

DOCUMENT RESUME

ED 095 456

CG 009 139

AUTHOR Fenske, Robert H.; Scott, Craig S.
TITLE College Students' Goals, Plans, and Background Characteristics; A Synthesis of Three Empirical Studies.
PUB DATE Feb 73
NOTE 40p.; Paper presented at the Annual Meeting of the American Educational Research Association (59th, Chicago, Illinois, April 1974)
EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE
DESCRIPTORS *Changing Attitudes; *College Bound Students; *Longitudinal Studies; *Occupational Aspiration; Speeches; Student Characteristics; *Student Needs; Student Personnel Work

ABSTRACT

This study was designed to provide longitudinal data bearing on the change and/or stability of college-bound students' educational and vocational goals, as well as their background characteristics. Data from three studies were contrasted and compared. Included in these studies were: (1) a 2-year followup of 4,009 junior college students; (2) a 4-year followup of 5,623 4-year college students; and (3) a comparison of the responses of two independent samples (32,351 and 50,205) of high school seniors. Considerable differences in stability among characteristics were found; however, these seemed to be orderly and according to expectation. The utility of the findings regarding changes and stability in student characteristics for college personnel workers is discussed, and possible applications are suggested. (Author/PC)

ED 095456

College Students' Goals, Plans, and Background Characteristics:

A Synthesis of Three Empirical Studies

Robert H. Fenske and Craig S. Scott

P. O. Box 168, Iowa City, Iowa 52240

**U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION**

**THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY**

**A paper presented at the Annual Meeting of the American
Educational Research Association, New Orleans,
Louisiana, February 26, 1973. To be
published in the Journal of Research
In Higher Education.**

CG 009 139

College Students' Goals, Plans, and Background Characteristics

A Synthesis of Three Empirical Studies

There is a constant need for reliable information regarding important attributes and aspirations of college-bound youth. Personnel of all types who are concerned with meeting the educational needs of post-secondary students must be concerned with a multitude of important questions about incoming students. What are they like? What do they want? What do they need? Where do they feel they are headed? Where are they headed? This report provides information that may be useful in the search for answers to questions such as these, as well as others regarding (a) the degree of stability exhibited over time by the distributions of various student characteristics, and (b) the effects over time of post secondary educational experiences on student's personal and vocational development. As our students increase in both number and diversity it becomes even more necessary to evaluate the extent to which students' plans change so that available services may be revised or extended accordingly.

The present study consolidates and compares the findings of studies reported in three previously unpublished research papers (Shevel & Carmody, 1970; Carmody, 1971; Fenske & Carmody, 1971) which have studied change and stability in students' responses to the Student Profile Section (SPS). The SPS is a short biographical inventory, which is included in The American College Testing Program's (ACT) Assessment, that enables

students to inform prospective colleges of their academic, nonacademic, and vocational interests and achievements, as well as what they anticipate some of their needs will be while in college.

Method

Data from the three studies referred to above were contrasted and compared. Included in these studies were (a) a 2-year follow-up of junior-community college students, (b) a 4-year follow-up of 4-year college and university students, and (c) a comparison of the responses of two independent samples of high school seniors to items regarding their background characteristics.

In the 2-year study (Shevel & Carmody, 1970) a follow-up questionnaire designed by Leonard L. Baird, James M. Richards, Jr., and Linda R. Shevel was administered in the spring of 1967 to a sample of junior college students. This instrument included the following topics which were also in the initial SPS.

- (a) Choice of major field
- (b) Proposed vocation.
- (c) Highest level of education expected to be completed.
- (d) Goals in attending college.
- (e) Proposed employment patterns while in college.
- (f) Participation in college-related activities.

In the 4-year study (Carmody, 1971), a follow-up questionnaire was developed and administered by James M. Richards, Jr., Leonard L. Baird, and John L. Holland. It was administered in the spring of 1969 to a sample of college seniors and included the same items dealing with the six topics listed above for the 2-year study.

The third study (Fenske & Carmody, 1971) compared the distributions of responses to SPS items from two independent samples of students over a 4-year period.

The Samples

A total of four samples were used in these studies: one each for the 2-year and the 4-year follow-ups and two independent samples for the third study. Each of the samples is described below.

The 2-year follow-up study used a national sample of junior college students who took the ACT Assessment in 1965 and were completing their second year in the spring of 1967. A total of 4,009 students at 29 2-year colleges responded to the questionnaire, with the number of students at individual colleges ranging from 22 to 490. The nature of the colleges that participated in the study was quite diverse (21 were public institutions, 4 were independent, and 4 were church-related), widely dispersed geographically, and . . . "close to the national norms on all scales except size, and discrepancy on this scale is probably due to the small number of very small two-year colleges in the sample. Thus the

sample colleges appear to be a reasonable cross-section of American two-year colleges" (Baird, Richards, & Shevel, 1969a, p. 3). See Lutz (1968) for a list of the names of the colleges which were included in the sample.

