STUDY HABITS OF FAILING FRESHMEN

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Tan PROBLEM

Many quantitative analyses have been reported which dealt with the number of failing students, the amount of time students spend in studying, as correlated with the success of studying, or grades, and other such factors. There have been fewer studies dealing with the qualitative analyses of the academic activity of college students. Recent discussions by prominent educators have brought to light much quantitative data regarding the study habits of college students. These discussions have concluded that there is no relationship between the amount of time spent in **study and the quality of accomplishment. In other words, students who spend the largest amount of time studying frequently learn least. Such discussions concluded at this point without considering the qualitative aspects of the study habits of college students. It seems obvious from the conclusion reached that academic success depends as much upon the quality as upon the quantity of study.**

The following pages present a discussion of the qualitative characteristics of the study habits of 94 students who were freshmen during the session of 1931-32 at the Mississippi State College for Women. These 94 students were reported by their teachers, at the conclusion of the first midsemester, the first semester, or the second mid-semester, as having less than a passing average in one or more subjects. Each of these 94 failing students was interviewed one or more times, were given reading tests, and their study habits were surveyed with the use of a mimeographed schedule. The validity of the information regarding the study habits of this group of failing students depends upon the honesty of the students concerned. The following directions were placed on the first page of the survey of

"In the following pages you will find a series of questions dealing with study habits. You are asked to answer each question in such a way that the Division of Educational Research' will be able to get from your answer a complete description of the way in which you study.

"The sole purpose of this survey is to discover the inefficient habits of study, if any, which you are now using that probably contribute something to the unsatisfactory status of your academic work at the present time.

"When you have answered all the questions asked about your study habits, you will be informed of any difficulty that you may now be experiencing due to study difficulties. Recommendations will be made to you indicating ways of avoiding these difficulties that, if put in practice, will do much toward removing the difficulties indicated.

"Remember that the sole purpose of this survey is to help you. For that reason, ANSWER EACH QUESTION AS TRUTHFULLY AS YOU CAN. To cover up your true habits of study makes it impossible for this office to aid you along these lines.

"The privacy of your name and your answers will be strictly respected."

In addition to securing the above-mentioned information from the students, the teachers under whom the students made failing grades were asked to give their opinions regarding the factors that probably contributed to the unsatisfactory work of the student.

It is the purpose of this discussion to present an analysis of the data secured from the sources mentioned and to suggest opportunities that will perhaps enable the adviser and the student to eliminate at least some of the factors that are thought to have caused unsatisfactory work.

THE DATA

Characteristics of Failing Students. The 94 failing students of the session 1931-32 are, as a group, somewhat inferior in intelligence and in information acquired in high school to the entire freshman class and to the freshmen who did not make failing grades in any subject. The class as a whole is somewhat inferior to the members of the class that did not

r The writer was Director of Educational Research at the

17 make any failing grades during the session. This is shown in Table I which shows the percentile ranks of the intelli

gence quotients of the failing students, the entire class, and non-failing students. Table II presents the same data regarding the students' knowledge of English grammar, as mealTABLE I

PERCENTILE RANKS OF I.Q.'s DERIVED FROM OTIS INTELLIGENCE TEST

PERCENTILE RANKS	Failing STUDENTS	ENTIRE CLASS	NON-FAILING STUDENTS
	100	119	124
	124	95	113
	118	119	90
111			
117			
	118 85	109 115	117 80
	108 113	116 75	107 112
	115 70	106 111	114 65
	104 110	113 60	103 109
	112 55	102 108	111 50
	101 107	110 45	
	99 106	109 40	98 104
	108 35	97 103	107
30		96 102	106
25		95 100	105
20		93	99 104
15		92	96 102
10		90	94 101
'5		87	91 100
0		80	80
		90 S.D.	7.75 8.05 7.4
Number of stu			
dents	94	236	142

ured by the Cross Test. Table III presents information for the three groups coming from the Markham Vocabulary Test. Table IV presents the results of the American Council History Test.

An analysis of Tables I to IV brings out three facts:

1. The scores made by failing students entitling them to a given percentile rank, are in each test, inferior to the score made by the entire class entitling them to the same percentile rank. Furthermore, the scores made by these stu-

dents are inferior to those made by the non-failing students entitling them to the same percentile rank. Table I, for instance, shows that the 50th percentile rank for failing students represents an I. Q. of 101; for the entire class it represents an I. Q. of 107; and for the non-failing students it represents an I. Q. of 110.

