

DEGREE OF RELATIONSHIP BETWEEN
SPELLING ABILITIES AND
SUCCESS IN COLLEGE

by

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Submitted in partial fulfillment of the requirements
for the Master of Education degree
in the Department of Education
Montana State College
June, 1965

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of Problem	3
Procedures	3
Limitations	10
II. REVIEW OF LITERATURE ON RELATIONSHIP BETWEEN SPELLING ABILITIES AND ACHIEVEMENT IN COLLEGE	12
III. THE DETERMINATION OF THE RELATIONSHIP BETWEEN SPELLING ABILITIES AND ACHIEVEMENT IN COLLEGE	16
Summary	21
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	23
Summary	23
Conclusions	25
Recommendations	25
APPENDIX	27
Appendix A: Spelling Word Test	28
Appendix B: Raw Scores on Spelling Word Test and Part 7, Spelling of the New Purdue Placement Test in English (Form E) and Grade-Point Average of 52 students	32
Appendix C: Raw Scores on Part 7, Spelling, of the New Purdue Placement Test in English (Form D) and Grade- Point Average of 52 Students	34
Appendix D: Letter from Purdue University transmitting Data on Means and Standard Deviations on the New Purdue Placement Test in English, 300 students	37
LITERATURE CONSULTED	39

LIST OF TABLES

Table	Page
1. Standard Deviation and Mean Score on Part 7, Spelling, of the Purdue Test, of Two Test Groups and Norm Group	17
2. Means, Standard Deviations, and Range of Grade-Point Averages	18
3. Correlation Coefficients between Grade-Point Averages and Spelling Word Test, Grade-Point Averages and Part 7, Spelling, Purdue, and Spelling Word Test and Part 7, Spelling, Purdue	19

ABSTRACT

The purpose of this investigation was to determine the degree of relationship between spelling abilities and success in college. Two experiments were conducted, one with 52 undergraduate students, and the other with 104. Both groups were elementary teacher candidates.

The procedure consisted of the following steps: (1) review of literature on relationship between spelling abilities and success in college, (2) prepare, administer, and check Spelling Word Test for sample of 52, (3) administer and check Part 7, Spelling, of the New Purdue Placement Test in English, Form E, for a sample of 52, and Form D for a sample of 104, (4) obtain and record grade-point averages for both groups, and (5) compute correlations, means, and standard deviations, for evaluation and comparison purposes.

The main findings of this investigation are that there is a low positive correlation between spelling abilities and grade-point averages and that there is a high positive correlation between the two types of spelling tests used.

Two of the major conclusions are that Part 7, Spelling, of the Purdue Test, is a more efficient and economical testing device than the Spelling Word Test for spelling ability; and that the correlation between grade-point averages and spelling abilities is not sufficiently high to serve as an indication or means of predicting success in college.

From the results of this study, the following recommendations are made: (1) That spelling ability be considered as an asset and end within itself; i. e., that proficient spelling ability be considered as a separate objective, and not as a means to other objectives. (2) That specific remedial work be instituted to improve spelling at the college level. (3) That analysis be made of the present curriculum, from elementary school through college, to determine where the spelling abilities break down and cease to function sufficiently well. (4) That following the above analysis, a course of study in the area of spelling be constructed and incorporated in the educational system. (5) That teachers be made aware of the deficiencies of spelling abilities of students, and that all teachers in all areas be made to feel jointly responsible for the improvement of spelling abilities. (6) That further research be done in the area of spelling, possibly on the prevention of spelling disability.

CHAPTER I

INTRODUCTION

The ability to write and speak good English is generally considered of prime importance to English-speaking students, their teachers, and their schools. The mastery of English is becoming especially important because of the increased use of automation, not only because of the need for understanding and communicating the problems presented in preparing material for processing, but because mistakes can be reproduced at the rate of 10,000 in less than a second.¹ It is well recognized that command of one's language is a distinct asset in all human fields of endeavor as well as particularly in the field of business.

The parts of the English language are sometimes differentiated as follows: recognition of grammatical errors, punctuation, sentence clearness and effectiveness, reading, vocabulary, and spelling. This study deals with only one part of the English language--that of spelling.

¹Patchen, E. A., "Automation Affects Secondary Business Education," Journal Business Education 37:5, February, 1962, pp. 193-194.

Spelling is one of the minor subjects in the curriculum but spelling ability is important indeed. Not only do spelling errors detract from the effectiveness of any written work, but in business and personal affairs, errors may be crucial.

Generally, it was presumed that spelling abilities have a high positive relationship with academic achievement in college, as well as throughout preceding educational levels. However, this has been a presumption and not a proven fact. Examples such as the following excerpt from Carr's¹ biography of John F. Kennedy, tend to lead a person to desire more information regarding the possible relationship, or lack of relationship between spelling and achievement.