The 4-year follow-up study used a sample of 4-year college and university students who took the ACT Assessment in 1965 and were completing their fourth year in the spring of 1969. A total of 5,623 students at 64 4-year colleges and universities were included in the sample. The distributions of sex of the students, size of the college in terms of enrollment, geographical dispersion of the colleges, and type of control (public vs. private) were similar to the national distribution of almost all factors. Fenske (1970) found, however, that the sample represented a somewhat higher distribution of ACT Composite Scores and was overrepresented in the "social, religious, and educational" majors and occupational fields. These differences, however, were not seen as being of sufficient magnitude to warrant weighting procedures in the present study. Nevertheless, because biases may still exist and the response rate cannot be determined, the findings presented herein should be regarded as descriptive only. Although all geographic regions were represented, the majority of the 64 institutions included in this sample are located in the midwestern, southern, and southwestern portions of the United States.

The comparison study (Fenske & Carmody, 1971) used both a 1966 and a 1969 sample. The 1966 sample included the record of every tenth unmarried student who was certified as having been enrolled in the fall of 1966. The 1969 sample was drawn in the same manner but represented unmarried students who were certified as having been enrolled in the fall of 1969. The 1966 sample contained 32,351 records from 796 colleges in 39 states; the 1969 sample contained 50,205 records from 1,103 colleges in 45 states. These colleges were distributed uniformly among the states involved except in the northeastern and the northwestern regions, which had relatively fewer colleges than did the remainder of the regions.

Results

Data from both the 2- and 4-year follow-ups were cross-tabulated to determine both the percentages of students who made the same response to an item 2- or 4-years later and the percentages of those who changed to each of the other possible responses. In all of the tables describing data from the 2- and 4-year follow-ups, (Tables 1 thru 12) the underlined percentages represent the proportion of respondents who made the same choice in the follow-up questionnaire as they had made prior to college entrance. Tables 13 thru 15 contain data from the 1966 and 1969 independent sample comparisons. Brief descriptions of each cross-tabulated variable are included in this section. More complete descriptions of each of the variables may be found in Research Report No. 52 published in August of 1972 by the American College Testing Program.

Major Field of Study

Tables 1 and 2 contain cross-tabulations of percentages of students who changed or retained their original choice of major field over the 2- or 4-year period. Examination of these tables indicates that both 2- and 4-year female students who majored in the social, religious, and educational fields were the most stable in their choice of major. The proportion of retention of major field of these students was 69% and 74% respectively. It is also of interest to note that for females in both of the follow-ups who majored in fields outside of the social, religious, and educational fields the most likely change, if a change did occur, was to the social, religious, and educational areas, especially if they were originally "undecided."

 Insert Tables 1 and 2 about here

The stability of male students in both of the follow-ups with regard to their major field of study was much more evenly distributed across the major areas than was the stability of females. Of the community-junior college males those who had originally indicated majors in the medical category or said they were "undecided" were the most likely to change to some other major area. Of the college seniors those who were most likely to change to another major field area were those who had originally indicated a major in the medical fields or had indicated that their choice was either "undecided" or "not included."

The counseling implications of these data for college student personnel workers are clear. Educational counseling, if it is to be most effective, should have as one of its major objectives the reduction in the number of unnecessary major field changes students make. It must be emphasized that the changes indicated in these data indicate only changes between major areas. That is, minor changes within ones' field are not included. Due to the magnitude of the changes that are included a reduction in the number of these major changes can only make for a more efficient use of available financial, human, and time resources.

The rate of stability was nearly one-third higher for females than males in the 4-year study. This is in agreement with the observation of a similar pattern in the 2-year study, namely, that as indicated by the distributions of major field selection, a far more restricted range of fields was initially open and attractive to these samples of females. Furthermore, as in the 2-year study, there were relatively fewer females than males who were "undecided" before entering college.

It is also of interest to note the patterns of change among the major fields. In the 4-year follow-up the largest single percentage change for males (36%) was from the medical field to the scientific field. There was no similar high percentage in the 2-year study. However, in both studies the fields which were most attractive generally for males who changed were the social, religious, and educational fields. Almost as attractive for

males who change majors, in both of the studies, were the administrative, political, and persuasive fields, especially for those who originally selected the business and finance fields; the social, religious, and educational fields; and those who were "undecided." For females, the pattern was not nearly so diffuse. These data should not be construed to imply any deliberate or even conscious policy on the part of these colleges to restrict women's choices of major. More likely, their restrictions are self-imposed and are a product of deep-rooted and pervasive social pressures regarding "appropriate" academic studies and occupations for women. The greater consistency of choice for females may also be attributable to a more restricted range of fields which are typically open and attractive to them. For example, few females indicated engineering, agricultural, technical, scientific, or business and finance fields in either the precollege or the follow-up questionnaire.

Proposed Vocation

Contained in Tables 3 and 4 are the percentages which resulted from cross-tabulations of student's original and current vocational choices. In both follow-ups the same divisions were used as with the choice of major fields, with the addition of "housewife" as a categorical choice for females. In both tables the pattern of stability and change was similar to those patterns which were in the data regarding major fields.

 Insert Tables 3 and 4 about here

Overall, 40% of the 4-year respondents were consistent in their pre-college and later vocational choices. This percentage is slightly lower than the percentage in the 2-year sample (42%). This slight difference may be expected since the 4-year sample had twice as long a period in which to reconsider their choices and to alter those choices. As in the 2-year sample females were, on the average, more consistent in their choices (46%) than were males (34%). The group consistency for males and females combined in the 2-year study, was 42%. This percentage was lower than the 47% recorded for major fields, indicating that major fields was somewhat easier to select and to maintain during the two years in junior college than was choice of vocation or occupation.

