SPELLING IMPROVEMENT THROUGH BASIC WORDS WITH AN ADDITIONAL SUBJECT STUDY IN THE CHISHOLM JUNIOR HIGH SCHOOL

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CHAPTER I

THE PROBLEM AND DEFINITIONS

> Many teachers are baffled by the problem of the child who learns the list of words in the spelling lesson but can't spell the words he needs to express his ideas in everyday language . . . .
>
> Teachers observe discrepancy between the words of the prescribed spelling list and the vocabulary of the pupil's casual conversation, between the spelling list and the words children want to use when they try to write . . . .
>
> Teachers report there is insufficient time in the school day to teach the words the children need to use in everyday writing and still cover the required work in the spelling textbook or course of study. They acknowledge that the words of the required spelling lesson are "over the children's heads" but they feel nothing can be done about it. [1]

Supporting the opinions of Miss Hildreth are the following sentences selected from the writings of eighth-grade students who participated in this study illustrating errors in common words:

". . . and with half the world's population croweded in one place."

"Some of India's cheif problems . . ."

"Spring fever has definate meaning to me."

"I talk about the latest styles in cloths."

". . . taking a slow ride on a bycicle and don't go to any speshal place."

". . . when your not in school."

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[1] Gertrude Hildreth, "A Modern Viewpoint on the Spelling Vocabulary" Education Digest, April, 1951, 13-16.

"In the basement I would have my own tooles and the modern equipment."

"With health you could never be sick a day in your live."

"These religions have strict rules for there congregations."

"Specking of grass . . ."

"I like to take hicks and rides on bicks."

"The sun is shinning . . ."

". . . it is eather to hot and dry . . ."

"We let Japan's students come ofer and look at our school system."

"The vegetation is very dens."

"Spring fever is a very wounderful thing."

". . . and we can do what we whant all day long."

"Japan rankes fiveth in world trade."

"If your father were a cow hearder . . ."

"She is two years old and dosen't no a thing."

" . . . when a teacher comes up to you and tapps you on the sholder."

"Those first two or three weeks after vacation I alwas insist on getting up at seven when I can sleep untill eight."

I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to determine whether or not eighth-grade students are deficient in their spelling of common words; (2) to determine whether or not a basic word list is a proper and worthwhile tool to use with eighth-grade students; and (3) to determine whether or not stressing a spelling conscience in an additional subject produces spelling improvement.

Importance of the study. As Miss Hildreth's statements bear out, spelling is of great concern to teachers, especially to those who must teach spelling.[2] In the high schools, these are primarily the language arts teachers.

From these teachers, the question often arises, "Just how do I teach spelling and where do I begin?" There are certain fundamental steps and techniques which may be followed in answering the "how" of teaching spelling, but the answers to "where do I begin?" range from word lists for each grade to individual lists. Authorities agree on one point concerning this question, however, and that is that knowledge of correct spelling is essential while attending school and in later life.

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[2]Hildreth, op. cit., 13-16.

Many of these authorities further agree that a list of basic words is the answer; it should be mastered before more difficult and less frequently-used words be approached by the learner. However, information concerning the proficiency with which these common words are spelled by particular age-groups is lacking.

In this study, an attempt was made to acquire this information from two eighth-grade groups and determine whether or not the basic list would be valuable as a beginning for the teaching of eighth-grade spelling.

Some authorities on spelling hold that the teaching of spelling is the responsibility of all teachers, not only the language arts teacher and that greater spelling improvement can be made when teachers of all subjects emphasize a spelling conscience.

The two groups in this study were taught both English and geography by the investigator. An attempt was made, using basic words, to determine whether spelling improvement could be made. Would the group receiving spelling emphasis in geography, the experimental group, exceed the control group in spelling improvement?

II. DEFINITIONS OF TERMS USED

Common or basic words. Research has shown through examination of large numbers of materials written by

children and adults that a comparatively few words recur frequently. As an example, Henry D. Rinsland, after an examination of 101,213 compositions, found that 25,632 different words composed 6,012,359 running words.[3] These frequently-used words, those which do nearly all the work in any writing that persons are likely to do, are called common words.

Basic word list. Through studies such as that conducted by Rinsland, lists of common words have been compiled according to the frequency with which they occur. The list used in this study[4] was compiled by Edward Dolch[5] and contains 2,000 words, composing 95 per cent of all words written by children and adults. Because of the frequency with which these words are used, they are a necessary foundation, basic to one's writing vocabulary. These lists, therefore, are called basic word lists.

Additional subject emphasis. The teaching of spelling, as has been stated previously, is most often the responsibility of the language arts teacher. In the majority of schools, language arts, or English, occupies one period in a student's six or seven period day.

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[3]Henry Rinsland, A Basic Vocabulary for Elementary School Children (New York: The Macmillan Company, 1945).

[4]Appendix A, page 57.

[5]Edward Dolch, Better Spelling (Champaign, Illinois: The Garrand Press, 1942).

During the hours spent in classes other than language arts, correct spelling is very often desired but is seldom required.

An additional subject emphasis, therefore, can be defined as support given to the language arts spelling program by another classroom teacher during a period other than that devoted to language arts. This support may be given by attempting to create awareness of and a desire for correct spelling.

In this study, the additional subject was eighth-grade geography.

Spelling conscience. A spelling conscience is similar to a moral conscience in that a student conducts himself in accordance with a sense of right.

With a spelling conscience, the sense of right is a sense for spelling correctness. When the spelling conscience has been developed to a high degree, any uncertainty of complete spelling accuracy is not acceptable and must be dispelled.

Summary. In this chapter the problems to be studied were presented: (1) Are eighth-grade students deficient in their spelling of common words?; (2) Is a basic list a proper and worthwhile tool to use with eighth-grade students?; (3) Does stressing a spelling conscience in an additional subject produce spelling improvement?

Terms defined were (1) common or basic words; (2) basic word list; (3) additional subject emphasis; and (4) the spelling conscience.

CHAPTER II

REVIEW OF THE LITERATURE

The ensuing chapter is devoted to the presentation of selected information acquired through reviewing materials written by authorities in the area of spelling. Specifically, the review deals with (1) the teaching of spelling; (2) means of improving spelling; and (3) the basic word list.

Written materials regarding the many aspects of spelling are quite numerous and varied. Because of the wide scope of the subject, it was necessary to confine the review to factors which would be pertinent in any spelling program and, also, to those same factors incorporated in this study.

The major considerations were (1) the teaching of spelling with regard to aims, obstacles, causes of poor spelling; (2) means of improving spelling; and (3) the construction and values of the basic word list.

I. THE TEACHING OF SPELLING

Spelling aims. "Spelling has one purpose -- to facilitate the reading of what is written."[1] As Miss Hildreth says, this is the ultimate goal of any spelling

[1]Gertrude Hildreth, Teaching Spelling (New York: Henry Holt and Company, 1955), p. 2.

program.

For a student to reach this goal, Ruth Strickland points out three common objectives: (1) an effective method of learning, (2) a desire to spell correctly, and (3) mastery of those words which will be important for him in his writing.[2]

Spelling obstacles. These appear to be of two major types: (1) obstacles due to the character of the English language; and (2) those due to everyday use and instruction. Hildreth lists common language obstacles:

1. Different sounds given to the same letter or letter combinations: break, cream, head
2. Same sound given by different letters or letter combinations:
   Same sound reversed: ei, ie; el, le
   Fourteen ways of expressing $\bar{o}$: toe, boat
   U: you, issue, nuisance, new
   E: green, scene, seen
3. Silent letters: debt, enough, promise
4. Alternate spellings, both correct: theater, theatre; center, centre
5. Homonyms: sale, sail; so, sew; blue, blew
6. Range of words with variations and derivations.[3]

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[2]Ruth Strickland, "Utilizing Spelling Research", Education Digest (February, 1956), 40-43.

[3]Hildreth, op. cit., p. 4.

The following are obstacles which appear in everyday use and instruction:

1. Large number of words.
2. Careless speech.
3. Lack of importance that parents attach to spelling and make evident through poor examples.
4. Purposely misspelled words on television and commercials.
5. Lack of consistency and continuity in the spelling program.

These, then, are the obstacles which must be surmounted in a successful spelling program.

