

# THE AIMS AND NEEDS OF COLLEGE VOCATIONAL EDUCATION DROPOUTS

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For a number of years the administrators of Louisiana Tech University have been concerned with the mounting dropout rate among its undergraduate students, estimated to be as high as 40 percent overall.

Recent studies conducted with a relatively small segment of the total student enrollment revealed that there was no significant correlation (.43) between achievement test scores and success in an academic program. ACT scores from 120 of 194 students who resigned during the spring quarter of 1971 showed that 34 percent scored 20 to 24 on the tests and 13 percent scored 25 to 36. This indicated that many of those dropouts were capable students with the intellectual capacity to succeed. These data created renewed interest in the perplexing question of why students drop out of college.

In the fall of 1971 the department of Vocational Agricultural Education applied to the Research Coordinating Unit of the Louisiana State Department of Education for a grant to investigate the "Aims and Needs of College Vocational Education Dropouts". The project was funded and scheduled to run for eleven months, beginning January 1, 1972.

The subjects of the research were full-time students who interrupted their program in Vocational Agriculture, Home Economics, and Business Education at Louisiana Tech during the academic years 1966-67, 1967-68, 1968-69, 1969-70 and 1970-71.

One hundred eighty, the total number of dropouts from the three curricula involved, were included in the study.

As a basis for comparison 79 persons who graduated successfully during the same period were randomly selected to participate in the study. One hundred percent of those meeting the guidelines described above were contacted.

The research was designed to locate, interview and determine the present status of those students who failed to complete the requirements for graduation in their respective curricula. It sought to determine why they found it necessary or desirable to leave school and to secure their opinions as to what actions could have prevented their failure.

The specific objectives of the research were:

- (1) To locate former university students who failed to complete their college programs in vocational education.
- (2) To determine their present occupational status and level of educational achievement.
- (3) To interview those dropouts in order to secure their opinions as to what actions the university might have taken to prevent their failure.
- (4) To accumulate and evaluate personal background information that might influence success or failure in college.
- (5) To evaluate the importance of vocational guidance functions in career orientation.
- (6) To secure the subjects' opinions on several aspects of vocational education of less than college grade.
- (7) To develop criteria by which potential dropouts might be identified by a "dropout profile" as determined from data collected.

Data collected in this study were of two distinct types, necessitating two special forms of treatment. Since many of the reactions to the interview were in the form of opinions, responses were grouped according to frequency of occurrence and reported in tabular form as percentages. Clusters of responses may seem redundant in some tables and would appear to lend themselves to more meaningful reporting by condensing them into fewer categories. However, in order to establish a high level of confidence, it was felt that personal interpretations by the research staff should be held to a minimum to eliminate bias and maximize reliability of the data.

Personal and background data believed to have positive influence on student success or failure were subjected to a more

sophisticated treatment.

The basic procedure that dominates this interpretation is that of comparison. The groups compared were: (1) the group that continued in the vocational programs until graduation and (2) the group that dropped out of the vocational programs. The latter group consists of two sub-groups: those who transferred to another degree program (the persisters) and those who did not. In the interpretation process, the persisters were given considerable attention as a group of major interest. However, this group was not compared to the dropout group, since one group is a sub-group of the other. Hence the basic pattern was to compare the graduates with (a) the total dropout group and (b) the sub-group of dropouts called the persisters.

Most statistical procedures center around one of two approaches, a study of differences and a study of relationships. The chief concern in this study lies in the area of differences. If several groups are to be compared, the usual procedure is the chi-square or analysis of variance. However, if only two groups are to be compared, the simple "t" test is the one that is commonly used. In this interpretation, the "t" test and chi-square were the principal techniques used. In the area of relationships, there were some situations in this analysis that were suited to some specialized procedures. The one that was of primary value was the coefficient of contingency. This is a relatively crude measure, frequently associated with the chi-square procedure. In several situations, both chi-square and coefficient of contingency (C) are shown.

It was interesting to note at the outset that approximately one-third of the dropouts and 55 percent of the graduates had made the decision to attend college prior to high school. It would be pure speculation to say that an early decision to attend college contributed to an individual's chances for a successful completion of a college curriculum, but it does point up the need for guidance and counseling services in elementary and junior high school years.