Degree Aspirations

Contained in both follow-up questionnaires was an item which asked the students to indicate the highest level of education that he or she expected to complete. Tables 5 and 6 show the 2- and 4-year percentage distribution of these responses cross-tabulated by their precollege responses. Table 5 shows that the community-junior college student's

 Insert Tables 5 and 6 about here

responses indicated that if they initially chose to aspire to less than a bachelor's degree (BA), then two years later they very likely had raised their aspirations to a bachelor's, or master's degree. This tendency

was especially evident with the male group. Of the males who made an initial choice of "less than BA," 82% chose a bachelor's or higher degree two years later.

Those students who initially chose a bachelor's degree were much more likely to have raised their aspirations than to have lowered them. Of those female students who initially expected to complete a bachelor's degree, 52% subsequently made the same choice, only 9% had lowered their aspiration, and 38% had raised it. These percentages were very similar for males. Students who originally had expectations of receiving a master's or some higher degree were more likely two years later to have chosen the same or lower degree target. The focal point of most changes was either the bachelor's or the master's degree, those having lower initial aspirations moving up to these degrees and those with the various doctoral level degrees switching primarily to the master's degree level. In general, changes in either direction were predominantly to the next degree. None of those originally choosing a doctoral level degree subsequently changed to a junior college degree; conversely, only a very small percentage of the changes were from junior college to doctoral degrees. The figure for those who retained their original degree aspirations for these community-junior college students was 43% for males and 48% for females. The overall retention rate was 45% for the total sample. The community-junior college students who changed degree aspirations were

approximately three times as likely to have revised their sights upward rather than downward; of the 1,355 respondents who changed, (excluding "Other"), 1,055 (78%) shifted to a higher degree. Evidently, community-junior colleges are to some extent accomplishing their much publicized purpose of raising the educational goals of those who enter with modest aspirations. It is of interest to note that Baird (1969) found that those students who did not raise their degree aspirations were no less talented as a group than were 2-year college students who raised their aspirations.

The data from the 4-year follow-up indicate that females who originally aimed very high were much more likely to lower their sights than were males. More than twice as large a percentage of males persisted in both the Ph. D. and M. D. degree aspirations (45% and 32%, respectively) compared with females (20% and 12%, respectively). Unfortunately, the data did not show why these females no longer aspired toward Ph. D. or M. D. degrees. It is quite probable that no one answer applies; some may simply have had enough of school after four undergraduate years; others may have made their decision for reasons related to their status as women within the society. The latter reason may have included lack of family support in cases where males would receive the required financing, marrying males who needed the support of a working wife for their own graduate programs, a lack of adequate child care facilities, or discouragement from teachers and/or advisors about the

prospects for females being able to succeed in Ph. D. or M. D. programs and then competing successfully in the profession. In any case, the guidance implications in these data for college student personnel workers are numerous.

Goals in Attending College

Both of the follow-up studies contained a question which asked the respondents to indicate their most important goal in attending college. Examination of Tables 7 and 8 reveals that 93% of the students in the 2-year follow-up initially chose as their most important goal one of the following three: "To develop my mind and intellectual ability," "To secure vocational training," or "To earn a higher income." As

 Insert Tables 7 and 8 about here

indicated by the column totals the opportunity provided by vocational and professional training was the most frequently indicated reason for attending college prior to enrolling in post-secondary institutions. The majority of these respondents retained this choice two years later.

These data support contentions which have been reported elsewhere (Garbin and Vaughn, 1971) that development of intellectual ability, securing vocational and professional training, and earning a higher income all are probably among the most important if not the most important goals in attending college.

Employment Patterns

The percentages reported in Tables 9 and 10 indicate that for males and females in both follow-ups the great majority (more than 85%) of students worked full- or part-time at some time during the period studied. Females in both the 2- and 4-year study samples who indicated that they did not expect to work were slightly more realistic than were males who did not expect to work. That is, males who did not expect to work, did,

 Insert Tables 9 and 10 about here

in fact, work at some time during their college careers more frequently than did females. Conversely, students in both samples who expected to work during their college careers were very realistic. That is, very few students, regardless of sex, did not work if they originally had expected to work.

Extracurricular Activities

Nine items on the SPS were concerned with activities that are commonly related to high school and college student life. Respondents were asked whether or not they planned to participate in any of the following: music, writing, student government, science clubs, debate, acting, departmental clubs, intramural clubs, and intercollegiate athletics.

Table 11 indicates that in almost all activities those students who initially stated that they did not plan to participate had more realistic

 Insert Table 11 about here

expectations than those who did plan to participate. The only two activities in the 2-year follow-up in which more than 13% of those who did not plan to participate actually did were departmental clubs (20% males, 29% females) and intramural athletics (22% males, 15% females). Examination of Table 12 indicates similar trends for the 4-year follow-up.

 Insert Table 12 about here

The major finding evident in these two tables should be of great interest to college personnel of all types. Students in the 2-year sample, for example, did not follow through on their plans to participate in extracurricular activities. There was not a single activity in which at least half of those who planned to participate actually did so. The only plausible explanation seems to be that either most of these activities were not available at these institutions or that they were available only on extremely selective bases. Whatever the explanation, these students before college entrance were clearly either unrealistic or uninformed about their chances of participating in college debate.