It would be reasonable to expect his (John F. Kennedy's) memory to help him learn spelling, but it didn't. Spelling always was difficult for him, even long after he had left Canterbury. In a typical letter to his parents he reported that he had learned to play "baggamon" and in another letter he told his devout mother, "We have chapel every morning and evening and I will be quite pius I guess when I get home."

Even Jack Kennedy's beloved sports were not exempt from his spelling distortions. He once wrote home that he had gone out for "football pracite."

¹Carr, William H. A., JFK: The Life and Death of a President. A Complete Biography 1917-1963, pp. 42-43.

Statement of Problem

The problem was to determine the degree of relationship between spelling abilities and success in college, as measured by grade-point average. Grade-point average is defined as the numerical evaluation of scholastic achievement, based upon a formula of equivalents that grants credit varying with the grade attained.

Procedures

A review of the literature was made to determine whether or not previous investigations had been made to determine the degree of relationship that exists between spelling abilities and achievement in college. The importance of a high spelling ability has been regarded as a positive asset in academic and business situations, and it was hoped that some previous studies had been made in this area so that comparison of results could be made.

In order to test spelling abilities of college students, recognition was given the fact that spelling abilities consist not only of being able to correctly spell words as they are dictated, but also to recognize misspelled words in context. Therefore, the writer decided to use two types of tests to measure the spelling abilities of college students.

The first type of test was to measure the ability of students to correctly spell words as they were dictated, and used in sentences in all cases where the identification of the correct word would not have been clear otherwise. A Spelling Word Test of 435 words was compiled expressly for the purpose of this study. The main part of this test was drawn from an eighth-grade spelling list prepared by McKee¹ as a list of words frequently misspelled by eighth-grade students. Some of the words in McKee's list were omitted and words substituted which seemed more relevant to the vocabulary of college students. The writer assumed that the words in McKee's list form the basis for a satisfactory spelling list, as McKee is a well-known and respected authority in the field of education.

Another source of words for the Spelling Word Test was from a list of words of about the same level of difficulty on which college students had been observed to have difficulty. The observations concerning these frequently misspelled words were made by the writer in noting misspelled words on tests and examinations of students at the college level.

A copy of the Spelling Word Test will be found in Appendix A.

¹McKee, Paul; Prestwood, Elwood; Blossom, John; Watson, Corinne; Floyd, Mary Frances; English for Meaning:8, pp. 465-467.

The Spelling Word Test was given as part of the class-room activity for students enrolled at Montana State College, Bozeman, Montana, in a course entitled, "Education 316, Teaching of Language Arts and Social Studies," which is described as follows in the Montana State College Bulletin.¹

Current theory and techniques of teaching oral and written language. How to establish and reach worthy aims in social studies through pupil-teacher planning and unit study.

This course is taken as a required course for elementary school teacher candidates and is usually taken during the student's junior year.

The results of the Spelling Word Test were recorded by number of words spelled correctly. The maximum score possible was 435.

The cumulative grade-point average was obtained from the records and recorded for each of the students who took the Spelling Word Test.

The second type of test was to measure the ability of college students to identify errors of spelling in printed context. This type of testing material was readily available from many sources, and the one chosen for this study was Part 7, Spelling, of The New Purdue

¹ Montana State College Bulletin, XVIII, 4, July, 1964, p. 250.

Placement Test in English.¹ Spelling, Part 7, of the Purdue Test, has a time limit of 11 minutes, and the directions for this part of the test are as follows:

Among the first three words in each line below (there are 45 lines) there may be one misspelled word. Some lines contain no misspelled word. Find the misspelled word, if any, in each line, and mark "x" in the square containing the number which corresponds to the number of this word. If none of the words is misspelled, mark "x" in the square numbered 4.

The scores on Part 7 of the Purdue Test for the students in this study were recorded by number of correct answers out of the possible score of 45.

The information from the above-described steps of procedure is contained in Appendix B.

By machine technique, the following computations were made by the Computer Service of the College:

1. Means and standard deviations of scores on the Spelling Word Test, Part 7, Spelling of the Purdue Test; and grade-point averages.

¹Wykoff, G. S., McKee, J. H., and Remmers, H. H., The New Purdue Placement Test In English, New York: Houghton Mifflin Company, 1955. In future references this test will be referred to as the Purdue Test. Unless otherwise stated, Form E of the Purdue Test is the form used or referred to.

