

DOCUMENT RESUME

ED 035 396

JC 700 001

TITLE Where Are They Now? A Follow-up of First Time In College Freshmen in Florida's Community Junior Colleges in Fall 1966.

PUB DATE Nov 69

NOTE 56p.

EDRS PRICE MF-\$0.25 HC-\$2.90

DESCRIPTORS *Followup Studies, *Institutional Research, *Junior Colleges, Questionnaires, *State Surveys, *Student Characteristics

IDENTIFIERS Florida

ABSTRACT

Florida colleges' own follow-up studies have been valuable to themselves, but statewide research has been needed to assess the system's success--hence this 1969 study of fall 1966 first-time freshmen. From 28,396 students of 26 colleges, a random-stratified sample of 499 was drawn according to each college's enrollment and by sex ratio, with provision for alternates. Usable responses to the 9-item questionnaire came from 277 men and 211 women. As all did not answer all items, they were analyzed individually. Data on residency, high school background, degrees earned, transfer status, value of college experience, and post-college activities were to be used, after analysis, by the State Education Department for statewide planning. The study showed the need for a standard Student Information System to supply full and uniform data on each student in the system. (The Florida Community Junior College Inter-institutional Research Council is now developing such a system.) It was found that the "average" student attends the college in his own county directly after high school, takes over two years to get his diploma, works while at college, graduates from the same one he enters, enrolls in a transfer program, majors after transfer in education or arts/sciences, and feels his junior college experience was helpful. The detailed procedures used in this study could be a model for those wishing to make a similar one. The investigators felt the questions raised by the study were its most valuable result. (HH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

ED035396

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

WHERE ARE THEY NOW?

A Follow-Up Study of First-Time-In-College Freshmen
in Florida's Community Junior Colleges in Fall, 1966

The Florida Community Junior College
Inter-institutional Research Council

November, 1969

UNIVERSITY OF CALIF.
LOS ANGELES

DEC 17 1969

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

Jc 700 001

TABLE OF CONTENTS

	Page
Introduction	1
Background Information	1
Procedures	3
Analysis of the Data	5
High School Background	7
Junior College Degrees Earned	11
Transfer Students	16
Value of the Junior College Experience	19
Summary and Conclusions	28
Summary of Findings	28
Conclusions	30
Appendix A - Steps in Doing Follow-Up Study Fall 1966 Public Junior College FTIC Credit Students	33
Appendix B - Questionnaire	35
Appendix C - Data Tables	38
Appendix D - Administrative Materials	45
Bibliography	55

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Student Residency, 1966 Freshmen in Florida Junior Colleges	6
2	Date of High School Graduation for All 1966 Entering Freshmen	8
3	Date of High School Graduation for Prior 1966 Graduates	10
4	Type of Degree Received	15
5	Four-Year Colleges to Which Students Transferred	17
6	Major Fields Chosen by Transfer Students	18
7	Class Standing of Transfers	20
8	Value of the Junior College Experience For All Students	22
9	Value of the Junior College Experience for Transfer Students Currently Attending a Four-Year Institution	24
10	Value of the Junior College Experience for Transfers Not Currently Attending a Four-Year Institution	25
11	Value of the Junior College Experience for Non-Graduate, Non-transfer, Working Students	26
12	Value of the Junior College Experience for Graduate, Non-Transfer, Working Students	27

Introduction

Follow-up studies of entering community junior college students are designed to point up the accomplishments of both students and colleges but such studies often have provided insights into the problems and the failures of the institutions as well. Concern over the gap between the philosophical aims of the community colleges in Florida and the results which are apparently accomplished encourages changes which should improve educational programs. Such changes, however, should be based upon information obtained and interpreted in the most reliable manner possible.

Individual community colleges in Florida have conducted follow-up studies of their own students. These have been valuable specifically for the institution conducting the study. However, there need to be carried out from time to time, studies of statewide scope. The overall state accomplishments need to be validated and described, so that the progress of the system toward its goals may be assessed.

This study has been designed to provide basic information about the students who entered Florida's community junior colleges in the Fall of 1966. It is based on a representative sample of all such students. Conclusions drawn in the study are applicable to the total community college population.

Background Information

In seeking to provide the best educational experience for each student in a student body characterized by diversity, the community junior colleges in Florida are assigned five essential roles:

- a. That of providing a basic general education for all students;
- b. That of making available a program designed for transfer and/or to meet preprofessional requirements;
- c. That of developing and encouraging students to enroll in an occupational (vocational-technical) program;
- d. That of providing to their own communities a community service program as well as a variety of continuing education for adults;
- e. That of providing a comprehensive community and guidance program.

Individual community junior colleges normally find it difficult to assess their effectiveness in these programs. Not only have the variables involved often been inadequately defined, but instruments for measuring these variables have also frequently been unavailable.

One of the means by which colleges have attempted in the past to assess their effectiveness in reaching these goals has been the follow-up study. These studies in general are assessments of what has happened to a given group of students since a particular point in time. In the winter of 1969 the Florida Community Junior College Inter-institutional Research Council, at the suggestion of the Division of Community Colleges, Department of Education, accepted the responsibility of conducting a follow-up study of those students who had entered college for the first time as freshmen in the fall term of 1966. The primary purpose of this study was to answer the title question, "Where Are They Now?" As the study progressed from development of a research design through data gathering, analyses and interpretation, the investigators became increasingly convinced that this highly complex question merits expanded studies as well as replication. This investigation has raised many more questions than it has answered, and these questions may be among the most valuable results of this research. The study has pointed to critical areas of investigation for the future and provided vital insights into the relative value of given research, sampling,

questionnaire building, data gathering, and analytical techniques.

From its inception, this study has been a cooperative endeavor. The study design was developed by the members of the Research Council and implemented through the untiring efforts of Directors of Research in the various community junior colleges in Florida. As data were collected and analyzed, teachers, administrators, and researchers in these community colleges suggested additional important relationships to be tested. Data analyses and interpretation have been accomplished by the staff but again with the invaluable assistance of various community junior college faculty. A flow chart outlining and summarizing the development and implementation of the study is included as Appendix A.

Procedures

The initial examination of the population of Fall 1966 freshmen revealed that the total number of 28,396 students was too large a group to permit involving each of these individuals in the study. Therefore, a random-stratified sample was drawn from this population in accordance with Cella's¹ formula for determination of sample size. The original sample size was 499 students, which corresponds to a 95 percent interval of confidence and a sampling error of less than 2 percent. The sample was distributed proportionally throughout the 26 community junior colleges operating in Florida in Fall 1966. The proportion of the sample assigned to each community college depended on the size of its freshman class of 1966 in relation to the freshman classes of the other colleges.

¹Francis R. Cella, Sampling Statistics in Business and Economics, (Norman, Oklahoma: Bureau of Business Research, University of Oklahoma, 1950), p.162.

The sample was further distributed, again proportionally for each community college, by sex. Sex was the only known, accurate, and readily available variable common to all students in the population. This emphasized the need for a standardized Student Information System which would make complete and uniform data available on each student in Florida's community colleges and thus greatly facilitate needed research. Such a system is currently being developed by the Florida Community Junior College Inter-institutional Research Council.

Students were selected for participation in the study by the use of a table of random digits. First a list of integers was selected from this table and sent to Research Directors of the participating colleges. The Directors divided their Fall 1966 entering freshmen by sex into two alphabetized lists, and then contacted each student so that he could complete the questionnaire, which is included as Appendix B. When a student initially selected for study was unavailable, an alternate was used. The alternates had been preselected in a manner identical to that used in selecting students for the original sample. Completed questionnaires were mailed to the IRC Offices in Gainesville for tabulation, analyses, and interpretation.

The responses were received by the IRC Offices somewhat more slowly than expected. Deadline dates for receiving questionnaires were revised several times. It was found that even after much traveling, letter-writing, and long-distance telephoning, 8 of the 499 students simply could not be reached. Responses to the questionnaire were received from 277 males (3 additional males were reported as deceased) and 211 females. Thus the final sample studied consisted of 491 subjects (57.02 percent male 42.97 percent female) distributed proportionally among the

26 colleges. Four of the 8 excluded students were from the Northwest "Panhandle" section of Florida. This area may be somewhat under-represented; however, comparisons of given statistics with similar statistics from earlier studies do not bear this out. All evidence on the sub-populations in the 26 community junior colleges indicates that this slight misrepresentation has had no affect on the direct applicability of this study's findings to all of Florida's community junior colleges. The final sample size yields an interval of confidence of 95 percent with a sampling error of 1.87 percent.

Analysis of the Data

Since every student did not answer all the items on the questionnaire, the responses to each question have been examined individually. Data analyses and interpretation have been on an item-by item basis. Some of the items were answered by virtually all of the students in the sample. Analysis of these items is somewhat more extensive than on other items answered by a very few respondents. For these latter items, it would be somewhat hazardous to draw final conclusions from the data. Subtle trends and questions for future investigation, where indicated by these responses, have been noted.

Student Residency

Several of the findings of this study concern student residency. (See Figure 1.) Of the 485 responding students 85.98 percent reported that they were residents of a county contributing to the support of the junior college they entered. While 5.98 percent of the respondents were Florida residents who entered junior colleges outside their home district, 4.33 percent resided in Florida counties not contributing

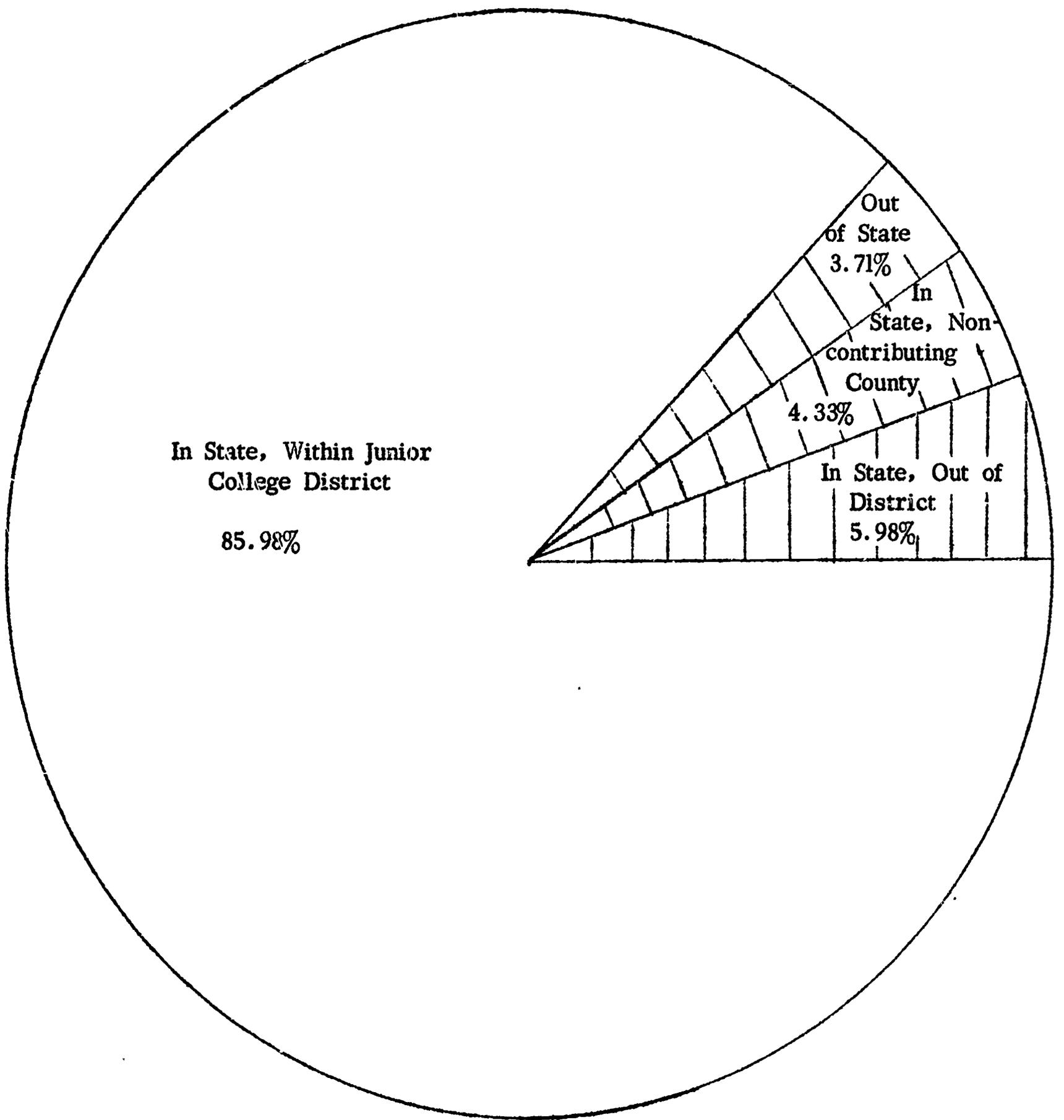


Figure 1. Student Residency, 1966 Freshmen in Florida Junior Colleges. n = 485

to the support of any community college. Only 3.71 percent reported out-of-state residency. Florida's community junior colleges are definitely serving Florida's residents.