Average High School Grades

At the time of the administration of the ACT Assessment, the student is asked to give the last letter grade that he earned by the end of his junior year in high school in social studies, and English, mathematics, and natural sciences. A recent study by Maxey and Ormsby (1971) indicated that high school students' self-reported grades and non-academic activities

were accurate sources of information regardless of income level, sex, race, or high school class size. The correlations between self-reported grades and school-reported grades were found to range from .81 to .86. Table 13 contains data from the comparison study. There was a very slight shift toward higher grades in the 1969 sample but the pattern was essentially the same for both years.

 Insert Table 13 about here

ACT Composite Scores

The ACT Composite Score is an unweighted average of separate scores on the four tests which comprise the Assessment. Table 14 shows that these distributions were substantially the same for both years. However, while these distributions usually vary slightly from year to year, the observed increase of three percentage points in the

 Insert Table 14 about here

lowest category is worthy of comment. The 3-year period encompassed by these samples brought striking increases in the number of junior colleges and in the number of students enrolled in them. According to the 1967 and 1970 Junior College Directories, the total number of junior colleges in the United States increased from 837 in the fall of 1966 to 1,038 in the fall of 1969. Over the same 3-year period, the total number of junior college students increased from 1,464,099 to 2,186,272.

An avowed objective of junior colleges is to encourage attendance by students who view themselves as academic "high-risk" students in terms of the scholastic aptitude and achievement usually associated with beginning a college career. It may be that recent increases in the number of community-junior colleges is influencing the plans of enough low-scoring students to cause the indicated increase in percentage of "high-risk" students enrolled in college.

Level of Educational Aspirations

Table 15 shows the level of educational aspirations. The percentages of students who indicated master's and doctoral degrees were virtually identical between 1966 and 1969. However, there was a slight shift between 1966 and 1969 for those who indicated junior college and bachelor's degrees. The proportion that indicated aspirations to junior college degrees increased slightly while the proportion that indicated bachelor's degrees decreased by about the same amount.

 Insert Table 15 about here

Discussion

The overall impression created by these data is that many of the students with which college personnel work do change their goals and plans, sometimes drastically, during their college experience. While there are some differences between students attending 2-year institutions and students attending 4-year institutions, these differences are not usually large. The student personnel worker who perceives that each incoming

group of freshmen is not dissimilar to those in preceding years now has additional data to support his personal observation and also his hunch that next year's crop is likely to be similar to the current one. He also now has empirical support for the extensive changes he sees taking place in the educational goals and plans of many college students during their post-secondary educational experiences. Personal observations are necessarily a small fragment of the larger picture and, as such, provide limited basis for student personnel and college-wide policies. Most of the findings reported here merely buttress expected views and other available research findings; however, some new or at least uncommon insights are offered. Salient findings and their implications are reviewed below.

Males and females who indicated major fields of study in the social, religious, and educational fields; the sciences; the engineering, agricultural, and technical fields; and the arts and humanities fields seem to be relatively sure of their choices in both the 2-year and 4-year follow-ups. Those who select other major areas will, as a group most likely need more intense educational and/or vocational counseling early in their educational experience. However, less than half of the 2- and 4-year follow-up samples retained their original choice of major field. The retention rate of females' original choices was much less than the rate for males. In large proportions they abandoned their original choices of

traditionally male majors, and gravitated toward the social science and educational fields. As might have been expected, these findings also generally hold for vocational choice. Collection of the data reviewed in the present study predates the current upsurge of interest in the women's liberation movement, one of the major tenets of which is equal access with men to all academic fields and levels of occupations. A replication of the present study would be most interesting a few years hence. These data should provide benchmarks against which to measure any possible changes.

The level of education aspired to by the students in all three samples showed interesting patterns of stability and change. In the 2-year sample, aspirations before entering college were at a lower level than those measured at the end of the 2-year college career. The 2-year college experience definitely raised the educational aspirations of the students as measured at the end of the 2-year period. As noted previously, these community-junior colleges seem to be accomplishing their most publicized educational goal of raising the goals of those students who enter with modest aspirations. Conversely, the 4-year sample showed a downward trend in level of aspiration, especially for females. Also of interest in the 4-year study was a natural regression effect which showed changes from the extremes (e. g. 2-year degree and Ph. D. 's) toward the intermediate degrees.

A comparison of the level of educational aspirations and the level of degrees actually awarded in the same years (1960 and 1969) showed a "cooling out" effect, that is, the number and level of degrees awarded was markedly lower than the number and level of degrees to which these national samples aspired. These data predate the current job market situation which advises students that bachelor's and/or advanced degrees no longer insure a job. Thus it is reasonable to assume that the disparity between degrees to which these students aspired and those awarded may be even greater at the present time.

Data from both of the follow-ups support the contention that there are three basic goals toward which those who attend college are working: (a) "to secure vocational or professional training," (b) "to develop my mind and intellectual abilities" and (c) "to earn a higher income." The data in the present study not only indicate that the vocational and professional goal has the highest rate of retention of original choice but also that it attracts the largest proportion of those who change their goals during their college careers. These data underscore the fact that whatever objectives are stated in college catalogs relating to intellectual and cultural growth and personality development, the overwhelming majority of students want to secure either vocational and professional training or to earn a higher income. Furthermore, as students are drawn increasingly heterogeneous backgrounds, the trend toward

vocationalism at all levels of higher education is likely to increase. Implications for curriculum development and counseling are obvious and direct. In view of the evidence of what students want to gain from their post-secondary educational experiences, it is pertinent to ask whether or not the amount of vocational counseling and job placement typically provided by institutions of higher education, is appropriate to the desires and needs of their students.

