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Teaching Spelling for Retention

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TEACHING SPELLING FOR RETENTION

by

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Abstract

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Because the teaching of spelling to students above the seventh grade is not a universally endorsed curriculum, it is the purpose of this study to explore varied opinions concerning the reasons and methods for teaching spelling, to develop a specified six week curriculum for the teaching of a spelling unit to eighth graders, and to evaluate the curriculum and its relevance to students of this age.

Study and research reveal that most students of middle school age do have spelling difficulties which can be overcome. This curriculum utilizes methods suggested in the related literature for enhancing the study of specified word lists.

The resulting data indicates that additional classroom activities do produce positive increases in the attainment of the knowledge of hard-to-spell words. However, the retention level appears to be the same, regardless of the methods of teaching.
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TEACHING SPELLING FOR RETENTION

Introduction

The teaching of spelling is a controversial area in which there are varied opinions concerning the proper procedures of teaching and methods of evaluations. Some professional authorities maintain the opinion that students perform better at spelling words within sentences than when they study words in isolation. Others theorize that one does not teach spelling, but, rather, the student reaches a realization of it as he generalizes his visual concepts. Therefore, as the student matures, his innate spelling abilities develop along a structural procedure of analogy of orthography, as well as of phonology. Authorities supporting these opinions disapprove of spelling lists and stress the learning of words through context, including reading and writing, rather than by rote drill and memorization.

In contrast, some opinions stress, especially for younger children, an emphasis on phonemic skills and on
the study of syllabication. Others feel that one should teach syllabication only after the student has learned the spelling of the word. There does seem to be a general consensus, however, that there are definite orthographic patterns to the spelling of English words, and students can learn these patterns through proper disciplines.

There exist in the professional literature as many differing theories of methods of teaching spelling as there are of measurements, but the attitude of the teacher seems to affect the success of any program, however well-structured. Among essential strategies that authorities have previously cited are: to teach rules inductively through writing, to stress use of the dictionary, to encourage mnemonic devices and spelling tricks for memorization, to simplify and clarify Latinate forms, to predict probable spellings, to teach visualization, and to analyze individually the structural patterns governing the spelling of words.

A major emphasis of this project is to determine the most beneficial method of teaching these elements of spelling so that students not only learn to spell for
specific tests, but also they learn to visualize, to associate, and to retain the spellings of words studied for a prescribed period of time.

To this end, the specific purpose of this project is to develop a six-week spelling curriculum correlated with the McGraw-Hill spelling text *Basic Goals in Spelling* for eighth grade middle-school language arts students in a small Northeast Florida town which will enable the students to retain the spelling of given words for at least two weeks following direct teaching.
Review of Related Literature

Orthography and the Importance of Spelling

One of the most essential skills in learning to read is that of being able to recognize printed words. Conversely, one of the necessary ingredients of learning to write is that of being able to reproduce the words exactly as they should be spelled orthographically on a page. With a renewed interest on composition skills, educators are beginning also to re-emphasize the related skills, including spelling. Steve Graham and Lamoine Miller (1979) stress that spelling is a crucial ingredient to writing, as the general public often associates spelling with educational attainment, accuracy, neatness, and cultivation, while the inability to spell is frequently linked with illiteracy. Therefore, they argue that because of the public's emphasis on the importance of spelling achievement, the incorrect spelling may adversely affect an individual's educational and occupational status.

The seriousness of spelling correctly, if stressed from the earliest grades, should be directed toward developing in the children an awareness of its importance.
Spelling is one area of all the areas of learning in which perfection is the only standard (Yatvin, 1979).

In spite of the value placed on the importance of spelling accurately, however, most educators have not promoted the teaching of spelling beyond the elementary grades. Collett and Curry (1979), who have researched spelling in junior colleges, suggest that even though spelling is not a major element of the curriculum of secondary and college education, the fact remains that spelling errors do detract from the effectiveness of any written work, and some emphasis should be placed on planning methods and techniques to improve the teaching of spelling at all levels.

Recent investigations cited by Zutell (1979) indicate that children's spelling attempts tend to follow an orderly sequential progression dependent upon each child's abstract phonological system and his ability to integrate other sources of information into an understanding of English orthography. Graham and Miller (1979) elaborate on the similar research by Beers and Henderson (1977) in which students tend, first, to omit essential sound features of
the word. At the next level, spelling is primarily phonetic. During the third stage, attributes of the English orthographic system begin to appear. At the fourth stage, students recognize and recall the correct lexical representation of the word.

Spelling, then, tends to be multi-faceted and requires mastery of a variety of skills. Graham and Miller (1979) define spelling as "the ability to recognize, recall, reproduce, or obtain orally or in written form the correct sequence of letters in words" (p. 2). Spelling correctly is, then, the blending together of each of the facets of the spelling process in an organized manner.

Pursuant to Piaget's theory that humans have a need to structure experiences in order to comprehend them (Zutell, 1979), recent attempts to analyze and organize spelling errors and problems have produced a greater comprehension of orthographic structure. Though English spellings tend to be inconsistent, and English orthography is often considered to be a highly inefficient system, professional literature now indicates that a logical system of impressive regularity does exist and can be
learned (Templeton, 1979).

A fundamental understanding of orthography reveals in the study of the English language, or any other language, a consistency of visual symbols which represent sounds or patterns of sounds. Orthographic structure also consists of special signs, such as punctuation and diacritical marks, which provide information not found in oral language directly. Hall and Ramig (1978) illustrate this with the examples of aisle and isle, both pronounced the same as I'll. The words differ, however, not only in spelling, but also in the specific features of orthography. Therefore, the structural patterns of orthography do provide purpose and scope for further study of established consistencies. If students can master these predictabilities, they can then eliminate most roadblocks to effective spelling performance.
Methods for Teaching Spelling

There are many who think that spelling can be mastered through the writing process, but they stress first that the actual writing of the student may initially consist of words he uses but does not spell correctly. It is then the responsibility of the teacher to produce in the student the pride and pleasure of correct spelling so that a finished paper has a finished look.

Elementary-school teachers of Florida devised a procedure in 1965 to encourage children to do more writing, even when they cannot spell all the words they use. Children learn the value of using a dictionary by writing and then rewriting to attain correct spelling (English Language Arts in Elementary Schools, 1965). The major problem with such a method of teaching spelling, however, may be the improbabilities of one's ever approaching an accumulation of widely used words that are difficult to spell. It encourages the student to use words with which he is familiar and limits his access to increasing his vocabulary through a spelling process. The greatest support for this method would be as a supplementary activity,
rather than as a substitute for a spelling program.

