

DOCUMENT RESUME

ED 099 030

JC 740 471

**AUTHOR** Jelfo, Donald T.  
**TITLE** An Investigation of the Relationship Between Student Verbal Abilities and Performance in U.S. History 151 Classes.  
**INSTITUTION** Nova Univ., Fort Lauderdale, Fla.  
**PUB DATE** 15 Apr 74  
**NOTE** 29p.; Practicum submitted to Nova University in partial fulfillment of requirements for Doctor of Education degree

**EDRS PRICE** MF-\$0.75 HC-\$1.85 PLUS POSTAGE  
**DESCRIPTORS** Able Students; \*College Students; \*Community Colleges; Comparative Analysis; Grade Point Average; \*History Instruction; Low Ability Students; Persistence; Post Secondary Education; Practicums; \*Reading Ability; \*Verbal Ability  
**IDENTIFIERS** \*Cuyahoga Community College; Ohio

**ABSTRACT**

The purpose of this study was to investigate the relationship between student verbal ability and performance in an introductory United States history class at a comprehensive community college. For the purposes of this study, performance was defined as grade point average and rate of persistence. Because of degree requirements, students at Cuyahoga Community College must successfully complete three courses in either history, political science, or social science, all of which are verbally demanding. Despite the fact that the student body is heterogeneous, as is often the case, with regard to socioeconomic background, reading and writing skills, and goals, instruction is quite traditional, emphasizing lecture and discussion. Thus, all students receive basically the same instruction. Two sample populations were selected for the study. Those U.S. history students who were concurrently enrolled in English 101 classes were defined as verbally able. Those who were concurrently enrolled in English 091, a remedial class, were defined as verbally deficient. With a sample of 121 English 101 students and 41 English 091 students, mean grade point averages and withdrawal rates were calculated. Through the use of a t-test, a significant relationship was established between student grade point average and verbal ability. A chi-square test established that there was no significant relationship between verbal ability and withdrawal rates from U.S. history classes. To enable students with poor verbal skills to succeed in U.S. history classes, faculty in the history department should write a program of individualized instruction and self-instructional learning packages at a less demanding reading level. (Author)

ED 0999030

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  
THE OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

BEST COPY AVAILABLE

**AN INVESTIGATION OF THE RELATIONSHIP BETWEEN  
STUDENT VERBAL ABILITIES AND PERFORMANCE IN  
U.S. HISTORY 151 CLASSES**

by

**Donald T. Jelfo, M.A.**

**Cuyahoga Community College, Eastern Campus**

**A PRACTICUM REPORT PRESENTED TO NOVA UNIVERSITY  
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF DOCTOR OF EDUCATION**

**NOVA UNIVERSITY**

**APRIL 15, 1974**

JC 740 471

## TABLE OF CONTENTS

### Chapter

I.	THE TITLE . . . . .	1
II.	THE STATEMENT OF THE PROBLEM . . . . .	1
III.	THE HYPOTHESIS . . . . .	1
IV.	BACKGROUND AND SIGNIFICANCE OF THE STUDY . . . . .	1
	Review of Literature (1)--The Problem at Eastern Campus (7)--Recent Studiew Dealing with Placement Scores and Student Performance (9)--Objective of the Study (10)	
V.	DEFINITION OF TERMS . . . . .	11
VI.	LIMITATIONS OF THE STUDY . . . . .	13
VII.	BASIC ASSUMPTIONS . . . . .	14
VIII.	PROCEDURES FOR COLLECTING DATA . . . . .	14
IX.	PROCEDURES FOR TREATING DATA . . . . .	15
X.	DATA RESULTING FROM THE STUDY . . . . .	16
XI.	ANALYSIS OF DATA . . . . .	19
XII.	CONCLUSIONS AND SIGNIFICANCE . . . . .	21

## LIST OF TABLES

Table	Page
1. Frequency Distribution of Student Grades and Withdrawals . . . . .	17
2. Proportional Distribution of Student Grades . . . . .	17
3. Classification of Observed Withdrawal Records of English 101 and 091 Students . . . . .	19
4. Expected Withdrawal of English 101 and English 091 Students Assuming Independence of Classification . . . . .	20
5. Calculation of Chi Square . . . . .	21

**LIST OF ILLUSTRATIONS**

<b>Figure</b>		<b>Page</b>
1.	Frequency Polygon of Proportional Distribution of Student Grades . . . . .	18

I. THE TITLE

An Investigation of the Relationship between Student Verbal Abilities and Performance in U.S. History 151 Classes.

