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A PROGRAM FOR THE IMPROVEMENT OF INSTRUCTION
IN SPELLING IN THE HIGH SCHOOLS OF
RUTHERFORD COUNTY

A Thesis
Presented to
the Faculty of the Graduate School
Appalachian State Teachers College

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

by
Robert Allen Nelson

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RUTHERFORD COUNTY

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CHAPTER I

INTRODUCTION

The teaching of spelling, it would appear, has become a neglected area of the high school program of study. This assumption is made on the basis of the considerable amount of criticism that has appeared in popular magazines, newspaper editorials, and professional journals over the last several years. This conclusion also is in line with the writer's observation and personal experience as a teacher of high school English during the last three years.

The problem of improving spelling in high school involves many complex factors, among which should be mentioned the powerful effects of home life and the general cultural surroundings afforded by the community in which the high school pupils live. One aspect of the problem is the extent to which the spelling habits of high school pupils can be modified by instructional procedures employed by the school.

Nature of the problem. The underlying problem dealt with in this study is whether spelling instruction and levels of spelling achievement in the high school might be measurably improved through deliberate emphasis on spelling and teaching procedures consistently aimed at overcoming spelling

faults. The problem relates specifically to the nine high schools of Rutherford County, since the writer is a teacher in that school system. It was suspected that the levels of spelling proficiency in the high schools of that county were generally lower than might be expected in the average situation.

The problem of improving spelling is a matter of substantial importance. Spelling accuracy may be a criterion by which others judge one's total level of educational development. Dakin pointed out that literacy is often judged by spelling, because almost everyone can recognize spelling errors while failing to detect many grammatical errors which may exist in the same piece of writing.¹ It is desirable, therefore, for the high school to apply the most effective principles of spelling instruction so that the pupil may learn most effectively.

Hildreth pointed out that, since spelling is something of a draft horse in writing, writing cannot be done effectively without accurate spelling. Although spelling may not be the least nor the most important aspect of writing, it is surely an important part. A good speller may concentrate on his

¹Dorothy Dakin, How to Teach High School English (Boston: D. C. Heath, 1947), p. 98.

ideas without being distracted by the mechanics of writing, and he may record his ideas more easily. The purpose of spelling, Hildreth says, is to facilitate the reading of what is being written. Good spelling is evidence of good manners and identifies one as being cultivated, neat, and accurate.²

The problem of spelling instruction on the secondary level appeared sufficiently important to justify the present study, particularly in view of the seriousness of the problem in the high schools of Rutherford County.

A special program of spelling instruction was carried out in an attempt to improve the quality of spelling instruction in the high schools of Rutherford County. It was thought that spelling instruction could be improved by a broad program of deliberate attention to spelling, even though the program was supervised in only a general manner. There was little opportunity for direct supervision of the activities of individual teachers. The program was directed by means of group meetings and written materials.

²Gertrude Hildreth, Teaching Spelling (New York: Henry Holt, 1955), pp. 1-2.

Purpose of the study. The purpose of this study was to test the effects of a special program of instruction on the improvement of spelling in the high schools of Rutherford County. This program called for the use of a systematic plan of spelling instruction which was organized specifically for this program. The program involved the cooperation of the Rutherford County Superintendent of Schools, the principals, and the teachers of Rutherford County.

Other purposes of this study were to measure the present level of achievement in spelling of the high school pupils, to investigate the relationship between pupil achievement and certain activities and instructional practices on the part of the teachers, and to make specific recommendations for continued efforts toward the improvement of spelling instruction in Rutherford County.

Limitations of the study. The study is subject to the effects of certain limitations. There was little opportunity to provide much personal leadership and supervision in carrying out the experimental procedures in the individual classrooms. Supervision was of a general nature, largely involving group meetings or written directives and teaching aids. It is possible that some of the teachers in the experimental group failed to carry out their voluntary agreements to follow the general plan outlined for the program.

There was no way to account for the activities in the schools in the control group which might distort the results of the study. It is possible that some of the schools outside the experimental group also may have engaged in activities which were especially designed to improve spelling, since some of the teachers doubtless became aware that their classes would be compared with the experimental group.

These limitations, although substantial, grow out of conditions that are quite realistic, since many supervisors of instruction in the school systems of North Carolina find that they must "spread themselves thin" in carrying out supervisory activities.

Organization of the remainder of the thesis. Chapter II of this thesis is devoted to a review of literature related to the problem of spelling instruction on the secondary level. This review established a base of reference regarding the specific problem in Rutherford County. Some of the information gathered from this review was used in organizing the general plan of instruction which was used in the experimental procedures in this study. Chapter III contains a description of the groups studied, of the materials used, and of the procedures employed in the study. Chapter IV shows the findings of a testing program involving over two thousand pupils and the results of a period of experimental

instruction involving over six hundred pupils for eighteen weeks. Chapter IV also contains conclusions drawn from the findings and recommendations for continued efforts toward improving the teaching of spelling in the high schools of Rutherford County.

CHAPTER II

REVIEW OF RELATED LITERATURE

The problem of developing successful methods of teaching spelling has long been recognized. Review of Monroe's Encyclopedia of Educational Research, volumes of The Education Index since 1947, and other research aids reveals little research into the problem of spelling instruction on the high school level. The majority of the research reported has been conducted on the elementary school level, since the teaching of spelling traditionally has been considered chiefly a function of the elementary school. A large amount of literature has been published regarding spelling vocabulary and grade levels for the introduction of particular words into the spelling vocabulary. Much research has been conducted concerning the frequency of the use of words in the vocabulary of both school children and adults.

The present review is restricted to literature which has been published since 1900 and which is available through the facilities of the library of Appalachian State Teachers College.

Literature concerning spelling vocabulary. In 1915, Ayres¹ reported one thousand of the most commonly used words which he suggested as a basic spelling vocabulary. These words were selected from tabulations of the frequency of the use of words which had been reported in four earlier studies: (1) Rev. J. Knowles, "The London Point System of Reading for the Blind"; (2) R. C. Eldridge, "Six Thousand Common English Words"; (3) Leonard P. Ayres, "The Spelling Vocabularies of Personal and Business Letters," and (4) W. A. Cook and M. V. O'Shea, The Child and His Spelling. The thousand words selected were organized into scales of increasing difficulty to measure the ability of pupils in grades two through eight.

One of the outstanding works in spelling vocabulary is A Basic Writing Vocabulary, by Horn.² This vocabulary contains the ten thousand words most likely to be used in writing by adults outside school. It is implied that these words, or most of them, should be mastered by pupils before leaving school in order that they be prepared for their writing outside school. No extensive study of adult writing vocabulary has been reported since Horn's was reported in 1926.³

¹Leonard P. Ayres, A Measuring Scale for Ability in Spelling (New York: Russell Sage Foundation, 1915).

²Ernest Horn, A Basic Writing Vocabulary (University of Iowa Monographs in Education, First Series, No. 4, Iowa City: University of Iowa, 1926).

³Ernest Horn, "Spelling," Encyclopedia of Educational Research (New York: Macmillan, 1950), p. 1249.

Research into the problem of the size of the spelling vocabulary needed was summarized several years ago by Botel.⁴ This summary indicated that two thousand words make up about ninety-five per cent of all words used in writing on the secondary school level; three thousand account for ninety-eight per cent of all words used. If a pupil masters three thousand words, in his writing he will misspell only about one word out of fifty.⁵

A recent nation-wide study by Ayer resulted in the following conclusions:⁶

(1) Wide variations in levels of spelling achievement exist in various schools.

(2) Wide variations in levels of spelling achievement exist among pupils of the same school grade.

(3) In recent years a general falling-off has occurred in the spelling ability of ninth graders.

⁴Morton Botel, "How to Teach Spelling on the Secondary Level," High School Journal, 39 (November, 1955).

⁵Ibid., p. 76.

⁶Fred C. Ayer, "An Evaluation of High School Spelling," The School Review, LIX (April, 1951), p. 235.

Literature on instructional methods in spelling at the secondary school level. Watson found that instruction in spelling in the high school curriculum is not uniform. Spelling is usually taught as a component of the English course. Special stress in spelling is often a part of business training, but less often in subjects other than English.⁷

A survey conducted in Denver which covered the Denver high school graduates of 1954 and 1955, reported by Edna Lue Furness, showed that forty per cent of the graduates replying to a questionnaire felt that the poorest instruction they had received was in the basic skill of spelling. Employees who hired these graduates felt that about thirty per cent of them needed more training in spelling.⁸ Furness attributed much of this shortcoming to the failure of teachers to apply effective teaching principles. Furness further indicated that many teachers are indifferent to the teaching of spelling and lack preparation for such teaching.⁹

⁷Gussie Boone Watson, "The Administration of High School Spelling with Special Reference to the Junction, Texas, High School" (unpublished Master's thesis, University of Texas, Austin, Texas, 1950), pp. 14-15.

⁸Edna Lue Furness, "Who Can Cure the Spelling Sickness?" American School Board Journal, 134 (May, 1957), p. 33.

⁹Ibid., p. 34.

Poor spelling is the defect most often noted by educated persons, according to Furness, and evidence seems to indicate that spelling ability has deteriorated as other phases of general education have improved.¹⁰

Ayer reported that tests indicate that recent theory and methods have resulted in a failure to develop a technique for mastery of new words and a failure to master many words which should have been learned in elementary school and which are essential to high school needs.¹¹

Staiger pointed out the fact that new words and new types of words are being met by high school pupils, and he implied that teachers of all subjects should recognize the burden of teaching these words.¹²

Hogan reached this conclusion: "Systematic instruction in spelling should be given in the high school English classes and other classes where there is a need for special or technical vocabulary."¹³

¹⁰Edna Lue Furness, "Why Johnny Can't Spell," School and Society, 82 (December 24, 1955), p. 199.

¹¹Ayer, op. cit., p. 234.

¹²Ralph C. Staiger, "The Spelling Problem in High School," Education, 76 (January, 1956), p. 284.

¹³Gladys M. Hogan, "A Study in Improving the Spelling Habits of High School Pupils at Pickard High School, Brenham, Texas" (unpublished Master's thesis, Prairie View A. and M. College, Prairie View, Texas, 1953), p. 41.

Both Staiger¹⁴ and Horn¹⁵ showed that teacher attitudes favorable to spelling are essential to enhance the learning process in spelling. Staiger pointed out that every teacher ought to be concerned with spelling not just in a negative manner but in a manner which will cause pupils to learn correct spelling.¹⁶ Horn showed that teacher attitudes toward spelling will influence pupil attitudes. Even using less modern and effective methods, an enthusiastic and sympathetic teacher will get better results than the unenthusiastic and unsympathetic teacher, Horn stated. He further indicated that, although spelling is a subject which teachers do not always like to teach, their interest may be increased by an understanding of the importance of spelling, by knowing efficient methods of instruction, and by the knowledge that each pupil can improve his ability to spell.¹⁷

Horn showed that development in spelling ability is not restricted to what is done in spelling periods. Many contributions are made through reading and composition.

¹⁴Staiger, op. cit.

¹⁵Ernest Horn, "Teaching Spelling" (What Research Says to the Teacher, No. 3, American Educational Research Association of the National Education Association, Washington: National Education Association, 1954).

¹⁶Staiger, op. cit., p. 284. ¹⁷Horn, op. cit., pp. 20-21.

Speech and handwriting also play a part, as do all activities which utilize language. He further stated that dictionary use, phonic instruction, an effective method of learning words, proofreading by the pupil, and an increased interest in his spelling ability can all combine to make a pupil's spelling more accurate.¹⁸

Hildreth believes that spelling instruction in the high schools has been too restricted to the teacher of English, and that spelling instruction will not carry over to all of a pupil's writing unless every teacher requires accurate spelling. She suggests procedures which she believes will encourage pupils to become better spellers.¹⁹

The following two paragraphs by Hildreth summarize her views on spelling instruction on the secondary level:

The compartmentalized subject-teaching which prevails in high schools has tended to restrict spelling instruction to English courses. English teachers may be held responsible for teaching pupils methods of word study, spelling rules, and principles of word derivation, but this will not carry over to the student's writing in general unless the student's other teachers also show a concern over spelling and demand accurately written papers.²⁰

¹⁸Ibid., pp. 10-19.

¹⁹Gertrude Hildreth, Teaching Spelling (New York: Henry Holt, 1955).

²⁰Ibid., p. 270.

So far as marks are concerned, a good rule is never to assign marks on papers the children themselves correct. Otherwise the pupils will feel inclined to slide over errors. The goal is to prepare a correct paper, not to get 100 on a spelling test. Commend the students highly for locating their own or each other's errors. So strong is the tradition of being graded with formal marks, however, that teachers say they could never motivate pupils to improve in spelling unless they knew their papers were to be graded on the basis of one hundred per cent. The best policy is to rate pupils on their ability to spell correctly in all written work.²¹

Dolch concluded that the entire school must teach spelling if it is to have good spellers. One teacher who disregards spelling accuracy causes serious interference with the work of all the others. Good spelling is essential to a good education; therefore, it cannot be relegated to some position as "less important" than something else.²²

Dakin believes that spelling should be taught in every year of the secondary school--directly in the ninth and tenth grades and indirectly in the eleventh and twelfth grades. Dakin defines the indirect method as pointing out errors for pupils to correct, with no general class drill.