Although the Florida Guide of 1965 indicates that writing is the ultimate test of ability to spell, the authors believe that children learn to spell, not by writing, but by studying spelling. Children should be provided a spelling period which is directed by the teacher and the children, not by the spelling textbook, and which is an important time for study of the English language. This spelling period may have time limits that are fixed or flexible, and it may be scheduled for every day or two or three times a week (English Language Arts in Elementary Schools, 1965). The methods teachers employ during the spelling period and the techniques of guiding the student toward learning to spell are varied. Among these are the synthetic alphabet instruction, the whole word approach, the phonemic approach, memorization lists, mnemonic devices, and modern technology.

Duffy (1969) supports the linguistic approach that students should first master the consistent spellings in English before teachers ever present them with irregularly spelled words. In this way, the student initially learns
spelling as if there were truly a one-to-one relationship between the phoneme and grapheme. Then he later learns the irregularities of spelling patterns.

In a recent article on spelling research, however, Graham and Miller (1979) explain and endorse the theory that English orthography is difficult to master and that, therefore, instruction should be based on a special synthetic alphabet, the Initial Teaching Alphabet. Students would then spell with a one-to-one grapheme-phoneme relationship. The major obstacle to this method is that of an additional process of translating the synthetically spelled word back into the English orthography.

Some students learn to spell words by visualizing the images of the graphic symbols. Nicholson and Schachter (1979) propose that students have visual dictionaries in their heads to which they refer for correct spellings of unpredictable characteristics. These words are learned as unique structures of graphemes, or as small sets of graphemes. For example, they cite word families such as light, sight, and right, all with similar graphic structures. Other words are so irregular that students must simply
memorize the visual images. Visual associations can also be used for verifying the correct spelling after a word has been written. If this procedure is accepted, teachers can teach the whole word method by teaching word families, associations, proofreading, and visual lists, including flash cards. Ehri and Roberts (1979) report in a study of readers that students who study words on flash cards learn more about orthographic identities of words than subjects who are context readers. The thought is that the isolated study of words provides more letter analysis such as letter detail, letters as related to sounds, and complete letter images.

Another need for study of visual images is the situation in which one must spell homonyms. Words that sound alike are difficult to distinguish without a visual image. In fact, it is necessary to have both the image and the context to spell the word correctly.

Supporters of the phonemic approach suggest that there are systematic properties of orthography which are consistent and can be applied to the process of spelling. Through learning these specific rules, students can apply
their spelling techniques to most words for successful spelling achievement. To support the phonemic approach, some good spellers who have had concentrated backgrounds in phonics contend that their ability to spell is due to their knowledge of phonics. However, others feel that their inability to spell well is caused by their unsuccessful attempts to “sound out words” to spell them.

The authors of the Florida Guide, *Language Arts in the Elementary School* (1965), stress that much of the value of phonetic helps depends on how much is known about the common patterns of English spelling. As children mature in their language knowledge, their usage of phonetic principles also adds reasoning to following sounding patterns with recognition of visual differences.

In further study, Chomsky (1969) argues that children do, indeed, use language knowledge in spelling structurally related words, such as those with Latinate forms (Nicholson & Schachter, 1979). Similarly, from the works of Venezky, Chomsky, and Hall emerges a theory that English speakers use phonological rules to pronounce words. In areas of stress placement and regular vowel and consonant alternations,
the orthography remains constant. For example, *sane* becomes *sanity*, *crime* becomes *criminal*, and the same orthographic symbol is used to represent both vowel sounds. Hence, stress placement and vowel reduction are generally not reflected in orthography (Hodges & Rudorf, 1972).

A study of structural analysis provides reasonably reliable spelling aids for combination words. Once the student has learned the base word, he can master the spellings of words made from the base. The Latinate forms suggested by Chomsky (1969) enrich vocabulary and spelling and provide additional skills relative to a study of word structure. A knowledge of the English system, thus, does not require the storage of every vocabulary word in the dictionary since there may be many words which derive from the same base word.

Besides instilling a photographic or visual image in students' minds, teachers may also use mnemonic devices to help students recall problem spots of spelling particular words and thus reinforce orthographic structure. One method is to attach a spelling to something already known or easily remembered by the student (Hesse & Robin-
son, 1982). Some well-known aids cited in *Language Arts in the Elementary School* are:

- There's a rat in separate.
- Use your ear to hear.
- The principal is your pal. A principle is a rule.
- A piece of pie.

Another method teachers may use is to associate a sing-song rhythm to learning the letters in a word. In a list of sixteen sight-words, Quinn (1980) suggests that children learn to spell house by singing the "Mickey Mouse" song and changing the M to H, and to spell because by spelling be and then singing cause to the tune of "Mickey Mouse," stressing, of course, that the au sound is spelled au, not ou. These methods of mnemonic devices appear to be successful in providing for children tangible methods of recall.

Since a primary goal in teaching spelling is to teach correct awareness of orthographic structure, the student must essentially have a certain conscientious purpose in his writing that causes him to proofread and correct errors as he makes them. In rereading words, he then eliminates
spelling errors made simply from hasty writing and concentrates on researching and learning the words he has missed. If he does not proofread and correct himself, then he may continue to make spelling errors and render useless all other efforts and attempts to master the procedures.

A final and new method involving technology includes a recent classroom innovation for spelling, the Speak and Spell battery operated computer. The machine has a 200-word vocabulary with four levels of difficulty. Teachers who have used this machine say that it offers a non-threatening approach to spelling, gently corrects errors, individualizes learning, and is fun for the children (Marshall, 1979).

Since mechanical instruments for teaching do seem to be rapidly becoming classroom necessities, and with the recent interest in computers in the classroom, it is essential to note that there are also available specific computer lessons in spelling provided for the use of intensifying or remediating the study of orthography. These are provided by the programmers of computer lessons.
In conclusion, Elliott Lessen (1980) summarizes the review on spelling performance methods by stating that whether or not the English language is comprised of regularly or irregularly spelled words, individuals do need to learn to spell correctly. Regardless of the methodology used to teach correct spelling, it is the final form presented by the learner that is evaluated.