TABLE II

PERCENTILE RANKS IN CROSS GRAMMAR TEST

PERaEaTna FAILING ENTIRE Nox-rAIaxG SANKS STUDENTS CLASS STUDENTS

100 169 174 174 95 158 166 168 90 151 163 165 85
147 160 163 80 144 157 161 75 142 154 159 70 140
151 157 65 137 149 155 60 134 147 153 55 132 144
151 50 130 142 149 45 128 140 147 40 126 138 146
35 125 135 144 30 124 132 142 25 122 128 140 20
120 126 137 15 113 123 134
10 107 118 127
5 101 107 121

0 95 95 100 S.D. 15.90

16.75 14.35 Number of stu

dents 94 236 142 2. The standard deviation is generally conceded to be the most useful measure of dispersion in dealing with groups of data. The standard deviation is computed for the three groups of students in each table and appears as next to the last line of each table. A measure of dispersion in data of this type is a good measure of homogeneity or. heterogeneity of the groups involved. A study of Tables I to IV will show that the standard deviation is smaller for non

19 failing students than for failing students, and, with one exception (American History) it is smaller for each of these

than for the entire class. The sizes of these standard deviations indicate relative homogeneity of the groups. The standard deviation of failing students is second in size, indicating that they are less homogeneous, and the standard TABLE III

PERCENTILE RANKS IN VOCABULARY TEST

PERCENTILE FAILING ENTIRE NoN-rAmIxa RAxss STUDENTS CLASS STUDENTS

100 104 139 139 95 98 108 110 90 93 103 107
85 91 100 104
80 87 97 101
75 84 95 98
70 81 93 97
65 79 90 95
60 77 88 94
55 75 86 92
50 73 84 90
45 71 82 88
40 70 80 86
35 68 76 85
30 66 74 83
25 65 71 81
20 61 68 78
15 54 65 73
10 49 60 69
5 44 51 62
0 35 35
55 S.D. 15.5 17.80 14.75

Number of stu

dents 94 236 142 deviation for the entire class is the largest of the three, indicating that the entire class is more heterogeneous than the

two smaller groups. Table I, for instance, shows that the standard deviation of the I. Q. of the entire class is 8.05; whereas the standard deviation of the failing students is 7.75, and of the non-failing students, 7.4. This coupled with the percentile ranking means that insofar as intelligence alone is concerned the non-failing students have a higher

average than the other groups. The failing students with a standard deviation of 7.75 rank second in homogeneity, and the entire class is more heterogeneous insofar as intelligence is concerned than the two smaller groups in question. This same line of reasoning may be applied to Tables II, III, and IV.

TABLE I V

PERCENTILE RANKS IN AMERICAN HISTORY TEST PERCRNTHA FAILING ENTiRR NoN-niuwG EANBS STUDRNTS CLASS STUDENTS

				100	89 114	114
	95		68	86		89
90	61	75	83			
85	54	69	76			
80	52	65	71			
75	50	62	67			
70	47	57	65			
65	44	56	62			
60 -	42	53	60			
55	39	50	58			
50	38	48	56			
45	36	45	53			
40	35	43	50			
35	33	41	48			
30	30	39	45			
25	28	36	43			
20	25	32	41 -			
15	21	28	37			
10	17	24	29			
		5 11	20	24		
		0	5	5		
			20 S.D.	10.75	20.10	7,4.75
Number of stu						
dents	94	236	142			

3. Some failing students undoubtedly have the native ability and the high school training to do acceptable college work. Table I, for instance, shows that one student who has an I. Q. of 119 was failing at one of the times considered in this study. An I. Q. of 119 is undoubtedly sufficient for the successful performance of college work. Tables II, III, and IV indicate that there is a large number of students with sufficient high school training, as measured by the .tests in questions, to do acceptable college work.

TABLE V

~'- INSTRUCTORS' OPINIONS REGARDING CAUSES OF FAILURE IN FRESHMAN CLASS OF 1931-32 CAUss or FAnURz QUZNf

1	Insufficient industry shown by student.	56
2	Student uses an inferior technique of studying.....	50
3 .	Insufficient high school preparation (quantity)	43
4	Student possesses apparent inability to read under.	
standing1y..... 39 Intellectual immaturity.....		35 .8.5
Excitable when working under pressure.....		31
6.5	Student has difficulty in taking notes on class lectures or other materials given out in the class room, making it appear that she does not profit from the general exercises of the class	
	31 Course too advanced for student's present academic level.....	
	23	
a	Student seems unable to interpret scientific data correctly..... 18	
llO'	Failure to pay attention in class.....	16 Student's
previous high school training (Quality) hinders rather than helps in present academic situation 13		
11.5	Class room inefficiency due to undue haste in labo	
	ratory work, written exercises, etc.....	13
13	Student possesses an apparent difficulty in keeping	
-	a notebook on outside reading, laboratory work,	
	etc	12
14.5	Student seems unable to manipulate laboratory apparatus..... 11	
14.5	Student seems unable correctly to observe labora	
	tory materials and reactions.....	11
16	Student has difficulty in recording observations and	
	experimental data correctly.....	10
17.5	Student possesses an indifferent, don't care attitude	

These students who have the native ability and the educational background to do successful college work, but who fail one or more subjects, constitute the most serious problem in educational guidance. They can be spared the embarrassment of failing and the waste of time and money if they can be properly motivated. The work of the guidance counselor in dealing with this group of students is primarily a problem of motivation. They are good college material and can become successful college students if their advisers can get them to work. Their work must be done efficiently if maximum results be obtained.

Teachers' Opinions Regarding Failing Students. Each teacher who reported a failing grade for a member of this group of 94 freshman students was asked to give her opinion regarding the probable cause of the student's failure. These opinions have been summarized and are presented in Table V. In summarizing instructors' opinions, each probable cause of a student's failure was counted only once for a given student. If, for instance, a student received a failing grade under two teachers, and they both reported the same cause of failure, this cause was counted only once.