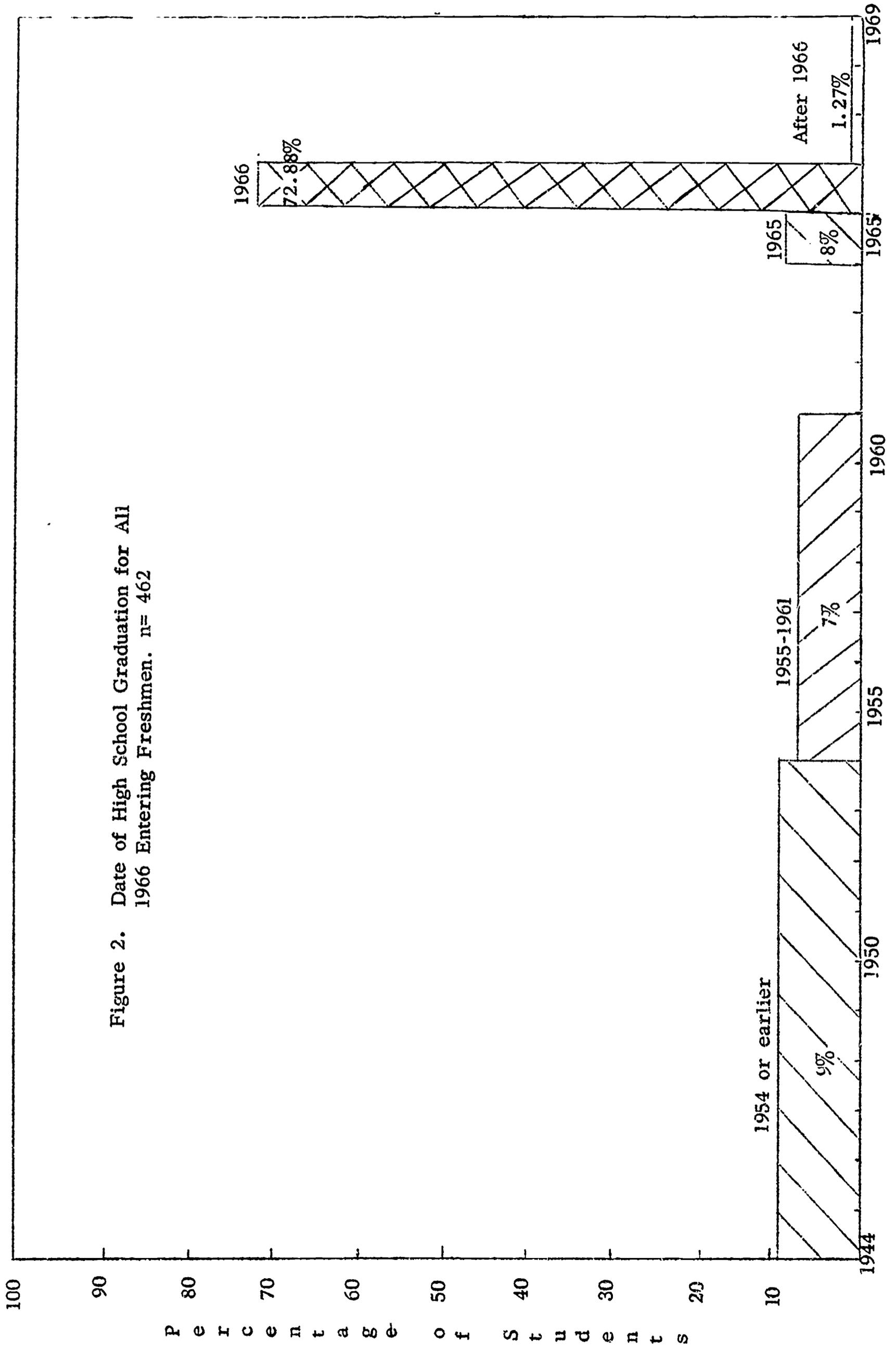
Further, since most students, 85.98 percent, attending a community college resided in a county which supported that college, it may be stated that counties which support a community college are providing opportunities for higher education mainly to their own residents. This statistic also may imply that where a junior college is available within commuting distance, a larger number of area residents are encouraged to continue their education. The data indicate that those counties not supporting a junior college have fewer students attending such colleges. In the Fall of 1966, residents of the ten Florida counties not supporting junior colleges made up 11.83 percent of the total state population.² Only 4.39 percent of the students in Florida's community junior colleges came from these counties.

High School Background

Other conclusions of this study are derived from data on the high school experience, especially date of graduation, of junior college students. (See Figure 2.) As might be expected, most (72.88 percent) of the 472 students who responded to this item entered college immediately after graduating from high school. These students graduated from high school in 1966 and entered the junior college in the September after their June graduation. Six students (1.27 percent) reported that they graduated after entering the junior college. We may assume that these students either entered the college under an early admissions program or received

²Allen Morris, The Florida Handbook 1969-70, (Tallahassee, Fla.: The Peninsula Publishing Company, 1969), pp. 428-29.

Figure 2. Date of High School Graduation for All 1966 Entering Freshmen. n= 462



a graduate equivalency diploma after entering college. While most students reported receiving either a college preparatory or regular high school diploma, 4.49 percent indicated that they had received high school equivalency or graduate equivalency diplomas.

It is significant that one fourth (25.85 per cent) of the entering freshmen who responded to this item had delayed their entry into college after high school graduation. Approximately 8 percent of the respondents graduated from high school one or two years prior to entering as freshmen. A somewhat more sizeable group, 15.8 percent, had completed high school five years or more prior to junior college admission. Forty-two of these 75 students had graduated as long ago as 1955, and 23 students reported graduation dates of 1944 or earlier. In summary, of the 25.85 percent who had delayed entering the junior college, approximately 61 percent had graduated before 1962, the majority of these several years earlier. Only 39 percent of this group graduated between 1962 and 1965. (See Figure 3). Thus we have a bimodal distribution with students either entering the junior college immediately after high school graduation or waiting several years.

As Thornton points out, this rather large proportion of older students, many who are in their 30's and 40's, "indicates that the junior college is fulfilling its function of making education available to those to whom it had earlier been denied-- the veteran, the housewife, the so-called 'late bloomer.'"³ The rapid growth of junior colleges in Florida further supports the hypothesis that entry and integration into higher education is facilitated by the presence of a community junior college

³James W. Thornton, Jr., The Community Junior College, (New York: John Wiley & Sons, Inc., 1966), p. 151.

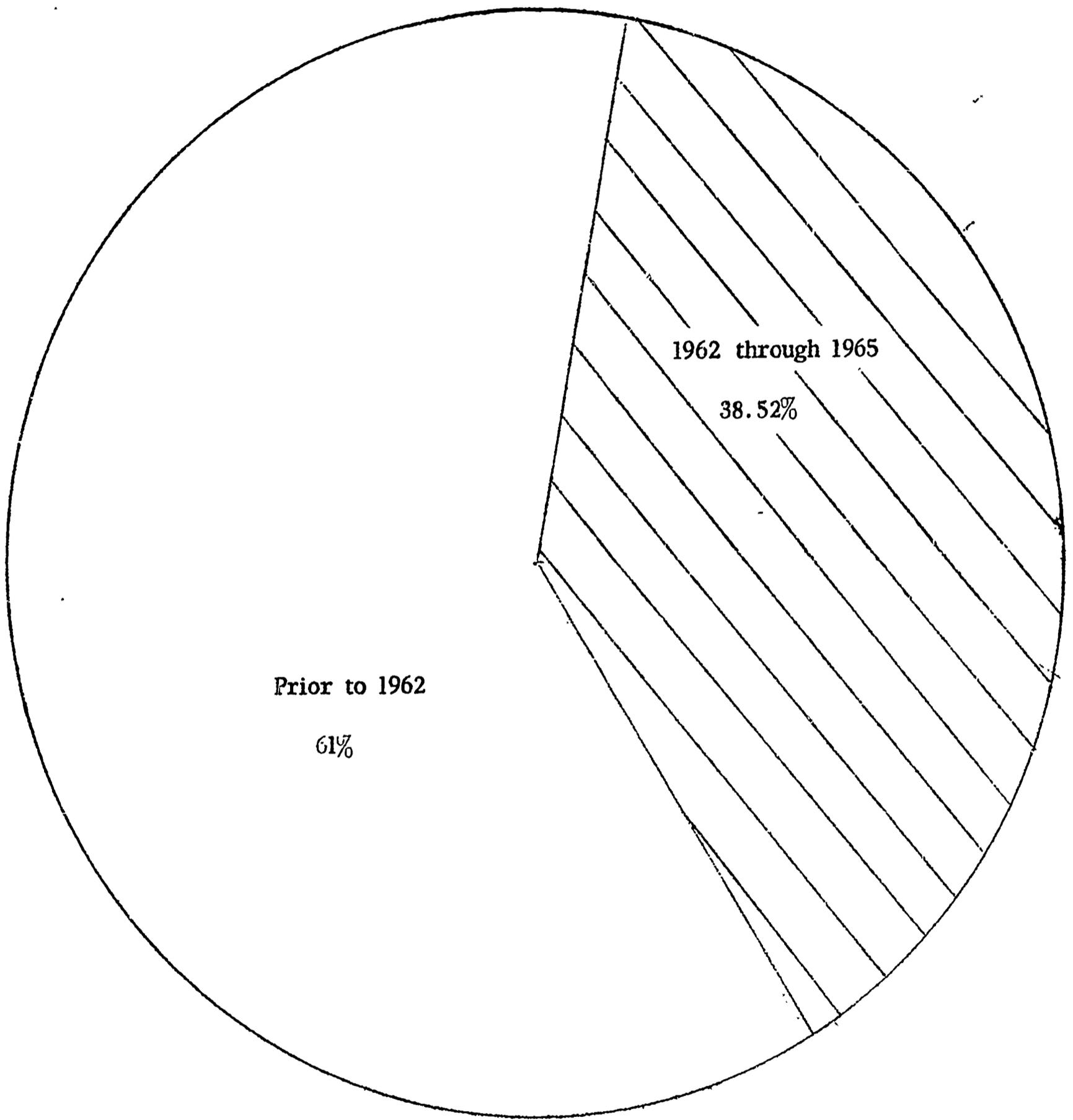


Figure 3. Date of High School Graduation for Prior 1966 Graduates. n = 122

in the area. This is especially true for the student who is, for one reason or another, out of his teens and older than his average freshman classmate. The data further indicate that having a community college nearby rekindled educational interest and motivation in the student who returned to school five years or more after his high school graduation. These and similar hypotheses suggested by this data warrant more intensive study in the future.

Junior College Degrees Earned

A third major area of concern in this study dealt with degrees received by students attending the junior colleges in Florida. Unfortunately, the data in this area are somewhat incomplete, and therefore inconclusive, for three reasons. First, as mentioned earlier, students did not answer all items on the questionnaire, although the rate of responses to the series of questions concerning degrees was relatively high. Second, differences in the numbers of responses on related but not identical items made it difficult at best to analyze relationships between these responses. Third, the nature of the questionnaire makes it difficult to assess accurately the number of students included in the sample who are still attending junior college. (See Appendix B, Items 5 and 6). Because of this, we cannot form generalizations concerning that large number of the sample--293 students--who neither reported receiving a junior college degree nor indicated transferring to a 4-year college or university. Nevertheless, the data reveal some very strong trends in the responses of this group and raise some crucial questions which will be examined in expanded replications of this study.