Spelling in the Middle School

Spelling is a traditional element of the elementary school curriculum, but its status beyond elementary schools is a controversial issue for teachers to pursue. In a booklet, Helping Your Child with Spelling, Dolch (1960) says that beyond the fifth grade as a child begins to use long words, he progressively learns to spell no longer as whole words, but by syllables. He will say the word and then write it a syllable at a time. In this way, he is actually seeing the word in parts that are already familiar to him from his associations with other words.

Data gathered by Zutell (1979) on spelling strategies support the argument that children progressively develop
more sophisticated strategies of spelling as they have a need to deal more effectively with English orthography. Many authorities on spelling stress the concept that children do innately generalize and associate visual and sound patterns to form their own rules of survival in the world of spelling. Nicholson and Schachter (1979) contend that spellers develop an internalized system of rules enabling them to predict and write the most probable spelling for the words and that the successful speller then integrates a language knowledge of internalized rules and visual associations.

Dolch (1960) states that most parents do not worry greatly about spelling in grade school for they assume the child will eventually learn as he matures. However, many teachers of middle school and high school students also then contend that if students have not learned to spell by that age, they never will, anyway. Thus, other aspects of the curriculum often override the spelling lessons. Manning and Manning (1982) suggest in the Middle School Journal that a spelling curriculum be developed specifically in the middle school. They admit that there are at this
age students who do not require actual spelling instruction, but they also stress that there are, indeed, other students who need intensive study. These students do not have visual images of the words and do not yet systematically proofread their work. The Mannings (1982) stress that middle schools do have a definite responsibility to help students improve their spelling and, that when teachers determine the needs of the students and plan appropriate instruction with time and materials for that instruction, they can then "effectively meet the needs of the students to spell and communicate in written form" (p.16).

Hesse and Robinson (1982) contend that middle schools have "no choice but to assume direct responsibility for spelling instruction" (p.16). They encourage and declare the responsibility of all content area teachers to teach spelling standards across the curriculum so that transfer of learning is reinforced from the language arts classes throughout all areas of learning. In fact, they take the stand that if a teacher or principal cannot identify where a twenty minute spelling segment of instruction takes place daily, probably none is taking place. As a final declaration
of the need for team-work in spelling, Hesse and Robinson stress that the quality in student spelling performance will only increase when teachers themselves value accuracy in spelling by demanding it of themselves and of their students.

Identification of Spelling Problems

There are many varied opinions on the characteristic traits of a good speller. Dolch (1960) says that some people were born with the ability to spell, while others must develop an awareness of correct spelling along with methods for compensating for spelling problems. Cox (1978) of Indiana University did a study of personality traits of spellers and discovered from his research that sensitizers who intellectualize and attempt to control stimuli and situations which are anxiety-arousing are considerably better spellers than repressers who are impulsive and avoid anxiety-arousing stimuli by using denial and rationalization. He also found in his study that females demonstrated higher spelling scores than males for each personality type.
Research consistently reinforces the concept that while spelling is considered an essential skill for the educated and intelligent person, it is in no way a measure of intelligence. There are poor spellers among both the high-achieving scholars and the remedial low-achievers. Interestingly, there are also poor spellers in other languages with the same problems as the poor spellers of English. For example, in research compiled by the Switzerland Commission for Applied Linguistics (1977), poor spellers of the French language demonstrated problems in auditory perception, graphic perception, and meaning comprehension. It was established that they, too, go through a progressive process of learning sound and the meaning of sound, along with the orthographic structures representing sound.

In addition, Graham and Miller (1979) assert that the majority of children who are presently labeled handicapped usually exhibit spelling problems. Learning disabilities, mental retardation, emotional disturbance, and crippling and other health impairments may unfavorably affect spelling performance. Spelling problems exist for children with learning disabilities because they have difficulty with
visual imagery and phonics. These children, however, may be guided through consecutive processes of recognition of errors and self-correction. This process is further explained and developed by Yudkivitz (1979).

The ability to spell accurately and easily is not included among the characteristic traits of Gifted students as listed by the United States Office of Education (Martinson, 1979). Although these students are expected to be highly verbal children, they may or may not be good spellers. However, as basic perfectionists, one would think they certainly should be capable of learning methods of assuring correct spelling through visualizing, memorizing, and using a dictionary.

**Spelling Programs and Procedures**

There has always been a problem with spelling because there are not purely phonetic systems of writing. As spoken language continues to change, the written language does not keep pace with the omissions and rearrangements of pronunciations. Spelling reform was first advocated in America by Benjamin Franklin who convinced Noah Webster
that it was necessary to establish a phonetic method of spelling. Webster, author of the Webster's Dictionary, felt the only change that could be successful would be a gradual reform (West, 1961). While pronunciations sometimes tend to be altered readily, spelling is a more difficult area in which to make universal changes. Thus, the spelling programs of schools must compensate through specific study for the mismatching of spellings and pronunciations of words.

As stated earlier, methods of teaching spelling vary. One procedure a teacher might use described by Nicholson and Schacter (1979) would be to teach language relationships by classifying words, deductively or inductively, according to language structure, visual associations, and rules. Still other words would have to be taught as sight words, using a variety of techniques such as saying and writing the words and then recalling them.

The visual strategy recommended by Nicholson and Schacter (1979) encourages the following procedure:
1) Look at the word.

2) Say the word.

3) Close your eyes. Try to see the word.

4) Look at the word again.

5) Cover the word and try to write it.

6) Check to see if you spelled it right. (p. 808)

Fisher (1980) stresses individual spelling methods for a good spelling program. She suggests that children keep a notebook in which they write the correct spelling for words they have missed in any written work they do. Then, when the spelling word is learned, they mark it.

Another method Fisher (1980) recommends is to identify the spelling strategies children are using to spell unfamiliar words and then to group them for individualized instruction. A common spelling strategy misused includes not using the system correctly. For example, *rute* for *ruin* is unsystematic in the sense that it is almost a random response. Thinking about the word, proofreading the spelling, and using games and practice activities would be helpful for overcoming this problem in spelling.
Another common strategy misused by children is that some children consistently pick the wrong option. For example, they spell *bref*, *befe*, *breef*, or *breaf* instead of *brief*. They need to develop a sense of what "looks right." More emphasis again on visualizing and proofreading would be beneficial (Fisher, 1980).