The two follow-ups reviewed in this study showed that more than four-fifths of these college students worked at least part-time while in college. Of particular interest was the finding that nearly three-fourths of those who had indicated on the SPS that they did not expect to work noted later that they had worked at least part-time. The unrealistic attitudes of these youth should be of great concern to those of us who function in college settings. High school and college student personnel workers should be apprised of the fact and inform their students of the fact that all but a small minority who do not expect to be employed at least part-time while in college are, in fact, being unrealistic.

Of all the variables examined in the study, college-related activities have the least consistency between precollege plans and actual experiences. Data from both of the follow-ups indicated that the nine activities listed in the SPS were participated in only by a minority of the students who had planned to participate. Of those who had not planned to participate few actually did so.

The comparison study reviewed in this report highlighted the consistency from year to year in the distributions of high school grades, ACT Composite Scores, and level of educational aspiration. A similar consistency was shown between the precollege responses and the follow-up data from the two follow-up studies. However, the data collected near the end of the college career in the two follow-ups revealed that many students do significantly alter their goals and plans. Unfortunately, from this data it is not possible to ascertain the specific reasons for the changes--even if all the changes are subject to rational explanation. Remember, also, that the follow-up samples included only those who carried through their presumed intention to enter and to complete the educational career they started in the college where they first enrolled. Excluded are those who made the most drastic change of all by leaving the college in which they had enrolled before the customary or 2- or 4-year period had passed. Some of these undoubtedly transferred to other colleges, some may have graduated through acceleration of their programs, but many (perhaps most) dropped out. Thus the changes recorded here for students in the follow-up studies are probably conservative estimates by virtue of the fact that the samples included only those who remained in the college in which they originally enrolled.

As with any descriptive study, the findings here raise a number of important research questions. For example, to what extent, are the

changes indicated here simply maturational, e.g., did these students find that the list of college related activities they found so attractive while still in high school prove to be of little interest three or four years later? To what extent are changes such as in major fields a matter of knowledge and experience with many academic areas acquired while in college? To what extent are changes primarily due to unforeseen circumstances, e.g., the death of a parent while a student is in college may drastically alter original plans regarding many student needs or behaviors while in college. To what extent do the changes simply result from inadequate and unrealistic planning and/or knowledge of what to expect in college? To what extent are the changes and accommodations due to shortcomings in the overall structure of the educational and vocational counseling and/or extracurricular programs available in institutions such as those represented in this study?"

In regard to the last question, higher education personnel at all levels may find it possible to infer a link between some of the more drastic changes in student's plans and needs for improved curricula and/or counseling programs. In any case, it is hoped that the findings presented here will provide information that will be useful to those who are charged with the responsibility of assisting students in the planning and development of their careers.

References

- American Association of Junior Colleges. 1967 Junior College Directory. Washington, D. C.: Author, 1967.
- American Association of Junior Colleges. 1970 Junior College Directory. Washington, D. C.: Author, 1970.
- Baird, L. L. Patterns of educational aspiration. ACT Research Report No. 32, Iowa City, Iowa: The American College Testing Program, 1969.
- Carmody, J. F. A four-year follow-up of entering students' responses to the student profile section: A validation study. Unpublished research paper, Iowa City, Iowa: The American College Testing Program, 1971.
- Carmody, J. F., Fenske, R. H., & Scott, C. S. Changes in goals, plans, and background characteristics of college-bound high school students. ACT Research Report No. 52, Iowa City, Iowa: The American College Testing Program, 1972.
- Fenske, R. H. Sources of student satisfaction in the college experience. In P. S. Wright (Ed.), Institutional research and communication in higher education: Tenth annual forum 1970. Berkeley: The Association for Institutional Research, 1970.

- Fenske, R. H., & Carmody, J. F. A comparison of the distribution of responses to student profile section items of two independent samples. Unpublished research paper, Iowa City, Iowa: The American College Testing Program, 1971.
- Garbin, A. P., & Vaughn, D. Community-junior college students enrolled in occupational programs: Selected characteristics, experiences, and perceptions. Columbus, Ohio: The Center for Vocational and Technical Education, 1971.
- Lutz, S. W. Do they do what they say they will do? ACT Research Report No. 24, Iowa City, Iowa: The American College Testing Program, 1968.
- Maxey, E. J., & Ormsby, V. J. The accuracy of self-report information collected on the ACT test battery: High school grades and items of nonacademic achievement. ACT Research Report No. 45, Iowa City, Iowa: The American College Testing Program, 1971.
- Shevel, L. R., & Carmody, J. F. Two-year follow-up of student profile section responses of junior college students: A validation study. Unpublished research paper, Iowa City, Iowa: The American College Testing Program, 1970.

