mean scores ranged from a low of 118.13 for those faculty members at Southwestern who have not had such a course to a high of 141.25 for faculty members at Southeastern who had taken such a course. A significant difference was shown within two of the institutions, Central and Southwestern. The mean attitude scale score for faculty at Central who had taken a course primarily with junior college education content was 139.46, and the mean score for faculty members who had not had such a course was 127.94. The point biserial correlation coefficient was .21, and the t ratio was 1.99, which for 88 degrees of freedom, $t(88)=1.99$ $p<.05$, is significant at the .05 level. Faculty members at Southwestern who had taken a course dealing primarily with junior college education had

a mean attitude scale score of 132.09, compared to a mean score of 118.13 for those faculty members from that institution who had not taken such a course. The point biserial correlation coefficient was .24, and the t ratio was 2.06, which for 71 degrees of freedom, $t(71)=2.06$ $p<.05$, is significant at the .05 level.

The last of the five items which were analyzed by the point biserial technique was the personal data item that asked whether or not the faculty member had taught in junior college. Results of this analysis are shown in Table VIII. This table compared the attitude scale scores of faculty members who have taught in a junior college with those who have not. Only 48 of the faculty members in this sample responded that they had taught in a junior college. The other 246 faculty members in the study have not had such experience. Statistical analyses resulted in a mean attitude scale score of 136.44 for those faculty members from all six of the universities who had taught in a junior college, and of 124.28 for those faculty members without such experience. A point biserial correlation of .20 and a t ratio of 3.48 were calculated. The t, with 292 degrees of freedom, $t(292)=3.48$ $p<.01$ is significant at the .01 level. The result of the analysis of the data for this item was that there is a significant difference in attitude toward junior college education between those faculty members in the six regional universities who have taught in a junior college and those faculty members who have not taught in a junior college. However, Southwestern was the only one of the universities to show a significant difference between faculty members who had taught in a junior college and faculty members who had not. The mean attitude scale score for those faculty members who had taught in a junior college was

TABLE VIII

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHO HAVE TAUGHT IN A JUNIOR COLLEGE WITH THOSE WHO HAVE NOT

Institution	Junior College Teaching Experience	Number	Mean	Standard Deviation (Continuous Variable)	Point Biserial Correlation Coefficient	t
Central	Have	14	132.36	19.55	.06	.57
	Have Not	76	129.09			
East Central	Have	8	135.00	19.43	.26	1.42
	Have Not	23	123.65			
Northeastern	Have	8	136.88	22.22	.17	1.27
	Have Not	47	126.02			
Northwestern	Have	3	132.00	12.45	.07	.24
	Have Not	11	134.09			
Southeastern	Have	3	141.33	35.67	.15	.83
	Have Not	28	122.96			

TABLE VIII (Continued)

Southwestern	Have	12	141.75	21.08	.45	**4.28
	Have Not	61	116.00			
All Institutions	Have	48	136.44	22.53	.20	**3.48
	Have Not	246	124.28			

**$p < .01$

141.75, and the mean score for faculty members who had not taught in a junior college was 116.00, which was the lowest for any group on this particular item. The point biserial correlation coefficient was .45, and the t ratio was 4.28, with 77 degrees of freedom, $t(77)=4.28$ $p<.01$, which is significant at the .01 level. Mean attitude scale scores for all of the universities were favorable to some degree, with the exception of the mean score of 116.00, lower than the undecided mean score of 117.00, for those faculty members at Southwestern who had no teaching experience in a junior college.

Research Questions Tested Using Biserial

Tables IX, X and XI present the results for the three research questions which were tested using the biserial statistic.

Data in Table IX did not lend itself to a comparison between groups within institutions, since respondents from individual universities should not differ in response to whether their university was less than 20 miles from the nearest junior college or more than 20 miles from the nearest junior college. Faculty in three of the institutions, Central State, Northeastern, and Southeastern, varied in response to this item. Seventy-two faculty members at Central indicated that their institution was less than 20 miles from the nearest junior college, 17 indicated that their institution was more than 20 miles from the nearest junior college, and one individual did not respond. Only two Northeastern faculty members indicated their institution to be less than 20 miles from the nearest junior college, and 53 faculty members said that their university was more than 20 miles from the nearest junior college. For Southeastern, four faculty members indi-

TABLE IX

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHOSE INSTITUTIONS ARE MORE THAN TWENTY MILES OR LESS THAN TWENTY MILES FROM A JUNIOR COLLEGE

Proximity to Junior College	Number	Mean	Standard Deviation	Biserial Correlation Coefficient	t
Less Than 20 Miles	78	129.09	19.94	.10	1.44
More Than 20 Miles	215	125.12	23.34		

cated their institution to be less than 20 miles from the nearest junior college, and 27 responded that their institution was more than 20 miles from the nearest junior college. In each of these cases all of the faculty members in an institution were shown in a single category that reflected the majority of responses.