Some children depend too much on sounding out, according to Fisher, as in *insatoot* for *institute*. Many children have problems adding affixes to words. Fisher suggests inductive teaching of the rules with key words put up as examples around the room (1980).

Children who reverse letters need emphasis on sequence and proofreading. Mnemonic devices will help children who have trouble with pairs of words that are frequent troublemakers, such as *they're*, *there*, and *their* (Fisher, 1980).

In stressing the individualized program, Fisher suggests that students do not have to have one-on-one individualization, but may be grouped according to strategies used; they may also be assigned spelling partners or may have individualization on a part-time basis only. The options are presented, explained, and then encouraged for
adaptation to the individual teacher's needs.

Sorenson and Kerstetter (1979) stress teaching spelling through the application of the writing process. By letting the child invent his own spelling as he learns the written and oral language together, they contend that the child develops his own internalized rules as he has the need and desire to create his language of expression. He learns to trust his own perceptions and to correct himself as he seeks to find answers from the teachers and from usage of a word book. It is his need to write to communicate with others that influences his desire to utilize the correct spellings they would recognize (Sorenson and Kerstetter, 1979).

Yatvin (1979) also endorses teaching spelling through the writing process. She states that children who are properly motivated and who see uses for writing the words correctly are more willing to make the efforts to do so. She suggests the use of dictionaries, the keeping of personal indexes by the children of their own hard-to-spell words, the assigning of spelling patterns, the teaching of words to be used prior to their use in writing, and, finally, the allowing of time for improvement and proofreading.
Manning and Manning (1982) stress two methods of teaching spelling: the formal and the informal. In the informal approach, extensive spelling takes place throughout the entire curriculum, and the students do not have formal spelling lists. They improve their spelling by reading, through writing, and by proofreading. The Mannings emphasize, however, that the children who write and receive teacher-corrected papers to discard or file away do not improve as do those who have discussions with the teacher on their writing and spelling and become involved individually.

The Mannings (1982) suggest that content area teachers encourage good spelling. In presenting new vocabulary, they might write the words on a chalkboard or display the words in the classroom, as well as encourage the children to work together in pairs to proofread; but teachers should not evaluate children's work on the basis of spelling correctly, even though they do stress good spelling.

To teach spelling formally, the Mannings (1982) recommend that periods of fifteen minutes or less are more successful than longer periods of study. Students can help
each other in pairs or in small groups. They may call out their words to each other and select the methods they use to practice the words. They keep records of the words studied and learned, and they are encouraged to increase the amount of reading and writing they do to improve their spelling. Although most middle schools use only graded spelling textbooks, the Mannings suggest that teachers can make spelling kits by placing lists of words on index cards, or even by mounting pages of traditional spelling books on cardboard and then arranging the separate units in a box for the various ranges of grade levels to be taught. There are also commercial spelling kits available (Manning & Manning, 1982).

Hesse and Robinson (1982) suggest that spelling be taught through mastery learning so that children learn to spell the targeted words correctly and automatically in all writing situations—not just on formal spelling tests of lists of words. This means, then, that the teacher must constantly set up situations in which the child is expected to use the unmastered words and monitor his performance for the correct spellings. Hesse and
Robinson suggest the following procedure:

1) Use manuscript and cursive writing.

2) Use a student-teacher analytic procedure for locating errors.

3) Use mnemonic devices.

4) Provide novel and independent trials.

5) Correct each trial.

6) Restrict the use of phonics.

7) Eliminate the use of syllabication.

8) Use morphological structures.

9) Omit vocabulary instruction. (pp. 18-19)

The success of the program recommended by Hesse and Robinson depends upon the instructional demands of the teachers and the degree that the standards are reinforced by the entire school.

Johnson (1982) presents a four-step method of teaching spelling taken from *Ideas for Teaching English Grades 7-9*, NCTE, 1966. These steps are to teach spelling by:

1) Comparing the sounds and letters.

2) Studying the root word.
3) Finding a rhyming word that was spelled the same way.

4) Dividing the word into parts. (p. 20)

Other approaches Johnson endorses include focusing on: connotation, prefixes and suffixes, etymology, antonyms and synonyms, and homophones (1982).

A spelling model as presented by Graham and Miller (1979) illustrates the basic components of the successful spelling program.

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<td>1. Proofreading</td>
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<td>2. Word Study Technique</td>
<td>2. Phonemic Skills</td>
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**Interest and Motivation**

1. Reinforcement
2. Games
3. Supplemental Aids
4. Spelling Conscience
5. Graphs or Charts (Graham & Miller, 1979, p. 9)
A study of this model indicates that the integration of the three parts of the model—Spelling Vocabulary, Supplemental Instruction, and Interest and Motivation—is essential for students to learn and retain spelling knowledge.

While Graham and Miller (1979) list several different techniques for teaching spelling, they also identify the procedures supported by research and those not supported by research. Since some of these procedures seem to be in common use, it is beneficial to peruse them. These procedures are cited without the specific lists of references included with each by Graham and Miller.

Procedures Supported by Research

1. The test-study-test is superior to the study-test method.

2. Learning spelling words by a synthetic approach is a better technique than learning words by syllables.

3. It is more efficient to present words for study in a list or column form than in sentence or paragraph form.
4. The single most important factor in learning to spell is the student correcting his or her own spelling test under the teacher's direction.

5. Spelling games stimulate student interest.

6. Sixty to seventy-five minutes per week should be allotted to spelling instruction.

Procedures Not Supported by Research

1. Writing spelling words in the air is a valuable aid in learning new words.

2. Studying the "hard spots" in words improves spelling ability.

3. Students should devise their own method for studying spelling words.

4. Student interest in spelling is secondary to rewards received for achievement in spelling.

5. Writing words several times ensures spelling retention. (Graham & Miller, 1979, p. 10)

In conclusion, the discussion of the teaching techniques and procedures described here indicates the variety of options provided for the teacher in fostering spelling instruction. The remainder of this project
will focus upon the development of a specific set of procedures and activities for use in the context of the eighth-grade classroom.
Procedures

In the preceding study of related literature, there is an established agreement that spelling is an essential element of the overall curriculum of all schools. It is, then, the purpose of this study to verify the need for the program in a middle school and to devise a plan for teaching a spelling unit which will ensure optimum retention of the correct spellings of specific words studied. Subjects participating in the study consist of two selected eighth grade classes of thirty students each, taught by the same teacher, held within the last two periods of the school day, and instructed with the same basic spelling text.