One question asked in this study was whether or not a junior college degree had been earned since these students entered junior college in the Fall of 1966.

Of the total sample, 69.86 percent reported that they had not yet graduated from a junior college. These students have often been labeled "drop-outs" in other follow-up studies. Other sections of the questionnaire indicate however, that there are several reasons for non-graduation which cannot be judged to be synonymous with non-success for these students.

First, a student may have transferred to a 4-year college or university without graduation from a junior college. (See Table 1, Appendix C) Of the 476 students in the sample who responded to both the item concerning graduation and the item concerning transfer, 9.03 percent reported such transfer without the junior college degree. Once again, due to inconsistencies in the number of responses to these items, statistics in this area are inconclusive.

Second, these students still may be attending junior college. Although there are no conclusive data on the proportion of those still attending, the responses in this study strongly indicate that a sizeable portion of the 293 non-graduate, non-transfer students are still attending. Many of these are probably attending on a part-time basis. This hypothesis is supported by several independent statistics:

- a. 70.65 percent of the non-graduating, non-transferring students report full- or part-time employment; (See Table 2, Appendix C)
- b. 32.08 percent of the non-graduating, non-transferring students report graduating from high school prior to 1966. (See Table 3, Appendix C). Of this 32.08 percent, 65.96 percent graduated in 1961 or earlier--30.65 percent of whom graduated in 1944 or before. This indicates that many of these non-graduating, non-transferring students are probably those older students who are

working to support themselves and/or their families and who are continuing to earn a junior college degree on a part-time basis;

- c. The total number (94) of non-graduating, non-transferring students who graduated from high school prior to 1966 cannot account for all of that 70.65 percent who report employment. Thus it is likely that a large portion of the younger students are also continuing to earn a degree while employed;
- d. Only 12.97 percent of all non-graduating, non-transferring students report having given up plans for further college education. This strongly indicates that many of these students are either still attending a junior college, or intend to return in the near future.

Third, a student may leave junior college before earning his degree so that he can accept employment in a job for which the junior college has prepared him. Thornton points out that as the demand increases for technically trained personnel, many students leave junior college for well-paying jobs before receiving a degree.⁴ Although the variable amounts of data on this question again demand somewhat less than positive statements, there appear to be trends in this direction. While only 12.97 percent of the non-graduate, non-transferees reported having abandoned plans for any further college education, over half of these reported that they did so to seek immediate employment. It is questionable to assume that these students should be added to "drop-out" statistics.

⁴ Ibid., 193.

Fourth, a student may interrupt his junior college education to enter active military service, as was reported by 12.63 percent of the non-graduating, non-transferring students, including 4 females.

Fifth, a student may encounter financial problems necessitating his temporary withdrawal from junior college. This hypothesis is supported by the fact that of the 70.65 percent of the non-graduate, non-transfers who reported full- or part-time employment, 27.54 percent reported intentions of returning and completing junior college, and an additional 11.11 percent reported intentions of returning to earn a B. A. or higher.

Of the 142 students who reported receiving junior college degrees, 94.49 percent reported that they had graduated from the same junior college entered in the Fall of 1966. Thus, junior college students are not as mobile as has often been hypothesized.

Transfer degrees were received by 82.39 percent; occupational degrees, by 13.38 percent; and other types of degrees, by 4.23 percent. (See Figure 4.) The relatively low percentage of occupational degrees earned may be explained in part by the fact that some of these programs do not grant degrees, but rather, certificates. Occupational programs may also include enough general education courses and college-transfer work to allow students originally in occupational programs to receive transfer degrees. In still other instances the junior colleges do not distinguish between transfer and occupational courses or degree types. In addition, there is a tendency for the occupational student to seek employment before receiving a degree as discussed above.

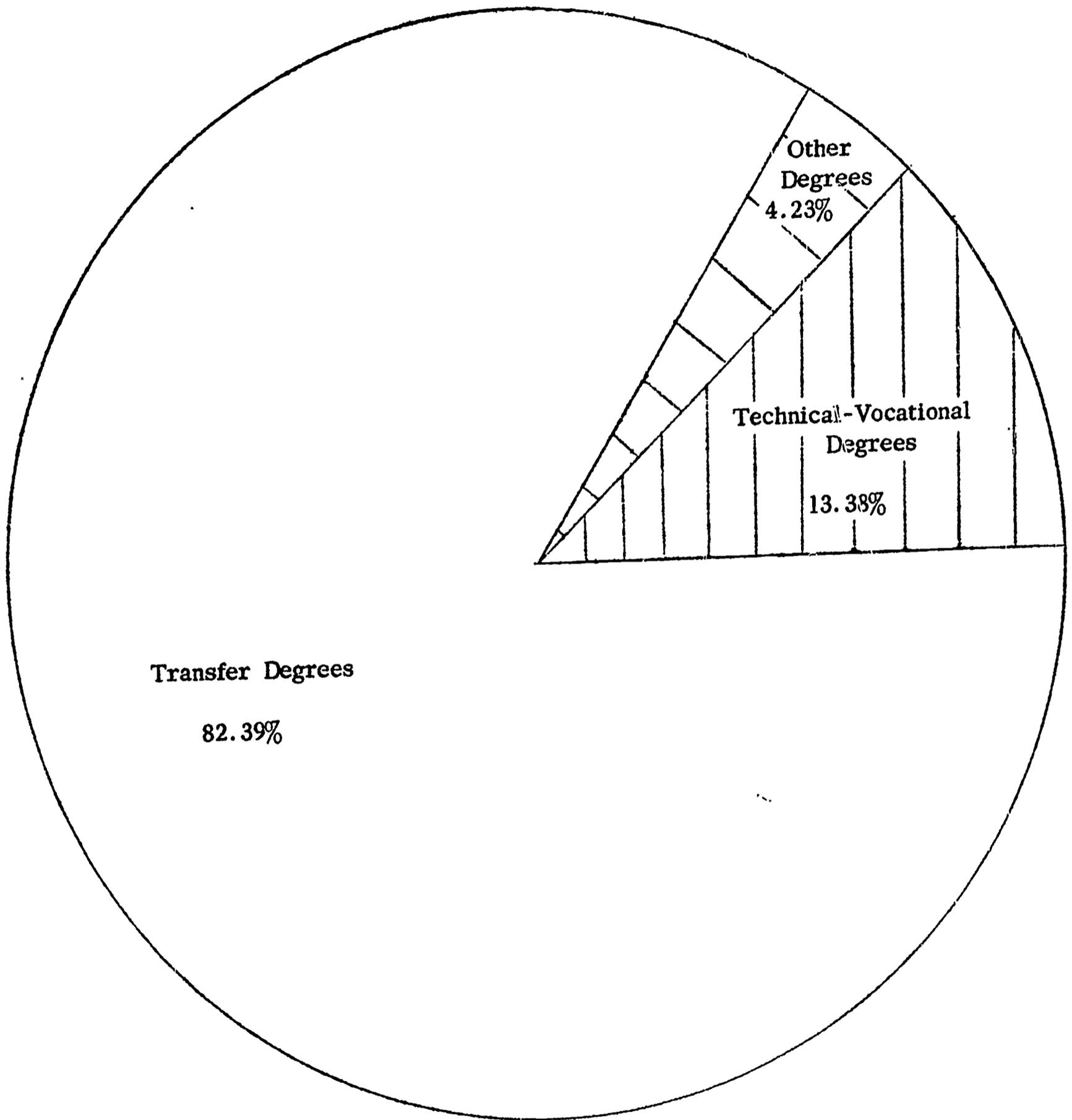


Figure 4. Type of Degree Received. n = 142

Transfer Students

Of the students who responded to the question on transfer to a 4-year college or university, 31.04 percent indicated that they had transferred. This constituted 30.35 percent of the total sample. (See Table 1, Appendix C). Most, 95.90 percent, of the transfer students were attending a 4-year institution full-time when they answered the questionnaire. Only 4.10 percent reported part-time attendance. The majority of these students transferred to Florida colleges and universities, with the University of Florida and Florida State University receiving the largest percentages, 22.82 percent and 18.79 percent respectively. Colleges chosen by transfer students are shown in Figure 5 in descending order of the percentage of transfers received.

The most frequently chosen majors were either Arts and Sciences (29.45 percent) or Education (also 29.45 percent). Future research will hopefully yield more detailed information regarding specific majors (e.g., chemistry, history) chosen within Arts and Sciences. The distribution of responses to the item on choice of major fields is shown in Figure 6.

Of the students who transferred, 81.56 percent reported that they were still attending a 4-year college or university. However, since the questionnaires were mailed during the summer, it is quite possible that some of the students who were out of school for a summer vacation misinterpreted the item questioning current attendance. "Current" could have been interpreted very literally as the exact time of questionnaire completion. The likelihood of such a misinterpretation is supported by the fact that while only 115 students indicated they were currently attending a