Causes of poor spelling. Poor spelling may be attributed both directly and indirectly to the teacher with one major exception. A teacher has no control over the mental ability of his students, and mental ability is listed as a major factor in poor spelling by authors Emett Betts[4] and Edna Furness.[5] Betts writes that "high intelligence is no guarantee of spelling ability, but mental maturity is necessary to talk, read, and write."[6]

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[4]Emett Betts, "What about Spelling?" Education, 76 (January, 1956), 310-325.

[5]Edna Furness, "Psychological Determinants of Spelling Success," Education, 79 (December, 1958), 234-238.

[6]Betts, op. cit., p. 310.

On the other hand, causes which may be traced to poor teaching of spelling include these from Betts:

1. Overemphasis on phonics.
2. Poor study habits.
3. Inability to judge spelling accuracy.
4. Poor handwriting.[7]

Common handicaps, according to Furness, are intellectual inertia and carelessness.[8]

James A. Fitzgerald claims poor spelling results are achieved in school for the following reasons:

1. Many children do not see spelling as a part of living.
2. They have not been interested in learning to spell.
3. They do not understand the need for spelling.
4. They study words they do not use.
5. They do not study the words they need.
6. They use a method which does not direct them to study the words they cannot spell.
7. Their techniques of learning to spell are ineffective.
8. They do not spell carefully or write legibly.
9. They do not apply or transfer spelling knowledge to their writing.

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[7] Ibid., p. 310.

[8] Furness, op. cit., p. 237.

10. They do not achieve independence in working out their spelling problems.[9]

Thomas Horn adds further to the list:

1. There is a decreased emphasis on spelling compared with other areas.
2. There is a lowering of prestige value of spelling insofar as pupils are concerned.
3. There is a lack of systematic appraisal.
4. There is widespread use and acceptance of inferior methods.[10]

Hildreth goes beyond the student and lists five traits of poor adult spellers, a result of poor instruction:

1. They do not proofread or check their writing; are not concerned about details.
2. They mispronounce words they commonly misspell; they do not articulate clearly.
3. Instead of trying to learn new spellings, they substitute other words for ones they cannot spell.
4. They are poor in language skills, generally, including reading.

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[9]James A. Fitzgerald, The Teaching of Spelling (Milwaukee: Bruce Publishing Company, 1951) p. 2.

[10]Thomas Horn, "Some Issues in Learning to Spell," Education, 79 (December, 1958) p. 229.

5. They are poor in penmanship; careless in letter forming.[11]

II. MEANS OF IMPROVING SPELLING

As the preceding section pointed out, there are many causes for poor spellers. These causes certainly should raise concern among teachers. Of greater concern, however, is the need for means of eliminating these causes. Authorities suggest the means also; the success of which depends, once again, upon the teaching.

Motivation. Foremost in any successful spelling program is motivation. A child must want to learn to spell correctly and feel that good spelling is important. It then becomes the responsibility of the teacher to create in the student the necessary desire and maintain his interest. The goal is writing of which the student can be proud. Some suggested methods of creating a desire for good spelling are the following:

1. Show that spelling errors make poor impressions in letters and job applications.
2. Stress that the words are those likely to be used now and in the future.

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[11] Gertrude Hildreth, Teaching Spelling (New York: Henry Holt and Company, 1955), p. 281.

3. Increase interest through learning an effective method of study.
4. Convince them they can improve. This can be done, for example, through test comparisons.
5. Help the children to assume responsibility for learning to spell and co-operate in setting goals.
6. Give abundant opportunity for writing on subjects of interest to children.[12]

Further suggestions are those offered by Guy Wagner:

1. The child should be helped to gain success at his present level of achievement.
2. The teacher should make provisions for children to achieve status through spelling.
3. Lower achievers should receive class recognition for work well done at their present rung on the spelling ladder.
4. Students should correct their own papers.
5. Teachers should stop working on spelling while the children are still interested.
6. Give a "pat on the back" when it is deserved.[13]

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[12]Ernest Horn, "Teaching Spelling," American Education Research Association of NEA (National Education Association, 1951), p. 17.

[13]Guy Wagner, "They Like to Spell," Education, 76 (January, 1956), p. 307.

Frank L. Christ has six points which he considers important in motivating students:

1. Concede that English spelling is a mess. Sketch the history of the language with examples showing that English is a melting pot of languages.
2. After knowing the rules, the necessary skills for good spelling remain a strong visual imagination and a good memory.
3. Emphasize most bad spelling is a result of sheer carelessness and laziness. Emphasize proofreading.
4. Encourage them to rediscover the dictionary and to use it when in doubt.
5. Stress that poor spelling will result in poor grades and that accuracy is important in all subjects.
6. After graduation they will go on to college or into a world that will estimate their degree of literacy by their spelling.[14]

All the preceding suggestions, in summary, have one purpose: to motivate students toward better spelling.

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[14]Frank L. Christ, "Motivating Your Students to Spell Better," The Clearing House, 35 (November, 1960), p. 173.

Spelling conscience. Following motivation in importance for a successful spelling program is the necessity of each student developing a spelling conscience. As a conscience is a moral sense distinguishing right from wrong, so the spelling conscience would be a spelling sense distinguishing correctness from incorrectness. The conscience would consist of three points:

1. The student must care about spelling. This would be a result of successful motivation. The student would be aware that correct spelling is desirable no matter what type of writing he may be doing.
2. Upon completing any writing, the individual would stop and re-read the material, proofreading for spelling errors.
3. In many instances an individual, not knowing the correct spelling of a word, will guess, writing what he thinks is the correct spelling. This is a normal procedure, but it is not completed until he has checked his guess. Should he be in the classroom, it would be appropriate to ask the teacher; out of the classroom,

to use a dictionary. However he checks it, the desirable habit of checking the guess may be formed.

Comprising the spelling conscience, then, are (1) caring about spelling; (2) proofreading; (3) checking the guess.

Method. Method represents another important factor in the spelling program. There are many methods that have been and are being used, but the majority of research has been done concerning the following four:

1. The contextual approach which enables the student to become acquainted with the spelling word as it appears in a sentence.
2. The study-test method where students are given a list of words to study and, later, to be tested.
3. The test-study-test method, which is similar to the study-test method in that a list of words is given each student, but differs in that the first test is given without any advance study.
4. The individual study method allows students to compose their own lists of words, words they feel need to be studied.

Authorities such as Thomas Horn, G. R. Carlson, James Fitzgerald, Edward Dolch, and Ernest Horn agree that, generally, the test-study-test method with a list of words is most effective. The reasoning for this conclusion is that, following the first test, the student need study only those words which he misspelled.

Challenging superior spellers. Activities for superior spellers must be provided in the program. Superior spellers are those who have mastered the spelling of many words, words which very often appear in the class spelling lists.

To require superior spellers to participate in class activities they do not need would be a waste of time and would result in boredom. Walter J. Petty questions the practice of having all students study the same lesson and lists the following activities as replacements:

1. Excuse superior students from all spelling instruction, allowing work on other enrichment activities such as reading.
2. Look for fresh substitutes for overworked, dreary words.
3. Rewrite sentences.
4. Define words.

5. Study word histories.

6. Study prefixes and suffixes, add them to roots, and note the effects on meaning.[15]

The use of the preceding or similar activities would be to maintain the interest of superior spellers while, at the same time, to develop their vocabularies.

Whole-school spelling. Another important means of improving spelling, a means that is being given a great deal of support by authorities, is the encouragement of the whole-school plan.

Basically, the whole-school plan involves all teachers as teachers of spelling. "Inasmuch as written expression is basically a part of every course or subject," writes Vernon W. Stone, "there is no alternative but to make spelling an aspect."[16]

Dolch writes that it is the responsibility of every teacher "to help cultivate the attitude of 'caring about spelling.'"[17]

"The most important way in which all teachers can help children to care about spelling is to present a unified point in saying that good spelling is necessary and in insisting that a person who doesn't learn to spell

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[15]Walter J. Petty, "Challenging Superior Spellers," Elementary School Journal, 59 (October, 1958) p. 156.

[16]Vernon W. Stone, "Every Course Is a Spelling Course," Balance Sheet (October, 1960) p. 60.