Recent scores in spelling on the California Comprehensive Test of Basic Skills reveal that Group I has seventy-three percent who scored on or above eighth grade level and Group II has sixty-three percent who scored on or above the eighth grade level. These students have an established familiarity with the text to be used, and it is assumed that, as groups, they have acquired basic skills necessary to proceed with the unit to be taught. However, there is
also an observable need to increase the spelling consciousness of students so that there is a transfer of the awareness of spelling to a purposeful usage of correct spellings in practical situations, such as formal and informal writing. Furthermore, there is some evidence that these students tend to memorize spelling lists for short periods of time merely to fulfill assignment requirements of the teacher. It is hoped that a curriculum can be developed which will instill motivation for purposes of retention rather than for grades alone.

The objectives for this study are to be determined through a survey of student needs and attitudes toward spelling and through the use of pre-tests consisting of both a word list and the words presented in a written context. From the ensuing data obtained, objectives are to be formulated to meet the needs of the students. Among the general objectives, however, are those mentioned above—use in formal and informal writing, recall over long periods of time, and motivation for spelling correctly.

The content of this curriculum includes and concentrates upon a basic unit, Lessons 25 through 30, of the spelling
text *Basic Goals in Spelling* for grade eight. The plans for the curriculum are to enlarge upon and enrich the study of this unit from using the text alone to supplementing the lessons with motivating exercises. This supplementary material is teacher-made and directed and is relevant to the student needs as determined through earlier procedures. The activities and learning tasks follow a sequenced order in which the final lesson consolidates a total review and summative evaluation.

The learning experiences provided for the students in this curriculum are to utilize some activities suggested earlier in the Review of Literature and to motivate, reinforce, and instill retention of the specific word lists and lessons provided by the text as related to the needs of these particular students. These activities are selected from the Teacher's Guide of the text and from teacher-made activities pertaining to the specified objectives.

The evaluation procedures of the lessons' effectiveness are continual study and evaluation of each phase, or lesson, provided. A formative evaluation follows the study of
each specific group of words, and a summative evaluation concludes the study with a measurement of the knowledge of the total unit studied. In addition, another final evaluation is administered to analyze and summarize the retention level at approximately two weeks following the formal study of the words.

The effectiveness of the curriculum itself will be evaluated through a comparison between the pre-tests and post tests to ascertain the meeting of the predetermined objectives and purposes of the curriculum.
THE CURRICULUM
THE CURRICULUM

Preliminary Interest Survey

From the compilations of the student interest survey (See appendix), it is interesting to note that seventy-six percent of the students feel they are usually good spellers, seventy-nine percent enjoy reading some, and sixty-eight percent do notice the spelling of words as they read. In each question concerning methods of spelling, sixty-four percent of the students think they spell automatically without the specific use of theoretical devices, but they do recognize the usefulness of syllabication, visualization, and mnemonic devices. Seventy-one percent feel also that writing words five times each improves their learning them. Interestingly, sixty-two percent of the students believe that for them, once a word is learned, its spelling is not forgotten.

In the realm of writing, ninety-two percent of the students consider spelling to be important for newspapers
and magazines, but only sixty-four percent recognize the same importance in their own writing. When asked if spelling affects the words they use in their writing, sixty-eight percent answer that trying to spell correctly slows their writing spontaneity and twenty-nine percent actually try to use only words they already know they can spell correctly.

Finally, seventy-nine percent of these students do say that the teaching of spelling is worthwhile, and eighty-eight percent feel that it should be taught at least to the eighth grade and beyond.
Analysis of Pre-Tests

Three pre-tests were administered to these students. The first pre-test was given to the students orally as they wrote the words, pulling simply from their memory and spelling skills. The second pre-test was a written set of sentences with blanks where the spelling words were filled in as the teacher read the sentences aloud. This test gave the students a context within which to see the word as they spelled it. The final pre-test placed the correctly spelled word in a multi-choice situation with two other misspelled words. The student selected the correctly spelled word by recognizing what "looks right."

The results from the pre-tests administered (see appendix) indicated a need for the following activities to be incorporated within the structure of this curriculum.

In order to increase the student's ability and proficiency in spelling:

1. The student will be drilled on specific word lists with intensive study to increase his spelling vocabulary.
2. The student will be encouraged to recognize the need to make conscious efforts to spell correctly and to discontinue random responses.

3. The student will be made aware that with conscious efforts, he can visualize spellings of words to spell in the way that "looks right."

4. The student will learn to create mnemonic devices to aide his memory in the correct spelling of difficult words.

5. The student will be encouraged to enjoy the process of learning to spell correctly.

6. The student will be encouraged to recognize the necessity of spelling correctly so that he will review and edit his own writings for precision.

Because words that can be "sounded out" seemed to present few problems on the pre-test, it was assumed that eighth graders have a basic understanding of this concept.
Curriculum Design

This curriculum is designed to continue the use of the basic text Basic Goals in Spelling by Webster/McGraw-Hill, but to reinforce and intensify the acquisition of spelling knowledge and retention through additional teacher-directed activities.

Objective One: The student will attempt to master the spelling of the following particular words which look and sound like other words.

- petal
- access
- humane
- cartoon
- diary
- convey
- device
- peasant
- profit
- prosecute
- vocation
- ether
- celery
- haunted
- statue
- wither
- patent
- compliment
- courtesy
- impassable

Pre-test: Call out the words as the students write them.

Have the students to check them to see what they missed.

Write the words on construction paper (one word on a sheet) and place them about the room for visual reinforcement.

Activities:

1. Read the words together as a class and spell each one aloud together.
2. Write each word five times.

3. Write the exercises in the book which stress meaning and recognition of spellings. Correct the lesson together.

4. Discuss each word about the room on construction paper and talk of ways to remember how to spell them. Ex.: humane- Care for the horse with a mane.

wither- with her

impassable- not able to pass

diary- the first vowel sounds i

compliment- I like compliments.

5. Spell the words and stress the difficult letters.

6. Test.

**Objective Two:** The student will attempt to master the spelling of the following particular words which are homonyms.

<table>
<thead>
<tr>
<th>male</th>
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<th>hangar</th>
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<td>surf</td>
</tr>
<tr>
<td>cruise</td>
<td>bail</td>
<td>borne</td>
<td>sheer</td>
</tr>
</tbody>
</table>

**Pre-test:** Call out the words. Be sure to give a proper context. Have students check and correct their papers.
Place the spelling words on construction paper about the room for visual pictures.