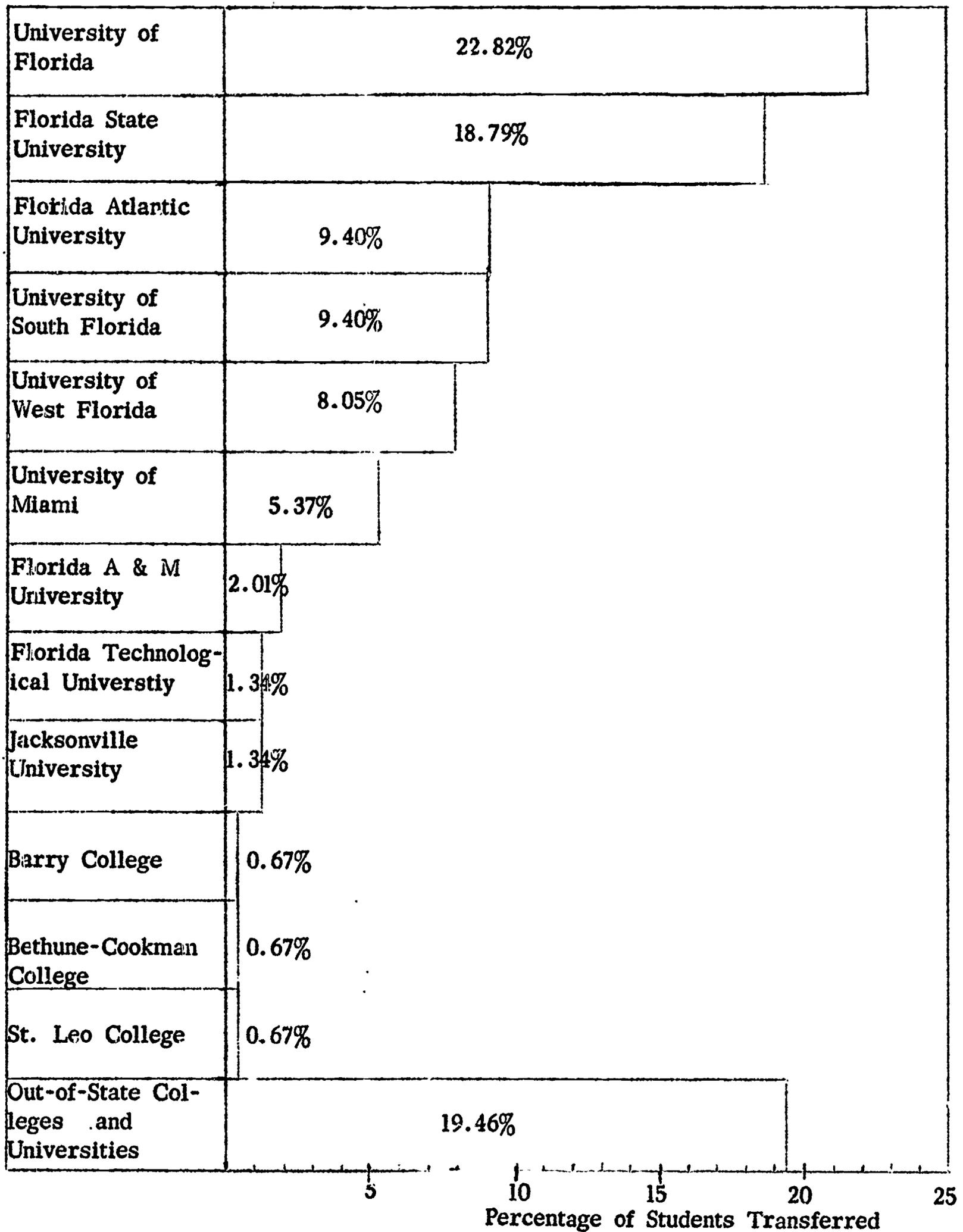


Figure 5. Four-Year Colleges To Which Students Transferred. n = 149

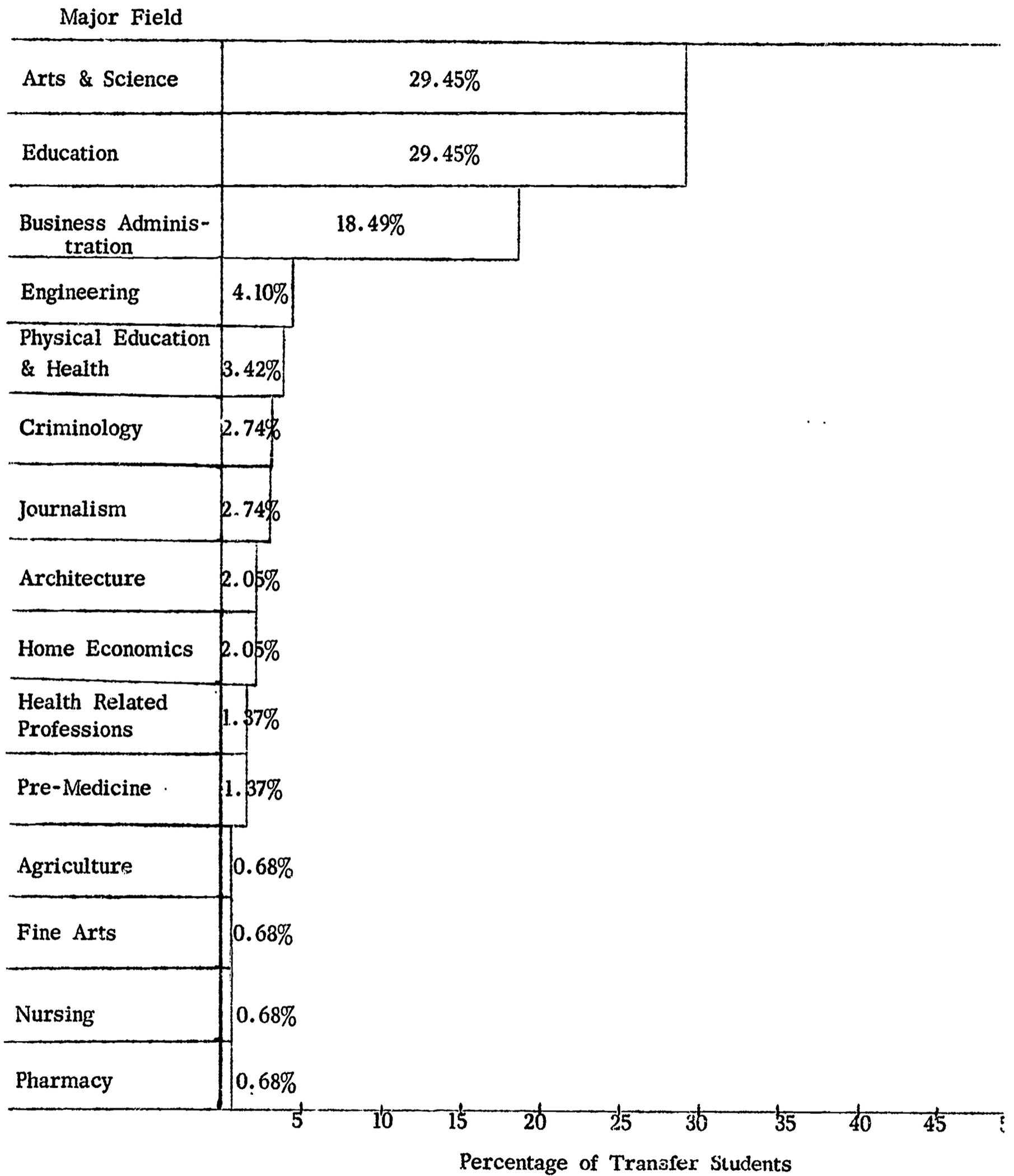


Figure 6. Major Fields Chosen by Transfer Students. n = 146

4-year institution, 138 students indicated their class rank at a 4-year college or university. Of these students reporting class rank 89.13 percent were classified as juniors or seniors (See Figure 7). This indicates that most junior college students in transfer programs move at a reasonable rate towards completion of a four-year program. Of the respondents, 7.97 percent were classified as sophomores, and only one student was classified as a freshman. Specific information as to when these students left the junior college is not available in this study and is another area of possible investigation for future research.

Transfer to a 4-year institution was not the only path chosen by junior college students in continuing their education. Forty-one out of 491 students in the sample reported that they had gone into other types of training after junior college. On-the-job training was reported by 24.39 percent of these respondents. Entry into business or secretarial school was reported by 14.63 percent; attendance of a technical institute, by 9.76 percent; and acceptance of an apprenticeship, by 7.32 percent. The specific type of additional training was not reported by 43.90 percent of the students continuing their education.

Value of the Junior College Experience

The measures used to evaluate the relative success of a community junior college in reaching its objectives have varied widely. A number of studies define such success upon criteria related to the number of degrees granted, courses of study successfully completed or certificates awarded. Other studies define success in terms of how many students transfer to 4-year institutions. Still others refer to the students' ability to graduate from a 4-year institution in a "normal period of time" as a measure of the colleges' success in providing transfer work.

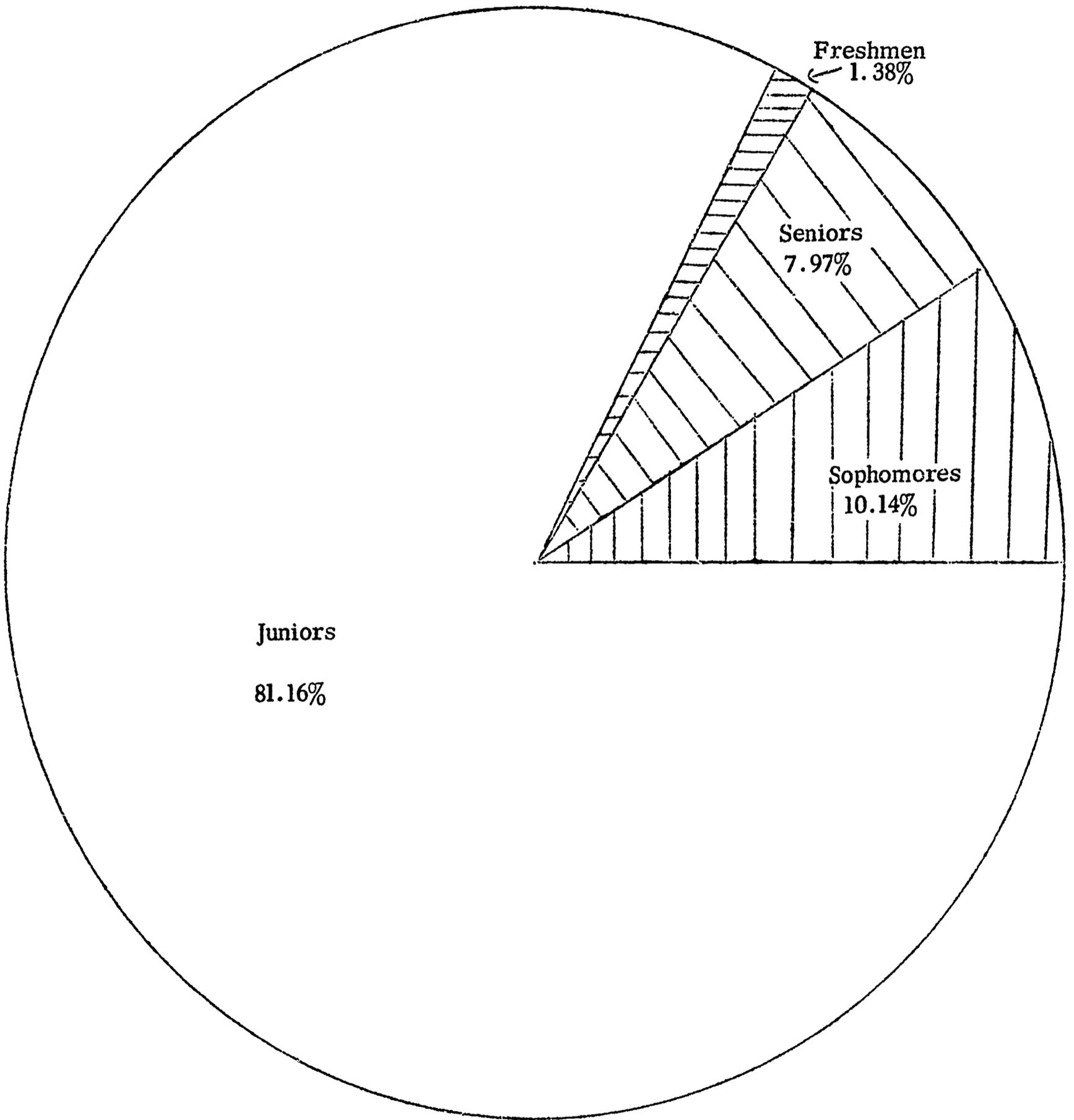


Figure 7. Class Standing of Transfers. n = 138

More recently researchers have begun to measure the effectiveness of a junior college in terms of student needs that have been fulfilled. Most frequently these studies measure the number of students who have been successfully employed in their chosen field rather than just the number who have completed programs of study in these fields.

One may question whether any of these criteria are true measures of the community junior colleges' relative effectiveness. If one assumes that the college experience is a meaningful one if the student comes out of a college as a "more worthwhile human being," other measures must be identified. Studies which purport to measure the effectiveness of a junior college program will need considerably more sophistication before they are capable of measuring these types of success. At this time it appears that these areas of success are best measured by the individual students themselves. This may imply that one meaningful measure of a community junior college's relative success is the evaluation by a student of how helpful he has found this educational experience to be.

The results of this study indicate that junior college students feel that the college experience has been a "helpful" one. (See Figure 8.) Nearly one-half, 43.71 percent, of the students in this study reported that their junior college experience was "extremely helpful." An additional 42.06 percent reported their experience to be "moderately helpful" or "helpful." Only 10.31 percent reported that the junior college experience was of "little help." An even smaller portion of the students included in this study, 3.92 percent, reported that the college experience was of "no help at all."