An analysis of the probable cause of student failures, as reported by the teachers of the failing students, will indicate that many of these causes can be eradicated, and many of these students will, then, perhaps, be able to do successful college work. Some of the causes of failure reported by the teacher can be eradicated in the class room if the teacher can give a small amount of time to such general problems as how the student should keep her notebook on class discussion, on outside readings, on laboratory work, etc. This type of guidance can be accomplished best by the classroom teacher rather than the freshman adviser. It is generally believed that the first few days of each semester, when used in orientation lectures, introducing the students to the type of work they are to do, how they can best do it, and the standards their work will be judged by, will help many students. The adviser can be of service

frequently mentioned cause of difficulty, "Insufficient industry shown by student."

Study Habits of Failing Students. This report does not contain any evidence regarding the study habits of successful college students. If this information were available it would be possible to compare the study habits of successful college students with the study habits of unsuccessful college students. Some recent investigations in study habits have concluded that the better college students frequently do not observe the best procedure in studying. It may possibly be said of this group that they succeed in spite of poor study habits. It stands to reason, however, that students who are unsuccessful should observe certain well-established principles of efficient study.

The following summary presents in the order of importance, as determined by the frequency of mention, certain specified study difficulties noted in the study habits of the failing students, which, if remedied, will, in all probability, be of benefit to the students in removing their academic difficulties. All of the difficulties mentioned were found in at least ten per cent of the 94 students considered in this report. Some of these difficulties were discovered in the study habits of half of the group.

1. Failure to observe a time schedule. These students do not have any particular time for studying each day, nor when they sit down to study a given subject do they allow themselves a given amount of time for the completion of the work. It is highly probable that unsuccessful students using this procedure find that so many other things make demands on their time that they do not get to study as much as they should.

2: Failure to use the proper technique in reading an assigned lesson. These students characteristically devote their first reading to a mastery of details and the second reading to getting a general outline of the material discussed. The better student, as a rule, reverses this procedure and lets the first reading be concerned with the outline and the second

reading with details. This criticism does not consider the rate or comprehension of reading, for that will be discussed later, but deals with the use of reading as a tool in studying.

3. Failure to review at short intervals the larger essentials of the material covered to date in the subject failed.

4. Failure to spend two or three minutes before the formal recitation hour in recalling the material learned while studying.

5. Poor physical conditions and surroundings while studying, including environmental conditions, posture, noise from roommates, etc. This is frequently associated with the student's failure to start studying immediately after placing herself in the proper place for studying-for example, a student goes to her room, sits at her desk, picks up a book, and, instead of beginning work immediately, postpones it some ten or fifteen minutes day dreaming, chatting with a roommate, or doing something else entirely unrelated to studying.

6. Failure to take notes in class on lectures, laboratory work, in organized form, or to organize them after class.

7. Failure or inability of the student to concentrate. As the student studies her attention wanders back and forth between the material being studied and other things. This is usually accompanied by the student's failure to begin again the study process when she discovers her attention has wandered.

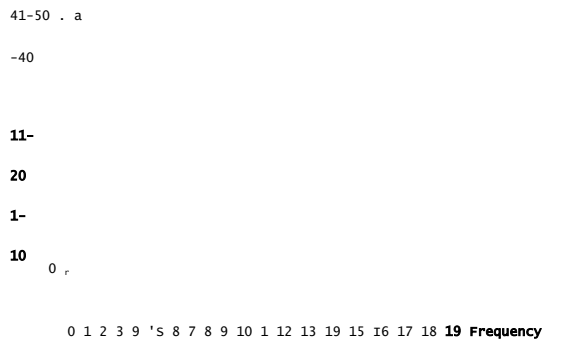
8. Failure to inform their teachers of class room difficulties and request their aid.

9. Failure, when they begin work in preparation of a given lesson, to know exactly what they are expected to learn from this material. This difficulty frequently may be avoided if the teacher will spend more time in making assignments in order to be sure that each student knows exactly what is to be accomplished in the preparation of a given lesson.

10. Failure, after they have completed their study of a

11. Failure to relax for a minute or so every forty-five minutes or an hour when working under pressure. The mus
cles of the eye become fatigued and the body becomes cramped from remaining in one position and the student frequently becomes fatigued physically but thinks she is mentally fatigued and unable to go on.

Reading Difficulties of Failing Freshmen. The preceding unit of the discussion referred among other things to a stu



1. Reading Scores of 88 Failing Students in Whipple's High School and College Reading Test.

dent's proper use of reading as a tool in acquiring information, and it was pointed out that many students who are good readers, mechanically speaking, make poor use of their reading ability. In collecting information regarding the reading ability of failing students use was made of Whipple's High School and College Reading Test, which is generally conceded to give an acceptable measure of a student's ability in this field. Scores coming from Whipple's reading test are interpreted by means of the percentile rank. Students having a percentile rank of 20 or less are such poor readers that they will have difficulty in acquiring a college