2. Correlation between grade-point averages and scores on Part 7, Spelling, of the Purdue Test.

3. Correlation between grade-point averages and scores on the Spelling Word Test.

4. Correlation between scores on the Spelling Word Test and scores on Part 7, Spelling, of the Purdue Test.

In order to obtain further evidence concerning the results, the writer did another study by administering and checking Part 7, Spelling, of the Purdue Test, Form D, for a sample of 104 students. Forms D and E of the Purdue Test are comparable forms. The group of 104 students was comparable to the first group as they also were teacher candidates, enrolled in a course entitled, "Educational Psychology, Education 302," which is described as follows in the Montana State College Bulletin:

The psychological foundations of educational theory and practice dealing with learning and human abilities. Emphasis is placed upon cognitive and affective learning as major outcomes of classroom learning.

Some supplementary experiences for observation of actual learning situations are provided. During the course the student will make plans for exploratory experiences that are required for Education 305...

¹Montana State College Bulletin, XVIII, 4, July, 1964, p. 251.

The cumulative grade-point average for each of the students in this group was obtained from the records. See Appendix C.

By machine technique, the following computations were made by the Computer Service of the College:

1. Means and standard deviations of Part 7, Spelling, of the Purdue Test, and of the grade-point averages. (Form D of the Purdue Test.)

2. Correlation between grade-point averages and scores on Part 7, Spelling, of the Purdue Test, Form D.

In order to compare the scores of the sample of students in the above studies, and to give further value to the above studies, the writer obtained from Purdue University the means and standard deviations of each of the parts of the Purdue Test for both Form D and Form E on scores of a sample of 300 students. See Appendix D for a copy of the letter containing the means and standard deviations on the parts of Form D and Form E of the Purdue Test of the sample of 300 students.

In summary, in order to determine the degree of relationship between spelling abilities and success in college, the following procedures were used:

1. A review of literature was made in the area of the degree of relationship of academic achievement to spelling ability at the college level.

2. A Spelling Word Test of 435 words was compiled and administered to a group of 52 undergraduates.

3. Part 7, Spelling, of the Purdue Test, Form E, was administered to this same group.

4. The means and standard deviations of scores on the Spelling Word Test; Part 7, Spelling, of the Purdue Test; and grade-point averages were computed.

5. Computations were made as to correlations between grade-point averages and scores on the Spelling Word Test; between grade-point averages and scores on Part 7, Spelling, of the Purdue Test; and between the Spelling Word Test and Part 7, Spelling, of the Purdue Test.

6. An additional study was done on the test scores on Part 7, Spelling, of the Purdue Test, Form D, of 104 undergraduate students. Correlations were computed by machine technique between the test scores and grade-point average. Means and standard deviations of the scores on Part 7, Spelling, of the Purdue Test were computed by machine technique.

7. The writer obtained from Purdue University data on a sample of 300 students of the means and standard deviations on each part of the Purdue Test, Forms D and E.

Limitations

The undergraduate college students who composed the two groups of students used in these studies were enrolled at Montana State College, Department of Education, Bozeman, Montana. All of the examinees in the two groups could be termed at least reasonably successful in that they had entered their second or third years in college. Also, they were teacher candidates for the elementary school.

The grade-point average, as used in these studies, is that used at Montana State College, as described in the College Bulletin:¹

Grading System--The quality of the student's work in each course is denoted by a letter grade according to the following tabulation. No plus or minus grades are used. For convenience, in computing scholastic averages, each letter grade is assigned a specific number of grade points for each credit. The general quality of a student's work is expressed in terms of a grade-point average.

PASSING GRADES

Grades	Numerical Value	Quality of work	Grade Points for Each Credit
A	90-99	Excellent	4
B	80-89	Good	3
C	70-79	Fair	2
D	60-69	Passing	1

Cumulative Grade-Point Average--The cumulative grade-point average is computed by dividing the

¹Montana State College Bulletin, XVIII, 4, July, 1964, pp. 50-51.

summation of grade points earned by the summation of credits carried, except that neither the credits nor grade point shall be counted for the following:

1. Sub-collegiate courses
2. Repeated courses...

CHAPTER II

REVIEW OF LITERATURE ON RELATIONSHIP BETWEEN SPELLING ABILITIES AND ACHIEVEMENT IN COLLEGE

A review of the literature was made in the area of the relationship between academic achievement and spelling ability of college students. The purpose of the review was to determine if previous studies had been made in this area so that comparison of results could be made. Considerable literature was found which dealt with contingent fields, such as relationship of intelligence to reading ability, but no specific research was found on the relationship of spelling abilities and success in college. However, some of the research in contingent, or parallel fields, is reviewed here for the interest and transfer value of the results of the studies.