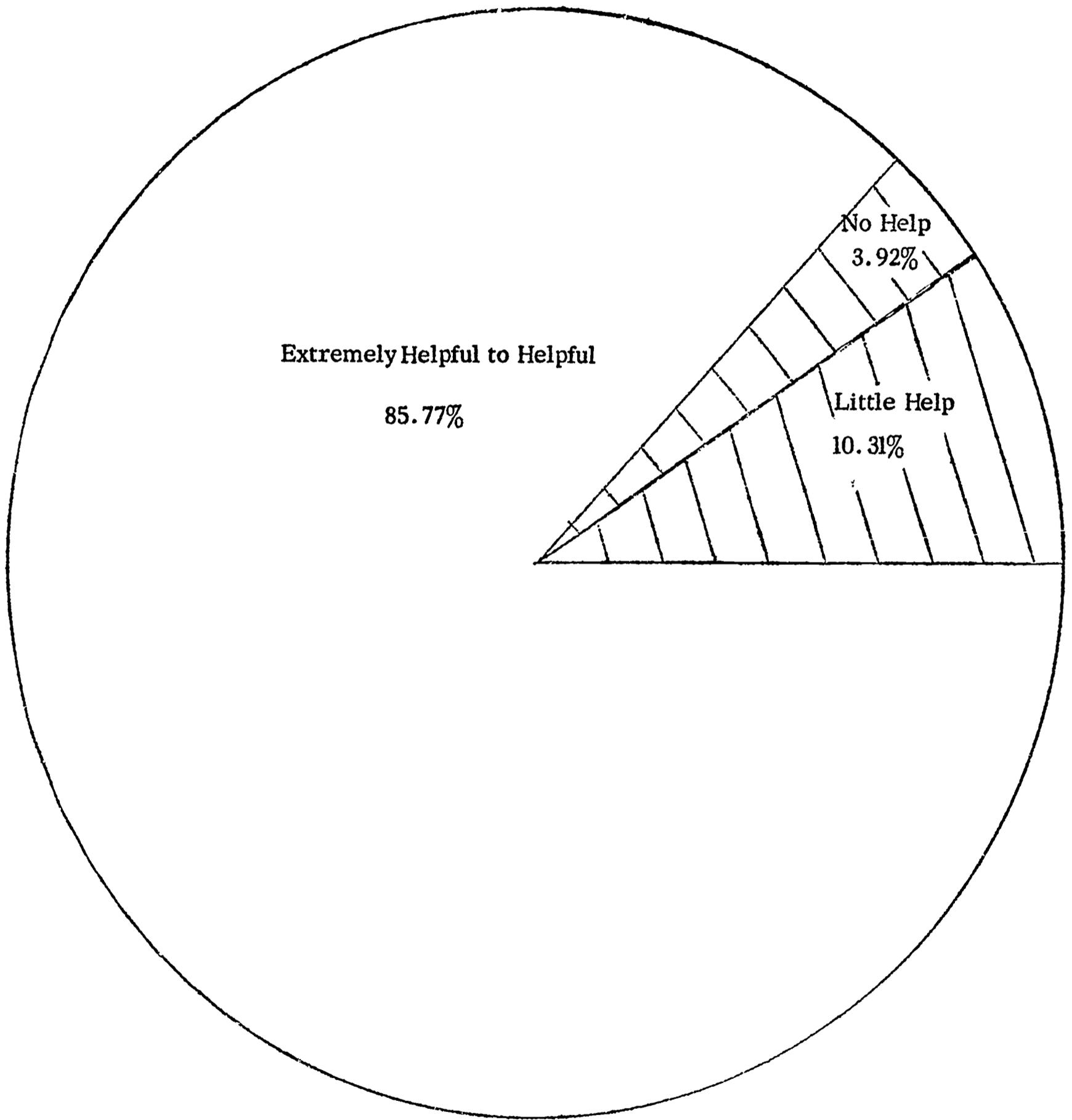


Figure 8. Value of the Junior College Experience for All Students. n = 485

The data gathered in ~~this~~ study further indicate that students who transferred to 4-year institutions may have found their junior college experience especially meaningful. Of the 113 students who reported that they were currently attending a 4-year institution 97.35 percent reported that the junior college experience was either "helpful" or "extremely helpful." Only 2.65 percent described it as of "little or no help." (See Figure 9) Of the 39 students who had transferred from a junior college but were not currently attending 94.87 percent reported their experience as "helpful" to "extremely helpful." (See Figure 10) None described it as of "little help," and only 5.13 percent reported their experience as of "no help at all."

The junior college experience appears to have been somewhat less valuable for the working student. (See Figures 11 and 12) Of the 207 non-graduate non-transfer students who were employed 79.23 percent described their experience as "helpful" to "extremely helpful." Only 15.46 percent reported it had been of "little help." An additional 4.83 percent described the experience as of "no help at all." Of the 26 graduate non-transfers who reported employment 88.46 percent described their experience as "helpful" to "extremely helpful." Of these students 11.54 reported the junior college as being of "little or no help." Thus, there are indications that the completion of a junior college program may lead to some change in the students' perception of the effectiveness of his program. Once again, the limited amount of data available merely serves to indicate a trend and does not allow a more definitive statement.

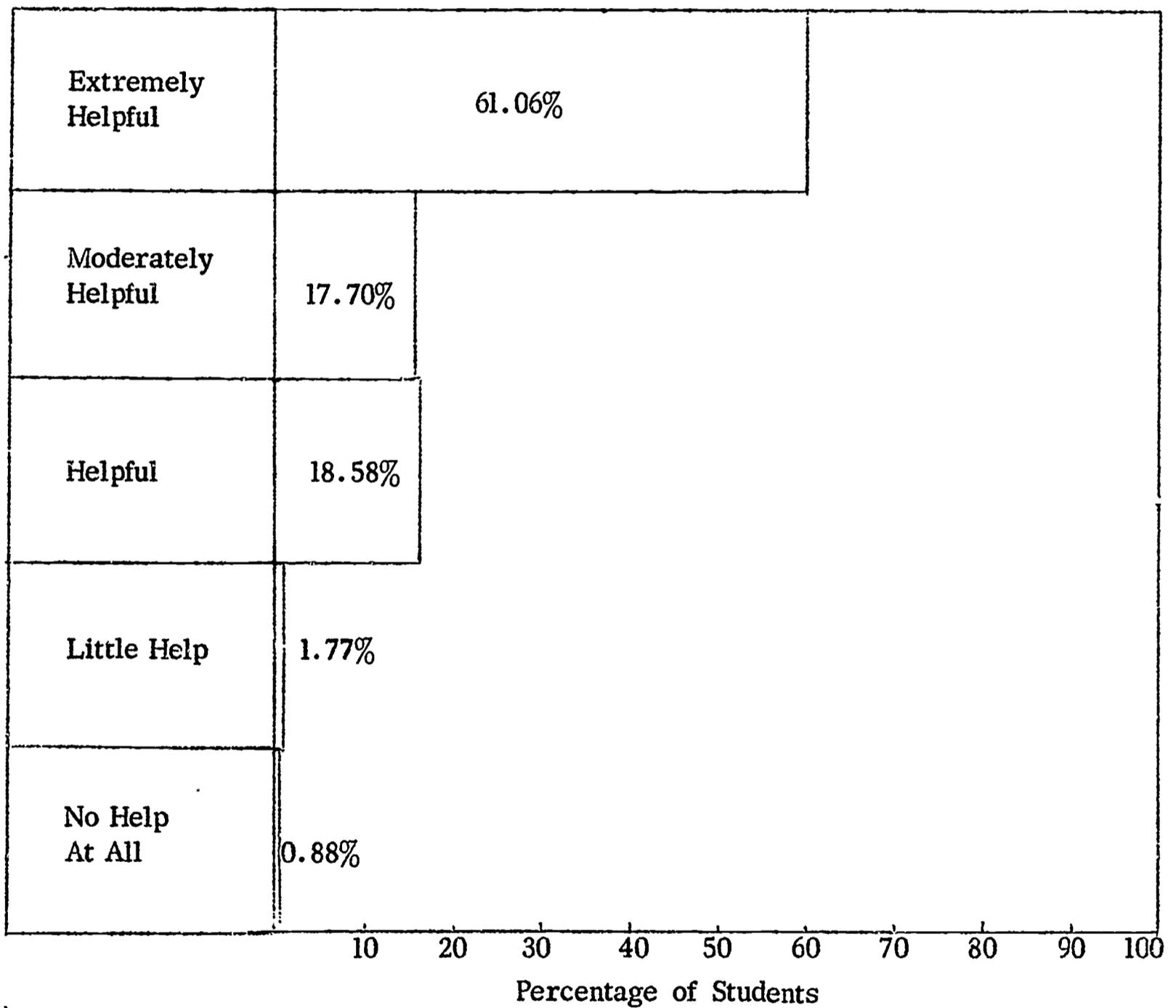


Figure 9. Value of the Junior College Experience for Transfer Students Currently Attending a 4-year Institution. n = 113

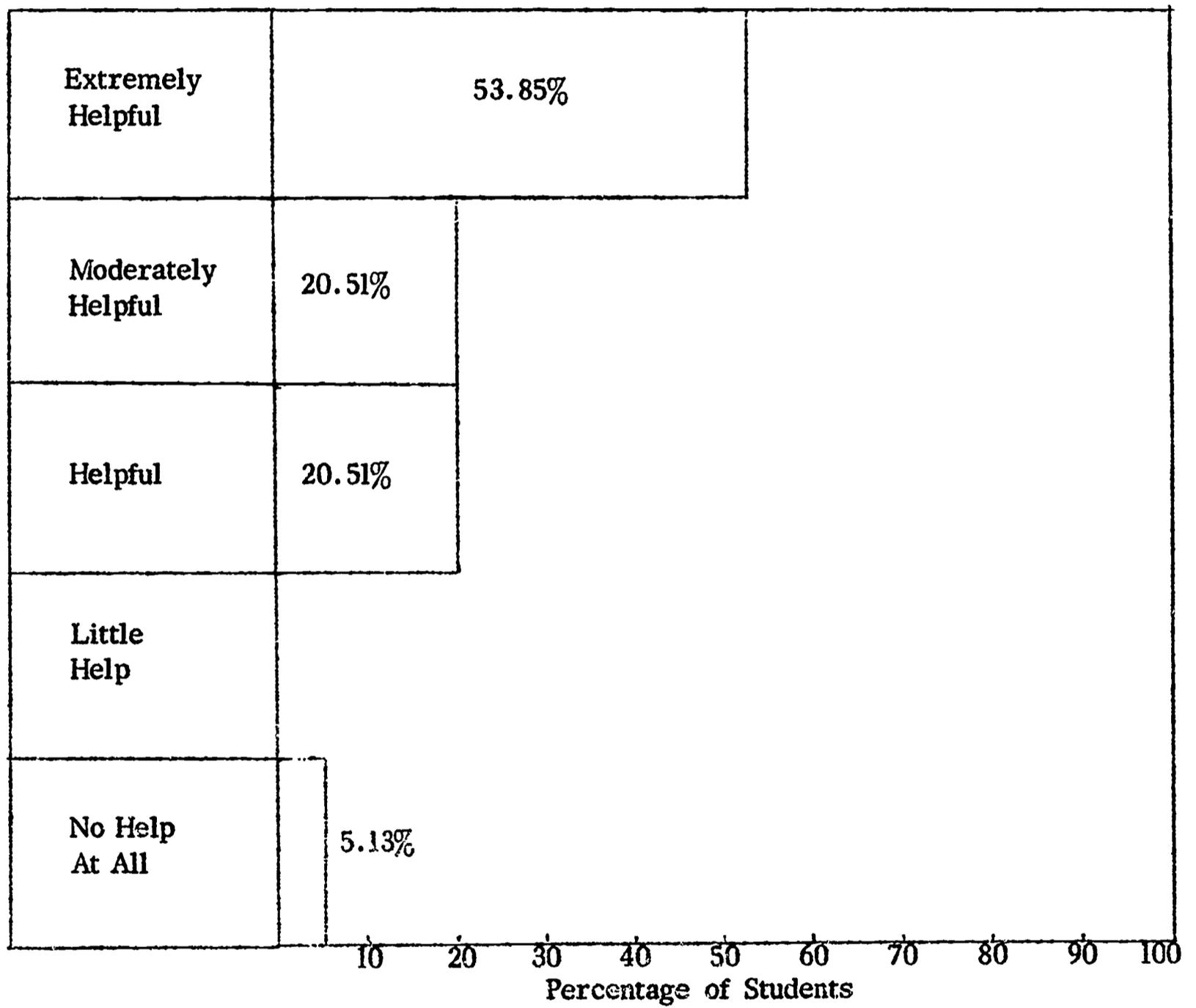


Figure 10. Value of the Junior College Experience for Transfers Not Currently Attending a 4-year Institution. n = 39