Table 1

Percentages of Students in the 2-Year Follow-up Who Changed or Who Retained Their Precollege Choice of Major Field of Study

Current choice	Precollege choice--males							
	1	2	3	4	5	6	7	8
1. Soc, rel, educ	47% ^a	10%	9%	6%	6%	16%	8%	21%
2. Admin, polit, pers	17	54	31	3	4	9	12	25
3. Bus & finance	6	16	44	2	5	6	2	10
4. Science	9	2	4	57	9	15	3	11
5. Engr, ag, tech	4	4	1	17	61	10	11	14
6. Medical	1	2	1	4	2	34	0	2
7. Arts & humanities	8	5	5	4	3	3	51	5
8. Undecided	6	5	4	6	5	7	8	12
9. Other	3	1	1	2	5	1	6	4
N	172	183	140	113	397	89	93	327

Current choice	Precollege choice--females							
	1	2	3	4	5	6	7	8
1. Soc, rel, educ	69% ^a	25%	24%	20%	24%	24%	24%	45%
2. Admin, polit, pers	3	28	3	2	3	0	2	4
3. Bus & finance	6	21	58	2	7	7	3	16
4. Science	3	4	1	41	2	2	2	6
5. Engr, ag, tech	0	0	1	5	0	0	0	0
6. Medical	2	4	1	15	46	8	1	6
7. Arts & humanities	13	15	4	2	9	9	63	9
8. Undecided	3	2	3	5	3	4	4	14
9. Other	2	2	4	7	5	4	1	4
N	379	53	136	41	<10 ^b	132	115	141

^a Numbers indicate the percentages of those in column who two years later gave the row response.

^b In this, and all subsequent tables, percentages in columns containing less than ten students are eliminated.

Table 2

Percentages of Students in the 4-Year Follow-up Who Changed or Who Retained Their Precollege Choice of Major Field of Study

Current choice	Precollege choice--males								
	1	2	3	4	5	6	7	8	9
1. Soc, rel, educ	47%	16%	15%	14%	8%	16%	14%	24%	22%
2. Admin, polit, pers	19	43	30	7	8	15	13	12	23
3. Bus & finance	3	23	37	9	10	7	3	6	15
4. Science	10	4	9	48	12	36	3	0	16
5. Engr, ag, tech	4	3	2	14	53	6	5	23	11
6. Medical	1	1	0	2	0	14	1	6	3
7. Arts & humanities	14	7	4	5	7	4	59	23	7
8. Not included	1	0	0	0	0	1	1	0	1
9. Undecided	1	3	3	1	2	1	2	6	2
N	291	331	180	375	550	263	191	17	434

Current choice	Precollege choice--females								
	1	2	3	4	5	6	7	8	9
1. Soc, rel, educ	74%	37%	50%	31%	36%	27%	80%	56%	
2. Admin, polit, pers	5	29	13	5	2	2	5	0	6
3. Bus & finance	1	7	24	5	1	1	1	0	2
4. Science	3	0	0	35	12	12	3	0	8
5. Engr, ag, tech	0	0	2	1	1	1	0	0	1
6. Medical	1	0	0	2	37	37	0	0	4
7. Arts & humanities	15	21	10	15	10	10	61	20	20
8. Not included	0	6	0	0	1	1	0	0	0
9. Undecided	1	6	1	0	1	1	3	0	3
N	958	72	62	110	<10	209	261	15	279

Table 3

Percentages of Students in the 2-Year Follow-up Who Changed or Who Retained Their Precollege Vocational Choice

Current choice	Precollege choice--males									
	1	2	3	4	5	6	7	8	9	
1. Soc, rel, educ	59% ^a	10%	10%	11%	8%	10%	11%	18%	21%	
2. Admin, polit, pers	11	49	22	7	4	8	12	8	17	
3. Bus & finance	4	11	50	7	4	3	4	7	10	
4. Science	4	1	5	36	6	4	3	2	3	
5. Engr, ag, tech	4	4	3	21	57	6	13	25	13	
6. Medical	1	1	0	4	4	52	0	6	3	
7. Arts & humanities	4	4	4	4	2	1	43	6	3	
8. Other	4	5	1	2	4	6	1	15	6	
9. Undecided	10	15	6	9	10	10	13	13	24	
N	169	135	110	56	317	79	76	125	416	
Current choice	Precollege choice--females									
	1	2	3	4	5	6	7	8	9	10
1. Soc, rel, educ	73% ^a	42%	21%	36%	26%	50%	32%	44%	56%	
2. Admin, polit, pers	1	17	3	0	2	3	10	3	0	
3. Bus & finance	5	10	46	0	7	4	8	13	6	
4. Science	1	2	3	14	1	0	1	1	0	
5. Engr, ag, tech	1	0	0	7	0	0	0	0	0	
6. Medical	3	2	2	21	44	1	7	4	19	
7. Arts & humanities	5	7	1	0	3	30	13	8	6	
8. Other	2	10	1	0	3	1	10	1	0	
9. Undecided	5	7	12	14	9	7	11	17	0	
10. Housewife	4	2	11	7	5	4	7	9	13	
N	342	41	120	14	129	74	71	179	16	

^aNumbers indicate the percentages of those in column who two years later gave the row response.