In the comparison of attitude scale scores for faculty members from all institutions, the mean score for faculty members who claimed their institution to be less than 20 miles from the nearest junior college was 129.09, whereas, faculty who indicated that their institution was more than 20 miles away from the nearest junior college yielded a mean of 125.12. The biserial correlation coefficient was .10, and the t ratio was 1.44 with 159 degrees of freedom, $t(159)=1.44$ $p>.05$, indicating that there is no significant difference in attitude toward junior college education between faculty members whose institution is more than 20 miles from the nearest junior college and faculty members whose institution is less than 20 miles from the nearest junior college. Both groups exhibited attitude scale mean scores that were slightly favorable to junior college education.

In Table X is the comparison of the attitude scale scores of faculty members whose primary teaching assignment was lower division with faculty members whose primary teaching assignment was upper division and/or graduate. In the comparison for all institutions, the 82 faculty members who responded that they taught primarily lower division had a mean attitude scale score of 122.35. Those 211 faculty members who indicated that their primary teaching assignment was upper division and/or graduate recorded a mean score of 128.04. The biserial correlation coefficient was .15, and the t ratio was 2.01, with 154 degrees

TABLE X

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS WHOSE PRIMARY TEACHING ASSIGNMENT IS LOWER DIVISION WITH THOSE WHOSE PRIMARY TEACHING ASSIGNMENT IS UPPER DIVISION AND/OR GRADUATE

Institution	Instructional Level	Number	Mean	Standard Deviation	Biserial Correlation Coefficient	t
Central	Lower Div.	23	128.78	17.77	.03	.25
	Upper Div./ Grad.	67	129.88	20.25		
East Central	Lower Div.	11	120.36	14.11	.31	1.51
	Upper Div./ Grad.	20	130.00	21.36		
Northeastern	Lower Div.	10	121.50	17.01	.19	1.17
	Upper Div./ Grad.	45	128.96	23.16		

TABLE X (Continued)

Northwestern	Lower Div.	3	129.33	8.08	.25	.89
	Upper Div./ Grad.	11	134.81	13.47		
Southeastern	Lower Div.	8	121.62	48.92	.07	.23
	Upper Div./ Grad.	23	125.83	31.13		
Southwestern	Lower Div.	27	117.44	16.74	.17	1.20
	Upper Div./ Grad.	45	123.00	22.22		
All Institutions	Lower Div.	82	122.35	21.52	.15	*2.01
	Upper Div. Grad.	211	128.04	22.50		

*$p < .05$

of freedom, $t(154)=2.01$ $p < .05$, which allowed the statement that there is a significant difference at the .05 level in attitudes toward junior college education of faculty members in the six regional universities whose primary assignment is teaching lower division and those faculty members whose teaching assignment is upper division and/or graduate. The mean attitude scale score of faculty members whose primary teaching assignment was upper division and/or graduate was higher than that of faculty members whose primary teaching assignment is lower division, contrary to the rationale that lower division instructors would be more likely to identify with the junior college instructors.

Although no significant difference at the .05 level or higher occurred between the two groups in any single university, the group that indicated their primary teaching assignment to be upper division and/or graduate had higher mean attitude scale scores than faculty members who said their primary teaching assignment was lower division. The highest mean score, 134.82, belonged to faculty members at Northwestern who taught primarily at the upper division and/or graduate level. The lowest mean score was held by faculty members teaching at the lower division level at Southwestern; the mean score for these professors was 117.44. Mean scores for all groups were shown to reflect attitudes slightly favorable (above a mean of 117.00) to junior college education.

A statistical analysis of faculty members in the study, shown in Table XI, revealed that there was no significant difference in attitude toward junior college education at the .05 level or higher for faculty members less than 40 years of age and 40 years of age or older. The mean score for faculty members less than 40 years of age was 123.30,

TABLE XI

COMPARISON OF ATTITUDE SCALE SCORES OF FACULTY MEMBERS FORTY YEARS OF AGE AND OLDER AND THOSE UNDER FORTY YEARS OF AGE

Institution	Age	Number	Mean	Standard Deviation	Biserial Correlation Coefficient	t
Central	Under 40	34	131.00	17.86	.04	.30
	40 and Over	52	129.75	20.98		
East Central	Under 40	14	126.07	18.34	.08	.34
	40 and Over	16	128.50	20.55		
Northeastern	Under 40	12	119.33	21.75	.27	1.48
	40 and Over	42	129.93	22.31		
Northwestern	Under 40	6	139.00	13.83	.47	1.39
	40 and Over	8	129.63	10.41		
Southeastern	Under 40	13	112.77	50.88	.36	1.42
	40 and Over	18	133.39	15.15		