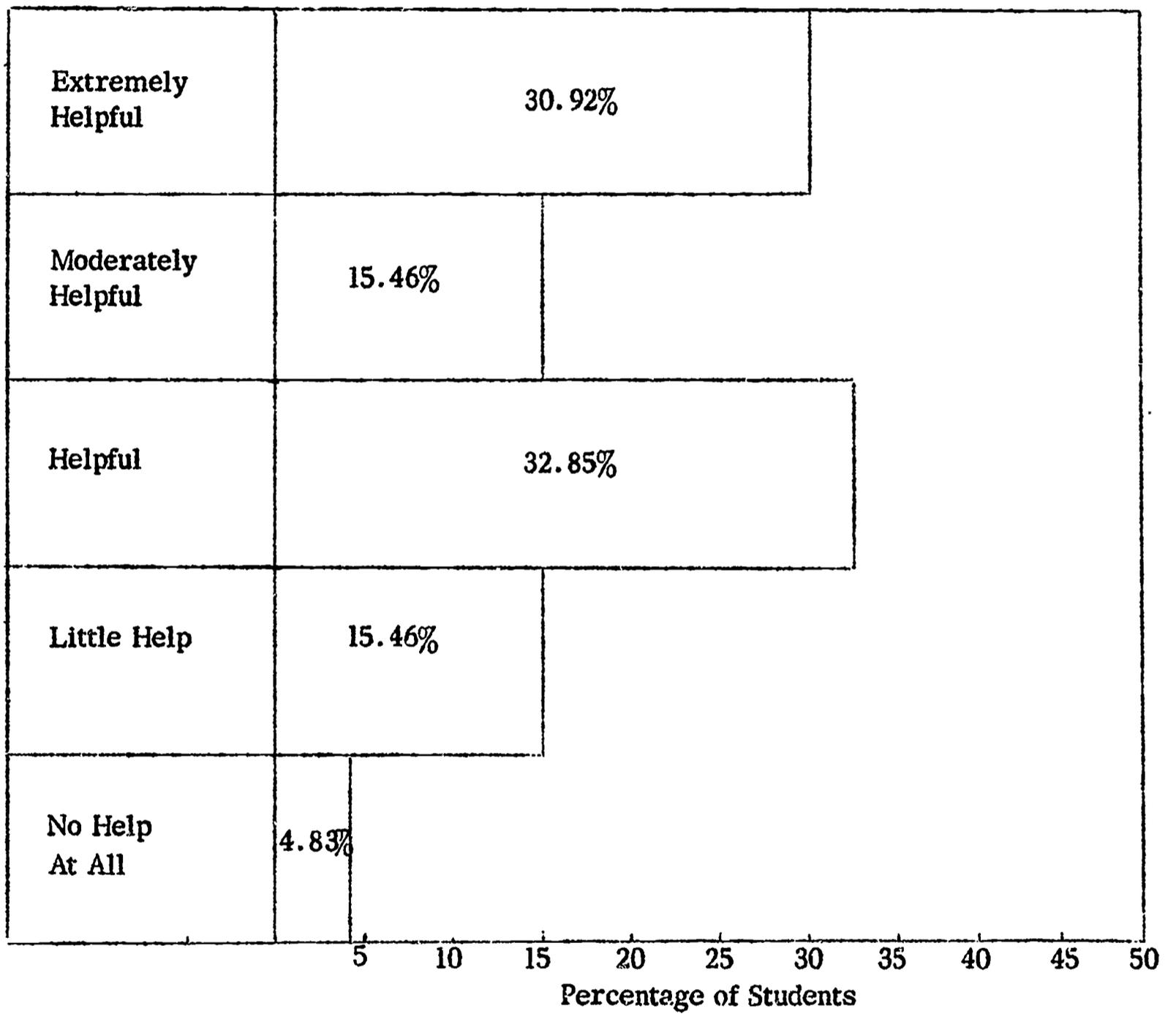


Figure II. Value of the Junior College Experience for Non-Graduate, Non-Transfer, Working Students. n = 207

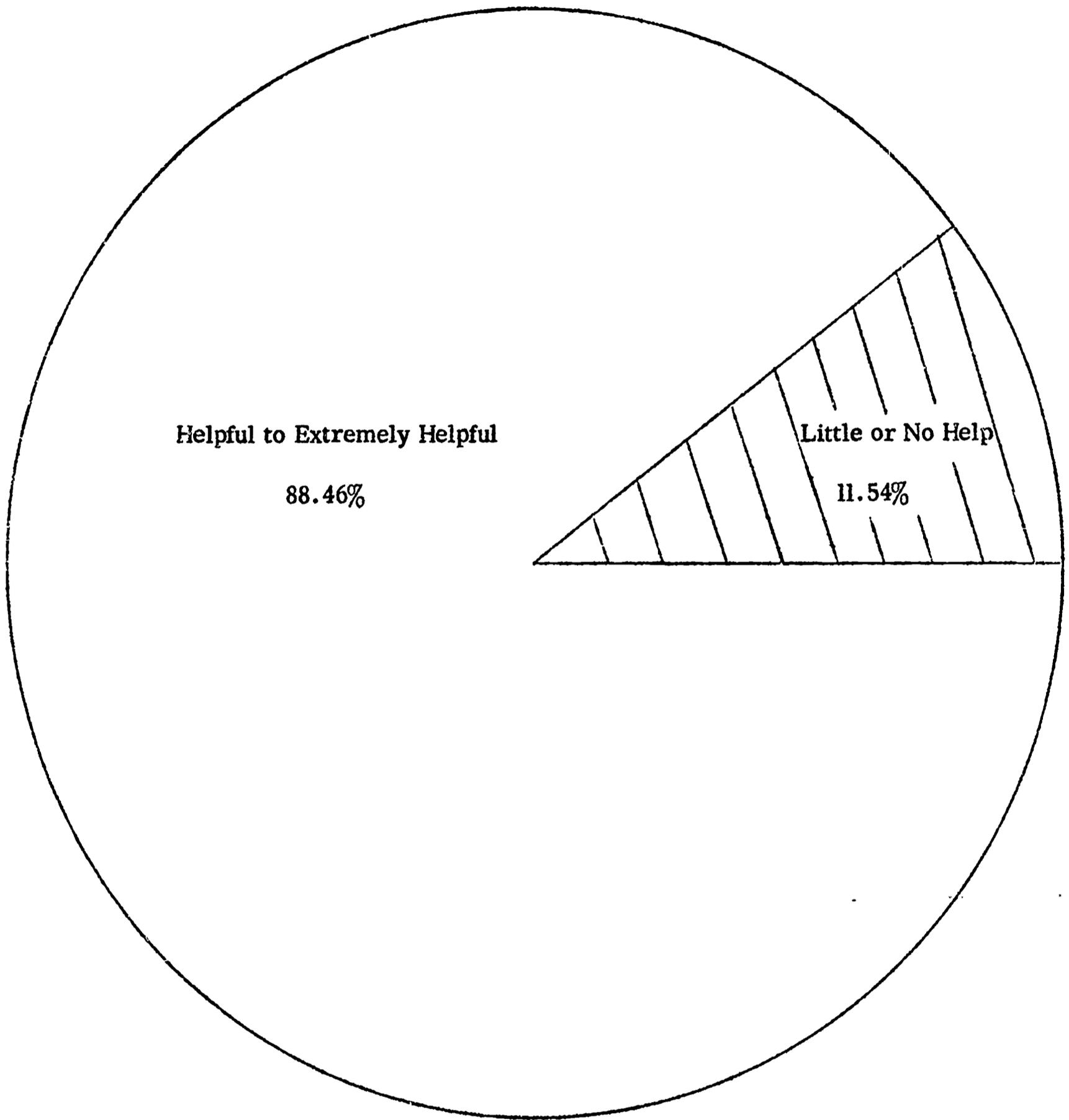


Figure 12. Value of the Junior College Experience for Graduate, Non-Transfer, Working Students. n = 26

Summary and Conclusions

Summary of Findings

From the findings of this study a profile of the "average" junior college student can be constructed. The average student is described by the arithmetic mean of variables describing characteristics of students. This average student is a Floridian residing in a county which supports his particular institution. The student enters junior college immediately after graduating from high school while one in four of his fellows wait five or more years before entering the junior college. The average student takes longer than two years to receive a junior college diploma. This student is employed while attending junior college. The junior college student graduates from the same school he originally enters. He is enrolled in a college transfer, rather than occupational program. If this student is among the three in ten students who have transferred to a four year institution, then he is majoring in Education or Arts and Sciences at the University of Florida or Florida State University. As he reflects upon it, his junior college experience is perceived to be a very helpful one.

The findings of this study may be further summarized as follows:

1. Those who attend Florida community junior colleges are in large part Florida residents (97.29 percent).
2. The majority of those who attend a particular community junior college reside in supporting counties (85.98 percent).
3. The majority of students entered a community junior college immediately after high school (72.88 percent).

4. Approximately one fourth of entering freshmen had allowed one or more years to elapse before entering a community junior college (25.85 percent).
5. Of students who entered junior college in Fall, 1966, 69.86 percent have not yet received degrees. This finding may be explained in part by noting that:
 - a. Approximately 9.03 percent of students reported transferring to a four-year institution without a junior college diploma.
 - b. An undetermined number of these students may still be attending junior college on a part-time or intermittent basis.
 - c. Of students who have not transferred or graduated, 12.94 percent have reported giving up further college education.
 - d. Of this group of students, 86.83 percent are gainfully employed or are in the armed services.
6. The vast majority of students who have received degrees, 94.49 percent, did so from junior colleges which they had initially entered and were enrolled in transfer programs.
7. Of the students in the sample, 30.35 percent transferred to a four-year institution and were still in attendance. The majority of these students, 80.54 percent transferred to Florida institutions.
8. Of students who did transfer, 58.90 percent chose majors in Arts and Sciences or Education.
9. Most, 85.77 percent, of students in the study rated their junior college experience from extremely helpful to helpful.
10. Of students in attendance at four-year institutions, 97.35 percent rated their junior college experience from extremely helpful to helpful.

Conclusions

As stated earlier, some of the most salient findings of this study are the insights for future investigations to which it led. Primary amongst these was the reemphasis of the need for a student information system. The need for uniform and easily retrievable student information in Florida's community junior colleges is not being met at this time. Meaningful research on students cannot be conducted on a statewide basis without such information. Follow-up studies could provide insights of a scope and depth that are not at present possible, if such studies were founded upon a strong information base.

The rapid growth of the student bodies in Florida's community junior colleges forces one to conclude that statewide studies of the universe are no longer feasible. Sampling techniques which provide manageable and representative samples of both the current and potential student bodies of these colleges need to be developed.

The need for careful and reflective questionnaire design has been illuminated by this study. The development of a follow-up questionnaire should involve representatives from all areas of the junior college educational endeavor. Students, faculty, administration, lay people within the community and local and state legislators are vitally interested in the community college and their concerns should be reflected in questionnaire design. The items on the questionnaire should be subjected to rigorous linguistic analyses so that ambiguity and confusion are reduced to a minimum. The visual format of the instrument should be simple and clear to the respondent so that he can clearly understand and fully answer each item. A pilot study should be conducted so that oversights in the development of the questionnaire can be corrected.

It should be noted that the use of a questionnaire in follow-up studies has some shortcomings. The rate of return usually does not exceed forty percent and many items on those which are returned go unanswered.⁵ This present study had a very high rate of return due to the untiring efforts of research personnel in the participating junior colleges; however, many questionnaire items still remained unanswered. Other alternative methods of conducting follow-up studies, such as the interview technique, should be considered in the future.

A number of questions arose during the progress of this study which require examination over a longer period of time, and over specified time intervals. The fact that a majority of the students in the sample did not graduate or transfer from a junior college in the time period covered by the present study leaves a great many questions unanswered as to the effect of their junior college experience. Studies in the future need to be expanded longitudinally to examine such questions.

These studies should also include an examination of the reasons for student "non-success." Studies to date concentrate too heavily on student "success." Furthermore, student "success" is usually defined only on the basis of the more easily quantifiable variables such as number of degrees received, number of students successfully transferring, etc. If we are to draw conclusions concerning how the junior college is meeting the needs of its student clientele, we must define "success" and "non-success" more broadly. Future follow-up studies might also investigate the role of affective variables in student growth as well as the demographic variables currently being examined. In addition, the relationships between

⁵Robert M. W. Travers, An Introduction to Educational Research. (New York: The Macmillan Company, 1969), p. 200.

student "success" and "non-success" and these variables need closer perusal.