II. THE STATEMENT OF THE PROBLEM

Is there a significant difference in the mean U.S. History 151 class grade point average of those students concurrently enrolled in English 101 and those students concurrently enrolled in English 091 classes? Is there a significant difference in the proportion of English 091 students withdrawing from U.S. History 151 classes and the proportion of English 101 students withdrawing from U.S. History 151?

III. THE HYPOTHESIS

There is a significant difference in the mean U.S. History 151 grade point average between those students whose verbal abilities place them in English 101 and those students whose verbal abilities place them in English 091. There is a significant difference in the proportion of English 101 students withdrawing from U.S. History 151 and the proportion of English 091 students withdrawing from U.S. History 151.

IV. BACKGROUND AND SIGNIFICANCE OF THE STUDY

Review of Literature

In 1947 President Harry S. Truman's Commission on Higher Education made the following recommendation: "Equal educational opportunities for all purposes, to the maximum of their

individual abilities and without regard to economic status, race, creed, color, sex, national origin, or ancestry, is a major goal of American democracy. Only an informed, thoughtful, tolerant people can maintain and develop a free society." (X, p. 14) The implementation of this open-door philosophy during the last two decades has brought about a phenomenal increase in community college enrollments. In California 80 percent of college age youth enter community junior colleges, in Illinois 54 percent, in New York 50 percent, and in Florida 69 percent. (XVII, p. 3) But for the open-door principle to be genuine it must imply more than an admissions policy. Certain supportive policies such as low-cost tuition and financial aid in the form of scholarships, grants, and work opportunities must exist. (X, p. 27) To prevent the open-door from becoming a revolving door, the community college must assume unusual responsibilities for its students. This implies more extensive counseling services and the development of curriculum and instructional processes that meet the needs of its diverse student population. (XVII, p. 9) As stated by Moore, the community college commitment to the open-door means providing each student "the best education possible commensurate with his needs, effort, motivation, and abilities." (XI, p.5) Historically, however, the community college has failed to live up to the implications of its philosophy.

In particular, the high risk student (other names for him include marginal, remedial, low-achieving, non-traditional, and educationally disadvantaged) has been neglected according

to critics. "The overwhelming majority of two-year institutions neither develop the same commitment, establish the same priorities, nor utilize the same precision and creativity in developing the programs and curricula for the educationally disadvantaged as they do for the able student." (XI, p. 5) Instructional processes, as well, are geared to the learning styles of the traditional or college transfer student even though he is becoming an increasingly smaller proportion of the total student population. Despite community college claims of innovation and student-centeredness, "little provision is made for differentiating between the verbally and non-verbally oriented student, nor between the self-starter and the other-directed student. (II, p. 76) This condition is in part responsible for the high attrition rate and low grade point average for the disadvantaged student. In many institutions the drop-out rate of first year students is about 50 percent. The proportion of disadvantaged who do not persist is unknown.

Compounding this problem is the fact that the community college population of the 1970's will be composed of increasingly greater numbers of non-traditional students. (II, p.111, VI, pp. 12-15) Although this group is by no means homogeneous, certain descriptive commonalities do exist. These students have histories of failure or only moderate success in high school, score in the lower one-third on college placement and admissions tests, and rate low in such personality traits as autonomy and intellectual disposition. This type of community



college student is more likely than the traditional student to come from lower social and economic backgrounds, have parents who did not attend college, and be a member of a minority ethnic or racial group. He comes to the community college for practical reasons, he views a degree as a ticket to economic and social mobility.

One of the reasons why these students fail in college may be that "most academic curricula are heavily dependent upon verbal skills." (VI, p. 123) The college environment places a continuous emphasis upon the communication of ideas through reading, writing, speaking, and listening. Success is dependent, in part, upon the ability to read and comprehend vast amounts of material and to write clear statements of his ideas. Without these skills, even a highly intelligent student will encounter difficulty. (XIV, p. 34) It is no accident, therefore, that college admissions examinations place a heavy emphasis on the testing of language skills. Together with high school grades, tests of verbal skills provide a fairly reliable prediction of success or failure in the existing college curriculum.