[17]Dolch, op. cit., p. 85.

is being stupid."[18]

With the preceding statements placing the responsibility for spelling on every teacher, how, then, may every teacher make spelling an aspect?

"Ask teachers of other subjects to help," Hardy Finch advises teachers of spelling, "and suggest they teach the words of the subject."[19]

"Devote a few moments to the teaching of words.

Strive for an awareness of errors in written work.

Stress re-reading, checking, and correcting."[20]

"Spelling of basic words and specialized terms in these courses must be attended to simultaneously with the basic instruction of the subject matter."[21]

What are the advantages of the whole-school method? Finch sums them up in four short statements:

1. Creates a spelling-sense consciousness.
2. Provides practice in basic spelling.
3. Focuses attention on course terminology.
4. Furnishes review of course content.[22]

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[18]Ibid., p. 90.

[19]Hardy Finch, "Some Spelling Problems and Procedures," English Journal, 42 (April, 1953) p. 191.

[20]Sister Josephina, "Spelling, the Responsibility of Every Teacher," Clearing House, 32 (March, 1958) p. 393.

[21]Finch, op. cit., p. 60.

[22]Ibid., p. 60

The additional subject experiment in this study was an attempt to evaluate the statements concerning the whole-school method made by the preceding authors.

III. BASIC WORD LIST

The answer to the question "Where do I begin teaching spelling?" is answered, according to many authorities, by the use of a basic word list. Since the term "basic word list" has been defined, of concern now are its construction and values.

Construction. The construction of any basic list of words involves, as a first step, the gathering of material. As an example, Rinsland, as mentioned earlier,[23] collected 101,213 compositions containing 6,012,359 running words from students in grades I-VIII.

Dr. A. J. Gates used the spelling lists from twenty-five widely-used spellers and the spelling lists prepared by committees in states and large cities.[24]

Ernest Horn's study covered one million running words of materials written by adults for social and business purposes.[25]

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[23]Chapter I, p. 4.

[24]A. J. Gates, "Spelling Difficulties of 3,875 Words," Bureau of Publications, Teachers College (New York, 1938)

[25]Ernest Horn, "The Curriculum for the Gifted; Some Principles and an Illustration," Twenty-third Yearbook of the National Society for the Study of Education (Bloomington: Public School Publishing Company, 1924).

The second step would then be the tabulation of every word as to the number of times it occurred. From his study, Horn compiled a table, Table I, page 23, showing the number of words and the per cent of the total one million words each group represented.

The final step would be the listing of the words which satisfy the following criteria:

1. Is the word used frequently enough?
2. Is the word used in writing in all parts of the United States?
3. Is the word used in many kinds of writing?
4. Has the word quality?
5. Is the word of such cruciality that it would penalize one if he misspelled it?
6. Is it a permanent word?
7. What is the difficulty of the word?[26]

The number of words in the list would depend upon the discretion of the author. For example, the Fitzgerald List[27] contains 2,106; the Smith List[28] contains 2,156.

The three steps in compiling a basic word list, therefore, would be (1) gathering material; (2) tabulation of words; and (3) selection.

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[26]James A. Fitzgerald, "The Selection of Vocabulary for Basic Spelling Instruction," Education (January, 1956) p. 288.

[27]James A. Fitzgerald, "The Vocabulary of Children's Letters, Written in Life Outside of School," Elementary School Journal, 34 (January, 1934) 358-370.

[28]James Smith, The Vocabulary of Children (Oshkosh, Wisconsin: State Teachers College, 1935).

TABLE I*

CONTRIBUTION OF THE MOST-USED WORDS TO THE TOTAL NUMBER OF RUNNING WORDS

Different words	Percentage of total
100	58.83
500	82.05
1,000	89.61
1,500	93.24
2,000	95.38
2,500	96.76
3,000	97.66
3,500	98.30
4,000	98.73
4,500	99.00
5,000	99.00
5,500	99.33
6,000	99.46
6,500	99.53

*Ernest Horn, "The Curriculum for the Gifted; Some Principles and an Illustration," Twenty-third Yearbook of the National Society for the Study of Education (Bloomington: Public School Publishing Company, 1924) p. 87.

Values. The values of the basic word list are apparent in Table I on page twenty-three. For example, if a student can learn the spelling of 2,000 basic words, 95 per cent of all the words he writes will be spelled correctly. These words, it would appear, should be the ones learned first. Literature supports this statement and the values in using a basic list:

"One of the purposes of the research on written and spoken vocabulary is to identify the words which are needed and so free the teacher from starting from scratch each year with each pupil. It shouldn't be hard to understand that research has tried to locate individual needs and that the pupil's 'very own' words can many times be anticipated."[29]

Gertrude Hildreth emphasized the need and values of common words by advising making it a rule always to check a child's proficiency in the lower-level high frequency words before going on to harder less-frequently used words.[30] She warns that "unless the pupil has learned by heart some two thousand to twenty-five hundred commonly-used words, he will find written composition a tedious, unwelcome task."[31]

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[29]Thomas Horn, "That Straw Man: the Spelling List," Elementary English (May, 1952) p. 266.

[30]Gertrude Hildreth, Teaching Spelling (New York: Henry Holt and Company, 1955) p. 178.

[31]Ibid., p. 168.

In further support, Miss Hildreth states that "all the essential spelling principles and habits can be learned by children through instruction with familiar, common-use words."[32]

Following classroom research and experimentation, Arnie Richmond made this observation about spelling and common words:

"Initial analysis of the data indicated that the spelling abilities of the children varied widely and that the spelling needs were highly individualized. However, it was found that a core of approximately twenty-five hundred words made up about 95 per cent of the words which children used."[33]

More evidence of the value and need for a basic word list is given by Thomas Horn:

"For the purpose of security in most writing, a spelling program should be built around a central writing core of from two to three thousand words. The core should include those high-frequency words needed by both children and adults."[34]

One of the goals of the Los Angeles School District #1 is the mastery of a minimum basic spelling

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[32]Gertrude Hildreth, "A Modern Viewpoint on the Spelling Vocabulary," Education Digest, (April, 1951) p. 15.

[33]Arnie Richmond, "Children's Spelling Needs and the Implications of Research," Elementary English, 33 (May, 1959) p. 504.

[34]T. D. Horn, "Research in Spelling," Elementary English (March, 1960) p. 174.

vocabulary for all pupils.[35] Similarly, teachers in Wichita, Kansas, as a basic principle for teachers of spelling, hold that spelling words should be selected on the basis of frequency of use.[36]

Objectives or teaching of spelling, stated by Ruth Strickland, include helping each child learn to spell accurately and confidently as many as possible of the common words in English.[37]

Based upon the observations of these authorities, it is possible to say that there is an apparent value in the basic word list and a need for it.

Summary. The review of the literature has been concerned with what authorities have written about aspects of spelling pertinent to this study. It included information regarding (1) spelling aims; (2) spelling obstacles; (3) causes of poor spelling; (4) motivation; (5) spelling conscience; (6) methods; (7) challenging superior spellers; (8) whole-school spelling; and (9) construction and values of the basic word list.

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[35]Los Angeles City School District #1, Curriculum Division, Instructional Guide for Spelling in Junior and Senior High School (Publication number Sc-451, 1952).

[36]English teachers in secondary schools of Wichita, Some Approaches to the Teaching of Spelling (State Department of Public Instruction, August, 1948) p. 1.

[37]Ruth Strickland, "Utilizing Spelling Research," Education Digest, (February, 1956) p. 40.

CHAPTER III

MATERIALS, GROUPS, AND PROCEDURES USED

In the previous chapters the following terms were defined: (1) basic words; (2) basic word list; (3) additional subject emphasis; and (4) the spelling conscience. Literature of spelling authorities was reviewed to provide information concerning the problems of the study.

The ensuing chapter is devoted to the initial testing, program of study, and retesting necessary to evaluate (1) the students' proficiency in spelling common words; (2) the basic list as a proper and worthwhile tool; and (3) the stressing of a spelling conscience in an additional subject as a means of improving spelling.

The materials used in this study were (1) Dolch's 2,000 Commonest Words[1]; and (2) the Iowa Tests of Basic Skills. Dolch's list determined knowledge of common words both in the initial and final evaluations; the Iowa Tests of Basic Skills determined spelling achievement prior to the study and the results may be used in planning the spelling program.