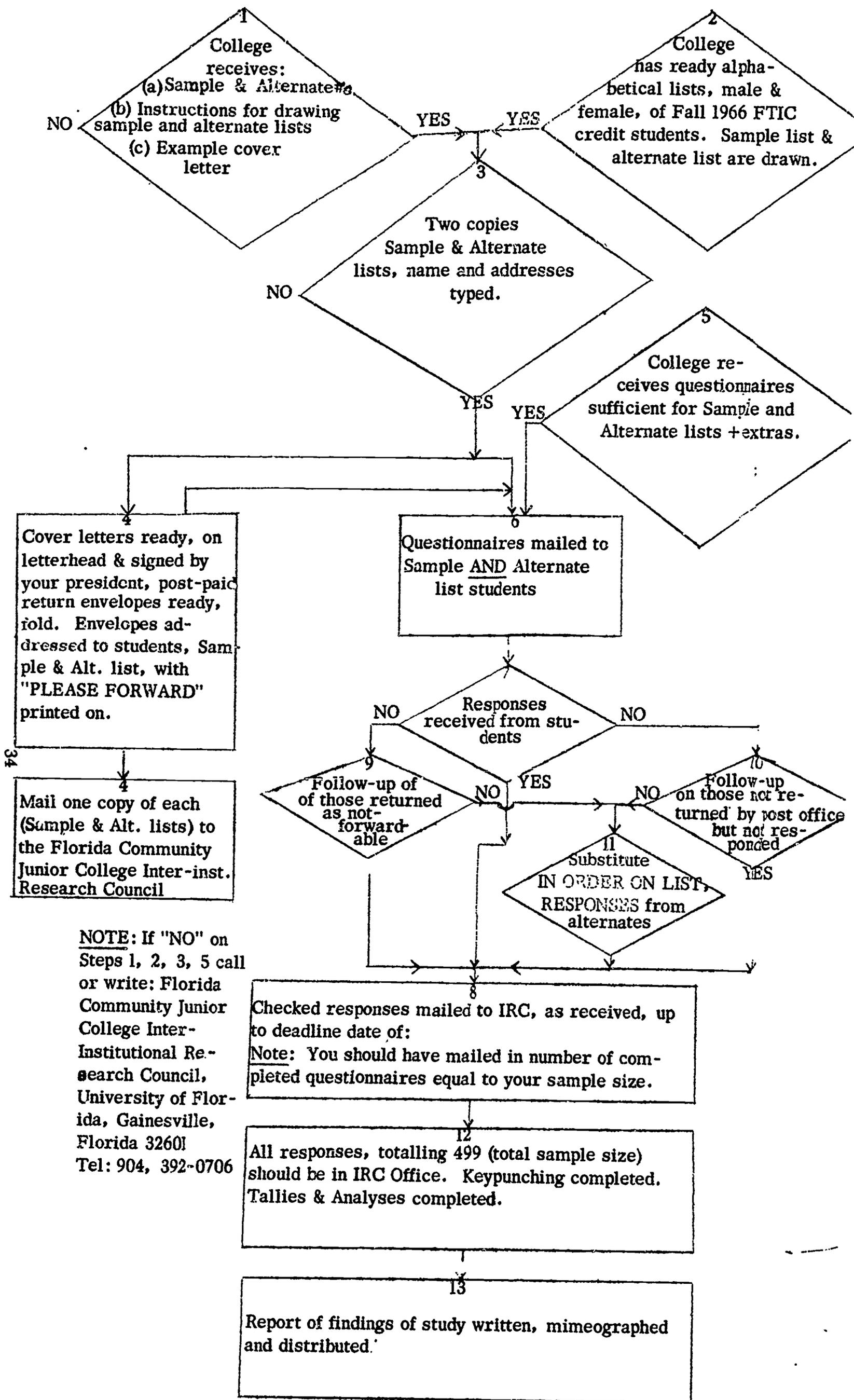
One may conclude on the basis of the responses to this study that the community colleges are doing a reasonably satisfactory job of working toward their aim of providing education for the students in college transfer or preprofessional programs. Additional data needs to be gathered so that we might assess how well the colleges are working toward their aims of providing a basic general education for all students, occupational programs, community service programs and comprehensive guidance programs. The Florida Community Junior College Inter-institutional Research Council is initiating developmental work on such expanded longitudinal follow-up studies.

APPENDIX A

STEPS IN DOING FOLLOW-UP STUDY

FALL 1966 PUBLIC JUNIOR COLLEGE FTIC CREDIT STUDENTS

FLOW CHART



NOTE: If "NO" on Steps 1, 2, 3, 5 call or write: Florida Community Junior College Inter-Institutional Research Council, University of Florida, Gainesville, Florida 32601 Tel: 904, 392-0706

Checked responses mailed to IRC, as received, up to deadline date of:
Note: You should have mailed in number of completed questionnaires equal to your sample size.

All responses, totalling 499 (total sample size) should be in IRC Office. Keypunching completed. Tallies & Analyses completed.

Report of findings of study written, mimeographed and distributed.

APPENDIX B

QUESTIONNAIRE

**FOLLOW-UP STUDY OF THE FALL 1966 FIRST-TIME-IN-COLLEGE FRESHMEN
ENROLLED AS CREDIT STUDENTS IN FLORIDA PUBLIC JUNIOR COLLEGES**

Numbers in parentheses refer to card columns for key punching. They have no meaning in regard to requested answers on the questionnaire. Please follow directions as carefully as possible, completing each question as directed. Your name will not be connected in any way with your answers. Answers will be put into cards for group analysis. Thank you

YOUR NAME: _____

(Last name) (First Name) (Middle) (Maiden*)

*It is most important for females, who married after leaving the junior college of first enrollment, to indicate their maiden names under which they were registered at this college.

SEX: Male _____ (3-1)
Female _____ (3-2)

YOUR CURRENT ADDRESS: _____

(Street & Number - P.O. Box No. - R. Route No.)

(City) (State) (Zip Code)

YOUR SOCIAL SECURITY NUMBER: _____ - _____ - _____

1. NAME OF FLORIDA JR. COLLEGE YOU FIRST ENTERED, FALL 1966:(1, 2) _____
2. PLEASE NAME, IN ORDER ATTENDED, ANY OTHER COLLEGES OR UNIVERSITIES, IF ANY, THAT YOU HAVE ATTENDED SINCE ENTERING THE JUNIOR COLLEGE NAMED ABOVE:

	<u>NAME OF COLLEGE</u>	<u>CITY AND STATE</u>
A. First college (8, 9)	_____	_____
B. Second college (10,11)	_____	_____
C. Third college (12, 13)	_____	_____

(If you attended any more, please check here _____, and list on back of this sheet)

3. A. NAME OF HIGH SCHOOL GRADUATED FROM: _____
CITY & STATE OF HIGH SCHOOL (14, 15, 16) _____, _____
- B. DATE YOU GRADUATED FROM HIGH SCHOOL: (17, 18) _____
- C. TYPE OF DIPLOMA YOU RECEIVED: (19) _____
(i.e., college prep., Regular, H.S. Equiv or GED)

4. WHERE WAS YOUR LEGAL RESIDENCE WHEN YOU FIRST ENROLLED IN COLLEGE FALL 1966? (Check only one please): (20, 21, 22)
- A. Florida County _____ Name of County: _____
- B. _____ Other state in U.S., or U.S. Territory, Name of state/possession: _____
- C. _____ Foreign country. Name of foreign country: _____

5. DID YOU GRADUATE FROM A JUNIOR COLLEGE? Yes _____; No _____ (23-0)
IF "YES", answer the following (Check only those that apply)
- A. Type of degree you received:
 - _____ (23-1) A "transfer" degree (eligible to enter junior year of 4-year college)
 - _____ (23-2) A "vocational-technical" degree (prepared you to enter immediate employment in a semi-professional or technical occupation)
 - _____ (23-3) A "general" associate degree (not prepared to transfer to 4-year college, and not for employment in a voca-tech field, but just a general education degree)
 - _____ (23-4) Other type of degree or diploma/certificate. Please explain: _____
- B. _____ (24, 25-00) junior college graduated from was same as one entered in Fall,
- C. _____ Junior college graduated from was not same as one entered Fall 1966.
Junior college graduated from: (24, 25) _____ (Name) _____ (City & State)

6. DID YOU TRANSFER TO A 4-YEAR COLLEGE OR UNIVERSITY (regardless of whether or not you graduated from junior college)? YES _____; NO _____ (26, 27-00)

If "YES":

A. Name of college/university: (26, 27) _____

(Name of Institution) (City & State)

B. What is your major field? (28, 29) _____

C. Are you currently attending? YES _____; NO _____ (30-0)

Are you (30-1) A Freshman? _____; (30-2) A sophomore? _____; (30-3) A junior? _____; (30-4) A senior? _____.

(31-1) A full-time student? _____ (Taking 12 or more sem. or quarter hours)

(31-2) A part-time student? _____ (Taking less than 12 sem./quarter hours)

D. I have already received a bachelor's degree. YES _____; NO _____ (32, 33-00)

If "YES", name of degree: (32, 33) _____; Date rec'd: (34, 35) _____

E. Are you now working toward a graduate degree? (Master's) YES _____ (36-1)

If "YES": NO _____ (36-2)

Full-time _____; Part-time _____; Kind of degree: _____

ALSO, PLEASE ANSWER THE FOLLOWING, AS THEY MAY APPLY TO YOU:

F. I am employed: Full-time _____ (37-1); Part-time _____ (37-2); Not working _____ (37-3)

G. I am now:

(1) In the U.S. armed services: on active service _____ (38-1); in the reserves _____ (38-2) in the national guard _____ (38-3).

(2) A veteran of U.S. armed services _____ (38-4)

(3) Branch of service: (39) _____

H. I am now receiving training in a manner other than in a college or university _____.

Kind of training: (40) _____

(e.g. - apprenticeship; technical institute; business or secretarial school; etc.)

7. IF YOUR ANSWER TO QUESTION 6 WAS "NO", PLEASE ANSWER THE FOLLOWING:

(Answer only one)

A. _____ (41-1) I plan to go back to junior college and complete it.

B. _____ (41-2) I plan to go to a 4-year college and complete at least a bachelor's degree.

C. _____ (41-3) I am uncertain now about further college plans.

D. _____ (41-4) I have given up further college plans.

E. _____ (41-5) Other (Please explain) _____

8. IF YOU HAVE GIVEN UP FURTHER COLLEGE PLANS, PLEASE CHECK THE MOST IMPORTANT REASON BELOW WHICH WAS THE CAUSE OF YOUR DECISION:

A. _____ (42-1) Junior college work was too difficult.

B. _____ (42-2) Junior college work was not suited to my needs.

C. _____ (42-3) I was not challenged by junior college work.

D. _____ (42-4) Economic reasons.

E. _____ (42-5) I was drafted into the armed services.

F. _____ (42-6) I volunteered military service.

G. _____ (42-7) I wanted to seek immediate employment.

H. _____ (42-8) I became ill or was injured.

I. _____ (42-9) Other reason (Please explain): _____

9. WHAT IS, IN YOUR OPINION, THE VALUE TO YOU OF THE EDUCATION YOU RECEIVE WHILE ATTENDING JUNIOR COLLEGE? PLEASE ANSWER THIS QUESTION, RELATING THE VALUE OF JUNIOR COLLEGE EDUCATION IN HELPING YOU IN YOUR PRESENT EDUCATION, EMPLOYMENT, OR WHATEVER YOU ARE DOING: (Please check only one)

A. _____ (43-1) Junior college was extremely helpful.

B. _____ (43-2) Junior college was moderately helpful.

C. _____ (43-3) Junior college was helpful.

D. _____ (43-4) Junior college was of little help.

E. _____ (43-5) Junior college was of no help at all.

APPENDIX C
DATA TABLES
(By Sub-Group)

Total Number of Responses to the Item ¹	Categories of Responses	Number of Responses in each Category	% of Total Sample (491 Subjects)	% of Total Responses to each Item
#5 Did you graduate from a junior college? 485	Yes	142	28.92	29.28
	No	343	69.86	70.72
#6 Did you transfer to a 4-year college or university? 480	Yes	149	30.35	31.04
	No	331	67.41	68.96
Responses to Both Items 5 and 6 476	Graduated, Transferred	105	21.38	22.06
	Graduated, Did Not Transfer	35	7.13	7.35
	Did Not Graduate, Transferred	43	8.76	9.03
	Did Not Graduate, Did Not Transfer	293	59.67	61.55

¹See Follow-Up Study Questionnaire, Appendix B.

Table 1. Graduate and Transfer Status.

	Employed Full-Time	Employed Part-Time	Not Employed
<u>GRADUATES</u>			
Non-transfers	23	3	9
Transfers*	13	28	50
Currently Attending A 4-year Institution	5	26	48
Not Currently Attending A 4-year Institution	8	2	2
<u>NON-GRADUATES</u>			
Non-transfers	183	24	43
Transfers*	7	7	22
Currently Attending A 4-year Institution	2	6	18
Not Currently Attending A 4-year Institution	5	1	4

*These totals are derived from the tabled data and do not indicate the number of students who actually responded to the items concerning their status as graduates and transfers.