Traxler¹ concluded that although spelling was generally considered an elementary-school subject, there was need for attention to the improvement of spelling at the higher levels of the school as shown by the fact that numerous individuals above the elementary school are greatly handicapped in ability to spell. He found that few secondary schools make a systematic attempt to teach spelling although the

¹Traxler, Arthur E., "Spelling in College," Journal of Higher Education 19: 1948, pp. 256-59.

number of these schools giving attention to at least the remedial aspects of spelling had increased in the preceding years. He found that aside from incidental help in connection with English themes, the provision of spelling instruction was negligible in nearly all colleges. Traxler made the observation that under usual conditions there was no program of special help and spelling achievement seemed to remain virtually unchanged throughout college.

Schonell¹ concluded that there were no sex differences in spelling abilities among the college students and adults, but that there was slightly more spelling disability among men, and that there was a low positive correlation between spelling ability and intelligence. He found outstanding important causes for spelling disability to be as follows: general disregard for details, weakness in visual perception, and weakness in auditory perception. He also found that spelling errors of adults were similar in kind to those of children and that the adults' commonest error was one related to the double letter.

Noyes² reported that one of his conclusions was that the Purdue Test could be used with confidence for a single measure of English

¹Schonell, F. J., "Ability and Disability in Spelling Amongst Educated Adults," British Journal of Educational Psychology, VI, January, 1936, pp. 123-146.

²Noyes, Robert Norman, The Prediction of English Proficiency of Teaching Candidates at Montana State College, pp. 4, 71.

proficiency or for a student whose record was incomplete or missing. He found that the Purdue Test scores correlated 0.827 with the composite scores for the 1959-60 student teachers and 0.848 for the autumn 1960 student teachers, Montana State College. In the composite scores, Noyes included: High school English mark, high school mark in field of major interest, American Council on Education Psychological Examination for College Freshmen quantitative score, ACE language score, ACE total score, Freshmen Week mathematics test score, college freshman year grade-point average, college grade-point average in field of major interest, and college grade-point average in field of minor interest.

The Examiner's Manual of the Purdue Test indicates that Spelling, Part 7 of the Purdue Test, Form D, had a correlation coefficient of 0.821 with the total test, and Form E had a correlation coefficient of 0.823 with the total test, based upon the scores of a sample of 300 for establishing intercorrelations of part scores and total scores. The manual points out, however, that the correlations with total score are spuriously high since total score includes each of the part scores.

Seegers¹ did a comparison study on subtest scores on the

¹Seegers, Jr., James E., and Rose, Harriett A., "Verbal Comprehension and Academic Success in College," Personnel and Guidance Journal XLII, November, 1963, pp. 295-6.

Diagnostic Reading Test for two groups of 17 full-time University of Kentucky female students, matched for I. Q. but differing on scholastic achievement. One group was on probation and the other group was on the honor student roll. No significant difference was found between the groups on reading rate or vocabulary percentile rankings, but the honor group was found to be significantly superior at the .01 level to the probation group in verbal comprehension. Since verbal comprehension indicates recognition of word forms in reading or listening, the findings of Seegers is possibly pertinent to recognition of spelling errors, which is similar to the type of spelling ability tested by Part 7, Spelling, of the Purdue Test.

CHAPTER III

THE DETERMINATION OF THE RELATIONSHIP BETWEEN
SPELLING ABILITIES AND ACHIEVEMENT IN
COLLEGE

A review of the literature failed to reveal specific research on the problem of determining the degree of relationship between spelling abilities and college achievement, with which the results of the present studies could be compared. However, certain comparisons can be made with general statements found in accounts of research in contingent areas. For instance, Schonell¹ found a low positive correlation between spelling ability and intelligence; also he found that outstanding causes for spelling disability were disregard for details, weakness in visual perception, and weakness in auditory perception. The writer noticed in grading the tests on the Word Spelling Test that certainly disregard for details contributed to many of the spelling errors and that weakness in auditory perception accounted for such spelling errors as spelling "ton" when the word which was dictated was "tongue." The fact that only two students from the group of 52 made this error

¹Schonell, F. J., "Ability and Disability in Spelling Amongst Educated Adults," British Journal of Educational Psychology, VI, January, 1936, pp. 123-146.

eliminated the possibility that faulty diction on the part of the examiner might have been the cause of the error.

Table 1 shows the results of the computations for the mean scores and standard deviations on Part 7, Spelling, of the Purdue Test, Forms D and E, of the two groups tested and the norm group, presented for informational purposes only.

TABLE I. STANDARD DEVIATION AND MEAN SCORE ON PART 7, SPELLING, OF THE PURDUE TEST, OF TWO TEST GROUPS AND NORM GROUP.