TABLE XI (Continued)

Southwestern	Under 40	40	118.05	18.99	.14	.95
	40 and Over	33	122.88	23.38		
All Institutions	Under 40	119	123.30	24.79	.15	1.95
	40 and Over	169	128.72	20.84		

and for faculty members 40 years of age or older, the mean score was 128.72. The biserial coefficient correlation was .15, and the t ratio was 1.95, with 226 degrees of freedom, $t(226)=1.95$ $p>.05$, just below the 1.96 needed for significance at the .05 level. None of the institutions had t ratios sufficiently high to be significant at the .05 level. Mean attitude scale scores for groups in the institutions ranged from a low of 112.77 for faculty members less than 40 years of age at Southeastern to a high of 139.00 for faculty members less than 40 years of age at Northwestern. All of the mean scores, with the exception of the lowest mean score mentioned above for Southeastern, were slightly favorable toward junior college education.

In Table XII are shown the attitude scale mean scores and standard deviations. Northwestern had the highest mean score of 133.64, and Southwestern had the lowest mean score, 120.23. The mean score for all institutions was 126.26. Each of the institutions had a mean score on the attitude scale of above 117.00 which indicated that each of the institutions is at least slightly favorable to junior college education.

TABLE XII

ATTITUDE SCALE SCORES COMPARED BY INSTITUTION AND FOR THE TOTAL SAMPLE

Institution	N	Mean	Standard Deviation
Central	90	129.60	19.55
East Central	31	126.58	19.43
Northeastern	55	127.00	22.22
Northwestern	14	133.64	12.45
Southeastern	31	124.74	35.67
Southwestern	73	120.23	21.08
For All Institutions	294	126.26	22.53

In summary of the statistical testing of the eight research questions, it was found that in a comparison categorization of attitude scale scores subjected to the t test at the .05 level that:

1. There was no significant difference in attitude toward junior college education by sex of the faculty member.
2. There was a significant difference in attitude toward junior college education for faculty members who had visited a junior college and faculty members who had not visited a junior college. Those faculty members who had visited a junior college were more favorable than those who had not.
3. There was no significant difference in attitude toward junior college education between faculty members whose university was

located less than 20 miles from the nearest junior college and faculty members whose university was located more than 20 miles away from the nearest junior college.

4. There was a significant difference in attitude toward junior college education between faculty members who attended a junior college and those faculty members who did not attend a junior college. Those who attended a junior college had a more favorable attitude toward junior college education.
5. There was a significant difference in attitude toward junior college education between faculty members who had taken a course dealing primarily with junior college education and faculty members who had not had such a course. Those who had taken such a course were more favorable toward junior college education than those not taking such a course.
6. There was a significant difference in attitude toward junior college education between faculty members who had taught in a junior college and those faculty members who had not taught in a junior college. Those who taught in a junior college were more favorable to junior college education than those who did not have junior college teaching experience.
7. There was a significant difference in attitude toward junior college education between those faculty members whose assignment was primarily lower division teaching and those faculty members whose primary teaching assignment was upper division and/or graduate. Those who taught primarily upper division and/or graduate courses were more favorable to junior college education than those who taught primarily lower divi-

sion courses.

8. There was no significant difference in attitude toward junior college education between faculty members under 40 years of age and faculty members 40 years of age or older.

In every case where combined institutions were tested, the mean attitude scale scores were found to be slightly favorable to junior college education, that is, they were above a mean of 117.00.

At the end of the questionnaire, respondents were invited to write any comments concerning junior colleges or the questionnaire. Twenty nine of the faculty members did include additional comments not allowed for on the structured questionnaire itself.

The remarks received fell primarily into the following categories, and some faculty members made statements that fit more than one category:

1. There were eight statements supportive of the study and asking to see the results of the study.
2. Six of the respondents said they did not have sufficient information concerning the junior college to respond accurately.
3. Ten individuals gave clarification or additional answers to questionnaire items.
4. Five of the faculty members made statements supportive of junior college education.
5. Comments of a negative nature concerning preparation of transfer students, junior college courses, junior college teachers and competition from the junior colleges for students and funding were made by nine individuals.

6. In addition to supportive comments about the study, five individuals made such negative comments about the questionnaire as: "Seems baited," "not enough flexibility in answers," "full of the preconceived notion that junior colleges are third rate," and "stilted and controlled."

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this study was to broaden the information available concerning Oklahoma higher education by identifying the existing attitudes of faculty members in the six regional Oklahoma state universities toward junior college education. This information could bring about greater understanding between these two types of institutions.