Table 2. Employment

	After 1966	1966	1965	1964	1963	1962	1955- 1961	1945- 1954	1944 or Before
Graduate, Transfer	1	95	3	0	1	1	3	1	0
Non-Graduate, Transfer	1	32	2	2	0	0	2	1	2
Graduate, Non-Transfer	0	29	3	1	0	1	0	0	0
Non-Graduate, Non-Transfer	4	183	17	7	5	3	27	16	19

Table 3. Date of High School Graduation.

		Extremely Helpful	Moderately Helpful	Helpful	Of Little Help	No Help At All
GRADUATE TRANSFERS	Currently Attending a 4-year Institution	55	14	16	0	1
	Not Currently Attending a 4-year Institution	18	5	7	0	0
	Employed Full-Time	4	2	2	0	0
	Employed Part-Time	14	3	5	0	0
	On Active Duty	2	0	0	0	0
NON-GRADUATE TRANSFERS	Currently Attending a 4-year Institution	14	6	5	2	0
	Not Currently Attending a 4-year Institution	2	4	2	1	1
	Employed Full-Time	1	2	1	0	1
	Employed Part-Time	0	1	0	0	0
	Not Employed	1	1	1	1	0
	On Active Duty	1	0	1	0	0

Table 4. Value of the Junior College Experience

Table 4 (Continued)

		Extremely Helpful	Moderately Helpful	Helpful	Of Little Help	No Help At All
GRADUATE NON- TRANSFERS	Employed Full-Time	16	4	1	1	1
	Employed Part-Time	2	0	0	0	1
	Not Employed	3	3	3	0	0
NON- GRADUATE NON- TRANSFERS	Employed Full-Time	51	28	64	31	8
	Employed Part-Time	13	4	4	1	2
	Not Employed	20	8	6	4	5
	On Active Duty	11	7	11	12	3

		Plan to Return and Complete Junior College	Plan to Return to a 4-Year Institution and Complete At Least a B. A.	Uncertain about future College Plans	Have Given up College Plans	Other
Non-Graduate Transfers Not Currently Attending A 4-Year Institution	On Active Duty	1	0	0	0	0
	Employed Full-Time	1	0	0	0	0
	Employed Part-Time	2	0	0	0	0
	Not Employed	1	2	0	0	0
Graduate Non-Transfers	Employed Full-Time	0	15	8	5	0
	Employed Part-Time	0	1	0	2	0
	Not Employed	1	4	2	0	1
Non-Graduate Non-Transfers	On Active Duty	18	6	11	2	0
	Employed Full-Time	54	13	55	31	16
	Employed Part-Time	3	10	4	0	5
	Not Employed	12	4	13	5	7

Table 5. Future College Plans.

APPENDIX D
ADMINISTRATIVE MATERIALS

PART I

Florida Public Community Junior Colleges Operating in 1966

<u>Junior College</u>	<u>Supporting Counties</u>
1. Brevard	Brevard
2. Broward	Broward
3. Central Florida	Citrus, Levy, Marion
4. Chipola	Calhoun, Holmes, Jackson, Washington
5. Daytona Beach	Flagler, Volusia
6. Edison	Charlotte, Collier, Lee
7. Florida	Duval, Nassau
8. Florida Keys	Monroe
9. Gulf Coast	Bay, Gulf
10. Indian River	Indian River, Martin, Okeechobee, St. Lucie
11. Lake City	Baker, Columbia, Dixie, Gilchrist, Union
12. Lake-Sumter	Lake, Sumter
13. Manatee	Manatee
14. Miami-Dade	Dade
15. North Florida	Hamilton, Jefferson, Lafayette, Madison, Taylor
16. Okaloosa-Walton	Okaloosa, Walton
17. Palm Beach	Palm Beach
18. Pensacola	Escambia, Santa Rosa

Junior College

Supporting Counties

19. Polk	Polk
20. St. Johns River	Clay, Putnam, St. Johns
21. St. Petersburg	Pinellas
22. Santa Fe	Alachua, Bradford
23. Seminole	Seminole
24. South Florida	Hardee, Highlands
25. Tallahassee	Gadsden, Leon, Wakulla
26. Valencia	Orange

PART II

FLORIDA COMMUNITY JUNIOR COLLEGE INTER-INSTITUTIONAL RESEARCH COUNCIL
Institute of Higher Education - College of Education
University of Florida

"FOLLOW-UP STUDY OF FALL, 1966 FIRST-TIME-IN-COLLEGE CREDIT STUDENTS"

INSTRUCTIONS AND TIME SCHEDULE FOR CONDUCTING THE STUDY

Step

1. Your college receives from FCJC-IRC the following:
 - (a) List of random numbers (yellow sheet) selected for you to draw your male and female names, constituting your sample for mailing questionnaires.
 - (b) "Instructions for Drawing Sample from Population"
 - (c) Example of cover letter (to be signed by your president on your letterhead) to be sent with questionnaire to each student in your sample.
2. Using available alphabetical list of male students and list of female students who were FTIC credit students in Fall Term of 1966, draw from these lists your male and female names, constituting your sample. Using the alternate numbers supplied to you (Alt. - on yellow sheet) draw male and female names for alternates in same manner (See "Instructions for Drawing Sample from Population")
3. Sample list and alternate list identified. Obtain from your records the last or best address for each student. Prepare 2 copies of list of names and addresses of sample names and 2 copies of list of alternate names and addresses. Retain 1 copy each of these 2 lists.
4. Mail 1 copy of each list immediately to: IRC Offices, Institute of Higher Education, College of Education, University of Florida, Gainesville, Fla.

Prepare sufficient copies of cover letter to accompany questionnaire to each student (sample + alternates) on your letterhead, preferably signed by your president.

Prepare sufficient first-class postage paid*, return addressed envelopes to fold and enclose with cover letter and questionnaire for students in sample plus alternates.

Address an envelope to each student on sample list and on alternate list. Print "PLEASE FORWARD" on each envelope.

*Contact your postmaster for special instructions if you are using metered postage on return envelopes.

Step

5. Your college receives sufficient copies for students on sample list plus alternate list. Several extra copies of questionnaire will also be included for your file.
6. Your questionnaires, including cover letter and return, post-paid envelope (folded), are mailed first-class postage. NOTE: Mail questionnaires to alternates also at the same time.
7. Responses from these students should begin coming in within the next few days. A GOOD NUMBER OF THESE ARE PROBABLY STILL IN YOUR COLLEGE.
Check these completed questionnaires to see if they have been properly answered - check return addresses on envelopes and on first page of questionnaire and record on your list, if different.
8. Checked completed questionnaires should be mailed to the IRC Offices in batches every day or two so that responses can be key-punched. This will prevent piling up of work.
9. Some questionnaires will be returned - not forwardable - by the Post Office. As soon as you receive these, set about locating these students by all means at your disposal (See "Hints for Locating Former Students" attached). Keep trying to trace these students, **ESPECIALLY** those on the primary sample list!
10. For those questionnaires not returned by the Post Office and for which responses have not been received by approximately 1 week after mailing, mail a reminder letter requesting immediate response and re-stating importance of study as in cover letter. You might also check by telephone or other applicable means to see that student still resides at that address. If you contact student, ask if he still has the questionnaire or not.
11. DEADLINE FOR MAILING ALL COMPLETED QUESTIONNAIRES IN SAMPLE TO THE IRC OFFICES
Every effort should be made to contact, and obtain a completed questionnaire from, every student on the sample list by _____. If, by this date, it has been impossible to locate one of students on sample list, THEN substitute the first response on the alternate list and mail it to the IRC Offices. Do likewise for another, if there is one, with the next alternate response received, and so forth.
12. All responses will have been received, key punched and tallies/analyses completed.
13. Final report of the study will be written, mimeographed and copies sent to Division of Community Colleges and to all Florida public junior colleges.

Instructions for Drawing Names for Sample & Alternate Lists

Follow-Up Study, Fall 1966 Public Junior College FTIC Credit Students

1. Each college should have ready an alphabetical list of students for males and a second alphabetical list of females who are in the above-designated population. Total males and total females should equal numbers, respectively, on your list (yellow sheet) you received (giving also your sample numbers).
2. Using the list (yellow sheet) of numbers for male sample and alternates, count down the male alphabetical list and select that student on the list represented by the first male sample number. (e.g. - If number is 168, count down 167 male students and select the 168th one). Repeat for each number in male sample AND alternate listing.
3. Repeat this process using female alphabetical list of students and female sample and alternate numbers.
4. Type up a list (make at least 2 copies) of the random number, name and last and/or best address, by male and female, sample and alternate. Send one list to the IRC Offices.

Suggested Techniques in Contacting Non-Responding Students and Students Whose Questionnaires were Non-Forwardable.

***ON YOUR MAIL-OUT ENVELOPE, RETURN ADDRESS, WRITE "ADDRESS CORRECTION REQUESTED"**

1. Use the last, or best, address first.
2. Go to permanent record, obtain parents/guardians permanent address, OR address to which they requested their degree be mailed.
3. Check Alumni Office files for later address.
4. For males, go to local Selective Service (Draft) Board for latest address.
5. If you have a social security number, contact the Regional Social Security Office. Local police know this procedure.
6. Check with his high school of graduation. They may have records; teachers may know of his whereabouts, or where a relative lives and can be contacted.
7. Check females for married name changes.
8. Use the faculty bulletin--some instructor may know his whereabouts of of a relative. Faculty may know one of his peer group (friends) who is in the college.
9. Contact your student personnel dean or director of counseling. They have to trace students for a variety of reasons and may know other techniques than these.

*Each one costs about 10¢

Example of the Form Letter to be Mailed with the Questionnaire.

Dear _____:

You are one of the 499 students selected from 28, 396 in Florida who entered junior college for the first time in the Fall of 1966. We need your help in answering a few brief questions.

The results of this study will be made available to the Florida Legislature by the State Department of Education. We hope this will be of use in planning to improve our Florida junior colleges. Your reply is therefore very important.

Please return the questionnaire with your name and address so we can check it in as received. Only the information you have given us, without your name, will be used for the study.

Please take a few minutes now to answer these questions and return the questionnaire in the enclosed envelope, so that we may complete the study by our deadline. We shall appreciate having this by return mail.

Thank you for your assistance.

Sincerely yours,

FLORIDA COMMUNITY JUNIOR COLLEGE INTER-INSTITUTIONAL RESEARCH COUNCIL
Institute of Higher Education - College of Education
University of Florida

MEMORANDUM

TO: Presidents of Florida Junior Colleges

FROM: IRC Research Associate

SUBJECT: Follow-Up Study of Fall 1966 FTIC Credit Students in
Florida Junior Colleges

(Please direct this memo to the person designated for this follow-up study.)

Regarding the Follow-Up Study of Fall, 1966 FTIC Credit Students in Florida Junior Colleges:

We are still experiencing difficulty, as reported by most junior colleges, in receiving responses from students in the sample and on the alternate list. Most report they had few, if any, letters returned as "not forwardable". Yet even a follow-up letter or letters has not been answered. Even when reached by telephone or personal contact, these former students promise to complete the questionnaire and mail it in. Yet they do not do this, in many cases.

Dr. Henderson has assured me that the study will still be of great value for the legislative program for next year. He says the validity of the study is most important, and that this is the thing we must strive for.

Therefore, since the study is of no value unless we receive full sample size responses from each college, we ask you to continue writing these former students, making personal visits, or telephone contacts, urging them to help you out by responding.

If it is absolutely necessary that you have a few additional alternate numbers drawn, please let us know and we will supply them to you.

We hope that the study can be wrapped up this summer, but we are prepared to wait longer if necessary in order to obtain a valid study.

Thank you. Let me know if we can be of any more assistance.

BIBLIOGRAPHY

1. Cella, Francis R. Sampling Statistics in Business and Economics.
Norman, Oklahoma: Bureau of Business Research, University
of Oklahoma, 1950.
2. Morris, Allen. The Florida Handbook 1969-70. Tallahassee,
Florida: The Peninsula Publishing Company, 1969.
3. Thornton, James W., Jr. The Community Junior College.
New York: John Wiley & Sons, Inc., 1966.
4. Travers, Robert M. W. An Introduction to Educational Research.
New York: The Macmillan Company, 1969.