²¹Ibid., p. 288.

²²Edward Dolch, Better Spelling (Champaign: The Garrard Press, 1942), pp. 88-90.

She suggests that the teacher should utilize visual, auditory, and muscular appeals to attract the pupil's attention to the words in such a way that he is given a vivid mental picture of the words. Each teacher should watch his own spelling closely.²³

Six specific school practices which tend to produce poor spellers are listed by Fernald:²⁴

- (1) formal spelling periods
- (2) monotonous and uninteresting repetition of of meaningless content
- (3) lack of adequate attention to spelling
- (4) the use of methods of teaching by which certain children cannot learn to spell
- (5) oral spelling
- (6) copying words

Fernald reported the use of an informal, context-centered method which gave better results than more formal methods. The pupils wrote on topics which interested them and received instruction about those words which presented problems. This work replaced the formal spelling period and was found to create more interest while lessening emotional strain and reducing monotony.²⁵

²³Dorothy Dakin, How to Teach High School English (Boston: D. C. Heath, 1947), pp. 98-100.

²⁴Grace M. Fernald, Remedial Techniques in Basic School Subjects (New York: McGraw-Hill, 1943), pp. 183-196.

²⁵Ibid., pp. 197-198.

In an interview reported in Nation's Schools, Ruby M. Schuyler, Director of Curriculum of the Glencoe, Illinois, public schools, stated that the final criterion of spelling ability must be how well the pupil uses his spelling in all written work every day.²⁶

Miss Schuyler is quoted as saying:

There is no doubt that such instruction [i. e., spelling instruction in high school] is needed. High school students should be given help in pronunciation, working on "spelling demons," use of a dictionary, word study (structural and phonetic analysis), and proof-reading. We need to accept the responsibility to help those pupils who wish to improve their spelling.²⁷

Certain fundamental principles of teaching spelling are expressed in Language Arts in the Public Schools of North Carolina,²⁸ and by Ellenjarden Nolde, writing in The English Journal.²⁹ These principles are (1) that every teacher should be a language arts teacher; in this case, specifically a teacher of spelling, and (2) that spelling must be taught in the context of all course work rather than in an isolated period.

²⁶"Better Ways of Teaching Spelling," Nation's Schools, 58 (September, 1956), p. 49.

²⁷Ibid., p. 50.

²⁸Language Arts in the Public Schools of North Carolina (Raleigh: State Superintendent of Public Instruction, 1945), p. 21.

²⁹Ellenjarden Nolde, "Classroom Spelling: Experimental Notes," The English Journal, XXXVIII (May, 1949), p. 279.

Summary. A survey was made of the literature concerning spelling instruction in high schools which was available through the facilities of the library of Appalachian State Teachers College. From this survey, certain principles may be summarized as follows:

- (1) That each teacher should be a teacher of spelling.
- (2) That spelling instruction should be a part of the content of every course.
- (3) That teacher attitudes toward spelling exert a great influence on the practices of pupils.
- (4) That high school teachers can improve their spelling instructional methods.
- (5) That pupils' ability in spelling generally may be improved.
- (6) That an indirect, context-centered method of spelling instruction appears to be more effective in high schools than do formal drills.

CHAPTER III

GROUPS STUDIED AND PROCEDURES USED IN THE STUDY

A large group of high school pupils in Rutherford County were taught spelling in accordance with principles and practices recommended as a part of a special program aimed at testing the effects of a planned program for improving spelling in the high schools of the county. The progress made by these pupils was compared with the progress made by a second group of pupils in the county who were taught spelling by customary methods used at their schools. It was assumed, in the absence of any recent county-wide emphasis on or specific supervisory reference to methods of teaching spelling in high school, that individual teachers dealt with spelling by varying degrees of emphasis and consistency of attention. A questionnaire dealing with practices and attitudes related to the teaching of spelling was presented to each high school teacher in the county prior to the beginning of the experimental program. A testing program was conducted to measure changes in the level of achievement of the pupils being taught.

Groups studied. The schools of Rutherford County, North Carolina, were chosen for this study because of the writer's familiarity with the system as a teacher in one of the schools in the county, Cliffside School. Permission to conduct the study was obtained from Mr. J. J. Tarleton, Rutherford County Superintendent of Schools, in July, 1957. As the program began, further permission was obtained from the principal of each school involved. Each faculty member involved in the experimental group was consulted and his cooperation solicited.

Two groups of pupils, an experimental group and a control group, were selected. A total of 2,300 pupils was enrolled in the high schools studied. Of these 680 were assigned to the experimental group, and 1,620 were assigned to the control group.

The experimental group. In selecting the experimental group, the primary considerations were the selection of a representative cross-section of the high school population of the county and the selection of an adequate number of cases. The high school pupils in the following schools were selected with these factors in mind:

- (1) Cliffside School
- (2) Harris School
- (3) Tri High School

The total number of pupils in these three schools afforded a workable and adequate number of cases. The writer was acquainted with the general school situations in the county and judged that this group was representative of the entire county high school population. The three student bodies are composed largely of the children of textile employees, children of agricultural families, children of tradesmen and salesmen, and a scattering of children of professional persons. This seems to be a picture of the high school population throughout Rutherford County.

As to training, apparent general qualifications, and general reputation, the faculties of the three schools are similar to the faculties of the other schools in the county. By general opinion neither these teachers nor these schools are significantly better or poorer than others in the county.

The control group. After the experimental group was selected, the pupils in the remaining six high schools of the county were designated as the control group. This included the following high schools:

- (1) Central High School
- (2) Cool Springs High School
- (3) Alexander School

- (4) Sunshine School
- (5) Mt. Vernon School
- (6) Ellenboro School

The faculty questionnaire. To discover something of the attitudes and practices of the teachers which might affect the quality of spelling instruction in the county, a questionnaire was submitted to all of the high school teachers in the county, ninety in number. The questionnaire was distributed to the high school principals and by them to the teachers. The questionnaire was completed by the teachers before any part of the testing or experimental instruction was begun. Complete information was supplied by each teacher except the members of the Central High School faculty, who failed to give the information requested concerning the classes taught and the number of pupils in each class. Therefore, the questionnaires from the Central High School faculty are not included in the study. The total number of questionnaires included in the study is sixty-seven. A copy of the questionnaire is included in the Appendix.

Questions number I, II, VI, and VII of the questionnaire were designed to indicate the teachers' attitudes toward spelling, while questions number III, IV, VIII, IX, and X were designed to ascertain existing practices. Question number V extended into both attitudes of the teachers and their practices in spelling instruction.

The Wellesley Spelling Scale. The Wellesley Spelling Scale, by Dr. Thelma G. Alpers and Dr. Edith B. Mallory, was administered to both groups in the fall of 1957 and the spring of 1958 to measure the pupils' progress in spelling proficiency. The tests were administered through the English classes by the individual teachers of English.

Guy M. Wilson, reviewing the Wellesley Scale for The Third Mental Measurements Yearbook, reported:

The modest claims of the authors of the scales appear to be justified by the product. The scales are conveniently arranged. Sentences are used to show the meanings of words. Comparative statistics are given. All of these features add to the usefulness of the scales.¹

The Wellesley Scale was selected because of its effectiveness as a measuring scale and the ease of administration. Copies of the scale and the manual of administration are included in the Appendix.

The Wellesley Spelling Scale is published in two booklets, Form 1 and Form 2. There is no time limit for administration; therefore, pupils taking the test are under no emotional strain to finish "on time." The time required

¹Oscar Krisen Buros (ed.), The Third Mental Measurements Yearbook (New Brunswick: Rutgers University Press, 1949), p. 247.

for administration of each form averaged approximately thirty minutes. The scale is designed to measure spelling proficiency from grade nine through college. The authors of the scale claim that the words used in the scale are representative of the written vocabulary of high school graduates.

Form 1 of the Wellesley Spelling Scale contains fifty words which are used in fifty separate sentences. In each sentence, a blank space indicates where the word under question should appear. From the context of the sentence, the meaning of the word can be understood. After the sentence, four variations in the spelling of the word are shown, one of which is correct. The variations are numbered one through four in order that the examinee may select the number of the correct spelling and write that number on a separate answer sheet.

Form 1 was administered during October, November, and December in the nine high schools of the county. An answer sheet and a test booklet were provided for each pupil, and a teachers manual was made available for each teacher administering the test. General instructions for administration were also given to the principals who were asked to pass these instructions on to the teachers of English.

Form 2 of the Wellesley Spelling Scale is quite similar to Form 1. The sentences used in each form are short and simple. The method of administration of Form 2 is identical to that of Form 1. Form 2 was administered in the nine high schools during the first two weeks of May, 1958, just prior to the closing of school.

The answer sheets were scored by the writer. Mean scores for each grade at each school were calculated, and the percentile ranks of the mean scores were ascertained from the manual of administration. These mean scores and the percentile ranks of mean scores for Form 1 were then compared to show the relative standing at the beginning of the experimental period of each class being studied. At the end of the experimental period, the mean scores and the percentile ranks of the mean scores for Form 2 were compared with those of Form 1 to indicate the progress made by the groups.

The experimental procedures. The experimental period of instruction began in the three schools during the second week of January, 1958, and lasted until the second week of May, 1958, a period of approximately eighteen weeks. At faculty meetings held in the three schools prior to the beginning of the experimental period, all of the teachers agreed to give additional emphasis to spelling by marking each misspelled word written by a pupil in any class, calling the word to his attention, and asking him to correct it.

They were further asked to talk about the importance of spelling in each class, to discuss difficult words with the pupils, and to study any words in the vocabulary used in that class which would not likely be taught in other classes.

The English teachers were asked to give instruction on word roots, prefixes, suffixes, and to conduct vocabulary exercises. Study sheets for this type of work were distributed to help the English teachers follow the same type of effort. Copies of these study sheets are included in the Appendix.

The study guides, "How to Study Spelling Effectively" and "Hints to Improve Your Spelling," were distributed to each pupil in the experimental group through the English classes. The method of study outlined is a five-step method which involves careful visualizing of the word, silent or audible spelling, writing the word, checking the spelling, and practicing the correct spelling. The hints concern legible writing, proper pronunciation of each word, planning of study, and good dictionary habits. The English teachers were asked to discuss these study methods and hints in their classes. Copies of these guides are included in the Appendix.

Copies of the teaching aids, "The Teaching of Spelling in High School" and "Classroom Methods in the Teaching of Spelling," which were prepared for this program, were given

to each teacher in the experimental group. These were intended to give the teachers a common procedural guide. Copies of these instructions are included in the Appendix.

In the two teaching aids just mentioned, the teachers were asked to utilize all possible sensory approaches in teaching spelling. The request was made that each teacher endeavor to stimulate the pupils to develop an interest in words and to assume responsibility for correct spelling. Teachers were asked to insist upon a high degree of spelling accuracy from each pupil. Essentially, the teachers were asked to set spelling standards for the pupils to meet and then to teach the pupils effective means of meeting those standards. A general outline of classroom procedures in teaching spelling was suggested in the second of these aids for the teachers.

The suggested classroom procedures may be summarized briefly. The teachers were asked to lead the pupils to understand that spelling errors create a poor impression and often result in a penalty. The teachers were also asked to teach each pupil a method of learning to spell which would be effective for him and to convince each pupil that he could improve his spelling. The teachers were asked to provide each pupil with opportunities to write about subjects which interest him so he would realize a need for accurate spelling and would assume some of the responsibility for accuracy in his written work.

The instructions for both pupils and teachers were prepared on the basis of principles widely recognized in the literature on the teaching of spelling. Analysis of the questionnaire results revealed certain points of needed emphasis which were of value in the preparation of the guides.

Minor details of instructional methods were left to the initiative of the various teachers. It was not possible to provide a great deal of personal supervision and leadership in the actual classroom situation. The work reported by several teachers will give examples of the type of work done during the experimental period.

One mathematics teacher selected a list of one hundred words commonly used in her algebra classes and tested her pupils on them. The results of the test were recorded, and the pupils began to study the words they had misspelled. Later they took four other tests, each containing twenty-five words from the master list. Toward the end of the period, the entire list of one hundred words was given and these results compared with the first test results. During the first testing period only one pupil missed fewer than ten words, but during the second testing period eight pupils spelled the entire list correctly, and an additional twenty-three pupils missed only five words or less. Fifty-one pupils were involved in this exercise.

One biology teacher aided his pupils in organizing a biology vocabulary list which was periodically checked. The pupils were expected to spell correctly at all times all the words in the vocabulary. Pupils used their own initiative in adding words to the original list. Lists varied in length from about one hundred words to about two hundred words. Misspelled words on biology written work were encircled, but no credit was taken from the pupil's score. The teacher felt that the quality of spelling of this group was superior to that of the other groups he has taught. Thirty-eight pupils were involved.