This condition of increasing numbers of high risk students coming to the community college because of its open-door policy has caused most of these institutions to establish remedial or developmental education programs. In most cases, the curriculum of these programs includes courses in English composition and reading and in basic mathematics. The objectives of these courses is to give the student the skills

for entry into a "regular" college program. According to Roueche, "remedial English, remedial reading, and remedial mathematics are probably the most offered courses in America's two-year institutions." (XVII, p. 4) This is indirect proof of the increasing numbers of high risk students. While most evaluations of these remedial programs are hardly complementary, Roueche has uncovered a small number that are moderately successful. If the main features of these programs were generally adopted, the community college could close the gap between its philosophy and its performance. The characteristics of these successful programs are: (XVII)

- (1) The faculty are volunteers and hold a total commitment to helping students succeed.
- (2) A wide variety of methodologies and teaching strategies were employed. Most of them actively involved the student in the learning process.
- (3) Measurable objectives for each course were stated and course content was broken into small manageable tasks.
- (4) The development of student self-concept was stressed.
- (5) There was a strong institutional commitment to the program. There was no dependence upon external sources for funds.
- (6) The program was separated from the academic transfer program. Often it included a full general education component in addition to remedial English and mathematics.

The characteristic of separateness was viewed by Roueche as a necessary evil. As yet, the community college teacher does not possess the instructional techniques to facilitate learning for all types of student. Often he is unwilling or untrained for accepting the responsibility for student learning. Thus, many instructors are unsuited for the effective teaching of non-traditional students and should not be teaching them.

Another approach, however, may be in order; one that views all education as developmental. "The advent of Bloom's concept of mastery has brought with it a shift away from emphasis on making a student eligible for entry into a program toward emphasis on helping him achieve whatever goals he may commit himself to at his own rate and in his own way." (II, p. 108) Bloom contends that possibly 95 percent of all students can learn a subject at a mastery level of competency if objectives are clear, if enough time is allowed, and if instructional methods and materials are matched with student learning styles and interests. (I, pp. 43-46) On the other hand, if students are presented exactly the same instruction, in terms of quality and time for learning, the end result will be a "normal" distribution. Bloom further observes "for the student in our highly verbal schools, it is likely that the ability to understand instruction is determined primarily by verbal ability and reading comprehension. These two measures of language proficiency are significantly related to achievement in the majority of subjects and they are highly correlated with grade point average at the high school or college level. What this suggests is that verbal ability determines some general ability to learn from teachers and instructional materials." (I, p. 48) Moreover, while it is possible to alter an individual's verbal ability by appropriate training, such as a remedial English program, there are limits to the amount of change that can be produced. Compensatory programs in

community colleges are not going to make many new students into traditional students. (VI, p. 157) Thus, using the Bloom framework, the instructor must offer alternative styles of materials, he should try to individualize instruction. Remediation is not a separate program; it is integrated into the existing academic transfer, general education, or occupation programs.

#### The Problem at Eastern Campus

At Cuyahoga Community College the developmental education program consists of several remedial courses in English and mathematics and free tutorial assistance in subject matter such as history, psychology, or philosophy. The latter is funded through State of Ohio Educational Grants. English placement test scores are used to assign students either to the remedial English composition courses (091,092,093), the remedial reading courses (095,096,097), or the academic transfer English Composition 101. The remedial courses carry college credit but only the composition courses may be used to satisfy degree requirement. Students earning an Associate in Applied Science Degree must complete one of the following sequences:

- a. English 091, 092, 093
- b. English 091, 101, 102
- c. English 101, 102, 103
- d. English 091, 092, Speech 101

Students en suing an Associate in Arts Degree must complete either b or c above or:

- e. English 091, 092, 093, and 101

Students enrolled in the remedial mathematics and English courses are allowed and, in fact, encouraged to enroll in any other course they desire. To obtain either an Associate in Arts or Applied Science Degree, the student must also complete three courses in a social science sequence (e.g. U.S. History 151, 152, 153). The nature of the curriculum and instruction in the social science courses are by no means remedial.