Group	Sample size	Part 7, Spelling, of the Purdue Test			
		Form D		Form E	
		Mean	S. D.	Mean	S. D.
Purdue Norm	300	22.0	7.6	22.4	7.6
Sample I	52			27.0	7.0
Sample II	104	26.6	7.2		

It will be noted from the above that the mean scores of the two groups tested were higher than the mean scores of the Purdue norm group. This would be expected in view of the fact that the Purdue Test norm group was composed of college freshmen and the two tested groups were college sophomores and juniors, so that some selectivity would have occurred. For this same reason, the standard deviation of the Purdue group was higher than of the tested groups, as expected.

Statistical information on the Spelling Word Test which was taken by Group I only is as follows: Range was 271-433 words spelled correctly; mean was 384.88; and standard deviation 40.71. The number of words in the test was 435. The mean of 384.88, or 385 words spelled correctly, with 50 words misspelled, is of special interest, as the examinees were undergraduates in college and the words in the test were considered to be of eighth-grade level.

Table 2 shows the mean of the grade-point averages and standard deviations of grade-point averages for both groups of examinees, presented for informational purposes only.

TABLE II. RANGES, MEANS, STANDARD DEVIATIONS OF GRADE-POINT AVERAGES.

Group	Range	Mean	Standard Deviation
I	1.77-3.73	2.60	0.44
II	1.46-3.65	2.65	0.47

Table 3 gives the correlation coefficients as computed by machine technique, for both groups.

TABLE III. CORRELATION COEFFICIENTS BETWEEN GRADE-POINT AVERAGES AND SPELLING WORD TEST, GRADE-POINT AVERAGES AND PART 7, SPELLING, PURDUE, AND SPELLING WORD TEST AND PART 7, SPELLING, PURDUE.

Group	Grade-point Averages and Spelling Word Test	Grade-point Averages and Part 7, Spelling, Purdue Test	Spelling Word Test and Part 7 Purdue
I	0.2691	0.3132	0.7404
II		0.3220	

In order to determine whether or not the correlation coefficients listed above were measures of a real relationship or whether the coefficients were merely chance deviations from a population in which the correlation is 0, null hypotheses were made that the obtained correlations did not differ from zero. Reference was made to a table for values of correlation coefficients for different levels of significance.¹

For a correlation coefficient of 0.2691, where the sample size is 52, a correlation of 0.2732 is required at the .05 level and 0.3541 at the .01 level. Since the obtained correlation of 0.2691 is smaller than both table values, the null hypothesis stands. Therefore, the correlation coefficient of 0.2691 which is an indication of the relationship

¹Source: Table, "Values of r for Different Levels of Significance," reprinted from a table of R. A. Fisher and F. Yates: Statistical Tables for Biological, Agricultural, and Medical Research, published by Oliver and Boyd Ltd., Edinburgh, by permission of the authors and publishers; contained in Basic Statistical Methods by N. M. Downie and R. W. Heath, Harper & Row, New York, 1959, p. 274.

between the grade-point average and scores on the Word Spelling Test was considered to be insignificant and is not indicative of a measure of real relationship. However, this coefficient shows a tendency to be significant as it lacks only 0.0041 of being a value significant at the .05 level.

The correlation coefficient of 0.3132, for the relationship between grade-point averages and scores on Part 7, Spelling, of the Purdue Test, where the sample size is 52, is significant at the .05 level.

For the correlation of 0.3220 between grade-point averages and scores on Part 7, Spelling of the Purdue Test, where the sample size is 104, the correlation coefficient of 0.3220 is larger than the value required at the .01 level; therefore, the null hypothesis of no true correlation is rejected at the .01 level.

For the correlation coefficient of 0.7404 between the scores on the Spelling Word Test and scores on Part 7, Spelling of the Purdue Test, where the sample size is 52, this coefficient is larger than the value required at the .01 level; therefore, the null hypothesis of no true correlation is rejected at the .01 level.

The interpretation of these results is that there is a low positive correlation between spelling abilities and success in college, as measured by grade-point achievement. Therefore, although the ability

to perform well in spelling is considered a highly desirable asset, there is not a high correlation coefficient, or relationship, between spelling abilities and grade-point achievement, or success in college.

Summary

In summary, a comparison of the means and standard deviations of the scores on Part 7, Spelling, of the Purdue Test, of the two groups tested with the Purdue Test norm group, indicated that the mean scores of the two groups tested were higher than the norm group and that the standard deviation of the two groups tested was less than that of the norm group. These facts were to be expected because the groups tested were mostly juniors and the norm group was composed of freshmen in college.

The correlation coefficient of 0.2691 between grade-point averages and the Spelling Word Test, with a sample size of 52, was not indicative of a measure of true relationship, but did show a tendency to be significant. The correlation coefficient of 0.3132 between the grade-point averages and scores on Part 7, Spelling, of the Purdue Test, Form E, with a sample size of 52, was significant at the .05 level.

The correlation coefficient of 0.3220 between grade-point averages and scores on Part 7, Spelling of the Purdue Test, Form D,

with a sample size of 104, was significant at the .01 level.