One English teacher encircled every word misspelled on written work by the pupils and required the entire paper to be re-written if she felt there were too many errors on any one paper. The pupils were asked to correct the spelling of the words which were encircled. Other teachers used various teaching devices to encourage and to teach correct spelling in all work.

The chief variable in teaching procedures applying to the experimental group and the control group was that teachers of the experimental group, as participants in a special program seeking improvement in spelling, sought consistently to give systematic attention to spelling and to utilize techniques which aimed directly at improvement of spelling.

Teachers in the control group were left to their own devices and taught in their customary manner. Indications as to the nature of the "customary manner" of teaching spelling are presented in Chapter IV along with the findings of the questionnaire.

CHAPTER IV

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This program of increased attention to spelling instruction on the secondary level was conducted to determine possible methods of improving spelling instruction in the high schools of Rutherford County and to make specific recommendations for continued efforts toward such improvement. Data for the study were gathered from four main sources: (1) review of literature concerned with improved instructional methods in spelling; (2) a questionnaire submitted to and returned by the teachers of Rutherford County; (3) a testing program carried out in all the high schools of the county, and (4) a period of experimental instruction in three of the schools. The findings from these sources and the conclusions and recommendations based on these findings are reported in the remainder of this chapter.

Findings. The results of the faculty questionnaire are shown in Table I. Sixty-seven teachers from eight high schools completed questionnaires which were used in the study.

TABLE I

RESULTS OF THE QUESTIONNAIRE

-
- I. Please give your estimate of the general level of the pupils in your classes as to their proficiency in spelling.
 Superior_____ Better than average 6 Average 37
 Below average 22 Poor 4
- II. Do you think it is the duty of each teacher to teach correct spelling in his classes?
 Yes 66 No 1
- III. Do you mark incorrectly spelled words on written work handed in by pupils?
 Yes 52 No 10 *Sometimes 3 *Occasionally 1
- IV. Do you require your pupils to correct the spelling of words which they have misspelled in written work:
 Always 4 Usually 23 Occasionally 37 Never 2
- V. Do you consider spelling as one of the bases on which you determine a pupil's grade in your course?
 Yes 35 No 32
- VI. Do you think that a spelling textbook should be used in the high school?
 Yes 54 No 12
- VII. Do you think spelling should be taught:
4 A. as a separate course.
25 B. in connection with other courses offered.
38 C. both approaches are needed.
- VIII. Do you check your own written materials which you give to pupils to see that your own spelling is correct?
 Always 38 Usually 29 Occasionally _____ Never _____
-

*These choices were not offered in the original questionnaire.

TABLE I (continued)

-
-
- IX. Please rate yourself on the following practices which you employ:
- A. Point out the importance of correct spelling in your courses.
Always 26 Usually 22 Occasionally 16 Never 1
- B. Allow class time for practice, drill, or discussion of spelling errors.
Yes 32 No 30
- C. Point out troublesome words when making assignments in order to foreward your pupils of difficulty.
Yes 51 No 14
- D. Have your pupils keep a list of words which they misspell.
Yes 9 No 52
- E. Require pupils to look up misspelled words in the dictionary.
Yes 27 No 33
-
-

Four teachers from Cool Springs High School and two from Cliffside School felt that the general level of spelling proficiency for their pupils was better than average; thirty-seven teachers felt that their pupils' proficiency was average. Twenty-two teachers felt that their pupils were below average in spelling, and four felt that their pupils rated poor.

All of the teachers except one felt that it is their duty to teach correct spelling in their classes. Thirty-five teachers take spelling into consideration in determining a pupil's grades, while thirty-two do not.

Fifty-four teachers felt that a spelling textbook is needed in high school, and twelve felt that a spelling textbook is not needed. Four teachers thought that a separate spelling course for high school is needed; twenty-five felt that spelling should be taught within the context of all courses, while thirty-eight felt that both of these approaches are needed.

Although almost all of the teachers, in response to question II, felt that it is their duty to teach correct spelling, ten said they do not mark incorrectly spelled words on the papers the pupils hand in. Fifty-two teachers replied that they do mark incorrectly spelled words, while four do so "sometimes" or "occasionally." Four teachers always require

and twenty-three teachers usually require their pupils to correct misspelled words; thirty-seven require this occasionally, and the remaining two teachers never require this. Thirty-eight of the teachers said they always check their own written materials to insure correct spelling, and the other twenty nine said they usually do so.

Question number IX was a five-point item asking each teacher to rate himself on certain practices which seem to be desirable. Forty-eight teachers always or usually point out the importance of correct spelling in their courses, while seventeen do so only occasionally or not at all. Thirty do not permit time for practice, drill, or class discussion of spelling errors. Thirty-two said they do conduct class drill and practice on spelling. Fifty-one teachers reported that they point out in advance words which might prove troublesome to the pupils, while fourteen teachers do not or do so only occasionally. Only nine of the teachers require their pupils to write lists of words found to be troublesome to them. Thirty-three of the teachers do not require their pupils to look up misspelled words in the dictionary, while twenty-seven do require this.

The replies to question I indicate that most of the teachers were rather accurately aware of the level of spelling proficiency for their own pupils. Most of the teachers at Harris School underestimated their pupils' achievement, but the teachers in the other schools made estimates close to the levels subsequently indicated by Form 1 of the Wellesley Spelling Scale.

Those groups scoring highest on Form 1 were taught by teachers, as indicated by their replies to the questionnaire, who give the most emphasis to spelling in their classes. The highest groups were the pupils in the ninth and tenth grades of Cliffside School, the ninth and eleventh grades of Cool Springs, and the twelfth grade of Tri High School.

In these groups, the majority of the teachers of the "academic" courses, such as languages, science, mathematics, and history, indicated that they mark words incorrectly spelled by pupils, that they always or usually require their pupils to correct those misspelled words, and that they consider spelling as a factor in determining a pupil's grades. In general they always or usually point out the importance of spelling in their courses, and many of them allow time for practice and drill on difficult words. Many point out in advance those words which might prove to be troublesome to

the pupils. Very few require their pupils to keep a list of misspelled words, but many of them require their pupils to look up misspelled words in the dictionary. Teachers of home economics, physical education, industrial arts, and agriculture do not seem to comply with these practices as often.

An analysis was made of the replies of the teachers who teach the twelfth grades of Ellenboro School, Mt. Vernon School, and Sunshine School, since these groups scored lowest in the county on Form 1. The majority of these teachers also mark incorrectly spelled words; however, only one-third of them usually require their pupils to correct spelling errors, and none always require this. Only one-fourth of these teachers consider spelling as a factor in determining grades. Only five of the total of twelve teachers always or usually point out the importance of correct spelling. Only five indicated that they allow class time for drill on spelling, point out troublesome words for the pupils, or require the pupils to list and look up in a dictionary those words which they misspell.

Item X gave each teacher the opportunity to list practices which he thought effective in the improvement of spelling. Comments were made by twenty-three teachers.

These suggested practices are summarized below. In cases of duplication, the total number of times suggested is indicated in parentheses at the end of the item.

1. Discuss and spell new words studied in the text material. (4)
2. Have tests on spelling and definitions. (4)
3. Conduct spelling contests. (3)
4. Count correct answers completely wrong if they contain a misspelled word. (3)
5. Pronounce words correctly. (3)
6. Count off for misspelled words. (3)
7. Separate words into roots, prefixes, and suffixes. (2)
8. List misspelled words found in pupils' themes and require pupils to learn them. (2)
9. Write words on board, pointing out diacritical markings and accents. (2)
10. Encourage pupils to bring in new words for class discussion and study.
11. Make sentences with new words.
12. Keep a new-word notebook.
13. Give oral reports using new words after studying pronunciation and spelling.

14. Break words into syllabicals. [sic.]
15. Count answers wrong if proper names are misspelled.
16. Underscore misspelled words on written work.
17. Keep a standard list of words which each pupil is expected to master.
18. Use a college list of about four hundred words.
19. Insist that all words used be correctly spelled.
20. Use several class periods in attempts to teach spelling alone.
21. Devote one period per week to spelling twenty-five troublesome words.
22. Use Reader's Digest word tests and achievement tests.
23. Keep a word book which is graded three times yearly.
24. Utilize outside reading.

The mean scores of the grades in each high school and the percentile ranks of mean scores made on the two forms of the Wellesley Spelling Scale are shown in Table II. The mean scores of Form 1 show that the ninth grade of Cool Springs scored the highest at the beginning of the study, while the ninth grade of Alexander scored lowest for that grade. In the tenth grade Cliffside was the highest, while Alexander

TABLE II

COMPARISON OF MEAN SCORES AND PERCENTILE RANKS
OF MEAN SCORES FOR THE TWO FORMS OF
THE WELLESLEY SPELLING SCALE

School	Grade	Mean Scores		Change + or -	Percentile Ranks		Change + or -
		Form 1	Form 2		Form 1	Form 2	
Cliffside	9	26	32	+6	60	80	+20
	10	30	31	+1	60	70	+10
	11	28	32	+4	50	70	+20
	12	27	31	+4	30	50	+20
Harris	9	24	27	+3	50	70	+20
	10	26	30	+4	50	70	+20
	11	26	28	+2	40	50	+10
	12	29	34	+5	40	60	+20
Tri High	9	25	28	+3	50	70	+20
	10	25	28	+3	40	60	+20
	11	27	30	+3	40	60	+20
	12	34	37	+3	70	70	0
Averages, Experimental Group		27.25	30.66	+3.41	48.33	65	+16.66
Alexander	9	21	25	+4	30	60	+30
	10	22	22	0	30	40	+10
	11	28	31	+3	50	60	+10
	12	29	31	+2	40	50	+10
Cool Springs	9	27	28	+1	60	70	+10
	10	28	29	+1	60	70	+10
	11	31	33	+2	60	70	+10
	12	31	32	+1	50	60	+10
Ellenboro	9	23	27	+4	40	70	+30
	10	23	28	+5	50	70	+20
	11	24	26	+2	30	40	+10
	12	26	36	+10	20	70	+50
Mt. Vernon	9	22	22	0	30	40	+10
	10	23	25	+2	30	50	+20
	11	25	31	+6	30	60	+30
	12	25	27	+2	20	30	+10
Sunshine	9	24	25	+1	50	60	+10
	10	23	33	+10	30	80	+50
	11	23	25	+2	30	40	+10
	12	23	24	+1	10	20	+10
Averages, Control Group		25.05	28	+2.95	37.5	55.5	+18

again was lowest. Cool Springs scored highest in the eleventh grade, and Sunshine scored lowest in both the eleventh and twelfth grades. Tri High scored highest in the twelfth grade. Mean scores on Form 1 ranged from a low of twenty-one, made by the ninth grade of Alexander, to a high of thirty-four, made by the twelfth grade of Tri High.

Nine of the mean scores of the grades on Form 1 ranked at the thirtieth percentile. Six ranked at the fortieth percentile; four were at the sixtieth percentile, and one at the seventieth percentile. Two mean scores ranked at the twentieth percentile, and one was at the tenth percentile. The mean score of nine grades ranked at the fiftieth percentile. The percentile ranks of mean scores on Form 1 ranged from the tenth percentile, ranked by the Sunshine twelfth grade, to the seventieth percentile, ranked by the Tri High twelfth grade.

Mean scores on Form 2 show that the Cliffside ninth grade scored highest for that grade at the end of the study and that Mt. Vernon scored lowest. Sunshine's tenth grade was highest, and Alexander's was still lowest. Cool Springs and Sunshine were still highest and lowest, respectively, in the eleventh grade, and Tri High and Sunshine were still highest and lowest in the twelfth grade. Mean scores on Form 2 ranged from a low of twenty-two, scored by both the Alexander tenth grade and the Mt. Vernon ninth grade, to a high of thirty-seven, scored by the Tri High twelfth grade.

Eleven of the mean scores of the groups ranked at the seventieth percentile, and nine ranked at the sixtieth percentile. Two of the mean scores were at the eightieth percentile on Form 2. Only one grade scored as low as the twentieth percentile; one ranked at the thirtieth, four at the fortieth, and four at the fiftieth percentile.

Comparison of the mean scores made on Form 2 by each grade reveals that for the ninth grades Cliffside made the greatest gain--six points. The Mt. Vernon ninth grade showed no gain. The average gain for all ninth grades was two and three-fourths points. For the tenth grades, Sunshine made the greatest gain with ten points. The Alexander tenth grade showed no gain. The average gain for all tenth grades was three and one-fourth points. The Mt. Vernon eleventh grade showed the greatest gain for that level with six points. Four eleventh grade groups were lowest with two points improvement each. The average gain for all eleventh grades was three points. For the twelfth grade, Ellenboro made the greatest gain with ten points, while Cool Springs and Sunshine showed the least improvement with a one point gain each. The average gain for all twelfth grades was three and one-half points. No group showed a decrease in mean score from Form 1 to Form 2.