In the U.S. History courses students are confronted with large amounts of reading in materials that are typical of those used in four-year institutions. Essay examinations and research papers are the standard tools of evaluation for all students. Instructors employ the lecture and discussion method to facilitate learning. Although some audio-visual materials and simulation games are used, the instructional strategies used are not consciously designed to meet the various and specific learning styles of students. Everyone receives the same style of instruction. It is aimed basically at the traditional, verbally able student and at the expense of the non-traditional, verbally deficient student.

The record of student achievement, in terms of grade point average and persistence, has been analyzed subjectively but never analytically at the Eastern Campus of Cuyahoga Community College. History instructors, this writer included, have noticed that during the first quarter of the sequence grades are generally low for those who persist and the withdrawal rate is between 30 and 40 percent. Typically, 20 percent withdraw

before the first exam. In the latter two quarters grades improve and few students withdraw. No study has been made to identify what types of students withdraw or receive low grades. Many of the instructors have presumed that the lack of verbal ability was the cause of poor student performance. These instructors have generally looked to tutorial assistance and the English remedial courses as the panacea to assist students with verbal skill deficiencies.

#### Recent Studies Dealing with Placement Scores and Student Performance

Numerous studies have been made during the past decade to establish the relationship between placement test scores and performance in college. Generally researchers contend that such exams as the ACT, which are primarily verbal, when combined with high school grades are a reliable predictor of grade point averages and persistence. (IV, VI, XVI) Using other testing devices, Donna Jean Corlett found a significant relationship between study habits, library skills, vocabulary, and reading comprehension and student achievement at the University of Portland. (V) At the high school level, an investigation of the relationship of reading achievement to academic performance was made by Dee Norman Lloyd. With a sample of 3611 sixth grade students he tested their reading abilities and compared those results with the later behavior of those same students in high school. Underachievers (low score) in reading, as a group, were found to be significantly lower in performance than average

(middle scores) or overachievers (high reading scores) in other scholastic areas. Underachievers also had the highest attrition rate. (IX)

Some researchers, however, have pointed out other factors in addition to verbal ability as playing an important causal role in student performance. Among such forces listed are motivation, social and economic background, sex, and psychological factors. (VI, VII, XII)

The number of studies dealing with the relationship between verbal abilities and community college student performance in social science courses, however, are few. Erwin Jost found a significant relationship between high verbal aptitude and success in social science courses at the College of San Mateo. The study did not deal with attrition rates, however, nor the performance of the high risk student. (VIII) Another, more recent study, claimed that research is still needed to investigate the relationship between reading scores and grades. The authors correctly stated that the dropout and flunk out rate at large municipal, open-door institutions of higher education is about 50 percent. The writer felt that reading deficiencies are related to this condition but causal relationships and workable solutions had not been identified. (XIII)

#### Objective of the Study

The objective of this study is to investigate the relationship between community college student verbal ability and performance in U.S. History courses. The finding of a

significant relationship could have major implications for the nature of instruction in history courses and for the scope and structure of the developmental education program. Since all degree-oriented students must take a social science sequence, it is imperative that the course be designed for all student learning, rather than for just a segment of the student population. A withdrawal rate of 40 percent in such courses is alarming, but it may be even worse for those students with low verbal scores. In light of the research of Bloom and Roueche, change is possible. If faculty can become motivated and receive the training to change instruction to meet the needs and learning styles of students, the open-door can become a reality.

V. DEFINITION OF TERMS

For the purpose of this study the following definitions of terms have been used:

**Non-traditional Student:** Any community college student whose English placement test scores would assign him to a remedial English course. Other names for this type of student that have been used with the same meaning are: educationally disadvantaged, marginal, high risk, and New Student.

**Withdrawal:** Any student whose name still appears on the instructor's class list after the second week of instruction who (1) later submits a student withdrawal form to the Admissions Office, (2) without permission of the instructor,



does not complete course requirements, and does receive a grade of Incomplete (I), (3) receives a (W) grade from the instructor.

**Essentials of Written Communication 091:** A three hour lecture course offered at Cuyahoga Community College. It is the first quarter of a three quarter sequence in remedial English composition. At the Eastern Campus, instructors employ lecture, discussion, and laboratory experience as methods of instruction. The 1972-73 Cuyahoga Community College catalogue description is the following: "Intensive practice in written communication and basic language skills." Placement is by department. English 091 students who successfully complete course requirements may enter either English 092, which is a continuation of 091 and is remedial, or English 101. The latter choice requires permission of instructor or departmental exam. Most four-year colleges do not allow transfer credit for English 091 or English 092.