The problem for the study was to determine and analyze the attitudes of full-time faculty members in the six regional universities toward junior college education through the use of the instrument, the Junior College Attitude Survey, developed by Dr. Gary Arnon James for use in a study of the attitudes of Illinois high school counselors toward junior college education. This instrument is a 39 item Likert-type questionnaire which could be used to study the attitudes of many different groups toward junior college education.

A random sample was drawn from a total population of 955 full-time teaching faculty members from the six institutions governed by the Board of Regents for Oklahoma Colleges. These institutions included for the study are Central State University at Edmond, East Central Oklahoma State University at Ada, Northeastern Oklahoma State University at Tahlequah, Northwestern Oklahoma State University at Alva, Southeastern Oklahoma State University at Durant, and

Southwestern Oklahoma State University at Weatherford.

A sample size of 400 was chosen, and names for inclusion in the study were selected through use of random tables. The results of the first mailing of the questionnaire, cover letter and stamped return envelope was a return of 290 responses, or 73%, within a two-week period following the first mailing. The second mailing included another copy of the questionnaire, a second cover letter different from the first, and another stamped return envelope. At the end of the second two-week period, the total return had reached 347, or 87%. A number of questionnaires were not included in the study. Five responses were too late to include, 50 other respondents identified themselves as being in some category other than full-time teaching, seven questionnaires had the identifying numbers removed which prevented sorting by group, and two individuals returned blank questionnaires stating that they did not wish to be included in the study. This left a total of 294, or 74%, of the original sample with useable questionnaires. Information from the questionnaires was then transferred to key punched cards to allow the results of the questionnaire response to be grouped and analyzed by the computer.

The research questions for the study were:

1. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members have had teaching experience in a junior college?
2. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college

faculty members have attended a junior college?

3. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members have had a course dealing primarily with the junior colleges?
4. Is there a significant relationship between total score on the Junior College Attitude Survey and whether senior college faculty members teach in an institution located less than 20 miles from the nearest junior college?
5. Is there a significant relationship between total score on the Junior College Attitude Survey and sex of the senior college faculty member?
6. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member is under 40 years of age?
7. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member has visited a junior college?
8. Is there a significant relationship between total score on the Junior College Attitude Survey and whether the senior college faculty member teaches primarily lower division courses?

The statistical techniques chosen for testing the research questions are the point-biserial and biserial correlations. The point-biserial was used for items in which one of the two variables was continuous (The Junior College Attitude Survey) and the other variable was dichotomous (personal data items from the questionnaire). The re-

search questions dealing with the following dichotomous variables were tested using the point-biserial technique:

1. Sex of the respondent.
2. Whether or not respondents had visited a junior college.
3. Whether or not respondents had been a student at a junior college.
4. Whether or not respondents had taken a course dealing primarily with junior college education.
5. Whether or not respondents had taught in a junior college.

The biserial technique may be correctly used when it can be assumed that a continuous variable underlies the dichotomy. Therefore the biserial statistic was used to test the remaining research questions:

1. Whether the respondent's institution is located more than 20 miles or less than 20 miles from the nearest junior college.
2. Whether the respondent's teaching assignment is primarily lower division or upper division and/or graduate.
3. Whether the respondent is 40 years of age or older or less than 40 years of age.

Using the point biserial and biserial techniques and the independent t test, the research questions were tested for significance at the .05 level of confidence, and the findings of the study were as follows:

1. There was no significant difference in attitude toward junior college education by sex of the faculty member.

2. There was a significant difference in attitude toward junior college education for faculty members who had visited a junior college and faculty members who had not visited a junior college. Faculty members who had visited a junior college were more favorable toward junior college education than the non-visitors.
3. There was no significant difference in attitude toward junior college education between faculty members whose university was located less than 20 miles from the nearest junior college and faculty members whose university was located more than 20 miles away from the nearest junior college. Relationships with faculty members in the junior colleges and transfer students from the junior college may be of greater importance than is geographical proximity.
4. There was a significant difference in attitude toward junior college education between faculty members who attended a junior college and those faculty members who did not attend a junior college. Those faculty members who attended a junior college were more favorable toward junior college education than were non-attenders.
5. There was a significant difference in attitude toward junior college education between faculty members who had taken a course dealing primarily with junior college education and faculty members who had not had such a course. Faculty members who had taken such a course were more favorable toward junior college education than were those faculty members who had not had such a course.