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[1]Appendix A, p. 57.

Two eighth-grade groups participated in the study, 8R and 8M. Both groups were used in their entirety, twenty-four and twenty-six students respectively, for the basic list evaluation. Each group was reduced to twenty students each for the additional subject experiment.

The procedures consisted of (1) the initial testing with Dolch's basic word list; (2) a ten-week study of the six-hundred most-misspelled words; and (3) a re-testing of the six-hundred words. During the entire fifteen week period, group 8M, the experimental group, received spelling emphasis in geography, as well as in English class.

I. MATERIALS USED

Basic list. The basic list used in this study was compiled by first using the study made by Gates[2] from which Dolch selected twenty-five hundred words. These words represented the composite judgment of a great number of investigators, editors, and curriculum specialists. Dolch says "it therefore may be considered highly reliable as representing the commonest words in writing."[3]

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[2]Chapter II, p. 17.

[3]Edward Dolch, Better Spelling (Champaign, Illinois: The Garrand Press, 1942) p. 10.

Dolch's second step was to reduce the list to two thousand words by comparison with studies of words actually written by children, omitting words which had less evidence of common use. The studies used were:

1. The Fitzgerald List of 2,106 words.[4]

2. The Smith List of 2,156 words.[5]

3. The Free Association Study of 9,250 words.[6]

Dolch's list was selected for use in this study on the basis of its construction and because, in any list of over two thousand, additional words show only a very slight increase in percentage of the total running words. This is illustrated in Table I, p. 23.

Iowa Tests of Basic Skills. The Iowa Tests of Basic Skills, administered in early September to grades seven and eight in the Chisholm Junior High School, measures skills in five major areas: vocabulary, reading, language, work-study, and arithmetic. Spelling is one of four subjects under the heading of "Language".

Validity was established through trial of more than seven thousand items in four hundred schools.

The spelling subject has a reliability coefficient of .90.

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[4]Chapter II, p. 19.

[5]Chapter II, p. 19.

[6]B. R. Buckingham and E. W. Dolch, A Combined Word List (Boston: Ginn and Company, 1936).

Interpretation of results is through percentile rank and grade-equivalent scores based upon a normative sample of 74,174 students including 12,625 eighth-grade students. The sample involved 213 schools in forty-six states.

Grade-equivalent scores were used in this study. In the grade-equivalent score, the first digit represents the grade and the second digit represents the month within the grade. As an example, if a pupil makes a grade-equivalent of seventy-seven, this means that his raw score on the test is the same as that made by the typical or median pupil in the seventh grade at the end of the seventh month in that grade.

II. GROUPS USED

Two groups of eighth-grade students participated in this study, 8R and 8M. The particular letters designate home-room groups, Roosevelt and Mayo. The number designates eighth grade. Both groups received instruction in English and geography from the investigator though not in consecutive periods.

Group 8R. For the purpose of evaluating the basic list as an effective tool, group 8R was kept intact with twenty-four students, fourteen boys and ten

girls. The group had an average grade-equivalent of 77.8 on the Iowa Tests of Basic Skills.

For the additional subject experiment, 8R, which became the control group, was reduced to twenty students, ten boys and ten girls, with an average grade-equivalent of 78.2.

Group 8M. As with group 8R, the 8M group, for evaluation of the basic list, was kept intact with twenty-six students, fourteen boys and twelve girls having an average grade-equivalent of 73.5, 4.3 lower than 8R.

For the additional subject experiment, 8M, which became the experimental group, was reduced to equal 8R; twenty students, ten boys and ten girls with an average grade-equivalent equal to 8R, 78.2.

III. PROCEDURES USED

The procedures used involving spelling instruction with the basic word list were identical in both groups. The basic list instruction took place only during the English periods and no use of the basic list nor reference to the list was made during the geography period.

Basic list instruction. The first step in the procedure was the reduction of Dolch's 2,000 Commonest Words to 1,600 with the elimination of extremely simple words.[7] This was done by the investigator on the assumption that correct spelling of the deleted words would have been certain or very nearly so.

The second step was the testing of the remaining 1,600 words. This was done by units of one hundred words, one unit per day. Each word was pronounced, included in a sentence, and pronounced once more. Following each unit, the students were allowed to ask for repetitions which were given in the form of pronunciation of the word followed by a sentence.

Correction of units by the teacher and correction of errors by the students composed the third step. The corrected units were returned daily to the students, and they were advised to keep a spelling notebook in which they were to write the correct spellings for all errors.

The correct spellings were to be obtained by any means satisfactory to the student. He could ask the teacher, check with a dictionary, ask a classmate, or copy directly from a classmate's unit. The only

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[7]Appendix A, p. 57.

stipulation was that the spellings entered in the notebook were to be correct.

The purpose for the notebook was for individual study upon completion of the sixteen units. This purpose was carefully explained and the importance of correctly-spelled words in the notebooks was stressed to the students.

The fourth step was a further reduction of the basic list, a deviation from the original planned procedure.

The procedure, upon the outset of the testing, was to make use of the individual study method in a program similar to that used by G. R. Carlson[8] in which students were paired off according to ability. Time was to be allotted for the pairs to study and test the words each had in his notebook, covering eight to ten words per day. The advantage, according to Carlson, was that each then would study the words he did not know how to spell. The student, therefore, would not waste time studying and testing those words he already knew.

The change in the planned procedure became necessary because, through periodic checks of the note-

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[8]G. R. Carlson, "So They Still Can't Spell," Education, 79 (December, 1958) 219-223.

books by the investigator, it was discovered that students who had many corrections to make were entering incorrect spellings in their notebooks; making little or no effort to obtain correct spellings.

As a substitute procedure, it then became necessary to tabulate the number of times each individual word of the 1,600 had been misspelled and compose a list which could be used for class study. Since many words were misspelled only a few times and study and re-testing of these par-words would have required time, yet applied to only a few students, an arbitrary minimum percentage of misspelling was set at twenty.

Any word misspelled by 20 per cent or more of all students was then chosen for studying and re-testing. Tabulation showed six hundred words misspelled by 20 per cent or more of all students. The 1,600 word basic list, therefore, was reduced to six hundred.[9] Each student received a duplicated copy of the reduced list.

The fourth step was the study of the six hundred words by the two groups for a period of ten weeks. Examination of the six hundred word list showed that many errors could be attributed to a lack of knowledge

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[9]Appendix B, p. 68.

in three areas: (1) contractions; (2) homonyms; and (3) capitalization. List words in each classification were subsequently studied by all students during the first two weeks. The schedule of study for the first week was as follows:

Monday: A discussion of values and construction of contractions. Each student was to select all contractions from the word list and write the expression each contraction represented.

Tuesday: A brief review of capitalization.

Wednesday: Testing on contractions and capitalization.

Thursday: Individual study of errors in Wednesday testing.

Friday: Re-testing on contractions and capitalization.

The schedule of study for the second week was as follows:

Monday: A discussion as to the meaning of each homonym on the list together with homonyms possibly mistaken for those on the list.

Tuesday: Each student was to write sentences with list homonyms included.

Wednesday: Testing of list homonyms.

Thursday: Individual study of errors in Wednesday testing.

Friday: Re-testing of list homonyms.

For the remainder of the six hundred word list, two methods were used:

1. The individual study method was used by those who had misspelled one hundred or fewer of the six hundred words in the original testing, the maximum of one hundred errors being an arbitrary number determined by the investigator.

Qualifying for individual study were ten students in the 8R group and eight in group 8M. The spelling notebooks of these students were satisfactory for individual study. Each student was paired with another and, during the spelling period, studied his individual lists or worked on enrichment activities such as listing synonyms and antonyms for his particular spelling words.

2. The test-study-test method was used with the remainder of the two groups. The remaining 480 words were divided into eight lists of sixty words each. One list was studied each week. Mondays were spent testing

and correcting; Tuesdays, Wednesdays, and Thursdays were devoted to study of words missed on Monday; and final tests were given on Fridays.

The final step was the re-testing of the six hundred most-misspelled words, one hundred words per day for six days. Again, each word was pronounced, included in a sentence, and pronounced a second time. Students were allowed to ask for repetitions which were given in the form of pronunciation of the word followed by a sentence.