An unexpected and gratifying statistic emerged when 68 percent of the graduates, as compared to 37 percent of the dropouts, reported that their parents had played major roles in their plans for higher education. Other interesting and significant data relating to the family emerged with an analysis of family size and sibling status. A chi-square procedure was used to test the hypothesis that there were no discernible patterns among the dropouts, D; persisters, P; and graduates, G, as to the size of family. A chi-square of 22.12 with 12 degrees of freedom resulted in this analysis. This value met the test of significance at the .05 level of confidence. While the difference was not notably apparent, it is worthy of attention that the average number of siblings in each group was: group D, 3.6; group P, 3.1; and group G, 2.96. Hence, we can state with some confidence the dropouts, as a group, were associated with larger families than the graduates, as a group.

A chi-square procedure was used to test the hypothesis that groups D, P and G followed essentially the same patterns of dispersion according to rank in family. This procedure yielded a chi-square 42.79 with 12 degrees of freedom. This value meets the test of significance at the .01 level of confidence. Two areas are worthy of note: (1) only six members of group D were first-born, compared with an expected or pure chance number of 22; and (2) 34 members of group G were firstborn, compared with a pure chance number of 21. In general, on the basis of these analyses, one can reach the conclusion that the graduates as a group were associated more than the dropouts with smaller families and with a rank of firstborn.

As in previous limited studies, it was discovered that the high school average is one of the best predictors of success in college

and that achievement test scores are not reliable indications of probable success in college programs. There were no significant differences in the graduates' achievement test scores when compared with the other groups. However, Group G was a much more homogeneous group with a standard deviation of 4.0 as compared to 9.9 for group D and 12.0 for group P.

**A Summary of Findings Between Graduates and Dropouts**

High School Averages	"t" test significant at .01 level.
College Averages	"t" test significant at .01 level.
Rural-urban Background	Chi-square indicated no significant differences between groups.
Size of High School	Chi-square indicated a significant difference at .01 level (favoring larger schools).
Occupational Classification of Fathers	Chi-square indicated a significant difference at .01 level (favoring the "higher" classified occupations).
Source of Financing Education	Chi-square significant at .05 level of confidence (favoring those adequately financed by parents and intermittent work).
Club Offices Held in High School	Chi-square indicated no significant differences.
Composite Scores on ACT	"t" test not significant.
SCAT Scores	"t" test not significant.

Of particular interest to those considering dropping out of college and for persons advising students, is that 31.62 percent of the dropouts reported incomes less than \$5,000 for the previous year. No graduates reported in this category.

The summary and recommendations for this study dealt mainly with the areas of guidance, counseling and career orienta-

tion. Fifty-five percent of the dropouts indicated a lack of awareness of the requirements of their curriculum or of the career for which they were preparing as contributing factors for their withdrawal.

Fifty-eight percent of group P reported that they had been involved in a discipline that did not fulfill their expectations for a satisfactory career. Eighty percent of the graduates who transferred into vocational programs expressed dissatisfaction with their first career choice.

An attempt to develop a student dropout profile is a statistical assessment of a group of diverse individuals who are reacting to various pressures, under different conditions at one point in time and hence, would be subject to challenge.

However, based upon the relatively small population sample represented in this study, it would appear that students whose educational achievements deviate significantly from the population norm are poor academic risks.

Students from large families with marginal financial resources are less likely to succeed in a college program than those from smaller families with adequate resources.

Individuals with vague or unrealistic career objectives are likely victims of attrition.

An "only child" has a high propensity for failure in a college program.

Marriage and its subsequent problems reduce a student's probability for success in college.

The absence of positive motivation for achievement contributes to failure in academic programs.

Graduates of smaller high schools are greater academic risks statistically than those from larger high schools.

Assuming these observations to be valid, a student exhibiting one or more of the above characteristics could be identified as dropout prone and possibly in need of individual guidance and counseling services.

**NACTA TREASURER'S REPORT  
December 31, 1972**

**INCOME**

Balance on Hand January 1, 1972.....		\$ 711.68
Cash Sources		
Individuals.....	\$ 755.00	
Institutional Active.....	625.00	
Institutions.....	2,097.00	
Library Subscriptions.....	286.64	
NACTA Convention.....	115.95	
	<u>3,879.59</u>	
Transfer of Time Deposit.....	1,025.16	
		<u>4,904.75</u>
Total Cash Income.....		5,616.43

**EXPENSES**

NACTA Journal:		
Printing.....	3,422.35	
Postage.....	384.16	
John A. Wright (Editor).....	300.00	
Other Printing.....	326.19	
NACTA Speaker Expenses.....	190.00	
Miscellaneous.....	64.97	
		<u>4,687.67</u>

BANK BALANCE December 31, 1972.....		928.76
Time Deposits.....		4,450.42
Total Cash Sources.....		<u>5,379.18</u>
Knights Fund (California Federal Savings and Loan).....		1,309.81
Total Assets.....		<u>\$6,688.99</u>