6. There was a significant difference in attitude toward junior college education between faculty members who had taught in a junior college and those faculty members who had not taught in a junior college. Faculty members having taught in a junior college were more favorable to junior college education than were faculty members who had not had that experience.
7. There was a significant difference in attitude toward junior college education between those faculty members whose assignment was primarily lower division teaching and those faculty members whose primary teaching assignment was upper division and/or graduate. Faculty members whose primary assignment was upper division and/or graduate were more favorable toward junior college education than were faculty members whose primary assignment was lower division. The favorable attitudes held by the upper division and/or graduate instructors could be, in part, the result of their association with junior college transfer students who would normally transfer as upper-division students.
8. There was no significant difference in attitude toward junior college education between faculty members under 40 years of age and faculty members 40 years of age or older.

The mean attitude scale score for all institutions was 126.262, which indicated that the faculty members in this study were slightly favorable to junior college education. All mean scores falling above 117.00 would be considered favorable to junior college education.

Conclusions

As a result of this study, it can be concluded that full-time teaching faculty members in Oklahoma's six regional universities have had such information and/or experiences that would cause them, as a group, to be favorable toward junior college education. Those faculty members in the study who had experienced the closest associations with the junior college by such means as attending a junior college, having taught at a junior college, having taken a course dealing primarily with junior college education, or having visited a junior college, had higher mean attitude scale scores than those faculty members not having such experiences.

Consistent with the concepts of attitude found in the literature, it can be expected that faculty members in the six state regional universities will remain favorable in their attitudes toward junior college education. It is unlikely that the direction of their attitudes will change, but the intensity of their attitudes may be changed through further experiences and relationships.

It can be further expected that the actions of faculty members in the six regional universities will tend to be congruent with favorable attitudes toward junior college education in future relationships of these four-year institution faculty members with faculty members in the two-year colleges.

Recommendations

Since contact with the junior college was found to favorably influence the attitude of faculty members in the six regional universi-

ties toward junior college education, more contact of a professional nature between faculty members in the four-year institutions and the junior colleges should be mutually beneficial. Senior institutions should become more aware and understanding of the complexities of the two-year college in its attempts to deal with the transfer student, students in vocational programs who are not planning to transfer to a four-year institution, and students unable to meet admission standards of the four-year college who are enrolled in junior college remedial programs. Junior college faculty members and administrators should seek ways to explain to faculty members in four-year institutions how the junior college mission, students, and programs are similar to and different from those of the four-year college and the reasons for these similarities and differences.

The literature dealing with attitudes pointed out that attitudes are based on an accumulation of a person's experiences. This experience would contain personal relationships and information received by the individual from other sources. Attitudinal literature also stated that a person's actions tend to be consistent with his attitudes. Therefore, the two-year and four-year institutions should seek out all possible means that would bring them together cooperatively. Below are examples of these possibilities:

1. Frequent meetings between faculty members of the departments of a four-year institution and the faculty members of the corresponding department of the junior college or junior colleges from which most of the senior institution's transfer students come. Possible subjects for these sessions could be joint curriculum planning, discussions on problems of the

transfer students, and the various aspects of the particular academic discipline, such as new findings, methods of teaching, and technological aids to instruction.

2. Where proximity permits, there could be joint production of musical and dramatic programs, student and faculty art shows, student research projects, and faculty research projects.
3. Inservice training and consultation with faculties of the junior colleges by the senior institutions. Cooper (1975) discussed such services by universities and said that the universities must continuously retool themselves in order to service the changing needs of the junior college.

Further information about the relationships of the two-year colleges with four-year institutions is needed. This information could result from such studies as:

1. An analysis of the information Oklahoma senior college faculty members have of junior college education and the sources of this information.
2. An attitude analysis of the two major Oklahoma universities toward junior college education.
3. A national study of the attitudes of four-year faculty members in private institutions and public institutions of varying sizes and in different geographical regions of the United States.
4. An analysis of the attitudes of faculty members in Oklahoma's junior colleges toward four-year institutions of higher education.

James' Junior College Attitude Survey would be suitable for study of different groups within the four-year institutions to determine their attitudes toward junior college education. Groups selected for study could include administrators, student advisors, deans and department chairmen, registrars, and students.