Additional subject emphasis. For the additional subject study, the experimental group 8M received spelling stress in geography in the following manner:

1. Correct spelling was required on all written work and was to be included as a factor in determining grades for all written material. This applied to all words including vocabulary of the subject.

The written material in geography was composed of (1) map construction; (2) sentence definitions for vocabulary; (3) sentence answers for chapter study questions; (4) paragraph answers to essay questions; and (5) all test answers.

2. Before a grade could be recorded, all spelling errors on a particular paper were to be corrected.

To impress upon the students the need for care in correcting, each time a paper was returned to the student because of incomplete or incorrect rectification, the grade for the paper was lowered three points. This applied to all written work including tests.

3. A spelling conscience was emphasized (1) through discussions of the desirability of correct spelling; (2) through required proofreading of each written assignment before it was turned in; and (3) through reminding the students to check any spelling guess they had made. These guesses were to be checked by asking the instructor, using the dictionary, or referring to the textbook.

Summary. A basic word list was administered to two eighth-grade groups. Following a fifteen-week period of study by the students, a retest was given to note the extent of improvement.

During the fifteen-week period, one group received additional spelling emphasis in geography while the other group did not. The purpose of the additional spelling emphasis was to determine whether or not this would result in greater spelling improvement.

CHAPTER IV

RESULTS

Basic list evaluation. On the original evaluation based upon the six hundred most-misspelled words, fifty students, writing a combined total of thirty thousand words, spelled 22,031 words correctly; 7,969 incorrectly for an average of 440.6 correctly-spelled words per student.

On the final evaluation of the six hundred most-misspelled words following the ten-week study period, fifty students again wrote a combined total of thirty thousand words. The results showed 25,819 words spelled correctly; 4,181 incorrectly for an average of 516.4 correctly-spelled words per student.

These results, as illustrated in Table II, page 40, showed an average improvement of 75.8 words per student.

Additional subject emphasis. On the original evaluation based upon the list of the six hundred most-misspelled words, each group of twenty students wrote a total of twelve thousand words with the following results:

Group 8R, the control group, spelled 9,431 words correctly; 2,569 incorrectly for a mean of 471.55 words correctly spelled.

TABLE II

EVALUATION OF THE BASIC WORD LIST

	Original evaluation	Final evaluation
Number of students	50	50
Total words spelled	30,000	30,000
Total correct words	22,031	25,819
Total incorrect words	7,969	4,181
Correct words per student	440.6	516.4

Average improvement per student 75.8

Group 8M, the experimental group, spelled 8,928 words correctly; 3,072 incorrectly for a mean of 446.40 words correctly spelled.

On the final evaluation of the six hundred most-misspelled words, the results were as follows:

Group 8R, the control group receiving no spelling emphasis in geography, spelled 10,816 words correctly; 1,184 incorrectly for a mean of 540.8 words correctly spelled.

Group 8M, the experimental group receiving fifteen weeks of spelling emphasis in geography, spelled 10,613 words correctly; 1,387 incorrectly for a mean of 530.65 words correctly spelled.

These results, as illustrated in Table III, page 42, show the mean increase in words correctly spelled to be 69.25 for the control group; 84.25 for the experimental group. The difference of the means was fifteen showing that the mean increase in correctly-spelled words was fifteen words higher per student in group 8M than in group 8R.

It appeared from these results that, with the experimental group, the additional emphasis in geography produced a greater spelling improvement than was attained by the control group. However, the

TABLE III

ADDITIONAL SUBJECT EMPHASIS

	GROUP 8 R		GROUP 8 M	
	Original evaluation	Final evaluation	Original evaluation	Final evaluation
Number of students	20	20	20	20
Total number of correct words	9,431	10,816	8,928	10,613
Total number of incorrect words	2,569	1,184	3,072	1,387
Average of correct words per student	471.55	540.8	446.4	530.65
Mean increase of correct words		69.25		84.25

Difference of the means 15

significance of the difference of the means needed testing to determine whether the difference in mean improvement of fifteen words was only a chance occurrence or whether the difference was related to the additional emphasis in spelling. In order to determine whether the difference was significant, it was necessary to test the null hypothesis.

The null hypothesis states that the true difference between two groups, such as those in this study, is zero and that the observed difference occurred only through chance.

In testing the hypothesis, it was first necessary to compute individual gain in words correct per student. On the basis of the six hundred most-misspelled words, the number of words spelled correctly by each student in the original evaluation was subtracted from the number of words spelled correctly in the final evaluation. The resulting number indicated the gain in correctly-spelled words.

A frequency distribution of individual gain was prepared for each group. Individual gain ranged from four words to 223 words in group 8R; seven to 206 in group 8M. Using an interval of ten, the standard

deviation was computed:

Group 8M $$S.D. = i\sqrt{\frac{Ef(x')^2}{N} - \left(\frac{Efx'}{N}\right)^2}$$

$$= 10\sqrt{\frac{700}{20} - \left(\frac{6}{20}\right)^2} = 59.10$$

Group 8R $$= 10\sqrt{\frac{529}{20} - \frac{2}{20}} = 51.33$$

From these results it was then possible to compute the standard error of the mean:

Group 8M $$S.E._M = \frac{S.E.(sample)}{\sqrt{N-1}} = \frac{59.10}{4.36} = 13.53$$

Group 8R $$= \frac{51.33}{4.36} = 11.77$$

The next step involved computing the standard error of the difference of the means:

$$S.E.(M_{8M} - M_{8R}) = \sqrt{S.E.^2 8M + S.E.^2 8R} =$$

$$= \sqrt{13.53^2 + 11.77^2} = 17.91$$

The significance ratio was then computed:

$$\frac{M_{8M}-M_{8R}}{S.E.\ Diff.} = \frac{84.25 - 69.25}{17.91} = .84$$

E. F. Lindquist[1] states that for a difference to be significant, the significance ratio must be at least 2.33. The significance ratio of .84 obtained in this experiment, therefore, is not sufficiently high to reject the null hypothesis. The figures in this computation are found in Table IV, page 46.

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[1]E. F. Lindquist, A First Course in Statistics (Boston: Houghton Mifflin Company, 1942), p. 132.

Considering these results, it must be said that the difference in mean gain, fifteen, is not statistically significant. The greater spelling improvement shown by group 8M was not necessarily related to spelling emphasis but could rather be a chance occurrence.

TABLE IV

TESTING THE SIGNIFICANCE OF THE DIFFERENCE OF THE MEANS

	GROUP 8R	GROUP 8M
Standard Deviation	51.33	59.10
Standard Error of the Mean	11.77	13.53
Standard Error of the Difference	17.91	
Significance ratio	.84	

CHAPTER V

SUMMARY AND RECOMMENDATIONS

I. SUMMARY

In this study, the basic word list was used in an attempt to evaluate and improve the spelling of eighth-grade students in the Chisholm Junior High School while, subsequently, evaluating the list itself as a worthwhile tool to use in a spelling program.

The procedure covered a period of fifteen weeks. It involved the evaluation of knowledge of common words. A basic list was administered to two eighth-grade groups. Then the six hundred most-misspelled words[1] were studied by the students and a retest of the six hundred was given to note extent of improvement.

One group received additional spelling emphasis in geography while the other group did not. The purpose of the additional spelling emphasis was to determine whether or not this would result in greater spelling improvement and support the conjecture that all teachers should teach spelling.

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[1]Appendix B, page 68.

The results of this study showed that two eighth-grade groups, shown to be slightly below the eighth-grade level of spelling achievement on the Iowa Tests of Basic Skills, initially misspelled an average of 159.4 of six-hundred common words. The determination of whether or not the resulting number of errors indicates a spelling deficiency cannot be made with authority because there are no available norms for Dolch's basic word list. However, as has been stated in the review of the literature, most authors believe that common words are important and spelling mastery of these words should be striven for. It is the conclusion of the investigator, therefore, based upon these results and the frequency with which these common words are used in both student and adult writing, that a deficiency exists and that there is evident opportunity for possible improvement.