The correlation coefficient of 0.7404 for the correlation between the scores on the Spelling Word Test and scores on Part 7, Spelling of the Purdue Test, with a sample size of 52, was significant at the .01 level. It was, in fact, a high positive correlation.

Thus, it was found that there was a higher correlation between the grade-point averages and Part 7, Spelling of the Purdue Test, than there was between the grade-point averages and the Spelling Word Test.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of this study was to determine the degree of relationship between spelling abilities and success in college, as measured by grade-point average. Experiments using two sample populations were conducted, one of 52 undergraduate students and the other of 104 undergraduate students, to attempt to determine the answer to the problem. A summary of the procedures and findings is presented next.

Summary

The procedures used were as follows:

1. Review of literature on relationship between spelling abilities and success in college.
2. Prepare a Spelling Word Test.
3. Administer and check the Spelling Word Test for sample of 52 students.
4. Administer and check Part 7, Spelling, the Purdue Test, Form E, for sample of 52 students.
5. Administer and check Part 7, Spelling, the Purdue Test, Form D, for sample of 104 students.

6. Obtain and record grade-point averages of students in both groups.

7. Compute correlations, means, and standard deviations, for comparison purposes.

A review of the literature failed to indicate that a study of the relationship between spelling abilities and success in college had been reported.

A Spelling Word Test was compiled and administered to a group of 52 undergraduates. Part 7, Spelling, of the Purdue Test, Form E, was also administered to this group of 52 undergraduates. Part 7, Spelling, of the Purdue Test, Form D, was administered to a sample of 104 undergraduates, and raw scores recorded. Grade-point averages for all students in the two groups were obtained.

Mean scores, standard deviations, and correlation coefficients were prepared by machine technique. Comparisons were made with mean scores and standard deviations of a sample of 300 students, with these computations presented for informational purposes only. The data on the sample of 300 students was furnished on request by Purdue University.

Comparisons were made and correlation coefficients were checked for significance at the .01 level and at the .05 level.

Conclusions

The following conclusions are based upon the experiments performed and the information obtained.

In interpreting the high positive correlation coefficient between the Spelling Word Test and Part 7, Spelling, of the Purdue Test, the indication is that the latter, which takes 11 minutes for completion, as compared with the time necessary for writing 435 words from dictation, is a more efficient and economical testing device for spelling ability.

Although the low positive correlation between grade-point averages and spelling is significant at the .05 level, it is not sufficiently high to serve as an indication or means of predicting for success in college.

Recommendations

From the results of this study, the following recommendations are made:

That spelling ability be considered as an asset and end within itself; i. e., that proficient spelling ability be considered as a separate objective and goal, and not as a means to other objectives.

That specific remedial work be instituted to improve spelling at the college level.

That analysis be made of the present curriculum, from elementary school through college, to determine where the spelling abilities break down and cease to function sufficiently well.

That, following the above analysis, that a course of study in the area of spelling be constructed and incorporated in the educational system.

That teachers be made aware of the deficiencies of spelling abilities of students, and that all teachers in all areas be made to feel jointly responsible for the improvement of spelling abilities.

That further research be done in the area of spelling--possibly in the following direction: Prevention of Spelling Disability.

APPENDIX

Appendix A
Spelling Word Test

The following list of words are often mispronounced and/or misspelled. Every teacher should be able to spell and pronounce them correctly. Each group could be studied as a lesson.

(1)

abandon
absence
abundant
acceptable
accidents
accommodation
accompanied
accomplishes
accordance
accurate

accuse
accustomed
acid
acknowledge
acknowledging
acquaintance
acquire
acres
activity
actually

(2)

additional
adequate
adjourned
admiration
admission
advertised
advisable
advertisement
affectionate
affidavit

agricultural
aisles
alfalfa
all right
alligators
ambassador
amendment
analysis
anticipate
anxiety

(3)

annual
apologize
appetite
applicant
appreciated
approximately
apron
arctic
artificial
ascertain
associate
athletics
attacked

attendant
attorney
authority
available
bankruptcy
bargain
bearing
benefit
bicycle
bookkeeping
bough
boundary
bouquet

(4)

bureau
businesses
cafeteria
calendar
campaign
canceled
candidate
canoes
capacity
carrying

cashier
catalogs
cathedral
caution
celebrate
certificate
challenge
characteristic
chicken pox
chorus
Christian

(5)

circuit
circulation
circumstances
civilization
cocoon
collar
collateral
college
colonel
commence
company

column
commendation
commissioner
communicate
company's
comparison
compensation
competent
competition
completely
conceal