Comparison of the percentile ranks on the two forms of the scale gives an indication of the progress of the groups compared with national norms. This comparison is shown in Table II. Fifteen of the groups improved ten percentile ranks, eleven improved twenty percentile ranks, and three improved thirty percentile ranks. Two groups, both in the control group, improved fifty percentile ranks. Only one group failed to show an improvement in percentile rank. No group showed a decrease.

Although the experimental group made the greater gain in mean score, the control group made a greater gain in percentile rank. This is partly explained by the facts that two groups in the control group made no gain in mean score, but each made a ten point gain in percentile rank. At the same time, one group in the experimental group made a three point gain in mean score, but made no gain in percentile rank.

Table III shows the average of the mean scores and the average change in mean score for each grade in the experimental group, the control group, and for the two groups combined. At both the beginning and the end of the experimental period, the average mean score in the experimental group was progressively higher from the ninth grades through the twelfth grades, except for the average mean scores of the tenth and the eleventh grades on Form 1. The mean score for these grades

TABLE III

AVERAGES OF MEAN SCORES AND CHANGES
IN MEAN SCORES, GRADE BY GRADE,
FORM 1 AND FORM 2

A. Experimental Group:

Grade	Average Form 1	Mean Score Form 2	Average Change + or -
9	25	29	+4
10	27	29.67	+2.67
11	27	30	+3
12	30	34	+4

B. Control Group:

Grade	Average Form 1	Mean Score Form 2	Average Change + or -
9	23.4	25.4	+2
10	23.8	27.4	+3.6
11	26.2	29.2	+3
12	26.8	30	+3.2

C. Total Group:

Grade	Average Form 1	Mean Score Form 2	Average Change + or -
9	24	26.75	+2.75
10	25	28.25	+3.25
11	26.5	29.5	+3
12	28	31.5	+3.5

was the same, twenty-seven. The average change for both the ninth and the twelfth grades of the experimental group was an improvement of four points. The tenth grades of the experimental group showed an average improvement of two and sixty-seven one-hundredths points, and the eleventh grades showed an average improvement of three points. The average gain of the entire experimental group was three and forty-one one-hundredths points.

In the control group, the average scores also were progressively higher from the ninth grade through the twelfth grade. The tenth grade made an improvement of three and six-tenths points. This is nearly two points greater than the improvement made by the tenth grade of the experimental group. The eleventh grades of the control group showed an average improvement of three points during the study, the same as was made by the eleventh grade in the experimental group. The ninth grade made an average improvement of two points, and the twelfth grades made an average improvement of three and two-tenths points. The average gain for the control group was two and ninety-five one-hundredths points.

For the pupils in both the experimental and the control groups, the average score on both forms of the Wellesley Spelling Scale increased progressively from the ninth through the twelfth grades. The twelfth grades showed the greatest

improvement, three and one-half points, while the tenth grades, showing three and one-fourth points, made the next greatest gain. The ninth grades averaged an improvement of two and three-fourths points, and the eleventh grades showed an average improvement of three points.

Both groups made improvement in spelling during the experimental period. The experimental group made a slightly greater gain, three and forty-one one-hundredths points, compared with two and ninety-five one-hundredths points gain by the control group, a difference of just over one-half a point. The difference between the improvement made by the ninth grades of the two groups was more pronounced than the differences between the other three grades of the two groups. The ninth grade of the experimental group made two points improvement than did the ninth grade of the control group. The twelfth grade of the experimental group made eight-tenths of a point improvement more than did the twelfth grade of the control group. The eleventh grade of the two groups made the same amount of improvement, three points. The tenth grade of the control group made slightly less than two points improvement more than did the same group of the experimental group.

The difference in amount of improvement between the experimental group and the control group, while certainly not impressive, may to some extent be attributed to the effects of the experimental procedures. The pupils in the experimental

group were thought to be representative of the pupil population of the county, although the experimental group rated somewhat higher than the control group on Form 1 of the test. The difference between the two groups, however, was slightly greater after Form 2 was administered, but it is not a sufficient difference to assume any major significance.

The study appears to show that additional emphasis on spelling, in the form of planned, consistent attention to instruction and application of sound principles and techniques carried out incidentally in the content of all classes, may possibly bring about a higher level of spelling proficiency on the part of the majority of the pupils. It should be noted, however, on the basis of the results of this study, that supervision in the form of group meetings, written directives, and written study sheets will bring about only limited improvement in spelling proficiency. Improvement of a more substantial nature, it appears, will require procedures carried out under more detailed and personalized supervision, and with more rigid control of variables.

Following is a summary of the findings of this study:

1. That at the beginning of the study there existed wide differences in levels of spelling achievement in Rutherford County, but that these differences decreased during the study.

2. That, with few exceptions, at the beginning of the study the levels of achievement were noticeably low.

3. That at the end of the study the levels of achievement were considerably higher.

4. That at the beginning of the study there existed some difference between the levels of achievement of the experimental group and the control group, and that the difference increased during the study with the experimental group showing a slightly greater improvement.

5. That, as revealed by the questionnaire results and analysis of scores on Form 1 of the test, a positive relation seems to exist between achievement of pupils and the attitudes and practices of their teachers.

Conclusions. The findings of this study seem to indicate that proficiency in spelling is a result of a number of influences upon the pupil. Although the instructional method is surely one of these influences, it does not appear that control of this single factor in the manner described in the experimental procedures will bring about any significant improvement in the achievement of pupils.

The major conclusions of the study are summarized as follows:

1. That consistent, methodical attention to the problem of spelling instruction, such as that carried out during the experimental period, will result in only a limited amount of improvement in spelling proficiency. The amount of improvement under conditions where supervision is of a general and rather impersonal nature, as was the case in this study, is not likely to be as great as might be expected under conditions where supervision of the experimental procedures and the activities of the control group is more direct and personal.

2. That a special program designed to attack deliberately the problem of improving spelling of high school pupils in a school system may require more direct, specific attention to spelling as a separate course. Little success seems to be derived where the supervisor of such a program can provide only a minimum amount of personal supervision and control over the actual classroom teaching. In this study, the supervisor of the program was in position to direct the activities only through means of group conferences with the teachers, supervisory bulletins, and written teaching aids.

3. That the problem of improving spelling in a school system involves deep-seated factors in the total experiences of pupils related to home life and community cultural

influences, and that the problem will require the application of continuous and consistent efforts on the part of the schools.

4. That further research is needed to ascertain methods of controlling more of the variable factors concerning teaching and learning of spelling, since spelling appears to be a complex process dependent upon numerous factors.

Recommendations. On the basis of the results of this study, the following recommendations are made to the administrators and the teachers of the high schools of Rutherford County:

1. That all teachers be encouraged to place additional emphasis on correct spelling in all written work done by the pupils. This emphasis should be in the form of planned, consistent attention to instruction and the application of sound principles of instruction such as those applied in the experimental program conducted as a part of this study.

2. That direct supervisory services be provided which would insure this needed additional emphasis on spelling and which would lead to consistent application of appropriate procedures and techniques in all classrooms.

3. That further research and study be conducted in Rutherford County to aid in improving the procedures for teaching correct spelling on the secondary level. Such

research and study should consist of comparisons of groups of pupils who are taught spelling as a separate course, of groups of pupils who are taught spelling directly for short intervals in a class such as the English class, and of groups of pupils who are taught spelling in the content of all their courses. This research and study should be supervised closely to control as many of the variable factors as possible.

MILLERS FALLS

OLD DEERFIELD BOND

50% COTTON CONTENT

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APPENDIX

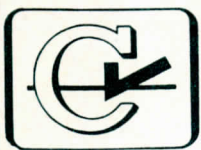
QUESTIONNAIRE

Name _____	Subjects _____	Grade Level _____	Number of Pupils _____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

This questionnaire is a part of a project to determine the effectiveness of spelling instruction in the high schools of Rutherford County. You are asked to check the appropriate response to each question as it refers to you and the courses you teach. Please complete this as quickly as possible and return it to your principal.

- I. Please give your estimate of the general level of the pupils in your classes as to their proficiency in spelling.
 Superior _____ Better than average _____ Average _____
 Below average _____ Poor _____
- II. Do you think it is the duty of each teacher to teach correct spelling in his classes?
 Yes _____ No _____
- III. Do you mark incorrectly spelled words on written work handed in by pupils?
 Yes _____ No _____
- IV. Do you require your pupils to correct the spelling of words which they have misspelled in written work?
 Always _____ Usually _____ Occasionally _____ Never _____
- V. Do you consider spelling as one of the bases on which you determine a pupil's grade in your course?
 Yes _____ No _____
- VI. Do you think that a spelling textbook should be used in the high school?
 Yes _____ No _____
- VII. Do you think spelling should be taught:
 _____ A. as a separate course.
 _____ B. in connection with other courses offered.
 _____ C. both approaches are needed.
- VIII. Do you check your own written materials which you give to pupils to see that your spelling is correct?
 Always _____ Usually _____ Occasionally _____ Never _____

- IX. Please rate yourself on the following practices which you employ:
- A. Point out the importance of correct spelling in your courses.
Always_____ Usually_____ Occasionally_____ Never_____
- B. Allow class time for practice, drill, or discussion of spelling errors.
Yes_____ No_____
- C. Point out troublesome words when making assignments in order to forewarn your pupils of difficulty.
Yes_____ No_____
- D. Have your pupils keep a list of words which they misspell.
Yes_____ No_____
- E. Require pupils to look up misspelled words in the dictionary.
Yes_____ No_____
- X. Please list on the bottom of this sheet any other practices you employ which you regard as effective in the improvement of spelling.



High Schools and Colleges • Form 1

Wellesley Spelling Scale

DEvised BY THELMA G. ALPER AND EDITH B. MALLORY

Do not write or mark on this booklet unless told to do so by the examiner.

Name..... Grade or Occupation..... Sex
Last First Middle Occupation M - F

School or Organization..... City..... Date of Test.....
Month Day Year

Examiner..... (.....) Examinee's Age..... Date of Birth.....
Month Day Year

INSTRUCTIONS TO EXAMINEES:

This is a spelling test. After each of the sentences in this booklet there are four spellings of the word which has been omitted in the sentence. Decide which form of the word is correctly spelled and mark its number as you are told.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.

SAMPLE: A. A good leader is a of the people.
1 **frend** 2 **friend** 3 **frenid** 4 **frende**

SAMPLE: B. A ruler is used to length.
1 **measure** 2 **mesure** 3 **meshure** 4 **measur**

Correct Test
Booklet Marks

Correct Answer
Sheet Marks

2 A

1 2 3 4
A | | | |

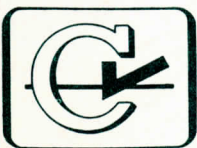
1 B

1 2 3 4
B | | | |

1. The dance was by a play.
¹ **proceded** ² **preceaded** ³ **preceeded** ⁴ **preceeded** 1
2. Pack these into boxes.
¹ **separate** ² **sepparate** ³ **sepperate** ⁴ **seperate** 2
3. What is this country's export?
¹ **princeple** ² **principle** ³ **princeptal** ⁴ **principal** 3
4. He told her that he would go.
¹ **definately** ² **definitely** ³ **definitly** ⁴ **definetely** 4
5. Try to the situation.
¹ **analyze** ² **annalize** ³ **analise** ⁴ **anylize** 5
6. There is too much false
¹ **opttomism.** ² **optomism.** ³ **optimisim.** ⁴ **optimism.** 6
7. Is it to go now?
¹ **allright** ² **alrite** ³ **all right** ⁴ **alright** 7
8. This book is now in my
¹ **posession.** ² **possession.** ³ **possession.** ⁴ **possission.** 8
9. Over the fireplace was a carved
¹ **mantle.** ² **mantel.** ³ **mantal.** ⁴ **manntle.** 9
10. The child was on his mother.
¹ **dependent** ² **dipendent** ³ **dependant** ⁴ **dipendant** 10
11. That my interest.
¹ **aroused** ² **arroused** ³ **arroussed** ⁴ **arowsed** 11
12. His was slow.
¹ **develapement** ² **developpment**
³ **developement** ⁴ **development** 12
13. Their rapid progress was
¹ **phenomenal.** ² **finominal.**
³ **phaenomanal.** ⁴ **phenominal.** 13
14. The rain did not his plans.
¹ **affect** ² **afect** ³ **effect** ⁴ **efect** 14
15. He is a child.
¹ **mischievious** ² **michevous**
³ **mischievous** ⁴ **mischevious** 15
16. The storm during the night.
¹ **ocurred** ² **occurred** ³ **occoured** ⁴ **occured** 16