Regarding the basic list as a proper and worthwhile tool to use with eighth-grade students, the results of the study, together with the literature, indicate that the basic list is valuable. The authors in the review of the literature advocate the use of a basic list because common words are the words written most frequently. Furthermore, because of their frequency

of use, the spelling of these common words should be learned before more difficult and less-frequently used words are studied.

In summary, the results of this study show that the spelling knowledge of common words was not complete in the two eighth-grade groups studied, and that spelling improvement can be made. In this investigation, an average improvement of 75.8 words per student was achieved. The basic list appears to be a proper beginning for an eighth-grade spelling program, beneficial to the student in subsequent writing and to the teacher in determining spelling needs.

Does stressing a spelling conscience in an additional subject produce spelling improvement? A mean gain of fifteen correctly-spelled words by the experimental group 8M over the control group 8R was shown to have no statistical significance. This means that the stressing of spelling in geography for a period of fifteen weeks made no difference in amount of spelling improvement. Perhaps future experimentation over a longer period of time involving more subjects may disclose the significant improvement found to be lacking in this study.

It is the hope of this investigator that the study may have produced intangible results which will prove beneficial to students in future writing: results such as motivation toward good spelling habits due to the added exposure to the spelling conscience and its components; caring about spelling, proofreading, and checking the guess.

II. RECOMMENDATIONS

Before planning an eighth-grade spelling program or any spelling program, it may be well to consider the value of common words. Should the correct spelling of common words be taken for granted or questioned? As a teacher, what would your reaction be should a student write at the bottom of his weekly spelling test, "Twenty wright; none rong."?

With these considerations in mind, a program may be planned with these recommendations:

1. Initiation of the program with the testing of basic words using Dolch's 2,000 Commonest Words or any other similar list.
2. Evaluation of the results and the determination of whether the group's proficiency with common words warrants further study or advancement to words of more difficult nature.

3. Continuation of the use of the basic list if the results of the evaluation show, in your estimation, a lack of spelling knowledge in common words.

The individual study method may be used with superior spellers. The superior spellers in this study were found to be quite capable of keeping an accurate list of errors and corrections. Individual lists were studied and mastered. Enrichment activities were willingly accepted and completed.

With average and below-average spellers, the test-study-test method with a weekly list may be used. This was found to be more beneficial than the individual study method primarily because of the students' inability to keep accurate lists. This inability, it appeared, was due to the large number of errors which needed correction.

If concentration upon particular word-groups is preferred, it may be well to work on the three areas of common error which in this study became evident during the error tabulation: capitalization, contractions, and homonyms.

Sell the idea of a spelling conscience to fellow-teachers. Point out that all students will be

more aware of correct spelling if all teachers emphasize its desirability. Advocate cultivation of the following habits in all students by all teachers: (1) caring about spelling; (2) proofreading; and (3) checking the guess.

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APPENDIXES

APPENDIX A

DOLCH'S 2,000 COMMONEST WORDS FOR SPELLING

*a
able
about
above
absent
accident
ache
across
*act
*add
addition
address
afraid
after
afternoon
again
against
*age
agent
agree
ahead
*aim
air
airplane
alike
alive
*all
allow
almost
alone
along
already
also
always
*am
*A.M.
among
amount
*an
*and
angry
animal
ankle
another
answer
ant
any
anybody
anyhow
anyone
anything
anyway
anywhere
apart
apple
*Apr.
April
apron
are
aren't
arithmetic
arm
army
around
arrest
arrow
*art
*as
ashes
*ask
asleep
*at
ate
attic
*Aug.
August
aunt
automobile
awake
away
awful
awhile
ax
babies
baby
back
backwards
bacon
*bad
badly
*bag
*bake
baking
*ball
balloon
banana
*band
bandage
*bank
banner
bare
*bark
*barn
barrel
*base
baseball
basement
basket
basketball
*bat
bath
bathe
bathing
battle
bay
*be
bead
bean
bear
beast
beat
beautiful
beauty
became
because
become
becoming
*bed
*bedroom
*bee
beef
been
beet
before
*beg
began
beggar
*begged
begin
beginning
begun
behave
behind
being
believe
bell
belong
below
belt
*bend
beneath
bent
berries
berry
beside
*best
*bet
*better
between
bicycle
*bid
*big
bigger
biggest
*bill
*bird
birth
birthday

*Indicates simple words omitted from initial evaluation.

*bit
*bite
bitter
black
blame
blank
blanket
blaze
bleed
bless
blew
*blind
block
blood
blossom
blot
blow
blue
bluff
board
boat
body
boil
*bone
*bonfire
bonnet
*book
bore
born
borrow
*best
bother
bottle
bottom
bought
bound
*bow
bowl
box
boy
braid
brain
brake
branch
branches
brand
brass
brave
bread
break
breakfast
breast
breath
brick
bridge
bright
bring
broad
broke
*broken
brook
broom
brother
brought
brown
brush
bucket
*bud
*bug
buggy
build
building
built
*bull
bullet
bump
bunch
bundle
*burn
burst
burnt
bury
bus
*bush
bushel
busy
*but
butcher
butter
button
buy
buying
buzz
*by
cabbage
cabin
cage
*cake
calf
*call
*came
camel
camp
*can
candy
*cane
canned
cannot
can't
*cap
captain
cape
capture
*car
card
care
careful
careless
carpet
carried
carries
carry
carrying
*cart
case
cash
cast
*cat
catch
cattle
caught
cause
*cave
cellar
cent
center
chain
chair
chalk
chance
change
changing
charm
chase
cheap
cheat
cheek
cheer
cheese
cherry
cherries
chicken
chief
child
children
chimney
chin
chocolate
choose
chop
Christmas
church
circle
circus
cities
*city
clap
class
clay
clean
clear
clerk
climb
cloak
clock
close
closet
cloth
clothes
clothing
cloud
clover
clown
*club

*Co.
coach
coal
coast
coat
cocoa
coffee
cold
collar
color
*colt
comb
come
coming
company
*cook
cookies
cool
copies
copper
*copy
cord
*corn
corner
cost
cotton
cough
could
couldn't
count
country
*county
course
cousin
cover
*cow
crack
cracker
cradle
crawl
crayon
crazy
cream
creek
creep
crept
cried
crop
cross
crossing
crow
crowd
crown
crumb
crust
*cry
crying
*cup
cupboard
cure
curl
curtain
*cut
cute
cutting
daisy
damp
dance
dancing
dandy
danger
dangerous
dare
*dark
darling
*date
*day
*days
dead
dear
*Dec.
December
decided
deed
*deep
deer
delight
dentist
deny
deserve
desk
*did
didn't
die
died
difference
*dig
*dim
dime
dine
dining
dinner
dirt
*dish
dishes
dismiss
ditch
divide
division
*do
doctor
dodge
does
doesn't
dog
doing
*doll
dollar
done
donkey
don't
*door
double
dove
down
dozen
*Dr.
drag
drank
draw
drawer
dream
dress
drew
dried
drift
*drink
drive
driven
driving
*drop
dropped
drove
drown
drug
drum
drunk
*dry
duck
*dug
dull
during
*dust
duty
each
ear
earlier
early
earn
earth
easier
east
Easter
easy
*eat
edge
*egg
eight
eighteen
eighth
eighty
either
elbow
elephant
eleven
else
empty
*end
engine
enjoy

enough
enter
entertainment
eraser
errand
*etc.
even
evening
ever
every
example
except
explain
excuse
expect
explore
eye
eyes
face
fact
fail
faint
fair
fairy
*fall
family
fancy
*far
fare
*farm
*farmer
farther
*fast
fasten
*fat
father
fault
fear
feast
feather
*Feb.
February
fed
feed
feel
feet
*fell
fellow
ferry
felt
fence
fever
*few
field
fifteen
fifth
fifty
fight
figure
file
*fill
finally
find
fine
finger
finish
fire
first
fish
*fit
fitted
five
*fir
flag
flame
flat
fled
flew
flies
flight
float
flock
flood
floor
flour
flower
fly
flying
fold
folks
follow
fond
food
fool
foolish
foot
football
*for
force
forenoon
forest
forget
forgive
forgot
fork
form
fort
forth
forty
fought
found
fountain
four
fourteen
fourth
fox
frame
free
freeze
freight
fresh
*Fri.
Friday
friend
frog
from
front
frost
froze
frozen
fruit
*fry
full
*fun
funny
fur
furniture
further
gain
gallon
game
garage
garden
*gas
gate
gather
gave
geese
gem
gentle
geography
get
getting
giant
gift
girl
give
given
giving
glad
glass
glove
*go
goat
goes
going
gold
golden
gone
good
good-bye
goose
*got
governor
grab
grade
grain
grand
grandfather
*grandma
grandmother
*grandpa
grant
grapes
grass
grave
gravy
gray