(6)

conception
concerned
condemn
conference
confidential
confirmation
congratulate
conscience
conscious
consequences

consequently
considerably
consign
consists
constitution
contemplate
continent
continually
continuous
contrary

(7)

controversy
convenient
convey
convinced
coopérate
cordially
corporation
correspondence
countenance
courteous

courtesy
crisis
criticism
croquet
curiosity
cylinder
debtor
deem
definition
delegate
deny

(8)

describe
desirable
despair
despise
destination
determined
develop
difficulties
dignity
dined

dipped
discipline
discussed
distinct
distinguished
distribution
doctrine
dormitory
drowned
duly
earnestly

(9)

economy
edition
effective
efficiency
electricity
elevator
eligible
eliminate
embroidery
emergency

employees
encourage
enclosure
endeavoring
endure
engineering
enormous
enthusiastic
equipment
error

(10)

essential
establishment
esteemed
estimated
excavated
excellent
exceptionally
excessive
execute
executive

eventually
evident
exactly
examination
exercise
exhaust
exhibit
exist
existence
expenses

(11)

experience
explanation
exquisite
extension
extreme
extremely
facilities
familiar
farewell
fascinating
faults

February
favorably
feeble
fifteenth
financial
flourish
formerly
fortunately
fountain pen
fraternity
galvanized

(12)

generally
genius
genuine
glimpse
glorious
governor
gratitude
guarantee
guardian
gymnasium
Halloween
handkerchief

hatred
heartily
hearty
hitherto
hundred
hygiene
icicles
ignorance
illustration
imagination
immediate

(13)

immense
immortal
impossible
incident
incidentally
inconvenience
indebtedness
indefinitely
independence
indictment
individual

inferior
inhabitant
innocent
initial
initiation
inquiry
inspiration
installation
instance
instinct
institution

(14)

intellectual
intelligence
intelligent
interrupt
intervals
intimate
itemized
jealousy
journal
kindergarten
knitted

laboratory
league
led
legislation
legislature
liability
library
license
lightning
lily
literature

- 3 -

(15)

locally
loyalty
luxury
magnificent
marvelous
materially
mathematics
maturity
meant
mechanical
memorandum
mental

merchandise
merit
messenger
military
mischievous
misery
mortgage
mourn
multiplication
municipal
murmur
mutual

(16)

mutual
necessary
necessity
ninety
nominative
occasion
occasionally
occurs
offense
official
omitted
opinion

opinion
opportunity
ordinarily
organization
originally
ornament
pageant
pamphlet
paradise
parliament
partial
particularly

(17)

particularly
patience
patronage
peasant
peculiar
peril
permanently
perspire
persuaded
petition
philosophy

physical
pigeon
pilgrims
policies
politician
positively
possess
possessions
possibility
practically
precious
preference

(18)

preliminary
presence
prevalence
principles
prior
privilege
probability
professional
prominent
promptness
prosperous

pursuit
receipts
recognize
recognition
recommend
references
referring
refrigeration
remittance
representative
responsibility
reverence

(19)

ridiculous
satisfactorily
schedule
scheme
scissors
secretary
sensible
sentiment
several
solemn
sorority

specification
specify
squirrel
statistics
statute
stretch
succeed
succession
surprise
suspicion
sympathy
temporary

(20)

thorough
tongue
tournament
tradition
tragedy
transferred
tremendous
trifle
unanimous
undoubtedly
universal
unnecessary

utilize
vague
variety
vein
vicinity
virtue
warrant
Wednesday
whether
wholly
wretched
wrought
yesterday

Appendix B

Raw Scores on Spelling Word Test and Part 7, Spelling,
of the New Purdue Placement Test in English
(Form E) and Grade-Point Average of
52 Students

Raw Scores on Spelling Word Test and Part 7, Spelling,
of the New Purdue Placement Test in English
(Form E) and Grade-Point Average of
52 students

Grade- Spelling Part 7				Grade- Spelling Part 7			
Student	Point	Word	Spelling	Student	Point	Word	Spelling
Number	Ave.	Test*	Purdue**	Number	Ave.	Test*	Purdue**
1	2.03	408	29	27	2.88	410	28
2	2.87	416	33	28	2.65	418	31
3	2.68	313	25	29	2.30	398	21
4	2.10	431	38	30	2.59	429	35
5	2.53	391	26	31	2.59	426	36
6	2.65	396	26	32	2.03	328	17
7	3.26	418	22	33	2.78	419	34
8	3.07	421	31	34	2.36	338	20
9	2.26	418	32	35	3.43	426	36
10	2.78	424	33	36	2.69	424	36
11	2.21	402	29	37	2.80	326	26
12	2.40	432	41	38	3.26	385	28
13	2.21	367	17	39	1.98	401	20
14	3.11	419	33	40	3.12	381	23
15	2.17	340	25	41	2.32	363	20
16	2.12	330	26	42	3.73	425	36
17	2.67	348	19	43	2.64	353	25
18	2.30	257	15	44	2.92	392	21
19	1.91	395	22	45	3.21	433	40
20	2.04	347	20	46	2.57	369	22
21	3.33	376	30	47	1.77	423	39
22	2.43	353	23	48	2.02	363	23
23	2.41	382	27	49	2.59	366	27
24	3.03	417	24	50	2.81	271	13
25	2.30	404	23	51	3.30	413	36
26	2.61	356	27	52	2.43	364	14