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APPENDIXES

APPENDIX A

JAMES' CORRELATION COEFFICIENTS AND "t" VALUES USED TO SELECT ITEMS FOR JUNIOR COLLEGE ATTITUDE SURVEY QUESTIONNAIRE

Item	Rank	t	Correlation Coefficient
1.	5	5.66	.462
2.	1	5.80	.481
3.	8	5.41	.494
4.	26	3.60	.460
5.	10	5.05	.503
6.	15	4.50	.397
7.	9	5.08	.578
8.	3	5.68	.395
9.	22	3.76	.481
10.	14	4.51	.421
11.	29	3.51	.404
12.	18	4.42	.506
13.	19	4.27	.471
14.	17	4.44	.384
15.	21	3.83	.421
16.	28	3.51	.377
17.	13	4.73	.331
18.	12	4.74	.486
19.	16	4.47	.443
20.	20	4.05	.449
21.	4	5.66	.559
22.	11	4.85	.484
23.	29	3.51	.445
24.	38	3.02	.211
25.	23	3.76	.276
26.	6	5.50	.452
27.	27	3.54	.331
28.	35	3.11	.229
29.	31	3.48	.407
30.	2	5.68	.411
31.	33	3.27	.349
32.	34	3.13	.253
33.	32	3.37	.393

Item	Rank	t	Correlation Coefficient
34.	7	5.41	.297
35.	25	3.65	.328
36.	37	3.05	.252
37.	39	3.01	.304
38.	36	3.09	.267
39.	24	3.72	.344

APPENDIX B

JUNIOR COLLEGE ATTITUDE SURVEY (James)

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

1. Students get the same quality of education in a junior college as they get in a four-year college or university.

2. The administrators of junior colleges are usually bright, dynamic, and highly competent leaders.

3. Junior college teachers are not as interested in their professional development as teachers in other colleges and universities.

4. The junior college serves chiefly the inept and unable student.

5. Junior colleges are for the dumb rich and the bright poor.

6. The facilities of the junior college compare unfavorably with those of four year colleges.

7. The junior colleges appear to have a good understanding of the needs of their students.

8. The opportunities for participation in extra curricular activities are very limited at the junior college.

9. Teachers in the junior college "spoon feed" their students with easy work and easy grading.

10. Vocational programs in the junior college have sufficient equipment to prepare students for occupations.

11. It would be better to expand four year colleges and universities than to build junior colleges.

12. Junior college transfers should perform as well in a four year college as they did in the junior college.

13. The lack of juniors and seniors leaves the junior college without competent student leaders.

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

14. Some of the most important aspects of attending college are missed on the junior college campus.

15. In the coming years, junior colleges will enroll an increasingly larger proportion of the college students.

16. Students from all levels of ability can be served well by the junior college.

17. Vocational teachers in the junior college are well prepared for their task.

18. I would advise students against attending a junior college.

19. The junior college has done a good job of communicating the goals of the junior college to the surrounding communities.

20. Junior colleges are the wastebaskets of higher education.

21. The junior college is in reality a glorified high school.

22. Course work in the junior college adequately prepares the student for transfer to a four year college.

23. The bright student should consider attending a junior college only if there are financial difficulties.

24. Junior colleges give mostly "lip service" to their guidance and counseling function.

25. Vocational courses in the junior colleges should be recommended to persons seeking vocational skills.

26. The junior college is organized much the same as a high school.

27. The college-bound student should consider junior college only after being denied admission by four year colleges and universities.

28. The advising and counseling functions in the junior colleges should be emphasized more highly than in the four year college.

29. The junior college is more a liability than an asset to its community.

30. Junior college presidents and deans are well prepared for their positions.

31. Junior colleges are more concerned with their relationships with the high schools than with the four year colleges.

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

32. Junior college teachers have more personal interest in the students than teachers in most colleges and universities.

33. The junior college student is considered a second-class citizen in the population of higher education.

34. Living at home is a handicap to the personal development of the junior college student.

35. Junior college programs provide little about which students could get excited.

36. Junior colleges provide better opportunities for student-teacher interaction than do four year colleges and universities.

37. Faculty members in the junior college are better qualified for academic advising than are the counselors.

38. Courses which do not lead to a degree weaken the image of the junior college as a college.

39. Accepting all students who apply gives the junior college a bad image.

APPENDIX C

655

JUNIOR COLLEGE ATTITUDE SURVEY

Instructions for Marking Responses

The following questionnaire is designed to provide a measure of your attitudes and beliefs concerning a number of aspects of the junior and community colleges.

Please read each item carefully, and place an X under the letter which most nearly indicates your true feelings. There are no right or wrong answers. Do not spend too much time on any particular item. When your attitude falls between choices, try to select the closer one. Please answer every item and erase completely the answers you have changed.

EXAMPLE: Socially immature college age students should attend junior colleges.

SD	D	U	A	SA

SD = Strongly Disagree
D = Disagree
U = Undecided
A = Agree
SA = Strongly Agree

If you strongly disagree with an item, place an X under the letters SD.

If you disagree with an item, place an X under the letter D.

Place an X under the letter U if you feel undecided about the item.

Place an X under the letter A if you agree with an item.

Place an X under the lettems SA if you strongly agree with an item.

Please attach an extra sheet at the end of the questionnaire for any comments you care to make regarding junior colleges or this questionnaire.