Table 4

Percentages of Students in the 4-Year Follow-up Who Changed or Who Retained Their Precollege Vocational Choice

Current choice	Precollege choice--males									
	1	2	3	4	5	6	7	8	9	
1. Soc, rel, educ	60%	18%	13%	19%	14%	16%	14%	19%	22%	
2. Admin, polit, pers	$\frac{12}{4}$	$\frac{47}{16}$	28	10	11	14	15	14	16	
3. Bus & finance	4	2	$\frac{39}{3}$	7	8	8	6	8	14	
4. Science	5	2	2	30	6	5	1	6	8	
5. Engr, ag, tech	2	2	2	11	$\frac{42}{2}$	5	8	27	10	
6. Medical	1	1	1	3	2	32	2	5	4	
7. Arts & humanities	5	4	2	4	4	$\frac{3}{3}$	37	5	6	
8. Other	7	10	9	9	8	11	$\frac{10}{10}$	6	15	
9. Undecided	4	1	3	6	6	6	8	11	6	
N	299	254	174	194	461	263	145	146	350	
Current choice	Precollege choice--females									
	1	2	3	4	5	6	7	8	9	10
1. Soc, rel, educ	76%	35%	54%	48%	37%	51%	39%	48%	53%	
2. Admin, polit, pers	$\frac{3}{1}$	$\frac{22}{6}$	4	6	2	3	11	0	3	
3. Bus & finance	1	0	$\frac{24}{2}$	2	2	2	3	5	2	
4. Science	1	0	0	6	3	2	2	0	3	
5. Engr, ag, tech	0	0	0	0	0	0	1	5	1	
6. Medical	1	0	0	11	$\frac{39}{2}$	2	6	5	4	
7. Arts & humanities	5	9	4	4	24	10	10	0	8	
8. Not included	7	15	4	12	$\frac{9}{9}$	6	10	5	14	
9. Housewife	4	3	7	2	3	3	4	24	3	
10. Undecided	3	9	2	10	5	4	14	$\frac{9}{9}$	9	
N	914	65	55	52	<10	215	136	21	350	

Table 5

Percentages of Students in the 2-Year Follow-up Who Changed or Who Retained Their Precollege Degree Aspirations

Current choice	Precollege choice--males							
	JC	BA	MA	PhD	MD	DDS	LLB	Other
Junior college degree	16%	4%	3%	0%	0%	0%	0%	8%
Bachelor's	$\frac{60}{18}$	$\frac{51}{38}$	22	13	16	20	19	14
Master's	1	4	$\frac{58}{9}$	29	46	27	22	47
PhD	1	0	3	$\frac{50}{4}$	6	0	11	11
MD	1	0	1	0	$\frac{23}{0}$	13	0	3
DDS	1	0	1	0	0	33	0	3
LLB	1	1	2	4	6	$\frac{0}{0}$	47	6
Other	3	1	2	0	3	7	$\frac{0}{0}$	8
N	350	736	316	48	32	15	36	36

Current choice	Precollege choice--females							
	JC	BA	MA	PhD	MD	DDS	LLB	Other
Junior college degree	40%	9%	6%	<10	<10	<10	<10	42%
Bachelor's	$\frac{42}{15}$	$\frac{52}{36}$	31	31	50	50	50	39
Master's	0	2	$\frac{58}{1}$	58	0	0	0	10
PhD	0	0	0	0	0	0	0	0
MD	3	0	4	0	0	0	0	10
Other	288	505	201	<10	12	<10	<10	31
N	288	505	201	<10	12	<10	<10	31

Table 6

Percentages of Students in the 4-Year Follow-up Who Changed or Who Retained Their Precollege Degree Aspirations

Current choice	Precollege choice--males									
	<BA	BA	MA	PhD	MD	DDS	LLB	BD	Other	
Bachelor's	48	33	18	7	9	21	14	5	19	
Master's	38	51	55	35	30	45	28	21	48	
PhD	8	9	16	45	18	11	16	42	21	
MD	1	1	2	3	3	4	0	0	2	
DDS	0	0	0	1	5	9	0	0	3	
LLB	3	3	6	6	2	6	40	0	2	
BD	1	1	1	1	0	2	1	26	0	
Other	1	1	2	3	4	2	1	5	5	
N	200	1185	759	158	152	53	90	19	58	

Current choice	Precollege choice--females									
	<BA	BA	MA	PhD	MD	DDS	LLB	BD	Other	
Bachelor's	50	34	17	13	21	21	17	10	23	
Master's	48	61	73	58	50	50	39	10	39	
PhD	1	3	8	20	15	15	4	0	4	
MD	0	0	0	2	12	12	0	0	0	
DDS	0	0	0	0	0	0	0	0	0	
LLB	1	0	1	0	3	3	0	0	0	
BD	0	0	0	0	0	0	0	0	0	
Other	1	1	1	7	0	0	0	0	0	
N	197	1199	506	45	34	10	10	10	23	

Table 7

Percentages of Students in the 2-Year Follow-up Who Changed or Who Retained Their Precollege Goal in Attending College

Current choice	Precollege choice--males			
	1	2	3	4
1. Develop int. ability	47%	26%	22%	29%
2. Voc and prof. training	$\frac{32}{13}$	$\frac{54}{14}$	34	$\frac{35}{12}$
3. Earn higher income	7	5	$\frac{37}{6}$	24
4. Other		846	223	$\frac{24}{85}$
N	425			

Current choice	Precollege choice--females			
	1	2	3	4
1. Develop int. ability	51%	32%	37%	35%
2. Voc and prof. training	$\frac{34}{3}$	$\frac{58}{3}$	48	$\frac{33}{3}$
3. Earn higher income	13	8	$\frac{7}{8}$	29
4. Other		600	27	$\frac{29}{75}$
N	352			