grease
great
green
greet
grew
grind
grip
grocery
group
grow
growl
grown
guard
guess
guide
*gum
*gun
*had
*half
hair
hail
Halloween
hall
hammer
hand
handful
handkerchief
handle
handling
hang
happen
happy
harbor
hard
harvest
*has
hasn't
*hat
hatch
hate
haul
have
haven't
having
hawk
hay
*he
head
health
heap
hear
heard
heart
heat
heaven
heavy
heel
held
hello
help
helpful
*hen
*her
herd
here
here's
hero
he's
*hid
hide
high
hill
*him
hinge
hire
*his
history
*hit
hoe
*hog
hold
hole
holiday
hollow
home
homesick
honest
honey
hood
hook
hoop
hop
hope
hoping
horn
horse
*horses
hose
*hot
hotel
hour
house
*houses
*how
how's
hundred
hung
hungry
hunt
hurried
hurry
hurt
*I
ice
I'd
idle
*if
*ill
I'll
I'm
*in
inch
inches
ink
inside
instead
interest
interesting
*into
invite
iron
*is
island
isn't
*it
its
I've
jail
*Jan.
January
*jar
jaw
jelly
*job
join
joke
jolly
*joy
judge
juice
July
jump
June
just
keen
keep
kept
kettle
*key
kick
*kid
kill
*kind
*kinds
king
kiss
kitchen
kite
kitten
knee
knew
knife
knock
knot
know
known
lace
lack
ladder
ladies

lady
laid
lake
lamb
lame
lamp
land
language
lantern
lap
*large
last
late
lately
later
laugh
laughed
laundry
law
lawn
lay
lazy
*lb.
lbs.
lead
leader
leaf
lean
learn
leather
leave
leaves
led
left
*leg
lemonade
lend
less
lesson
*let
letter
letting
lettuce
level
library
lick
*lid
lie
lies
life
lift
light
lightning
like
limb
limp
line
lion
*lip
listen
little
live
lives
living
load
loaf
lock
*log
long
look
lose
losing
lost
*lot
lots
loud
love
loving
low
luck
lumber
lump
lunch
lying
mad
made
mail
main
make
making
*mama
*man
manner
many
*map
*Mar.
March
marble
march
mark
market
master
mat
match
matter
May
*may
maybe
*me
meal
mean
meant
measure
meat
melon
medicine
meet
melt
*men
mend
merry
*met
mice
middle
midnight
might
mighty
mild
mile
milk
mill
million
mind
mine
mining
minute
mirror
Miss
miss
most
*mix
moment
*Mon.
Monday
money
monkey
month
moon
more
morning
most
mostly
mother
motion
mountain
mouse
mouth
move
moved
moving
*Mr.
*Mrs.
much
*mud
muddy
mule
music
must
*my
nail
name
*nap
napkin
nation
nature
naughty
navy
near
neat
neck
necktie
need
needle
Negro
neighbor
neither
nest
*not

never
new
New Year's
nice
nickel
niece
night
nine
nineteen
*no
noise
noisy
none
noon
*nor
north
nose
not
note
nothing
notice
notion
*Nov.
November
now
number
numbers
nurse
*nut
oatmeal
oak
oats
obey
ocean
o'clock
*Oct.
October
odd
*of
off
offer
office
often
officer
*oh
oil
O.K.
old
*on
once
one
onion
only
open
or
orange
order
organ
other
ought
*out
ours
ourselves
*our
outfit
outside
oven
over
overalls
overcoat
owl
own
owner
oyster
pack
page
paid
pail
paint
pain
pair
palm
*pan
pants
*papa
paper
parade
park
*parker
part
parties
party
*pass
past
paste
pasture
*pat
patch
*path
*pave
*paw
*pay
paying
peace
peach
peaches
pear
pearl
peas
peep
*pen
pencil
penny
people
pepper
perfume
perhaps
person
*pet
phone
piano
pick
pickle
picnic
picture
pie
piece
pieces
*pig
pigeon
pile
pillow
*pin
*pine
pink
pint
pipe
pitch
pitcher
place
places
plain
*plan
plane
plank
*plant
plate
play
played
playing
pleasant
please
pleasure
pledge
plenty
plow
plum
*plus
*P.M.
pocket
poem
point
poison
pole
policeman
pond
*pony
*pool
poor
porch
pork
position
post
*pot
potato
potatoes
pound
pour
powder
praise

pray
prayer
preach
preparing
president
preside
press
prettiest
pretty
price
pride
priest
print
prison
prisoner
prize
problem
product
program
promise
proof
proper
proud
prove
*P.S.
*pull
pump
pumpkin
puppy
pure
purple
push
*put
putting
puzzle
quart
quarter
queen
queer
question
quick
quiet
quilt
quit
quite
rabbit
race
rack
radio
radish
*rag
rail
railroad
rain
rainy
raise
raising
rake
*ran
ranch
rang
*rat
rather
rattle
raw
reach
read
reader
reading
ready
real
reason
receive
recess
recite
red
refuse
remainder
remember
remind
remove
rent
repeat
reply
report
respect
rest
return
review
ribbon
*rice
*rich
*rid
*ride
riding
rifle
right
ring
ripe
rise
rising
*risk
river
road
rob
robin
rock
rode
roll
roof
room
rooster
root
rope
*rose
roses
rotten
rough
round
row
*rub
rubber
*rug
*rule
ruler
*run
running
rye
sack
*sad
saddle
safe
said
sail
sailor
sake
sale
*salt
*same
*sand
sandwich
*sang
*Santa Claus
*sat
*Sat.
saucer
Saturday
save
saving
*saw
*say
says
scale
scare
scarf
scatter
school
scissors
*scooter
score
scout
scrap
scratch
scream
screen
screw
sea
season
*seat
second
see
*seed
*seek
seem
seen
self
*sell
send
sense
sent
separate
*Sept.
serve
September

*set
setting
settle
seven
seventeen
seventh
seventy
several
severe
sew
sewing
shade
shadow
shake
shall
shape
sharp
share
*she
*shed
sheep
sheet
shelf
*shell
shine
shining
*ship
*shirt
shoe
shoes
shook
shoot
*shop
shopping
shore
*shot
short
should
shoulder
shove
shovel
show
shut
*sick
sickness
*side
sidewalk
*sight
sign
silence
silent
silk
silly
*silver
*sin
since
*sing
single
*sink
*sir
sister
*sit
sitting
*six
sixteen
sixth
sixty
size
skate
*skin
*skip
sky
skirt
slap
sled
sleep
*sleeve
sleigh
slept
slice
slide
*slip
slipped
slipper
slippery
slow
small
smart
*smell
smile
smoke
smoking
smooth
snake
*snap
*snow
so
soak
soap
socks
*soda
*soft
*soil
sold
soldier
solid
some
son
song
soon
sore
sorry
*sort
sound
soup
*sour
south
sow
space
spade
spare
sparrow
speed
spell
spelling
spend
spent
spider
spill
*spin
split
spoil
spoke
spoon
sport
*spot
spread
spring
sprinkle
square
squeeze
squirrel
*St.
stable
stack
stairs
stalk
stamp
stand
star
stare
start
starve
state
station
statue
*stay
staying
steal
stream
steel
steep
steer
*step
*steps
stick
stiff
still
string
*stir
stitch
stock
stockings
stole
stomach
stone
stood
stool
*stop
stopped
store
stories
storm
*story
stove
straight
straighten
strap