Activities:

1. Read the spelling words together and discuss the spelling of each.

2. Visualize pictures of the correct meanings of homonyms. (Create visual cartoons.)

3. Spell the words together.

4. Write the words five times each.

5. Complete the spelling lesson which stresses meaning by definition and context. Correct the lesson together.

6. Write the words five times each again right before the test.

7. Test.

**Objective Three:** The student will attempt to master the spelling of the following words which are not spelled the way they are commonly pronounced.

- jewelry
- bouquet
- auxiliary
- tremendous
- amateur
- vacuum
- diamond
- miniature
- exquisite
- tedious
- liable
- athletic
- adult
- mischievous
- laboratory
- boundary
- athletic
- coupon
- gallery
- superintendent
Pre-test: Call out the words as students write them. Check and correct.

Activities:

1. Go over the words together aloud. Spell them aloud together.

2. Study the words about the room. Discuss particular things to notice, as in mischievous (not mis-che-vi-ous) and arthritis (not au-thor-it-is).

3. Fill in a picture puzzle of the words (Teacher-made). Turn the paper over and write the words; then make a puzzle around each. Ex.: \[
\text{je} \text{w} \text{e} \text{l} \text{r} \text{y}
\]

4. Complete and check the lesson together. These exercises stress meaning, syllabication, and spellings of endings of the words.

5. Review again the words about the room. Stress those pronunciations that need attention.

6. Test.

Objective Four: The student will attempt to master the spelling of the following words which have unexpected spellings.
tragedy  privilege  physician  acknowledge
succession  icicle  fiery  calendar
prairie  guarantee  judgment  biscuit
mileage  disguise  threaten  schedule
exaggerate  desperate  controversy  exile

Pre-test: Give a pre-test. Have students correct the words they missed.

Activities:

1. Go over the words together as a class.

2. In groups of two: divide the twenty words. Each partner will write questions using his ten words. Then the partners will exchange papers and answer the questions using the spelling word in each answer. (This has each student to write a sentence using each word.)

3. Complete the lesson which stresses recognition of the correct spelling and usage of the words. Check the lesson together.

4. Study carefully the words about the room. Talk about mnemonic devices:

1. **acknowledge**-I know about the **ledge**.
2. **privilege**-is fair. There is no ledge.
3. **exaggerate**-one exit, two gates.
4. **succession**- success
5. **icicle**- two i's in icicle.
6. **judgment**-The judge dropped the e case.
5. Write the words five times each.

6. Review the words together again.

7. Test.

**Objective Five:** The student will attempt to master the spelling of the following words in which the $s$ sound is unpredictable. These words must be memorized.

- license
- cease
- census
- suspicion
- scenery
- conscious
- precision
- cemetery
- cinder
- discipline
- procession
- parcel
- circular
- ancestor
- conscience
- cinch
- oasis
- faucet
- nuisance
- cylinder

**Pre-test:** Have students correct their words.

**Activities:**

1. Go over words together aloud.

2. Study words about the room and discuss which sound is spelled by $s$ or $c$.

3. Write each word; then look up each word and write its definition.

4. Write each word five times.

5. Write a sentence with each word.

6. Complete and then check the lesson which stresses recognition and definition.

7. Review the words, stressing $s$'s and $c$'s.

8. Test.
**Objective Six**: The student will attempt to master a review of the spelling of the preceding words.

**Activities**:

1. Go over the words together, spelling each aloud.

2. Complete and check the review lesson which stresses a review of the difficult concepts of each lesson.

3. Have a spelling bee.

4. For flashcards, use the constructed displays already prepared for use about the room. Hold the card up for a second or two, then lower it and have the class spell it together aloud.

   (The students seemed to enjoy doing this.)

5. Write a poem using at least six to ten of these words.

6. Final test over the unit.

**Post Tests**

The post tests are identical to the pre-tests. Therefore, an orally administered test, a context test, and a sight test are given. Following the prescribed time lapse of approximately two weeks, another orally administered
test exactly the same as the pre-test and post test should measure the retention of the knowledge and skills acquired through this curriculum study.

Evaluations of the Testing Results

Before beginning the unit on spelling, a pre-test on the words was given orally by the teacher. On the following day a test for spelling the words in a context and a test for recognition of the correct spelling were administered. Both the experimental group using the curriculum and the control group using only the text took these tests. An analysis of these pre-tests indicated a great need for intensive work with the words for all the students, as the classes averaged twenty-seven percent and twenty-eight percent accuracy on the oral pre-test. No one scored above sixty-five percent on the pre-test and the scores plunged downward to four percent. There was an improvement of only two percent on using the words in context, but there was a considerable increase in accuracy (forty-six percent) when selecting the one correct spelling from other spellings.

Lessons for the curriculum were prepared as individual
units of approximately two and a half hours each, spread throughout several days. The control group previewed the words, wrote them five times each, completed the lesson in the book, and took a test over the words. The experimental group took pre-tests for each lesson and corrected them. They also wrote the words five times each and completed each lesson, but along with their study were added some of the following aids: flashcards, words around the room, picture puzzles of words, the spelling of words aloud together as a class, the process of writing questions and answers using the words, definitions of words, and exercises in writing. A test was then administered after the lesson. These tests provided weekly evaluations.

Final post tests identical to the preliminary pre-tests were administered to both groups. A comparison study indicated that the concentration on spelling definitely provided improvement of students' performances in spelling and that the more activities provided, the greater the achievement scores, as the experimental group achieved scores ten percent higher than the control group.
Both groups, however, increased their mastery of this spelling vocabulary by thirty-six percent and forty-six percent improvement, allowing the group using the curriculum to achieve seventy-four percent mastery as a class.

The retention test, administered approximately two weeks later, may not be considered to be as accurate a measure as one would like, due to unavoidable delays in giving the post tests and favorable circumstances for the retention tests, but its consistency is noticeable and, therefore, relevant. The testing results display optimum retention of the spelling words, and a comparison between the two groups indicates that each group retained the skills of spelling in direct proportion to the scores attained on the post tests. That is, the level of retention was the same for each group in direct relation to its previous post scores. One might conclude that however the words are learned, once they have been learned, the end result (retention) is the same.