17. He the film last week.
 1 **develaped** 2 **developped**
 3 **developed** 4 **develapped** 17
18. The to his mother is striking.
 1 **ressemblance** 2 **resembelance**
 3 **resemblence** 4 **resemblance** 18
19. His is his worst fault.
 1 **stubbornness.** 2 **stubornness**
 3 **stubborness** 4 **stuborness** 19
20. It was a festive
 1 **occassion.** 2 **occaision.** 3 **occasion.** 4 **ocassion.** 20
21. He is in what he says.
 1 **inconsistant** 2 **inconcistant**
 3 **inconcistent** 4 **inconsistent** 21
22. The monk returned to the
 1 **monastary.** 2 **monastery.** 3 **monestery.** 4 **monestary.** 22
23. They cook on a stove.
 1 **carosine** 2 **kerosine** 3 **kerosene** 4 **kerosin** 23
24. They were by the war.
 1 **disilluisioned** 2 **disilusioned**
 3 **disalusioned** 4 **disallusioned** 24
25. Do you this brand?
 1 **reccommend** 2 **recomend**
 3 **reccomend** 4 **recommmend** 25
26. Let him to the conclusion.
 1 **proceed** 2 **proceede** 3 **procede** 4 **proceade** 26
27. I wish to for my error.
 1 **appologise** 2 **apologise** 3 **apologize** 4 **appologize** 27
28. His were usually right.
 1 **dicisions** 2 **decissions** 3 **decisions** 4 **descisions** 28
29. The fault was hers.
 1 **fundamentally** 2 **fundimentally**
 3 **fundementaly** 4 **fundamentaly** 29
30. His of facts was unusual.
 1 **absorpsion** 2 **absorbtion** 3 **absorption** 4 **absorbsion** 30
31. He tried to hide his
 1 **embarrassment.** 2 **embarassment.**
 3 **embarrasment.** 4 **embarrasement.** 31
32. is hard to bear.
 1 **Lonelyness** 2 **Loneliness** 3 **Lonliness** 4 **Lonlines** 32

33. Some behavior patterns are
¹ innate. ² enate. ³ inate. ⁴ ennate. _____ 33
34. To him she seemed and lovely.
¹ etherial ² atherial ³ athereal ⁴ ethereal _____ 34
35. The girl has a nose.
¹ shinny ² shinney ³ shiny ⁴ shiney _____ 35
36. His only was playing ball.
¹ past-time ² passtime ³ pastime ⁴ pasttime _____ 36
37. The bride had an look.
¹ exaulted ² exalted ³ exhalted ⁴ exhaulted _____ 37
38. Listen to the of their voices.
¹ murmur ² murmer ³ mermer ⁴ murmor _____ 38
39. This has five rooms.
¹ apartment ² appartement
 ³ appartment ⁴ appartement _____ 39
40. The word "....." means "in like manner."
¹ similiarly ² similarly ³ similiarly ⁴ similarly _____ 40
41. Mary has beauty.
¹ extraordinary ² extraodinary
 ³ extrodinary ⁴ extrordinary _____ 41
42. People were standing in both of the church.
¹ aisles ² ailes ³ ile ⁴ isles _____ 42
43. There is much in the news.
¹ propiganda ² propoganda
 ³ propeganda ⁴ propaganda _____ 43
44. Is college your brother?
¹ benifiting ² benefiting ³ benifitting ⁴ benefitting _____ 44
45. Each man his own interests.
¹ persues ² pursuse ³ pursues ⁴ persous _____ 45
46. We fear policies.
¹ aggressive ² agressive ³ agresive ⁴ aggressive _____ 46
47. The bolt ran down the rod.
¹ lightning ² lightining ³ lightenning ⁴ lightening _____ 47
48. The of the sun hurts my eyes.
¹ brillience ² brilience ³ brilliance ⁴ briliance _____ 48
49. There is no in his speech.
¹ sencerity ² sincerety ³ sincerity ⁴ scincerity _____ 49
50. These are for seniors only.
¹ priveleges ² privileges ³ priviledges ⁴ privilages _____ 50



High Schools and Colleges • Form 2

Wellesley Spelling Scale

DEvised BY THELMA G. ALPER AND EDITH B. MALLORY

Do not write or mark on this booklet unless told to do so by the examiner.

Name..... Grade or Occupation..... Sex
Last First Middle Occupation M - F

School or Organization..... City..... Date of Test.....
Month Day Year

Examiner..... (.....) Examinee's Age..... Date of Birth.....
Month Day Year

INSTRUCTIONS TO EXAMINEES:

This is a spelling test. After each of the sentences in this booklet there are four spellings of the word which has been omitted in the sentence. Decide which form of the word is correctly spelled and mark its number as you are told.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.

SAMPLE: A. A good leader is a of the people.
¹ frend ² friend ³ frenid ⁴ frende

Correct Test
Booklet Marks

2 A

SAMPLE: B. A ruler is used to length.
¹ measure ² mesure ³ meshure ⁴ measur

1 B

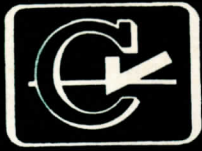
Correct Answer
Sheet Marks

	1	2	3	4
A				
B				

1. The cry sounded
¹ **wieired.** ² **wiered.** ³ **weird.** ⁴ **wierd.** _____ 1
2. Her first attempt was
¹ **successful.** ² **sucessful.** ³ **successfull.** ⁴ **succesful.** _____ 2
3. Because of his we gave in.
¹ **ensistance** ² **insistance** ³ **insistense** ⁴ **insistence** _____ 3
4. He the way.
¹ **lead** ² **led** ³ **ledd** ⁴ **leade** _____ 4
5. The disease was in many villages.
¹ **prevalent** ² **prevalant** ³ **prevelent** ⁴ **prevelant** _____ 5
6. What was the of the new law?
¹ **efect** ² **affect** ³ **afect** ⁴ **effect** _____ 6
7. He is the school
¹ **superentendent.** ² **superentendant.**
³ **superintendent.** ⁴ **superintendant.** _____ 7
8. Whatever happens, do not
¹ **dispair.** ² **dispare.** ³ **despair.** ⁴ **dispaire.** _____ 8
9. Take this twice a day.
¹ **medecine** ² **medicine** ³ **medecin** ⁴ **medicin** _____ 9
10. Do not this card.
¹ **lose** ² **loose** ³ **looze** ⁴ **loze** _____ 10
11. Our is brief.
¹ **existence** ² **exsistance** ³ **exhistence** ⁴ **existance** _____ 11
12. Kittens have a great deal of
¹ **couriousity.** ² **curriosity.** ³ **curiosity.** ⁴ **curiosity.** _____ 12
13. This is easy.
¹ **comparatively** ² **comparitively**
³ **comparetively** ⁴ **comparativly** _____ 13
14. She the longer road.
¹ **preferred** ² **perferred** ³ **prefered** ⁴ **preffered** _____ 14
15. Mountain air is
¹ **exilerating.** ² **exhilerating.**
³ **exhilarating.** ⁴ **exhilirating.** _____ 15
16. Her was convincing.
¹ **argumant** ² **argument** ³ **arguemant** ⁴ **arguement** _____ 16

17. He was unable to keep his
 1 **committment.** 2 **comittment.**
 3 **commitment.** 4 **committement.** _____ 17
18. He took a course in law.
 1 **correspondance** 2 **corespondance**
 3 **corespondence** 4 **correspondence** _____ 18
19. Her was pleasant to see.
 1 **enthusiasm** 2 **enthusiazim**
 3 **enthusiasme** 4 **enthousiasm** _____ 19
20. Popular music has strong
 1 **rhythmn.** 2 **rythem.** 3 **rhythm.** 4 **rythm.** _____ 20
21. He mentioned his plans only
 1 **incedentally.** 2 **incidently.**
 3 **incidentally.** 4 **incidentally.** _____ 21
22. The story made him laugh.
 1 **humurous** 2 **humorous** 3 **humerous** 4 **humorus** _____ 22
23. She was a individual.
 1 **presistant** 2 **percistent** 3 **persistent** 4 **persistant** _____ 23
24. She is about her work.
 1 **conscientious** 2 **conscientous**
 3 **conciencious** 4 **consciencious** _____ 24
25. If you you will succeed.
 1 **persever** 2 **perservere** 3 **percivere** 4 **persevere** _____ 25
26. We hold services on Sunday.
 1 **divine** 2 **devine** 3 **davine** 4 **devin** _____ 26
27. The children had a very party.
 1 **halarious** 2 **hilarious** 3 **hilarious** 4 **hellarious** _____ 27
28. The cannot change his spots.
 1 **leapord** 2 **lepard** 3 **leopard** 4 **lepeord** _____ 28
29. Put this in the folder marked
 1 **miscellaneous.** 2 **miscelaneous.**
 3 **miscellanious.** 4 **miscilaneous.** _____ 29
30. Eat these grapes.
 1 **lushious** 2 **lusious** 3 **luscious** 4 **lucious** _____ 30
31. Can you between the colors?
 1 **discriminate** 2 **discreminate**
 3 **descriminate** 4 **descriminate** _____ 31
32. He reported among the leaders.
 1 **dissention** 2 **dissension** 3 **descension** 4 **disention** _____ 32

33. These clippings are from my book.
¹ excerpts ² exerts ³ exerpts ⁴ exerps 33
34. Many of the live at school.
¹ sophemores ² sophmores
³ sophamores ⁴ sophomores 34
35. How can we the revolt?
¹ surpress ² surpres ³ suppress ⁴ supress 35
36. I was by what I had heard.
¹ prejudiced ² prejediced ³ prejudiced ⁴ prejudist 36
37. Many take this course.
¹ atheletes ² athletes ³ athiletes ⁴ athaletes 37
38. Tell the to bring the car at noon.
¹ chauffeur ² chaufer ³ chauffer ⁴ chauffeur 38
39. Many of his are alive.
¹ descendants ² descendent
³ decendants ⁴ decendents 39
40. He proved his point very
¹ subtilly. ² subtilly. ³ subtely. ⁴ subtly. 40
41. Her is suited to this work.
¹ temperament ² tempermant
³ temprament ⁴ temperment 41
42. She ate a breakfast.
¹ leisurly ² leisurly ³ liesurely ⁴ leasurely 42
43. How many speak English?
¹ interperators ² interprators
³ interpretors ⁴ interpreters 43
44. The coach is the players.
¹ critizing ² criticizing ³ critising ⁴ criticising 44
45. Can you two more people?
¹ accomadate ² accomodate
³ accomodate ⁴ accomadate 45
46. Do you that he is guilty?
¹ alledge ² alege ³ aledge ⁴ allege 46
47. History has a to repeat itself.
¹ tendency ² tendincy ³ tendancy ⁴ tendency 47
48. Do you honestly and believe this?
¹ trully ² truley ³ truly ⁴ truely 48
49. What is the in this test?
¹ preceadure ² proceedure ³ procedure ⁴ precedure 49
50. The overcoat his whole body.
¹ envelaped ² enveloped
³ envelloped ⁴ envelopped 50



CALIFORNIA TEST BUREAU

MANUAL

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Wellesley Spelling Scale

High School and College • Forms 1 and 2

DEvised BY THELMA G. ALPER AND EDITH B. MALLORY

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Wellesley Spelling Scale

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THE TEST

The *Wellesley Spelling Scale* is designed to test spelling proficiency at the ninth through the twelfth grade and college levels.

In high schools and colleges, a student's ability to spell is likely to be taken for granted, since the teaching of spelling, like the teaching of reading, ceases to occupy a position of importance in the usual school curriculum after the sixth or seventh grade. Actually, however, wide differences in spelling proficiency exist at these higher stages, a fact which becomes apparent when students try to enter a vocational field such as secretarial work or any other occupation which involves writing or clerical work.

The *Wellesley Spelling Scale* consists primarily of words which occur in the customary written vocabulary of the high school graduate, so that a person's score on this test is genuinely representative of the spelling which he will use in the course of ordinary school or business writing. The Scale therefore affords a useful gauge of this aspect of a person's efficiency.

The *Wellesley Spelling Scale* is an instrument designed to aid in the identification of poor spellers. It is not merely a measure of the distribution of spelling ability. A satisfactory remedial program should include valid standardized tests as well as suitable remedial techniques. An individual whose score is low on the *Wellesley Spelling Scale* should be encouraged to seek special instruction.

It is the primary function of the *Wellesley Spelling Scale* to provide a short, easily administered, spelling scale for high school and college students.

Description of the Test Reliability and Validity

Wellesley Spelling Scale

DESCRIPTION OF THE TEST

The two forms of the *Wellesley Spelling Scale* present an efficient method of testing spelling skill at levels above which it is ordinarily taught. The test is made up of fifty four-response multiple-choice items. Each item consists of a sentence with one word omitted. Under the sentence are four different spellings of the omitted word from which the examinee must choose the correct one.

The three incorrect versions of the word, which are offered together with the correct form, are, in each case, those misspellings which appeared most often in samples of students' written themes.

The examinee may mark his answers in his test booklet or he may use the special IBM Answer Sheet.

RELIABILITY AND VALIDITY

RELIABILITY

Statistical interpretation of test results produces reliability data applicable to individuals and other data applicable to groups or classes. Complete reliability data for an individual's raw score on either or both forms of the test are presented in Table 1; data for classes or groups are presented in Table 4 on page 4.