Thank you for your cooperation and interest in this very important study.

1. Students get a lower quality of education in a junior college than they get in a four-year college or university.

SD	D	U	A	SA

2. The administrators of junior colleges are usually bright, dynamic and highly competent leaders.

SD	D	U	A	SA

3. Junior college teachers are not as interested in their professional development as teachers in other colleges and universities.

SD	D	U	A	SA

		SD	D	U	A	SA
4.	The junior college serves chiefly the inept and unable student.	/	/	/	/	/
5.	Junior colleges are for the dumb rich and the bright poor.	/	/	/	/	/
6.	The facilities of the junior college compare unfavorably with those of the four-year college.	/	/	/	/	/
7.	The junior colleges appear to have a good understanding of the needs of their students.	/	/	/	/	/
8.	The opportunities for participation in extra-curricular activities are very limited at the junior college.	/	/	/	/	/
9.	Teachers in the junior college "spoon feed" their students with easy work and easy grading.	/	/	/	/	/
10.	Vocational programs in the junior college have sufficient equipment to prepare students for occupations.	/	/	/	/	/
11.	It would be better to expand four-year colleges and universities than to build junior colleges.	/	/	/	/	/
12.	Junior college transfers should perform as well in a four-year college as they did in the junior college.	/	/	/	/	/
13.	The lack of juniors and seniors leaves the junior college without competent student leaders.	/	/	/	/	/
14.	Some of the most important aspects of attending college are missed on the junior college campus.	/	/	/	/	/
15.	In the coming years, junior colleges will enroll an increasingly larger proportion of the college students.	/	/	/	/	/
16.	Students from all levels of ability can be served well by the junior college.	/	/	/	/	/
17.	Vocational teachers in the junior college are well prepared for their task.	/	/	/	/	/
18.	I would advise students against attending a junior college.	/	/	/	/	/

		SD	D	U	A	SA
19.	The junior college has done a good job of communicating the goals of the junior college to the surrounding communities.	/	/	/	/	/
20.	Junior colleges are the wastebaskets of higher education.	/	/	/	/	/
21.	The junior college is in reality a glorified high school.	/	/	/	/	/
22.	Course work in the junior college adequately prepares the student for transfer to a four-year college.	/	/	/	/	/
23.	The bright student should consider attending a junior college only if there are financial difficulties.	/	/	/	/	/
24.	Junior colleges give mostly "lip service" to their guidance and counseling function.	/	/	/	/	/
25.	Vocational courses in the junior colleges should be recommended to persons seeking vocational skills.	/	/	/	/	/
26.	The junior college is organized much the same as a high school.	/	/	/	/	/
27.	The college-bound student should consider junior college only after being denied admission by four-year colleges and universities.	/	/	/	/	/
28.	The advising and counseling functions in the junior colleges should be emphasized more highly than in the four-year college.	/	/	/	/	/
29.	The junior college is more a liability than an asset to its community.	/	/	/	/	/
30.	Junior college presidents and deans are well prepared for their positions.	/	/	/	/	/
31.	Junior colleges are more concerned with their relationships with the high schools than with the four-year colleges.	/	/	/	/	/
32.	Junior college teachers have more personal interest in the students than teachers in most colleges and universities.	/	/	/	/	/
33.	The junior college student is considered a second-class citizen in the population of higher education.	/	/	/	/	/

34. Living at home is a handicap to the personal development of the junior college student. SD / D / U / A / SA

35. Junior college programs provide little about which students could get excited. SD / D / U / A / SA

36. Junior colleges provide better opportunities for student-teacher interaction than do four-year colleges and universities. SD / D / U / A / SA

37. Faculty members in the junior college are better qualified for academic advising than are the four-year college faculty members. SD / D / U / A / SA

38. Courses which do not lead to a degree weaken the image of the junior college as a college. SD / D / U / A / SA

39. Accepting all students who apply gives the junior college a bad image. SD / D / U / A / SA

PERSONAL DATA ITEMS
Please place X's in the appropriate spaces

40. Sex: _____Male _____Female

41. Is your present assignment:
Full-time teaching_____
Part-time teaching_____
Administrative_____
Part-time teaching, remainder of time committed to other functions at the institution_____

42. Highest degree earned: _____Bachelors_____Masters_____Doctorate_____Specialist.

43. Have you had the opportunity to visit a junior college? _____Yes _____No

44. Approximately how far is your institution located from the nearest junior college? _____Less than 20 miles _____More than 20 miles.