**College Composition 101:** This course is the first quarter of a three quarter sequence offered by the English Department of Cuyahoga Community College. It is a three hour lecture course needed for graduation requirements for the Associate in Arts Degree and for most students working toward an Associate in Applied Science Degree. It can be used for transfer credit to four-year institutions. The 1972-73 College catalogue description is the following: "Study

and practice in the principles of good writing."

Placement is by department examination.

U.S. History 151: A three hour lecture course offered at Cuyahoga Community College. It is the first quarter of a three quarter sequence that can be used to satisfy the social science requirement for the Associate Degrees. The course may be used for transfer credit to four-year institutions. The 1972-73 College catalogue description is the following: "American development from discovery, colonial foundations, movement for independence, and early years of the Republic through the Jackson Administration." There are no course or examination prerequisites.

U.S. History 151 Grade Point Average: A student's grade in U.S. History 151 based upon a four-point system.

#### VI. LIMITATIONS OF THE STUDY

- (1) The size of the sample population may prevent a generalization of the findings.
- (2) The findings may be important only for the Eastern Campus of Cuyahoga Community College and perhaps only for its history department.
- (3) There were no provisions to control such factors as motivation or emotional problems.
- (4) No provision was made to analyze the data according to age, sex, military service, course load, previous college

experience, or number of hours spent working either full-time or part-time on a job outside of class.

- (5) No provision was made to hold constant the variable of instructors; thus, some instructors included may have used different grading systems.

#### VII. BASIC ASSUMPTIONS

For the purpose of this study the following assumptions have been made:

- (1) All instructors of History 151 hold the same standards of course objectives mastery.
- (2) The English placement exams are accurate indicators of verbal ability.
- (3) Students in English 091 have significantly less verbal ability than students in English 101.
- (4) U.S. History 151 is a course requiring a high level of verbal skill mastery.

#### VIII. PROCEDURES FOR COLLECTING DATA

- (1) Through the use of Departmental and Student Records, the names and grades of those students enrolled in History 151 classes at Eastern Campus of Cuyahoga Community College during the 1972-73 academic year and the Fall and Winter quarters of the 1973-74 academic year were obtained.
- (2) Through the use of Departmental and Student Records, the names of those students who were enrolled in U.S. History 151 and were concurrently enrolled in either English 101

or English 091 classes were obtained.

- (3) The above was done physically by viewing the records listed above.

#### IX. PROCEDURES FOR TREATING DATA

Two problems were tested in this study.

Problem 1: Is there a significant difference in the mean U.S. History 151 class grade point average of those students concurrently enrolled in English 101 and those students concurrently enrolled in English 091 classes?

##### Procedures for Problem 1:

- (1) A two-tailed t-test was used to analyze the data and test for significance of difference between the two means.
- (2) The null hypothesis is that the two sample means do not differ significantly.

$$H_0 : \bar{X}_1 = \bar{X}_2$$

- (3) The alternative hypothesis is that the two sample means do differ significantly.

$$H_a : \bar{X}_1 \neq \bar{X}_2$$

- (4) The desired level of significance ( $\alpha$ ) was .05.

Problem 2: Is there a significant difference in the proportion of English 091 students withdrawing from U.S. History 151 classes and the proportion of English 101 students withdrawing from U.S. History 151?

Procedures for Problem 2:

- (1) A Chi Square ( $\chi^2$ ) test was used to analyze the data and test for significance of difference between the two sample proportions.
- (2) The null hypothesis is that the difference between the proportion of English 091 students withdrawing and the proportion of English 101 students withdrawing is zero.
- (3) The alternative hypothesis is that the proportion of English 091 students withdrawing is significantly different from the proportion of English 101 students withdrawing from U.S. History 151.
- (4) The desired level of significance ( $\alpha$ ) was .05.