*435 maximum score

**45 maximum score

Appendix C

Raw Scores on Part 7, Spelling, of the New Purdue
Placement Test in English (Form D) and
Grade-Point Average of 52
Students

Raw Scores on Part 7, Spelling, of the New Purdue
Placement Test in English (Form D) and
Grade-Point Average of 104 Students

Student Number	Grade- Point Ave.	Part 7 Spelling Purdue	Student Number	Grade- Point Ave.	Part Spelling Purdue
1	3.64	27	33	2.81	23
2	2.79	25	34	2.13	22
3	2.15	22	35	2.12	22
4	3.01	30	36	2.65	15
5	2.05	36	37	2.66	32
6	2.36	26	38	3.62	34
7	2.29	25	39	3.05	22
8	2.26	25	40	2.48	7
9	3.35	36	41	2.68	29
10	1.91	23	42	2.35	18
11	1.83	20	43	1.86	25
12	2.30	32	44	2.27	30
13	2.85	38	45	2.90	26
14	2.64	27	46	2.59	35
15	3.01	29	47	2.56	15
16	3.14	40	48	3.23	33
17	2.33	30	49	2.49	28
18	3.23	30	50	2.82	19
19	3.32	23	51	2.92	28
20	3.29	36	52	2.41	14
21	2.04	19	53	2.51	21
22	2.61	23	54	2.94	30
23	3.42	17	55	3.06	20
24	2.17	21	56	2.26	29
25	1.46	25	57	2.32	34
26	2.16	29	58	3.10	19
27	2.71	36	59	2.57	19
28	3.04	37	60	3.51	30
29	2.05	34	61	2.13	24
30	2.38	17	62	2.14	33
31	2.48	32	63	3.19	42
32	2.35	26	64	2.04	23

Continued

Continuation of Raw Scores on Part 7, Spelling, of the New Purdue Placement Test in English (Form D) and Grade-Point Average of 104 Students:

Student Number	Grade Point Ave.	Part 7 Spelling Purdue	Student Number	Grade-Point Ave.	Part 7 Spelling Purdue
65	3.13	32	66	2.66	22
67	2.62	25	68	2.17	18
69	2.16	14	70	3.51	26
71	2.46	32	72	3.12	39
73	2.72	29	74	2.94	28
75	2.19	17	76	2.83	28
77	2.00	25	78	2.93	32
79	3.14	37	80	3.31	33
81	1.93	33	82	2.53	13
83	2.47	26	84	2.62	34
85	3.54	37	86	1.87	20
87	2.79	29	88	2.57	17
89	3.09	25	90	2.49	32
91	2.80	21	92	2.75	16
93	2.88	12	94	2.92	28
95	3.03	32	96	3.65	33
97	2.25	26	98	3.06	37
99	2.75	32	100	2.20	37
101	2.09	25	102	2.79	39
103	2.93	18	104	2.18	14

Appendix D

Letter from Purdue University transmitting
Data on Means and Standard Deviations
on the New Purdue Placement Test
in English, 300 students

PURDUE UNIVERSITY
Measurement and Research Center
LAFAYETTE, INDIANA

38

April 26, 1965

Mrs. Elsie M. Opheim
Route 2, Box 194
Bozeman, Montana

Dear Mrs. Opheim:

Your recent letter regarding the New Purdue Placement Test in English has been forwarded to this office.

In response to your request I have prepared the following table which is based upon the scores of a sample of 300 students.

Form D			Form E		
	Mean	S. D.		Mean	S. D.
Total	131.8	27.0	Total	127.3	34.7
Part 1	18.1	5.8	Part 1	18.4	4.9
2	26.8	8.7	2	25.8	7.0
3	19.8	3.6	3	19.7	3.7
4	9.5	3.3	4	9.0	3.4
5	11.7	2.2	5	9.6	3.2
6	23.6	7.9	6	22.4	8.6
7	22.0	7.6	7	22.4	7.6

If I may be of any further assistance please contact me.

Cordially yours,

/s/ J. Weisbrodt
J. Weisbrodt, Ph.D.
Director

JW/ee

LITERATURE CONSULTED

LITERATURE CONSULTED

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