Since students indicated a forty-six percent growth in the acquisition of the spelling of these words, it may be concluded that the teaching of spelling is indeed
worthwhile and that the curriculum did provide considerable growth for these students in their study of spelling. If more time and effort had been spent, perhaps the growth might have been greater, but within the realistic setting of a language arts classroom which encompasses many varied areas of study, it suffices to stress the accomplishments of the intensified efforts and to emphasize the need for such a study of spelling for these students.

It is interesting to note that the five words never mastered by one-third of the students were *amateur*, *mischievous*, *auxiliary*, *privilege*, and *guarantee*. These words each require visualization for memory in spelling. The words most easily spelled were those which could be spelled by syllabication. Some words, such as *acknowledge* and *judgment*, studied by mnemonic devices, produced excellent mastery. Therefore, in evaluating the curriculum itself, there is observable evidence that the goals of increasing spelling consciousness of students, of encouraging spelling growth of vocabularies, and of promoting spelling retention of words studied have been met successfully.
Conclusion of the Study

This project has been prepared for the purpose of identifying feasible methods to enhance the learning of spelling and to identify the need for the actual study of spelling. The students selected are typical eighth grade students in a realistic classroom situation in a small, rural town.

From the study of related literature, it is evident that particular methods of drills and approaches seem to have beneficial effects on the learner and that there is a real need to continue the teaching of spelling throughout the middle school. By increasing the activities that concentrate on particular word lists, the curriculum presented in this study endorses the opinions supporting spelling activities previously stated in the related literature and utilizes some of the procedures recommended.

The students themselves support the practice of writing their words five times each, of drilling over the words together, of studying visualization and memory tests, and of spending time on spelling—in class. The difficulty still encountered is the fact that most students do not
study their spelling words for any duration of time beyond the classroom.

The results of this study indicate how using the various methods and activities in addition to the lesson in the book may improve interest and motivation and promote better learning in spelling. These procedures, in turn, may be used with any other lesson or word list. Other suggestions found in the related literature may be feasible plans for teaching spelling also.

In planning a curriculum to include writing as a means of teaching spelling, difficulties arose because of the limited word lists which, in turn, limit creativity and freedom in writing. While there is value in the movement for more and better written communication, there is no indication from this study that learning to spell through writing could compare with the efficiency of drill as used in this curriculum. There is evidence from the pre-tests and post tests that spelling does improve slightly when words are written in context, but this seems rather to indicate that there are various spelling levels just as there are vocabulary levels. That is, a person's oral
spelling vocabulary may not be as vast as his spelling vocabulary in context or by sight.

If, in addition, it is true that students substitute words they can spell in their writing, as twenty-nine percent of these students indicate on the interest survey, and if watching their spelling slows the writing processes, as sixty-eight percent of the students expressed, the purpose of using writing to teach spelling seems extremely time-consuming and much too general an objective. Even recognizing the concept earlier stated of having students write first, then return to correct spelling errors, it is still difficult to measure the achievement of individual spelling growth in such random and unpredictable circumstances. Perhaps writing should really be taught for the emphasized purpose of communication and usage of punctuation, grammar, and spelling, and the method of specialized drill should be retained for identifying and intensifying students' skills in each of these areas. There can be no substitute for reinforcing the spelling of words until students have actually acquired the skill needed to visualize or memorize the correct spelling. That reinforcing
and teaching of spelling has been the purpose and the result of this study. Further, as stated earlier in the related literature, spelling should be taught and encouraged by all teachers in all subjects and all grades. Spelling is important, and it can be learned!
REFERENCES
Reference List


APPENDICES
STUDENT INTEREST SURVEY
On Spelling

Please select the correct answer.

1. Do you enjoy reading?  A) not at all  
   B) some  C) very much

2. About how much time a week do you spend on unassigned reading?  A) none  
   B) 1 hour a week  C) 2 hours a week  D) 3 hours or more a week

3. Do you write letters?  A) never  B) sometimes  
   C) often

4. Do you write in a diary or some kind of journal?  A) never  B) sometimes  
   C) often

5. How much time do you spend on studying your spelling words each week?  A) Less than 10 minutes  
   B) 10-20 minutes  C) 25-40 minutes  D) 45 minutes or more

6. Do you spell well?  A) never  B) sometimes  
   C) usually

7. Do you A) automatically spell most words or B) sound most words out to spell them?

8. In writing, when you cannot spell a word, do you usually A) spell it the best you can  
   B) use another word or C) look it up in a dictionary?

9. Do you find that memorizing tricks to remember helps you spell difficult words? For example, i before e, except after c. Does this help you spell words like receive, or do you just spell the word automatically, right or
wrong, without recalling the rhyme?
A) Memorizing tricks helps. B) Memorizing tricks doesn't help me.

16 20 64 -- 10. Do you think you A) form pictures of words in your mind to spell them, B) see words in parts, such as syllables, to spell them, or C) just automatically spell the words?

-- 60 40 -- 11. Does it help you A) none B) some C) a lot to see the word in writing to determine if it is spelled correctly?

20 67 13 -- 12. The correct pattern of gallop is A) CVC B) VCCV C) CVVC.

15 73 12 -- 13. The word gallop would be divided into syllables in which way? A) ga-llop B) gal-lop C) gall-op

48 52 -- -- 14. Did using the letter pattern help you to determine where to divide the word? A) Yes B) No

67 21 12 -- 15. Do you think a study of patterns is A) useful B) too difficult C) too easy?

71 29 -- -- 16. When you write spelling words 5 times each, does it A) improve your test grades B) have no effect on your learning the correct spellings for tests?

62 12 20 -- 17. How soon do you forget how to spell the new words we study? A) almost not at all B) one week later C) two or more weeks later D) immediately

68 32 -- -- 18. Do you notice spelling errors when you see them in something you are reading? A) yes B) no

92 8 -- -- 19. Do you think it is important to spell words correctly in a newspaper or magazine? A) of course, it is! B) I suppose so. C) Not really.

36 64 -- -- 20. Do you think it is important for you to spell
correctly in your own writing?  A) some  
B) very much  C) not at all

Does trying to spell correctly affect the words you use in writing?  A) It slows me when I stop to think how a word is spelled.  
B) I am not aware of spelling when I write.  
C) I select words I know I can spell.

When you write, do you proofread later for spelling errors?  A) sometimes  B) usually  
C) not usually

Do you think teachers spend too much time on spelling?  A) Definitely yes!  B) not really  
C) absolutely not!