X. DATA RESULTING FROM THE STUDY

The number of students who concurrently enrolled in History 151 and either English 091 or English 101 during the 1972-73 academic year and the Fall and Winter quarters of the 1973-74 academic year was 162. Contrary to expectations, the number concurrently enrolled in English 101 was much larger than those enrolled in English 091. The frequency distribution of student grades and withdrawals are indicated in Table 1. The proportion of persisting students who received each grade is reported in Table 2 and Figure 1 below:

TABLE 1  
FREQUENCY DISTRIBUTION OF STUDENT GRADES  
AND WITHDRAWALS

Classification	A	B	C	D	F	W	Total
English 101 Students	15	29	36	12	5	24	121
English 091 Students	1	5	13	8	4	10	41

TABLE 2  
PROPORTIONAL DISTRIBUTION OF STUDENT GRADES

Classification	A	B	C	D	F
English 101 Students	.15	.30	.37	.12	.05
English 091 Students	.03	.16	.42	.26	.13

ONLY COPY AVAILABLE

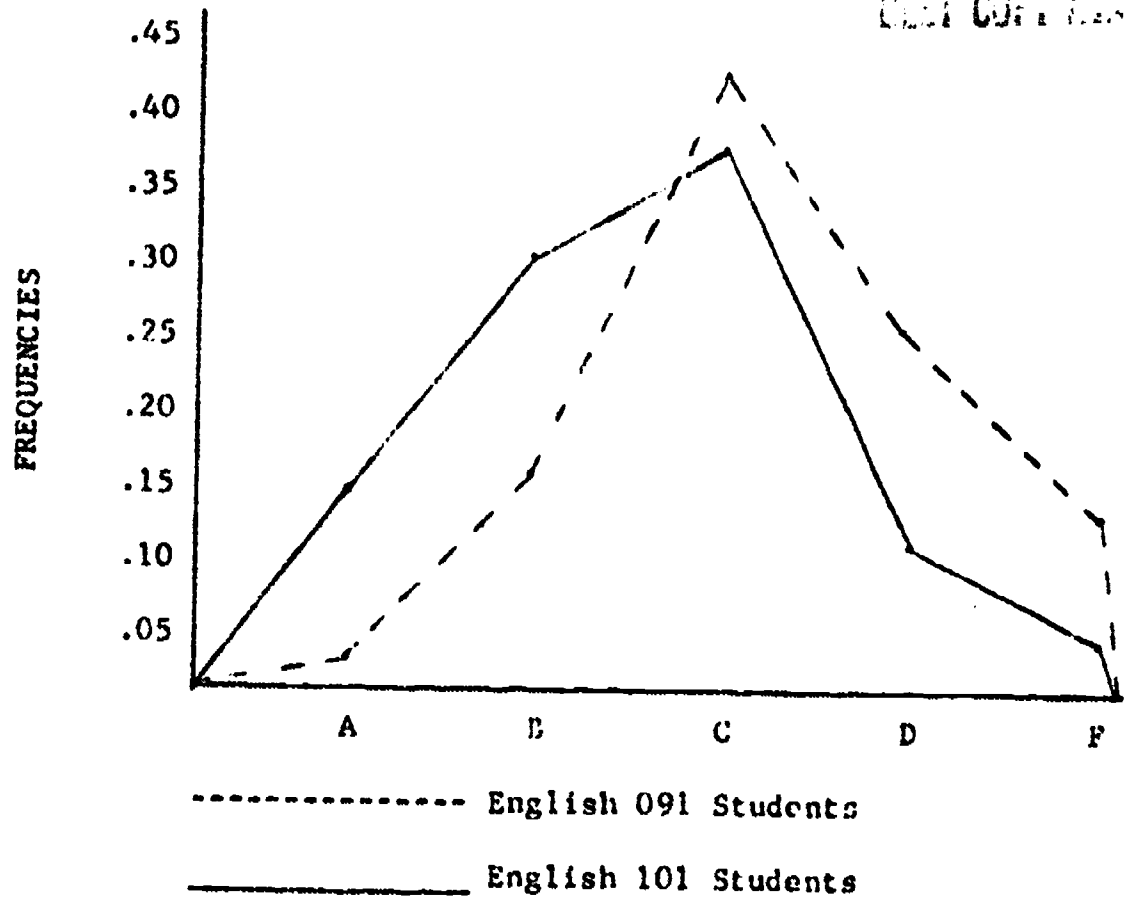


Figure 1. Frequency Polygon of Proportional Distribution of Student Grades

It should be noted that the proportion of English 101 students earning a grade of C or higher was 82 percent. The proportion of English 091 students earning a grade of C or higher, however, was only 61 percent. The mean grade point average for the persisting English 101 students was 2.38; for the persisting English 091 students it was 1.71.