Table 8

Percentages of Students in the 4-Year Follow-up Who Changed or Who Retained Their Precollege Goal in Attending College

Current choice	Precollege choice--males				
	1	2	3	4	5
1. Develop int. ability	42	26	21	29	33
2. Secure voc. prof. training	33	47	32	35	41
3. Earn higher income	9	12	32	0	13
4. Learn how to enjoy life	14	12	12	31	9
5. Other	2	3	3	5	4
N	817	1,463	237	123	624

Current choice	Precollege choice--females				
	1	2	3	4	5
1. Develop int. ability	42	26	32	26	41
2. Secure voc. prof. training	37	57	36	37	37
3. Earn higher income	1	2	14	4	4
4. Learn how to enjoy life	16	12	13	24	12
5. Other	4	3	5	9	6
N	773	1,051	22	130	955

Table 9

Percentages of Students in the 2-Year Follow-up Who Changed or who Retained Their Precollege Decision to Seek Employment While in College

Precollege choice--males		
	<u>Expect to work</u>	<u>Do not expect to work</u>
<u>Current choice</u>		
Did not work	9%	27
Sometimes part-time	32	38
Always part-time	35	20
Both full- and part-time	17	6
Sometimes full-time	3	4
Always full-time	4	2
N	1110	464

Precollege choice--females		
	<u>Expect to work</u>	<u>Do not expect to work</u>
<u>Current choice</u>		
Did not work	12%	32
Sometimes part-time	35	44
Always part-time	38	18
Both full- and part-time	10	3
Sometimes full-time	3	2
Always full-time	2	1
N	638	411

Table 10

Percentages of Students in the 4-Year Follow-up Who Changed or Who Retained Their Precollege Decision to Seek Employment While in College

	Precollege choice--males	
	<u>Expect to work</u>	<u>Do not expect to work</u>
<u>Current choice</u>		
Did not work	13%	25
Sometimes part-time	37	42
Always part-time	25	16
Both full- and part-time	22	15
Sometimes full-time	1	1
Always full-time	2	1
N	1654	1037
	Precollege choice--females	
	<u>Expect to work</u>	<u>Do not expect to work</u>
<u>Current choice</u>		
Did not work	15%	36
Sometimes part-time	40	44
Always part-time	29	12
Both full- and part-time	15	7
Sometimes full-time	0	1
Always full-time	1	0
N	1007	1001

Table 11

Percentages of Students in the 2-Year Follow-up Who Actually Participated in College Related Activities

<u>Precollege choice--males</u>		
<u>Current choice</u>	<u>Will participate</u>	<u>Will not participate</u>
Music	45	4
Writing	18	5
Student government	20	6
Science clubs	18	4
Debate	9	7
Acting	24	4
Departmental clubs	24	20
Intramural athletics	48	22
Intercollegiate athletics	42	6
<u>Precollege choice--females</u>		
<u>Current choice</u>	<u>Will participate</u>	<u>Will not participate</u>
Music	47%	11
Writing	24	6
Student government	27	13
Science clubs	13	4
Debate	2	1
Acting	20	5
Departmental clubs	39	29
Intramural athletics	38	15
Intercollegiate athletics	25	5

Table 12

Percentages of Students in the 4-Year Follow-up Who realized and Who did not Realize Their Precollege Expectation to Participate in Certain College Related Activities

<u>Precollege choice--Males</u>		
<u>Current choice</u>	<u>Will participate</u>	<u>Will not participate</u>
Music	47%	8
Writing	27%	9
Student government	34	16
Science clubs	29	9
Debate	11	2
Acting	22	5
Departmental clubs	59	50
Intramural athletics	73	42
Intercollegiate athletics	35	5
<u>Precollege choice--females</u>		
<u>Current choice</u>	<u>Will participate</u>	<u>Will not participate</u>
Music	48%	12
Writing	26	8
Student government	35	17
Science clubs	19	6
Debate	8	2
Acting	21	6
Departmental clubs	70	51
Intramural athletics	47	18
Intercollegiate athletics	15	3

Table 13

Distribution of High School Grades

Year	High school grades						
	0-2.00	2.01-2.50	2.51-3.00	3.01-3.50	3.51-4.00	Total	
1966	N	9132	8735	7632	4406	2446	32351
	%	28.2	27.0	23.6	13.6	7.6	100.0
1969	N	13489	13072	12510	7115	4019	50205
	%	26.9	26.0	24.9	14.2	8.0	100.0

NOTE--Letter grades converted to numeric scale where 2.00="C", 4.00="A".

Table 14

Distribution of ACT Composite Scores

<u>Year</u>	ACT composite scores						Total
	1-15	16-19	20-22	23-25	26-36		
1966	N	5685	8296	7651	6378	4341	32351
	%	17.6	25.6	23.6	19.7	13.4	99.9
1969	N	10300	12905	10817	9140	7043	50205
	%	20.5	25.7	21.5	18.2	14.0	99.9

Table 15

Distribution of Level of Educational Aspiration

<u>Year</u>	Level of educational aspiration					<u>Total</u>
	Jr. coll. degree	Bachelor's degree	Master's degree	Doctoral degree		
1966	N	3785	17782	7585	3103	32255
	%	11.7	55.1	23.5	9.6	99.9
1969	N	6518	26657	11562	5088	49825
	%	13.1	53.5	23.2	10.2	100.0