Could you learn to spell just as well if you did not have spelling tests?  A) probably so  
B) probably not

When do you think teachers should quit teaching spelling?  A) 5th grade  B) 7th grade  
C) 8th grade  D) 10th to 12th grade
SPELLING PRE-TEST AND POST TEST
Using Words in Context

Fill in the spelling words as the teacher reads the paragraphs.

1. His _______ is making _______ ________ ________
   for _______ customers at a _______ ________.
2. In his _______’s ________, ________ threatens to end
   his _______ career in the ________ year.
3. The ________ of the flowers in her ________ are ______
   to ________ in the ________ heat of the sun.
4. The ________ of ________ ________ followed as his
   body was borne to rest among his ________ in the
   ________.
5. The ________ ________ group are ________ ________,
   but their ________ singing was ________ by ________
   of applause from the ________.
6. The ________’s ________ is that ________ boys
   got access to the ________ and caused a ________.
7. The ________ about the ________ ________ was
   ________ and ________ before it got too ________.
8. The old ________ house is ________ by an ________
   king who was made ________ by a ________ of ________.
9. The scientist has a ________ for a computer ________
   which will ________ making a ________ count with great
   ________.
10. The women’s ________ ________ ________ a spring
    ________.

SPELLING PRE-TEST AND POST TEST
Sight Recognition

1. A)petal B)petle C)pedal
2. A)acess B)access C)axes
3. A)human B)humane C)humain
4. A)carton B)cartone C)cartoon
5. A)diary B)dairy C)diry
6. A)conver B)convey C)confay
7. A)devise B)device C)devize
8. A)peasant B)pesent C)pesant
9. A)profet B)proffit C)profit
10. A)procedute B)prosekute C)prosecute
11. A)vokation B)vocation C)vocashun
12. A)ether B)ethur C)ethar
13. A)celary B)salary C)celery
14. A)hauerted B)haunted C)hanted
15. A)statu B)statue C)statute
16. A)wither B)widher C)widder
17. A)patent B)padent C)patient
18. A)complement B)compliment C)kompliment
19. A)courtesy B)courtesy C)kurtesy
20. A)impassible B)impassable C)impassabul
21. A)male B)mail C)mael
22. A)maner B)manor C)manur
23. A)mourning B)morning C)mornning
24. A)hanger B)hangar C)hangger
25. A)vise B)vice C)vicce
26. A)very B)vary C)vary
27. A)corps B)core C)cores
28. A)canvas B)canvvas C)cannvass
29. A)lone B)loan C)lonne
30. A)chords B)cords C)corse
31. A)coral B)choral C)koral
32. A)peel B)peal C)pele
33. A)marshal B)marshall C)marshell
34. A)cereal B)sereal C)serial
35. A)creek B)creak C)creke
36. A) surf  B) serf  C) serv
37. A) cruise  B) crews  C) cruse
38. A) bail  B) bale  C) balle
39. A) borne  B) born  C) borned
40. A) shear  B) cheek  C) shear
41. A) jury  B) jewelry  C) jewlry
42. A) vacuum  B) vacume  C) vaccume
43. A) libele  B) liable  C) liible
44. A) bounedy  B) boundry  C) boundary
45. A) boket  B) bouket  C) bouquet
46. A) dimeone  B) diamond  C) dimund
47. A) athletick  B) athletik  C) athletik
48. A) arthritis  B) artheritis  C) arthuritis
49. A) auxiliary  B) auxilary  C) auxilery
50. A) miniture  B) minature  C) miniature
51. A) adult  B) aladult  C) addult
52. A) coopon  B) coupon  C) coopon
53. A) tremendous  B) tremendous  C) tremendous
54. A) superintendent  B) supertenden  C) superintdent
55. A) mischevous  B) mischevious  C) mischievous
56. A) exquisite  B) exquissit  C) exquizant
57. A) gallery  B) gallry  C) galillery
58. A) amature  B) amachure  C) amateur
59. A) tedious  B) tediuss  C) teadius
60. A) labatory  B) laboratory  C) labotory
61. A) tragedy  B) tradgedy  C) tradjedy
62. A) aeknowlege  B) aeknowledge  C) aeknowlige
63. A) privedge  B) priviledge  C) privilege
64. A) fsycician  B) physician  C) physican
65. A) cussession  B) sucession  C) succession
66. A) icicle  B) isikle  C) isicle
67. A) fierey  B) firey  C) fiery
68. A) calender  B) calender  C) calindar
69. A) prairie  B) prarie  C) prariee
70. A) guarentee  B) garantee  C) tarentee
71. A)biscuit B)biskit C)biket
72. A) judgement B) judgment C) judgement
73. A)milage B)milage C)millage
74. A) diskise B) disguise C) diskises
75. A) threaten B) threten C) thretan
76. A)skedule B)schedule C)skejule
77. A) exaggerate B) exagerate C) exajerate
78. A) despirte B) perperite C) desperate
79. A) contraversy B) controversy C) controvery
80. A) exile B) exaisie C) exisle
81. A) licence B) license C) lisense
82. A) sease B) cease C) ceaze
83. A) census B) cencus C) sencus
84. A) suspicion B) suspision C) suspishun
85. A) senery B) scenery C) seemery
86. A) conscious B) conscience C) consus
87. A) presizion B) prezishun C) precision
88. A) semetery B) cemetery C) seminary
89. A) cinder B) sender C) sendher
90. A) discipline B) dissipline C) dissiplene
91. A) procesion B) procession C) proccessson
92. A) partsel B) partial C) parcel
93. A) circular B) circuler C) cirsular
94. A) ancester B) ancesetor C) ancestor
95. A) conscience B) conscious C) konscience
96. A) cinch B) search C) stinch
97. A) oasis B) oases C) oaces
98. A) fauset B) fawset C) faucet
99. A) nuisance B) nuisance C) nussance
100. A) sylender B) cylinder C) cyllendar
EXPERIMENTAL GROUP  
(Curriculum)  

Results of Oral pre-test, post test, and retention test  
(percent correct)  

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<th>Post test</th>
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<th>Retention</th>
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Totals | 28% | 74% | 46% | 76%
**CONTROL GROUP**

Results of Oral pre-test, post test, and retention test  
( percent correct )

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The testing for this curriculum was performed during the final quarter of the school year when many activities were involving the students at the testing times. The retention test was given on the very last full day of class.