The number of students withdrawing from History 151 who were concurrently enrolled in English 101 and English 091 is reported in Table 3.

CLASSIFICATION OF OBSERVED WITHDRAWAL RECORDS OF ENGLISH 101 AND 091 STUDENTS  
f<sub>o</sub>

Classification	Withdrawal	Persisted	Total
English 101 Students	24	97	121
English 091 Students	10	31	41
Total	34	128	162

XI. ANALYSIS OF DATA

A t-test was used to test for significance of difference between the mean grade point averages of the two groups. The degrees of freedom for the test is 126 (df = n<sub>1</sub> + n<sub>2</sub> - 2). The critical t value at α = .05 is 1.98 for a two-tailed test. Therefore, H<sub>0</sub> can be rejected and H<sub>a</sub> can be accepted if the calculated t > 1.98. The formula used was:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

where:       $\bar{X}_1 = 2.38$                        $S_1 = 1.06$                        $n_1 = 97$   
                   $\bar{X}_2 = 1.71$                        $S_2 = 1.01$                        $n_2 = 31$   
                   $t = 3.35$

Since the calculated t exceeds the critical value of t, the null hypothesis can be rejected and the alternative hypothesis can be accepted; there is a significant difference between



the mean grade point averages of the two groups of students. A Chi Square test was used to test for a significant difference between the two proportions of withdrawing students. The degrees of freedom for the test was  $1 \text{ df} = (n - 1)(c - 1)$ . The critical  $\chi^2$  value for 1 degree of freedom at  $\alpha = .05$  is 3.84. Therefore,  $H_0$  can be rejected and  $H_a$  can be accepted if  $\chi^2 > 3.84$ .

$$\chi^2 = \sum \left[ \frac{(f_o - f_e)^2}{f_e} \right]$$

$f_o$  = observed frequency  
 $f_e$  = expected frequency

The observed frequencies were reported in Table 3. The expected frequencies, assuming independency of classification, are listed in Table 4 and Table 5.

TABLE 4  
 EXPECTED WITHDRAWAL OF ENGLISH 101 AND  
 ENGLISH 091 STUDENTS ASSUMING INDEPENDENCE  
 OF CLASSIFICATION  
 $f_e$

Classification	Withdrawal	Persisted	Total
English 101 Students	25.4	95.6	121
English 091 Students	8.6	32.4	41
Total	34.0	128.0	162

TABLE 5  
CALCULATION OF CHI SQUARE

Cell	Observed Frequencies $f_o$	Expected Frequencies $f_e$	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$
101 withdrew	24	25.4	-1.4	1.96	.08
101 persisted	97	95.6	1.4	1.96	.02
091 withdrew	10	8.6	1.4	1.96	.23
091 persisted	31	32.4	-1.4	1.96	.06
					$\chi^2 = .39$

Since the calculated value of  $\chi^2$  does not exceed the critical value  $\chi^2$ , the null hypothesis cannot be rejected; there is no significant difference between the proportion of English 101 students withdrawing and the proportion of English 091 students withdrawing.

**XII. CONCLUSIONS AND SIGNIFICANCE**

It has been found that a significant relationship exists between verbal ability and grade point average in U.S. History classes. Whereas 82 percent of the verbally able student sample earned a grade of C or higher, only 61 percent of the verbally deficient did so. The latter group, in fact, had a mean grade point average that was less than a C. For many of

these students, therefore, the open door admissions policy was an invitation to frustration and personal failure.

It should be pointed out, however, that this study does not claim that verbal ability is the sole determinant or even the most significant determinant of student performance. Rather it stressed that verbal ability is an important one and, fortunately, one that can be dealt with by careful, planned instruction. The research of Bloom, Roueche, and others contends that all students can learn to a mastery level given enough time and appropriate, often individualized, instruction.

Withdrawal rates, on the other hand, were not found to be significantly related to verbal ability. Other factors such as time conflicts, job situations, financial and personal problems may account for the high rate that nonetheless exists. The study did uncover, however, that the number of verbally deficient students enrolling in U.S. History classes was much lower than those who are verbally able. Perhaps fear of failure in such a verbally demanding course as U.S. History may account for this low enrollment and thus, indirectly affect the withdrawal rate. The study also did not investigate what proportion of each sample finished all three quarters of the U.S. History sequence which would have been a more rigorous test of persistence.