TABLE 1

RELIABILITY COEFFICIENTS AND RELATED DATA
FOR INDIVIDUAL RAW SCORES OF THE
WELLESLEY SPELLING SCALE

FORM 1*			FORM 1 vs. FORM 2†					
Grade	r	S.E. Meas.	Form 1		r	Form 2		S.D.
			Mean	S.D.		Mean	S.D.	
9	.72	3.45	25.6	5.92	.64	24.5	7.12	
10	.78	3.37	27.4	6.90	.73	26.9	7.71	
11	.80	3.29	28.4	7.21	.76	27.6	8.12	
12	.81	3.34	30.8	6.29	.80	30.7	7.41	
13	.76	3.43	—	—	—	—	—	

*Calculated by Kuder-Richardson formula 21. Number of cases: Grade 9 — 135; Grade 10 — 117; Grade 11 — 146; Grade 12 — 108; and Grade 13 — 1769.

†Calculated by Pearson product-moment formula. Number of cases: Grade 9 — 56; Grade 10 — 61; Grade 11 — 66; and Grade 12 — 54.

In interpreting individual scores, the standard error of measurement is usually more helpful than reliability coefficients. A reliability coefficient provides a general indication of the confidence which one may place in a measuring instrument. However, the standard error of measurement indicates how closely the individual's obtained score approximates his true score. For example, if the standard error is 3.0, the chances are two to one that the examinee's score lies within three raw score points (one S.E. Meas.) above or below his true score, or nineteen to one that it is not more than six raw score points (2 x S.E. Meas.) from it.

Tables 2 and 3 are provided to aid in the interpretation of reliability in terms of percentile ranks. They indicate the chances that true percentile ranks will fall at or above (Table 2) or at or below (Table 3) the median, for obtained percentile ranks of individuals on tests with various reliability coefficients.

TABLE 2

PROBABILITIES THAT TRUE PERCENTILE RANKS
FALL AT OR ABOVE MEDIANS FOR
OBTAINED PERCENTILE RANKS¹

Reliability Coefficient of Tests or Sub-tests	OBTAINED PERCENTILE RANK						
	40	30	20	10	5	2	1
.75	1 in 10	1 in 20	1 in 50	*	*	*	*
.80	1 in 11	1 in 25†	1 in 100	*	*	*	*
.85	1 in 14	1 in 33	*	*	*	*	*
.90	1 in 25	1 in 100	*	*	*	*	*

*Probability of less than 1 chance in 100 that the true percentile is at or above the median (or mean).

†Sample: If an examinee obtains a percentile rank of 30 on a test with a reliability of .80, there is only 1 chance in 25 that his true percentile rank is at or above the median.

TABLE 3

PROBABILITIES THAT TRUE PERCENTILE RANKS
FALL AT OR BELOW MEDIANS FOR
OBTAINED PERCENTILE RANKS¹

Reliability Coefficient of Tests or Sub-tests	OBTAINED PERCENTILE RANK						
	60	70	80	90	95	98	99
.75	1 in 10	1 in 20	1 in 50	*	*	*	*
.80	1 in 11	1 in 25†	1 in 100	*	*	*	*
.85	1 in 14	1 in 33	*	*	*	*	*
.90	1 in 25	1 in 100	*	*	*	*	*

*Probability of less than 1 chance in 100 that the true percentile is at or below the median (or mean).

†Sample: If an examinee obtains a percentile rank of 70 on a test with a reliability of .80, there is only 1 chance in 25 that his true percentile rank is at or below the median.

¹Based on Leone Chesire, Milton Saffir, and L. L. Thurstone, *Computing Diagrams for the Tetrachoric Correlation Coefficient* (Chicago: The University of Chicago Bookstore, 1933), 60 pp.

TABLE 4

STANDARD ERRORS OF TEST RAW SCORE MEDIANS FOR CLASSES OR GROUPS OF VARIOUS SIZES

FORMULA AND APPLICATION	SIZE OF CLASS OR GROUP			
	35	75	150	500
Formula for S.E. Med. in Terms of S.D. S.E. Med. = S.D. $\times \left(\frac{1.253}{\sqrt{N}} \right) =$.21 S.D.	.14 S.D.	.10 S.D.	.06 S.D.
Wellesley Spelling Scale S.E. Med. = 7.03 $\times \left(\frac{1.253}{\sqrt{N}} \right) =$	1.48	0.98	0.70	0.42

Class or group median raw scores or percentiles are extremely useful in test interpretation. They can and should be used for instructional evaluation and planning. As an aid in such interpretations, the standard errors of raw score medians for groups of various sizes are presented in Table 4. This statistic indicates how closely the obtained group raw score median would approximate the medians of similar samples from the same population.

VALIDITY

The validity of a test reflects the care and skill utilized in its construction. A description of the construction of the *Wellesley Spelling Scale* follows.²

A test designed to determine remedial needs is perhaps less concerned with the total distribution of the function which it purports to measure than with its effectiveness in selecting the students most in need of remedial instruction. For this reason the present test was constructed on the basis of the most frequently misspelled words in the active written vocabularies of college freshmen. The scale was derived by tabulating all the errors which were made by 363 freshmen enrolled in an eastern college in themes written for a required college course in English composition, and then listing the words which were most frequently misspelled. Seven words, which were used rarely in themes but which proved difficult for students when tested, are also included.

In these multiple-choice items the three incorrect versions of a word, which are offered together with the correct form, are in each case those misspellings which appeared most often in the students' work.

The spelling errors in over 5000 themes were tabulated. A record was kept of the frequency of each misspelled word, the form of the misspelling, and the number of students who made each error. The themes yielded a total of 1340 misspelled words. These words were classified into 501 word-families, i.e., base words and their derivatives, and arranged into five groups. Group I

includes all words of which either the base form or a derivative was misspelled by five or more freshmen; Group II, word-families misspelled by four freshmen, etc.

Following the procedure of Andersen,³ thirty-three word-families misspelled by five or more students and the seventeen word-families misspelled by at least four students were used for building a preliminary fifty-word spelling scale. In each word-family, the word-form most frequently misspelled in student themes was selected as the test word.

Following the construction of Form 1, a second form, Form 2, was developed with approximately the same difficulty. Results of the two are readily made comparable by the use of percentile scores as found in the table of norms on page 12.

In the preliminary studies the completion type of spelling item was utilized. However, in order to make the Scale more objectively scorable, the multiple-choice type of item was used in the development of the norms on page 12.

Both forms are of the multiple-choice type and test the student's ability to recognize the correct spelling of a word and to distinguish it from the correct versions. The operation is not unlike that which occurs if one rereads one's written work in order to check their accuracy. This kind of test is easy to administer and to score, yet results have been found to correlate highly with scores of the dictation-type test. Even at the college level, where the range of scores is relatively restricted, scores from Form 1, administered in multiple-choice form, correlated $.75 \pm .02$ with those obtained by dictating the word-list of Form 2.

Eighteen validation studies have been carried out which compare the *Wellesley Spelling Scale—Form 1* with other test instruments. The studies were made in and through the generous cooperation of educators in the following nine school systems and colleges: Afton, Wyoming; College of Idaho, Caldwell, Idaho; College of Emporia, Emporia, Kansas; Huron College, Huron, South Dakota; New Orleans, Louisiana; Richmond, Virginia; Tully, New York; Tulsa, Oklahoma; and Seattle, Washington.

² Thelma G. Alper, "A Diagnostic Spelling Scale for the College Level: Its Construction and Use," *Journal of Educational Psychology*, 33: 273-90, April, 1942.

³ William N. Andersen, "Determination of a Spelling Vocabulary Based Upon Written Correspondence," *University of Iowa Studies in Education*, Vol. II, No. 1, 1921, 66 pp.

TABLE 5

CORRELATION COEFFICIENTS AND RELATED DATA FOR OTHER STANDARDIZED TESTS VS. WELLESLEY SPELLING SCALE

OTHER TEST	GRADE	NO. OF CASES	OTHER TEST		COEFFICIENT*	WELLESLEY SPELLING SCALE	
			Mean	S.D.		Mean	S.D.
ayer Standardized Spelling Test.....	11	51	23.6	6.6	.64	31.6	7.3
ayer Standardized Spelling Test.....	12	29	22.5	6.1	.67	28.4	8.5
AT—Advanced Language (Spelling).....	10	35	13.2	4.3	.57	24.5	6.6
AT—Advanced Language (Spelling).....	11	48	15.3	4.2	.66	26.1	7.9
AT—Advanced Language (Spelling).....	12	20	16.8	7.4	.55	26.6	7.0
AT—Language Usage (Spelling).....	9	54	36.2	23.3	.74	23.9	6.9
AT—Language Usage (Spelling).....	10	30	45.7	28.8	.84	26.4	7.8
sential H.S. Content (Spelling).....	9	25	40.2	6.3	.76	23.8	6.6
sential H.S. Content (Spelling).....	10	26	44.3	7.4	.82	28.2	7.0
sential H.S. Content (Spelling).....	11	29	48.7	6.2	.85	32.8	6.7
sential H.S. Content (Spelling).....	12	25	48.4	3.3	.61	33.0	6.5
sentials of English (Spelling).....	13	51	20.2	3.6	.65	35.7	6.4
wa Placement, Series E.T. (Spelling).....	13	76	57.2	12.2	.73	32.3	6.6
ncoln Diagnostic Spelling.....	10	51	48.0	21.6	.73	26.6	7.4
ncoln Diagnostic Spelling.....	11	45	60.7	17.7	.76	27.1	6.4
urdue Placement Test in English (Sp.).....	13	37	40.4	9.8	.63	33.8	6.7
raxler H.S. Spelling (Form 3).....	11	21	48.0	27.6	.87	29.0	6.9
raxler H.S. Spelling (Form 3).....	12	71	62.0	22.4	.55	32.2	7.4

Unpublished coefficients, corrected for attenuation, resulted in r's of .90 and above in seven of the eighteen comparisons.

Wellesley Spelling Scale

The *Wellesley Spelling Scale* is designed to measure spelling proficiency at the ninth grade, high school, vocational school, and college levels. It includes primarily words which are frequently found in the written vocabulary of the high school graduate, so that a person's score on this test is genuinely representative of the spelling which he will use in the course of ordinary school or business writing. The last 15 per cent of the Scale is composed of items of considerable difficulty. This gives it a ceiling when used to test the upper high school grades and college classes.

In interpreting an examinee's score it is important that the correct norm group be used. (See the description of norm groups on page 11.) The composition of the population on which the norms were based ranges from grade 9 to college freshmen.

The *Wellesley Spelling Scale* can serve as a valuable counseling instrument. The interpretation of the scores varies little from one educational or counseling program to another. The action that follows the interpretations will, however, differ according to the facilities available. In business schools or secondary schools where facilities for formalized remedial work in spelling are available, students scoring below the standards of the school or the vocation for which they are preparing can be identified and referred to the proper programs or classes. When time or facilities for remedial work are not available, spelling scores will still be useful for counseling purposes or for employee selection. Spelling is an important factor to consider when evaluating an examinee's potential for success in vocations such as clerical or secretarial work or

for any job which requires writing or proofreading. Thus examinees whose scores are low in relation to the unselected norm groups should not be encouraged to consider fields where good spelling ability is essential to success.

To this point, the uses suggested for the *Wellesley Spelling Scale* have been concerned with the individual examinee's performance. Obviously, it can also serve as a survey instrument designed to measure the progress or status of groups in spelling. The presence of two forms facilitates its use in testing a group before and after a learning period. Table 4 on page 4 is designed to aid the examiner or administrator in determining the degree of refinement with which he can interpret the group results. Thus an individual interpreting test results of a group of thirty-five examinees from whose scores a median value of 31 is computed, can be quite confident (the chances are 2 to 1) that a repetition of the administration will result in a median score falling within the limits of 29.5 and 32.5.¹

An examination of the distribution of scores suggests that the level of test difficulty is suitable for the population tested. One will note that all of the groups, with the exception of the ninth grade, are skewed slightly to the lower end of the distribution (pile up at the upper end of the distribution). This is a desirable aspect of the *Wellesley Spelling Scale*, since its function is not so much to measure the distribution of spelling ability as to differentiate among examinees at the lower end of the scale and to aid in the identification of poor spellers.

¹ The S. E. Med. of 1.48 in Table 4 was rounded to 1.5 for convenience in interpretation.

PART 3

Directions for Administration

Wellesley Spelling Scale

GENERAL INSTRUCTIONS TO THE EXAMINER

This test of spelling yields a total raw score which can be converted into a percentile rank and interpreted on the basis of the table of percentile norms for five grades. This table is found on page 12.

TIME LIMITS

There is no time limit. Test booklets and/or answer sheets should be collected as soon as all examinees have finished. Most groups will be able to complete the items in fifteen minutes.

CAUTION AGAINST COACHING

It is important that examinees understand clearly the manner in which they are expected to indicate their responses. On the other hand, the

examiner should remember that he is giving a test and not directing a learning activity; therefore, the correct response should in no way be indicated for any item except in the practice exercises.