straw
strawberry
stream
street
stretch
strike
string
strong
struck
stuck
*studied
studies
*study
studying
stuff
*such
sudden
suffer
sugar
suit
sum
summer
sun
*Sun.
Sunday
*sunk
sunny
sunshine
supper
supply
suppose
sure
surprise
swear
sweat
sweater
sweep
sweet
swell
swept
*swim
swimming
swing
switch
table
tablet
*tag
tail
*take
taken
taking
*talk
tame
*tan
*tank
*tar
taste
taught
*tea
teach
teacher
team
tear
tease
teeth
telephone
*tell
*ten
tender
tent
tenth
*test
than
thank
thankful
Thanksgiving
*that
that's
*the
their
*them
themselves
then
there
there's
these
they
they're
they've
*thick
thief
think
*thing
*thin
third
thirsty
thirteen
thirty
*this
those
though
thought
thousand
thread
three
threw
through
throat
throw
thunder
*Thurs.
Thursday
*thus
ticket
tickled
tie
tied
tight
*till
timber
*time
*times
*tin
*tiny
*tip
*tire
*tired
to
toast
tobacco
today
too
together
told
tomato
tomatoes
tomorrow
*ton
tongue
tonight
*toe
*took
tooth
*tool
*top
tore
torn
toward
towel
town
*toy
track
trade
train
tramp
*trap
travel
treat
*tree
trick
tried
trim
*trip
trouble
truck
true
truly
trunk
truth
try
trying
*tub
*Tues.
Tuesday
turkey
*turn
turnip
turtle
twelve
twenty

twenty-five
twice
twin
two
ugly
umbrella
unable
uncle
under
understand
understood
unite
unless
until
*up
upon
*upset
use
*uses
*used
useful
useless
usual
vacation
valentine
valley
very
view
village
vine
visit
voice
*vote
voyage
wade
wagon
wait
wake
walk
wall
want
war
warm
*was
wash
wasn't
waste
watch
water
*wave
way
*we
weak
wear
weather
weave
*Wed.
Wednesday
*weed
week
weigh
welcome
*well
we'll
*went
*were
we're
weren't
*west
*wet
we've
*what
what's
wheat
wheel
when
where
wherever
whether
which
while
whip
whisper
whistle
white
*who
whole
whom
whose
*why
*wide
wild
*will
*win
*wind
window
windy
*wing
winter
*wipe
*wire
wise
*wish
wishes
witch
*with
without
woke
wolf
woman
women
won
wonder
wonderful
won't
wood
wooden
woods
wool
woolen
*word
wore
*work
world
*worm
*worn
worth
would
wound
wrap
wrapped
wrist
write
writer
writing
written
wrong
wrote
*Xmas
yard
year
*yell
yellow
*yes
yesterday
*yet
*you
you'd
you'll
young
*your
you're
*yours
you've
zero
zippers

APPENDIX B

600 MOST-MISSPELLED COMMON WORDS

absent
*accident
*ache
address
afraid
*against
aim
allow
*already
*ankle
answer
anywhere
apron
arithmetic
aren't
army
*arrest
attic
*August
aunt
*automobile
*awful
awhile
ax
babies
backwards
bacon
*balloon
banana
banner
basement
basketball
bathe
bathing
beautiful
*beauty
*beggar
begged
*beginning
*believe
beneath
berries
berry
*bicycle
birth
bitter
blame
bleed
blew
*blossom
blot
blow
bluff
boil
*bonnet
borrow
bother
bowl
*braid
*brake
break
breakfast
broad
buggy
bullet
bury
bushel
*busy
butcher
button
buying
buzz
cabbage
camel
canned
captain
capture
careful
careless
carries
*carrying
catch
caught
*cellar
chalk
cheek
cherries
cherry
*chimney
*chocolate
choose
chop
chin
Christmas
*circus
cities
clap
*clerk
*cloak
closet
clothes
*cocoa
collar
*copies
coming
company
corner
cough
couldn't
*course
cousin
*cracker
*cradle
crawl
crayon
crazy
creek
creep
crept
crowd
crumb
crust
*cupboard
*cure
curl
curtain
daisy
dangerous
dare
dead
December
*decided
dentist
*deny
deserve
die
died
*difference
different
dine
*dining
ditch
divide
division
doctor
dodge
*doesn't
dollar
double
*drawer
dried
dropped
*drown
during
duty
*earlier
*easier
Easter
easy
eighteen

*Indicates words misspelled by 20% or more students on the final evaluation.

*eighth
eighty
*either
elbow
elephant
empty
engine
enough
*errand
even
evening
example
fairy
fancy
fault
feast
*February
fed
*ferry
fifteen
field
fifth
figure
*finally
finish
fitted
fled
flies
float
*flour
folks
force
*forenoon
forth
*forty
fountain
four
*fourth
freeze
*freight
fresh
froze
furniture
further
gain
*garage
gem
*geography
good-bye
*governor
grab
grant
*gravy
*grease
great
grip
grocery
growl
guard
guess
guide
*Halloween
*handkerchief
hasn't
*haul
haven't
hawk
hear
heard
*heaven
heel
hello
*herd
*here
*here's
he's
*hinge
hoe
hollow
hook
*hoping
horse
*hose
how's
hungry
hurried
I'd
idle
*interest
*interesting
isn't
*its
jaw
join
juice
keen
kettle
kitchen
knee
knew
knock
knot
known
*ladder
*laid
lamb
*lame
language
*lantern
lap
*lately
*later
laughed
laundry
lawn
lay
lazy
lbs.
led
*lemonade
lend
lesson
*lettuce
*level
library
*lie
*lies
*lightning
lion
limb
listen
live
loaf
*lose
*losing
loud
lying
main
*manner
marble
March
mat
matter
maybe
*meant
measure
*medicine
*melon
melt
merry
middle
mining
minute
*mirror
Miss
*motion
muddy
napkin
*naughty
*necktie
*needle
*Negro
neither
*New Year's
*nickel
*niece
nineteen
noisy
nose
notice
notion
nurse
oatmeal
obey
*o'clock
officer
onion
organ
ought
ours
ourselves
*overalls
oyster
pack

paid
palm
*pants
parade
past
peace
*pear
*pearl
pencil
penny
*perfume
piano
pickle
picnic
*pigeon
*piece
*pieces
pillow
*pitcher
*plain
*pleasant
pleasure
pledge
plenty
plus
poem
*poison
policeman
*position
potato
powder
*praise
pray
preach
preside
president
*prettiest
*priest
prize
product
proof
*promise
proud
pumpkin
pure
purple
puzzle
*quarter
queer
*quiet
quilt
quit
rabbit
*radish
rainy
raise
raising
rake
rattle
*receive
*recess
*recite
*remainder
remember
remind
reply
*review
*ribbon
rifle
rising
road
*robin
rode
*rooster
*rotten
rough
ruler
rye
saddle
sailor
Saturday
*saucer
says
scale
scare
scarf
scatter
*scissors
scrap
*scratch
scream
*screen
seem
*sense
*separate
September
several
*severe
*sew
sewing
shake
*shining
shoulder
shove
shovel
sign
*silence
silent
skating
skirt
*sleigh
slippery
soak
*socks
*soldier
solid
sore
spare
sparrow
spoke
*sprinkle
square
*squeeze
*squirrel
stack
*stalk
statue
*steal
*steer
stiff
still
stitch
stole
stool
stopped
straight
*straighten
strap
strawberry
stream
*stretch
*strike
struck
*studying
stuff
sudden
Sunday
sugar
*supply
*suppose
sure
*surprise
swear
sweat
sweater
swimming
switch
taste
taught
*tear
tease
Thanksgiving
that's
their
there
*there's
these
*they're
they've
thief
*thirsty
thirteen
those
though
*threw
throat
through
throw
thumb
Thursday
thus
*tickled
tied
tight

to
*tobacco
*tomato
tomatoes
tomorrow
*tongue
too
tore
*toward
towel
tried
*truly
trying
Tuesday
turnip
turtle
twelve
*twenty-five
ugly
umbrella
*unite
unless
upon
useful
*usual
vacation
*valentine
valley
*view
village
*voyage
wade
*wait
wasn't
waste
wear
weather
Wednesday
weigh
we'll
*we're
*weren't
we've
what's
wheel
where
wherever
*whether
while
whip
*whisper
*whistle
whole
whom
whose
*witch
woman
women
won't
wound
*wrap
*wrapped
*wrist
*writing
written
wrote
*you'd
you'll
*you're
you've
zippers