45. Have you ever been a student at a junior college? _____Yes _____No

46. In your educational training have you had a course dealing primarily with junior college education? _____Yes _____No

47. Have you ever taught in a junior college? _____Yes _____No

48. Is your current teaching assignment primarily _____Lower division _____Upper division and/or graduate.

49. Please indicate your age_____

50. Years of teaching experience in Oklahoma_____

51. Total years of teaching experience_____

APPENDIX D

CENTRAL STATE UNIVERSITY / 100 NORTH UNIVERSITY DRIVE / EDMOND, OKLAHOMA 73034

School of Education

April 5, 1976

Dear

I am asking you for fifteen minutes of your time to help in a research project concerning higher education in Oklahoma. Junior colleges have grown rapidly here in Oklahoma as in the rest of the United States. However, there still exists a great void in information concerning junior colleges and their relationships with other segments of higher education.

This study will analyze attitudes of faculty members in Oklahoma's six regional state universities toward junior college education. You were chosen to participate through a random sample. We hope that you will take the approximately fifteen minutes required to complete the enclosed questionnaire, although you undoubtedly are very busy completing your academic obligations for the current semester. Of course, your response will be treated with professional confidentiality.

Please return the attitude scale in the enclosed self-addressed, stamped envelope at your earliest convenience. I very much appreciate the contribution that you will make to the study.

Thank you for your cooperation. I will look forward to hearing from you in the near future.

Sincerely,

Odus W. Rice
Assistant Professor

APPENDIX E

CENTRAL STATE UNIVERSITY / 100 NORTH UNIVERSITY DRIVE / EDMOND, OKLAHOMA 73034

School of Education

April 20, 1976

Recently I sent a copy of the enclosed questionnaire to you asking for your help in a research project concerning higher education in Oklahoma. We have not heard from you and since the possibility exists that your response may have been lost in the mail or mislaid, I have enclosed another.

I hope that you will take the approximately fifteen minutes required to complete the questionnaire and mail it back to me in the stamped, self-addressed envelope enclosed. Your response will be treated professionally and confidentially. Your input is very important to the study.

Thank you for your help. We will look forward to hearing from you.

Sincerely,

Odus W. Rice
Assistant Professor

APPENDIX F

JUNIOR COLLEGE ATTITUDE SURVEY
ITEM MEAN SCORES

Item	N	Mean	Standard Deviation
1.	290	2.80	1.20
2.	291	3.14	.88
3.	290	3.39	1.03
4.	290	3.97	.82
5.	291	4.19	.75
6.	292	3.28	1.11
7.	291	3.47	.87
8.	292	3.13	.98
9.	289	3.04	1.00
10.	288	3.29	.75
11.	292	2.67	1.27
12.	287	3.78	.88
13.	292	3.72	.85
14.	292	3.00	1.09
15.	291	3.71	.73
16.	291.	3.08	1.20
17.	289	3.32	.67
18.	291	3.36	1.16
19.	292	3.18	.94
20.	290	3.88	.92
21.	290	3.29	1.11
22.	291	3.01	1.08
23.	292	3.13	1.18
24.	289	3.26	.77
25.	291	3.91	.66
26.	290	3.34	.84
27.	291	3.64	1.02
28.	291	2.74	1.09
29.	292	4.08	.77
30.	290	3.22	.77
31.	292	2.95	.86
32.	292	2.51	1.04
33.	292	3.18	1.04

Item	N	Mean	Standard Deviation
34.	292	3.34	1.05
35.	292	3.65	.87
36.	290	2.60	1.03
37.	291	1.88	.72
38.	292	3.37	1.04
39.	291	3.14	1.10

VITA 2

Odus William Rice

Candidate for the Degree of

Doctor of Education

Thesis: AN ANALYSIS OF ATTITUDES OF FULL-TIME TEACHING FACULTY IN SIX OKLAHOMA STATE UNIVERSITIES TOWARD JUNIOR COLLEGE EDUCATION

Major Field: Higher Education

Biographical:

Personal Data: Born in Decatur, Texas, August 26, 1936, the son of Mr. and Mrs. Joe B. Rice.

Education: Graduated from Edmond High School, Edmond, Oklahoma, in May, 1954; attended Central State College, 1954-1957, transferred to Oklahoma State University in 1957 and received the Bachelor of Arts degree in Journalism from Oklahoma State University in 1958; received the Master of Science degree from Oklahoma State University in 1961, with a major in Secondary Education; completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1976.

Professional Experience: Appointed Director of Public Relations and Instructor of Journalism at Northern Oklahoma Junior College in 1968; appointed Assistant Director of Public Relations and Instructor of Journalism at Central State College in 1960; served as Acting Director of Public Relations at Central State College, 1961 through 1963; appointed Assistant Dean of the College at Central State College in 1963, with the title later changed to Assistant Vice President for Academic Affairs and Assistant Professor of Education, Central State University.