CHOOSING CORRECT DIRECTIONS

The *Wellesley Spelling Scale* is so designed that the same test booklet is used whether answers are to be marked in test booklets or on machine-scoring answer sheets. However, the directions differ somewhat in their methods of administration. If answers are to be marked in test booklets, use the directions which follow immediately after this paragraph. If answers are to be marked on machine-scoring answer sheets, the appropriate directions begin on page 8.

DIRECTIONS FOR ADMINISTRATION WHEN ANSWERS ARE MARKED IN TEST BOOKLETS

Materials required:

For each examinee —

- 1 test booklet — *Wellesley Spelling Scale*
- 1 ordinary lead pencil with eraser attached
- 1 eraser (if not attached to pencil)

In addition, for the examiner —

- extra pencils
- extra erasers
- extra copy of test booklet — for demonstration purposes

After checking to see that all examinees have pencils and erasers, distribute the test booklets, face-up.

From this point on, certain parts of these directions are printed in this different type face. These parts are to be read to examinees.

SAY: Read the instructions at the top of the page. They are: Do not write or mark on this booklet unless told to do so by the examiner. Since you are to mark your answers in this test booklet, pay no attention to that statement.

Now print your name and other requested information on the lines provided.

Note the space set off by parentheses in the middle of the third line for identifying data. This space is provided for teachers or examiners who wish examinees to indicate their section, class, home room, etc., in order to facilitate the handling of data and test booklets after tests have been scored.

Give examinees time to record these data. Check to see that information is properly entered.

SAY: You will notice that in the middle of the front page of the test which you have just been given, it says: Instructions to Examinees. Read these instructions silently while I read them aloud. These instructions are: This is a spelling test. After each of the sentences in this booklet there are four spellings of the word which has been omitted in the sentence. Decide which form of the word is correctly spelled and mark its number as you are told. Do not turn this page until told to do so.

Now look at Sample A below: A good leader is a of the people. Number 2, f-r-i-e-n-d, is correctly spelled, so a 2 has been written on the line right under the words "Correct Test Booklet Mark" to indicate that this spelling is the correct one.

Now look at Sample B: A ruler is used to length. The correct spelling of the omitted word is m-e-a-s-u-r-e. This corresponds to response number 1, so 1 has been written on the line to the right to indicate that this spelling is the correct one.

If examinees ask about the Correct Answer Sheet Mark to the right of the Correct Test Booklet Mark just described, tell them to ignore it since separate answer sheets are not being used.

SAY: You are to answer each of the test items by writing the number of the correct answer on the line to the right. Are there any questions about how to mark your answers?

If necessary, illustrate on the blackboard. Be sure that examinees understand the directions. After questions, if any, have been answered,

SAY: Now open your booklet and begin.

DIRECTIONS FOR ADMINISTRATION WHEN ANSWERS ARE MARKED ON MACHINE-SCORING ANSWER SHEETS

Materials required:

For each examinee —

- 1 test booklet — *Wellesley Spelling Scale*
- 1 Machine-Scoring Answer Sheet No. 5215 (identifiable beneath the California Test Bureau trademark)
- 1 electrographic pencil with attached eraser (an ordinary pencil with attached eraser is adequate if answer sheets are not to be scored with an IBM test-scoring machine)
- 1 eraser (if not attached to pencil)

In addition, for the examiner —

- extra pencils
- extra erasers
- extra copy of test booklet and answer sheet — for demonstration purposes

First check to see that all examinees have pencils and erasers.

From this point on, certain parts of these directions are printed in this different type face. These parts are to be read to examinees.

SAY: I am about to give you some answer sheets. Do not crease or fold them in any way. To do so might lower your marks if they are scored with an electrical test-scoring machine.

Next, distribute Machine-Scoring Answer Sheet No. 5215.

SAY: Look at the part of your answer sheet that has spaces for your name, occupation or grade, age, etc. Now write the information in the spaces provided.

Note the space set off by parentheses in the middle of the second line for identifying data. This space is provided for teachers or examiners who wish examinees to indicate their section, class, home room, etc., in order to facilitate the handling of data and test booklets after tests have been scored.

SAY: Now write the number of the form of the test you are taking in the box provided to the left of the word, city, on the third line of the blanks you have just filled in.

Check to see that the examinees have completed the identifying data properly.

Emphasize the next directions. Illustrate the routine for changing a mark on the blackboard.

When all the examinees have finished,

SAY: Stop. Put your pencil down and hand in your test booklet.

Collect the test booklets. Count them to be sure that you have the same number that were distributed.

SAY: The general directions for recording your answers on this answer sheet are: Mark on the answer sheet under the number of the answer you have decided is correct. Make each mark as long as the pair of dotted lines and move the pencil up and down firmly to make a heavy black line. Be sure to erase carefully any answer you wish to change. Any questions?

After questions, if any, have been answered,

SAY: I am now going to give each of you a copy of the test booklet. Do not write or mark on it in any way.

Distribute the *Wellesley Spelling Scale*.

SAY: Read the instructions at the top of the page. They are: Do not write or mark on this booklet unless told to do so by the examiner. I am telling you now not to mark on the booklet. You mark your answers only on the answer sheet. You will notice that in the middle of the front cover-page of the test booklet which you have just been given, it says: Instructions to Examinees. Read these instructions silently while I read them aloud. The instructions are: This is a spelling test. After each of the sentences in this booklet there are four spellings of the word which has been omitted in the sentence. Decide which form of the word is correctly spelled and mark the number as you are told. Do not turn to the next page until told to do so.

Now look at Sample A below: A good leader is a of the people. Number 4, f-r-i-e-n-d, is correctly spelled.

Now look at the answer line to the right under the words "Correct Answer Sheet Marked." Notice that a heavy line has been made under the small number 2 in answer row A to indicate that this spelling is the correct one.

Now look at Sample B: A ruler is used to measure length. The correct spelling of the omitted word is m-e-a-s-u-r-e. The number 1 corresponds to the response number 1, so a heavy line has been made under the small number 1 in answer row B to indicate that this spelling is the correct one. Are there any questions about how to mark your answers?

If examinees ask about the Correct Test Booklet,

Mark to the left of the Correct Answer Sheet (mark just described, tell them to ignore it since they will not mark their answers in the test booklets.

If necessary, illustrate on the blackboard. Be sure that examinees understand the directions. After questions, if any, have been answered,

SAY: Find answer row No. 1 on your answer sheet. Then find item No. 1 in your test booklet. You are to show your answer to each item by making a heavy black mark under the number of the correct answer on your answer sheet. Go right on from page to page until you finish the test booklet. Now open your test booklet and begin.

When all examinees have finished,

SAY: Stop. Put your pencil down. Now look at your test booklet. Did you make any accidental dots or marks on it? If so, erase them completely.

After examinees have had sufficient time,

SAY: Now hand in your test booklet.

Count them to be sure that you have the right number.

SAY: Now inspect your answer sheet. Are all your marks heavy black lines? If not, go over the light ones and blacken them well. Have you made any accidental dots or marks? If so, erase them. Are any of your erasures untidy? If you changed your answers, did you erase the wrong ones completely? Take a few minutes now to make your answer sheet neat and clean so you will be sure to get your correct score.

After examinees have had sufficient time,

SAY: Now hand in your answer sheet.

Count the answer sheets to be sure you have the right number. If you have given out electrographic pencils, collect them.

Directions for Scoring Norms

Wellesley Spelling Scale

DIRECTIONS FOR SCORING

HAND SCORING THE TEST BOOKLETS

The examiner may use the hand-scoring key or mark an unused test booklet with the correct answers as an aid in scoring. Instructions for scoring are:

1. Each item is either right or wrong. No partial credits are given.
2. Credit any clear method of indicating an answer.
3. All items call for only one answer each.
4. If two or more answers are given, count the item wrong unless the examinee has attempted to erase or cross out all except his choice for the correct answer.
5. Mark each right answer with a C.
6. Record the total number of Rights (C) in the space provided on the front cover of the test booklet. This is the raw score.
7. From the five norm groups, select the population that most nearly describes the examinees, or that which is representative of the kind of evaluation desired. Using the norms based on that norm group, determine the examinee's percentile rank. Plot his rank on the Percentile Scale. Check the norm group in the space provided for that purpose on the front cover-page of the test booklet. If local norms are used, indicate this in the space entitled "Other."

HAND SCORING THE ANSWER SHEETS

1. Inspect each answer sheet for omissions and double answers. A double answer occurs

where more than one answer space has been marked on a row and the examinee's choice for the best or correct answer is clearly indicated. Draw a horizontal line through each double answer.

2. Place the scoring stencil upon the answer sheet so that the pairs of dotted lines on the entire sheet are in alignment with the responding round openings in the stencil. When the stencil is in proper scoring position, the black answer marks may be clearly seen near the center of each opening.
3. To obtain the number of right answers, count the black marks which are visible through the part of the stencil specified for the item. Do not count marks crossed with red.
4. Record the number of Rights in the space provided on the answer sheet.
5. From the five norm groups, select the population that most nearly describes the examinees, or that which is representative of the kind of evaluation desired. Using the norms based on that norm group, determine the examinee's percentile rank. Enter his rank on the line provided on the answer sheet.

MACHINE SCORING THE ANSWER SHEETS

First examine each answer sheet. If there is more than one black mark for any item, erase all of them. Such items are considered wrong and should not, therefore, be recorded by the machine.

Directions for setting the machine are provided on the machine-scoring stencil.

NORMS

MEANING

Norms should not be regarded as rigid standards to be attained by all school groups under all circumstances. Instead, they should be regarded as relatively stable points of reference to be used in interpreting the test results for a particular school or community.

Norms reflect the performance of students who

are representative of a given population nationally on a particular level, on test items which have been carefully selected and validated. They reflect general instructional practices with respect to the objectives represented by the items and sampling of the particular measuring instrument. When the obtained scores of a particular school or community depart significantly from the norms, it means that these scores are either above or below the average scores of the population from which the test was standardized. Such results

not necessarily indicate superior or inferior school work. The testing program merely reveals the facts without interpreting them. Interpretation is the function and responsibility of the professional staff. Differences in course of study, materials of instruction, time allotments, and emphasis on particular content influence results. The quality of teaching, the intelligence of students, linguistic backgrounds, and differences in the cultural environment are other factors which may account for deviations from test norms.

When obtained results differ markedly from the test norms, an investigation should be made to determine the reasons for the variation.

The normative group of the *Wellesley Spelling Scale, Form 1*, was carefully selected to provide representative sampling of typical school populations selected from various sections throughout the United States. Tests were administered to 1,939 students. The subjects were distributed among the grades as follows: Grade 9 — 1596; Grade 10 — 7419; Grade 11 — 1052; Grade 12 — 199; and Grade 13 — 1933.

Both forms of the test were administered to the following number of students: Grade 9 — 56; Grade 10 — 61; Grade 11 — 66; and Grade 12 — 1. The comparison of the two sets of data and the comparison of the two sets of norms presented in the previous (1944) manual were used to prepare the norms for Grades 9 through 12 for Form 2. The norms for Grade 13 were based on the distribution of 509 students.

PERCENTILE NORMS

Percentile norms for total scores provide for the comparison of individual students with each other, with their class or group, and with national re-

sults. They can also be used as an aid in compiling cumulative records.

A percentile may be described as a point on a 100-point scale which gives the percentage of scores which falls below that particular percentile. For example, a student whose score falls at the 70th percentile point exceeds 70 per cent of the population on whom the test was standardized. Such a score may also be interpreted to mean that 30 per cent of the students in the standardization group exceed his score.

Percentile norms for the *Wellesley Spelling Scale* are presented in Table 7 on page 12. An example of how this table should be read follows: A student in the 10th grade receiving a score of 22 on Form 1 of the spelling test would be at the 30th percentile.

For convenience in interpretation, all scores are assigned the percentile ranks of the midpoint of the range of percentile ranks in which they are located. For example, a percentile rank of 70 represents percentile points 65.0-74.9 inclusive.

For those who are interested, or whose cumulative records may have a standard score profile, the following relationships between percentile ranks and standard scores are presented in Table 6.