It is unlikely that the social science graduation requirement stating that all two-year degree students must complete three courses of either history, political science, or

introductory social science will be modified. It is equally unlikely that students will be tracked or grouped according to verbal ability. Classes at Cuyahoga Community College, in all likelihood, will remain heterogeneous. Also, it is apparent from the studies of K. Patricia Cross that the number of students enrolling at community colleges with verbal skill deficiencies will increase. On the basis of those conditions, and the findings of this study, the following recommendations are made:

- 1) During the first week of class the instructors of U.S. History classes should identify through English Department records or a specially prepared diagnostic instrument the verbal abilities of their students.
- 2) Tutors and paraprofessionals in the history department should make special efforts to reach and assist those students identified as verbally deficient.
- 3) The instructors of U.S. History classes should develop a program of individualized instruction for their students. Self-instructional learning packages written at a more appropriate reading level and an audio-tutorial program are possible ways to implement such a charge.
- 4) The campus should undertake a study of withdrawal rates and attempt to identify the forces that contribute to the problem.

BIBLIOGRAPHY

1. Bloom, Benjamin, J. Thomas Hastings, and George F. Madaus, Handbook on Formative and Summative Evaluation of Student Learning. New York: McGraw-Hill, 1971.
2. Bushnell, David S., Organizing for Change: New Priorities for Community Colleges. New York: McGraw-Hill, 1973.
3. Cohen, Arthur and associates, A Constant Variable. San Francisco: Jossey-Bass, Inc., 1971.
4. Coker, David L., "Diversity of Intellectual and Non-Intellectual Characteristics Between Persisting and Non-Persisting Students Among Campuses," ERIC Educational Documents Abstracts, 1970, ED 033 645.
5. Corlett, Donna Jean, "A Correlational Analysis of Study Skills and Attitudes, Library Skills, and Reading Skills with Academic Success of Education Students at the University of Portland," ERIC Educational Documents Abstracts, 1970, ED 036 396.
6. Cross, K. Patricia, Beyond the Open Door. San Francisco: Jossey-Bass, Inc., 1971.
7. Hall, Lincoln, "Selective Variables in the Academic Achievement of Junior College Students from Different Socio-economic Backgrounds," Journal of Educational Research, Vol. 63, October, 1969, pp. 60-62.
8. Jost, Erwin, "High Verbal Aptitude and Grade Achievement," ERIC Educational Documents Abstracts, 1968, ED 012 580.
9. Lloyd, Dee Norman, "Reading Achievement and its Relationship to Academic Performance, Part I: Reading Deficiency in Elementary Schools and Relationships to Secondary School Performance," ERIC Educational Documents Abstracts, 1970, ED 034 660.
10. Mouroe, Charles R., Profile of the Community College. San Francisco: Jossey-Bass, Inc., 1972.
11. Moore, William Jr., Against the Odds. San Francisco: Jossey-Bass, inc., 1970.
12. Packword, William T., "Motivation and Junior College Achievement," Journal of Educational Research, Vol. 66, March, 1973, pp. 299-301.

13. Pedrini, Bonnie and D.T., "An Open Admissions Policy, Reading Ability, and Grades," ERIC Educational Documents Abstracts, 1973, ED 068 031.
14. Pitcher, Robert and B. Blaushild, Why College Students Fail. New York: Funk & Wagnalls, 1970.
15. Rice, Gary, "An Examination of the Earned Grade Point Distribution Between Successful and Dropout Students at Yakima Valley College," ERIC Educational Documents Abstracts, 1970, ED 036 293.
16. Richards, James M. and Sandra Lutz, "Predicting Student Accomplishment in College from the ACT Assessment," ERIC Educational Documents Abstracts, 1968, ED 013 628.
17. Roueche, John E. and R. Wade Kirk, Catching Up: Remedial Education. San Francisco: Jossey-Bass, Inc., 1973.
18. Roueche, John E. and John C. Pitman, A Modest Proposal: Students Can Learn. San Francisco: Jossey-Bass, Inc., 1972.

UNIVERSITY OF CALIF.  
LOS ANGELES

DEC 20 1971

CLEARINGHOUSE FOR  
JUNIOR COLLEGE  
INFORMATION