TABLE 6
NORMALIZED STANDARD SCORES AND THEIR
EQUIVALENT PERCENTILE RANKS

Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score
99	73	70	55	20	42
98	70	60	53	10	37
95	67	50	50	5	33
90	63	40	47	2	30
80	58	30	45	1	27

TABLE 7
PERCENTILE NORMS — WELLESLEY SPELLING SCALE

FORM 1						FORM 2					
PERCENTILE RANK	GRADE 9	GRADE 10	GRADE 11	GRADE 12	GRADE 13	GRADE 9	GRADE 10	GRADE 11	GRADE 12	GRADE 13	PERCENTILE RANK
99	41+	42+	44+	46+	47+	41+	43+	44+	48+	49+	99
98	39-40	39-41	42-43	44-45	46	39-40	40-42	42-43	46-47	48	98
95	36-38	36-38	39-41	42-43	44-45	36-38	37-39	39-41	44-45	46-47	95
90	33-35	34-35	36-38	39-41	42-43	33-35	35-36	36-38	41-43	44-45	90
80	30-32	32-33	34-35	37-38	40-41	30-32	32-34	34-35	38-40	42-43	80
70	28-29	31	32-33	34-36	38-39	27-29	30-31	32-33	35-37	40-41	70
60	26-27	29-30	30-31	32-33	36-37	25-26	27-29	30-31	32-34	38-39	60
50	24-25	26-28	28-29	30-31	34-35	23-24	24-26	28-29	30-31	37	50
40	23	24-25	26-27	29	32-33	21-22	22-23	25-27	28-29	35-36	40
30	21-22	22-23	23-25	27-28	29-31	19-20	20-21	22-24	26-27	33-34	30
20	18-20	19-21	20-22	24-26	26-28	16-18	17-19	19-21	23-25	30-32	20
10	15-17	16-18	18-19	21-23	23-25	13-15	14-16	17-18	21-22	27-29	10
5	12-14	14-15	16-17	19-20	20-22	11-12	12-13	15-16	19-20	23-26	5
2	11	11-13	14-15	17-18	18-19	10	11	13-14	17-18	19-22	2

ROOT WORDS

Root words are basic words from which a large number of other words may be formed by the addition of prefixes and suffixes. The English language has profited greatly from root words taken from Latin and Greek. Listed below are common root words taken from these two languages, their meanings, and some examples of English words using each root.

LATIN ROOT WORDS¹

<u>ROOT</u>	<u>MEANING</u>	<u>DERIVATIVES</u>
ag, act, ig	move, do	agitate activate
alter	another	alternate altercation
am	to love	amateur amicable
art	art	artificial
avi	bird	aviary aviator
brev	short	brief abbreviation
ced, cess	move, yield	recede proceed secede
cred	to believe	credible credence

¹Charles C. Parkhurst, Using Words Effectively, Series B (New York: Harpers, 1948), pp. 34-38, 44-47.

<u>ROOT</u>	<u>MEANING</u>	<u>DERIVATIVES</u>
dic, dict	say	dictaphone dictate
fac	make, do	factory manufacture
lect, leg	gather choose read	collect elect legible
lux	light	lucidity elucidate
man	hand	manipulate manage
mit	send	transmit missile
nav	ship	navy navigate
offic	duty	official officer
pel, puls	urge, drive	propel expulsion
plor	cry out	deplore implore
scrib, script	write	describe ascribe
spir	breathe	expire inspire
stru, struct	build	construe instruct
tract	draw	tractor extract
viv	live	vivacious survive
voc	call	vocation invoke

GREEK ROOT WORDS²

ROOT	MEANING	DERIVATIVES
anthrop	man	anthropology philanthropy
aster	star	astrology astronomy
auto	self	automobile automatic
bibl	book	Bible bibliography
chron	time	chronometer chronological
crypt	secret	cryptic cryptogram
dem	people	democracy epidemic
dox	opinion	orthodox paradox
graph, gram	write, written	photograph monogram
hydr	water	hydrometer hydrate
phil	love	philanthropy philologist
phon	sound	phonetics phonograph
tele	far	telescope telegraph
zo	animal	zodiac zoology

²Ibid., pp. 54-57.

PREFIXES

A prefix is a syllable added to the beginning of a root word which changes the meaning of that word. The following prefixes are commonly added to root words to create new words or to alter the meaning of the original word.

<u>PREFIX</u> ¹	<u>FROM</u>	<u>MEANING</u>	<u>EXAMPLE</u>
a-, an-	Gr.	not, without	abyss, anarchy
ambi-	L.	both, around	ambiguous ambition
amphi-	Gr.	both, around, on both sides, about	amphitheater amphibian
ante-	L.	before, preceding, in front of	anteroom antecedent
anti-	Gr.	against	antipathy antiphonal
by-	AS.	near, secondary, incidental	by-product by-pass
circum-	L.	around	circumference circumscribe
dia-	Gr.	through, across	diagonal diameter
epi-	Gr.	upon, over	epiphyte epigram
ex-	L.	out of, beyond	exhale excel
hyper-	Gr.	over	hypersensitive hypercritical
hypo-	Gr.	under, beneath	hypodermic

¹Charles C. Parkhurst, Using Words Effectively, Series B (New York: Harpers, 1948), pp. 9-11.

<u>PREFIX</u> ²	<u>FROM</u>	<u>MEANING</u>	<u>EXAMPLE</u>
re-	L.	back	refer reflect
de-	L.	down from, away	decline depression
pro-	L.	forward, in place of	progress propel
sub-	L.	under	submerge subtract
trans-	L.	across, beyond	transmission transfer
post-	L.	after	postscript postseason
bene-	L.	well	benediction benefactor
mal-	L.	badly	malediction malefactor
uni-	L.	one	unify uniform
bi-	L.	two	bilateral bisect
multi-	L.	many	multiply
mis-	OE.	badly, not	misfire mistreat
un-	OE.	not, opposing	unknown unlikely
peri-	Gr.	around, near	perimeter

²W. Powell Jones, Practical Word Study, Form A (New York: Oxford University Press, 1943), pp. 14-15.

SUFFIXES

A suffix is a syllable added at the end of a root word which changes the meaning of that root word. Occasionally the suffix will represent a complete word itself. The following common suffixes are often added to many words to create new words or to change the meanings of the old words.

<u>SUFFIX</u> ¹	<u>FROM</u>	<u>MEANING</u>	<u>EXAMPLE</u>
-able -ible -ble	L.	capable of, worthy of, or tending to	noticeable irresistible voluble
-acy -cy	L.	state of being or quality	accuracy hesitancy
-age	L.	state of	hostage marriage
-al	L.	pertaining to	marital causal
-ance, -ancy -ence, -ency	L.	state, quality, act, or condition	persistence brilliance
-ant, -ent	L.	one who acts	registrant student
-ar, -er, -or	L.	one who acts	bursar teacher doctor
-ful	AS.	full of, abounding in	cheerful masterful

¹Charles C. Parkhurst, Using Words Effectively, Series B (New York: Harpers, 1948), pp. 25-29.

<u>SUFFIX</u>	<u>FROM</u>	<u>MEANING</u>	<u>EXAMPLE</u>
-fy, -efy, -ify	L.	to make	defy rectify testify
-ice	L.	act, quality, or state	justice cowardice
-ion	L.	a state, or condition, or act of	insurrection exhaustion
-ar, -ary	L.	pertaining to, connected with	secular elementary
-dom	AS.	a state or condition	martyrdom serfdom
-esque	L.	in the manner of	picturesque grotesque
-ism	Gr.	the art of, philosophy of,	liberalism Americanism
-ist	Gr.	one who acts	philanthropist atheist
-ive	L.	having the nature of, given or tending toward	imaginative collective
-ize, -ise	Gr.	to make into, or to practice	mesmerize familiarize
-ory	L.	of, pertaining to place of, or for or that which pertains to	auditory prohibitory offertory
-ship	AS.	a state or quality art or skill	courtship partnership
-ward	AS.	characterized by, somewhat like	wayward northward

HOW TO STUDY SPELLING EFFECTIVELY¹

The following method of studying spelling is recommended whenever one becomes aware of a word or words which cause frequent difficulty in spelling. The method should also be used in learning new words to add to one's vocabulary. It is not advisable to attempt to learn a large number of new words at one time; learn small numbers of words often.

1. LOOK at each word carefully. Pronounce it by syllables, examining each syllable closely. (If you do not know the correct pronunciation, find it in a dictionary.)
2. SEE the word mentally as you close your eyes and spell it to yourself or audibly.
3. CHECK the spelling for accuracy. If you misspelled it, repeat steps one and two until you spell it correctly.
4. WRITE the word without aid. If necessary, repeat the first three steps until you can write it accurately.
5. PRACTICE writing the word. Check it, and then practice it several more times. When you are sure of your ability to spell the word, move to another one. If you make even one mistake, begin with step one and repeat all steps until you succeed in spelling the word accurately each time.

¹Language Arts in the Public Schools of North Carolina
(Raleigh: State Superintendent of Public Instruction, 1945),
p. 89.

HINTS TO IMPROVE YOUR SPELLING¹

The ability to spell accurately is a mark of courtesy and consideration. Society accepts it as a mark of an educated person. The following suggestions are intended to help you become adept in spelling.

1. Write legibly. Poor handwriting is one of the major causes of errors in spelling.
 - a. Be sure to dot each i, cross each t, and cross each x.
 - b. Be sure to close the a at the top.
 - c. Be sure the e does not look like an i.
 - d. Make a loop in the l, and make it tall.
 - e. Be sure that the d does not look like cl.
 - f. Be sure the r does not look like i.
2. Pronounce every word correctly. Give each syllable its full value.
3. Concentrate on those words which you know cause you difficulty.
4. Plan for definite time to study the spelling and meanings of words which cause you difficulty.
5. Make the use of a dictionary a habit with you.
6. Determine to improve your spelling.

¹Language Arts in the Public Schools of North Carolina
(Raleigh: State Superintendent of Public Instruction, 1945),
p. 87.

THE TEACHING OF SPELLING IN HIGH SCHOOL

Along with "the three R's," we must rank the ability to spell correctly as an essential to the education of each pupil. The pupil who spells accurately has a more usable vocabulary than the pupil who does not. Spelling is important in every form of written work, and since society penalizes those who cannot spell well, our schools should insure that each pupil is able to spell with some proficiency.

In presenting words to pupils, teachers should utilize all possible sensory approaches--seeing, hearing, speaking, and perhaps even touching. The child must be stimulated to develop an interest in words, and should be guided into assuming a conscious responsibility for correct spelling. He should be encouraged to develop desirable spelling habits.

Since spelling is important in all school subjects, it is necessary that we teach spelling in connection with every subject in the curriculum. Words which are learned as an integral part of a pupil's course work will be best remembered by him. The pupil should know that a high degree of accuracy in spelling is required of him in all the work that he does. Each teacher will need to be alert to spelling errors in all written work handed in. Most teachers will be able to foresee difficulties to the pupils, giving whatever help is necessary to overcome the difficulty.

Formal courses in spelling have been largely superseded today, especially in our high schools, by incidental spelling instruction. Ideally, the pupil should teach himself to spell by making an effort to spell accurately. However, to leave the pupil entirely to his own devices is not a realistic approach. We must set the standards for the pupils to meet; we must teach the pupil effective means of studying spelling, and we must insure that each pupil becomes as good a speller as he can become.

It is with these thoughts in mind that these and succeeding aids for teachers and pupils of spelling have been prepared. We hope that they may be of some benefit to you.

CLASSROOM METHODS IN THE TEACHING OF SPELLING¹

Evidence indicates that every pupil can improve his ability to spell. The enthusiastic teacher who is sympathetic with his pupils is likely to achieve greater success in teaching spelling than is the teacher who is not enthusiastic about the teaching of spelling. Enthusiasm, sympathy toward the pupils, and efficient methods of instruction should all be combined if one is to receive the greatest success in one's efforts to teach spelling.

A teacher's interest in correct spelling will help arouse his pupils' interest in correct spelling. Since a pupil's interest in spelling may well determine the degree of his accomplishment, it will be good to lead the pupil to develop interest in and favorable attitudes toward his improvement in spelling ability.

The following classroom procedures will be helpful in arousing pupil interest in the improvement of spelling:

1. Lead your pupils to understand that spelling errors in written work create a poor impression. Spelling errors in writing such as letters of application may be heavily penalized.

¹Ernest Horn, "Teaching Spelling" (What Research Says to the Teacher, No. 3, American Educational Research Association of the National Education Association, Washington: National Education Association, 1954), pp. 19-21.

2. Be certain that each pupil knows and uses an efficient method of attack in learning to spell words. Methods may vary for different pupils. If a student is having difficulty in learning to spell, ask how he proceeds in his studying. You will probably be able to help him to improve his study habits.

3. Convince each pupil that he can improve his spelling ability. Show him by comparison of his own work that he is making progress. Even the smallest improvement should be praised.

Let the pupil assume increasing responsibility for learning to spell. As the pupils cooperate in setting goals and assuming the responsibility for reaching those goals, the results are likely to be more satisfactory.

5. Provide each pupil with an abundance of opportunities for writing about subjects which interest him. He will soon realize a need for accurate spelling.

6. Lead the pupil to become proud of his ability to spell. Teach him to proofread all his written work to find and correct any errors it may contain.

7. Games, scholastic grades, and contests may be used to supplement the more valuable appeals for accurate spelling. However, these must never be used as complete substitutes for these appeals.

The ideal learning situation will occur when the pupils are motivated by their own desire to learn. If every teacher becomes enthusiastic about teaching spelling and employs effective teaching methods, the pupils will acquire a similar enthusiasm for accuracy in spelling. From this enthusiasm will come increased skill in spelling ability and a greater degree of accuracy which are the ultimate goals of spelling instruction.