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# Improving Spelling Performance Of Sixth Grade Students Using Eclectic Spelling Strategies And A Cognitive-Based Approach

Marilyn L. Frieling Nova Southeastern University

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## IMPROVING SPELLING PERFORMANCE OF SIXTH GRADE STUDENTS USING ECLECTIC SPELLING STRATEGIES AND A COGNITIVE - BASED APPROACH

by MARILYN L. FRIELING

A Practicum Report submitted to the Faculty of the Center - the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in the School Fractices Information Files for reference.

June/1988

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#### AUTHORSHIP STATEMENT

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practices. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my own work, presented here, will earn similar respect.

Marilyn L. Frieling

### ABSTRACT

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Improving Spelling Performance of Sixth Brade Students Using Eclectic Spelling Strategies and a Cognitive-Based Approach. Frieling, Marilyn L.: Practicum Report, Nova University, The Center for the Advancement of Education. Descriptors: Spelling, Spelling Instruction

The poor spelling performance of a group of sixth graders was addressed by utilizing the Informal Spelling Inventory suggested by Mann and Suiter(1974). This criterion - referenced test determined that nine members of the sixth grade class scored well below grade level expectations in spelling. A cognitive based approach and eclectic spelling strategies were implemented with the target group in order to improve their spelling achievement. The results indicated a cogn tive - based approach through phonetic instruction and rule generalizations increased levels of achievement in the target group. Students within the group demonstrated positive attitudinal changes. Purposeful writing became one of the group's favorite activities. It was concluded that a phonics - based approach, rule generalizations, and purposeful writing assignments could increase spelling achievement.

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#### 1. Purpose

The purpose of this final report is to discuss the implications of current educational practices in the teaching of spelling and to suggest alternative methods of instruction. These suggestions will be disseminated to area school in hopes that educators will use them to raise spelling achievement. The purpose includes the background, identification of the problem, and outcome objectives.

The site of the practicum project was a parochial school in a small community with a population of approximately 13,000 individuals. The school had been in existence since 1979 and served grades nursery through eight. It had a staff of twelve teachers, including a full-time principal, a school secretary, two part-time seacher aides, and two full-time custodians. There were 251 students attending the parochial school. There was one Indian-American and four Chinese-Americans in the student body. The remainder of the student body came from middle to upper-middle class white families.

Class size was very favorable. The largest class had 25 students, and the smallest had 16 е

students. The school boasted a pupil-teacher ratio of 20:1.

Tuition was comparable to that of other private and/or parochial schools in the area. The parochial school enjoyed a reputation for high-quality education in a caring, compassionate atmosphere.

Classes were all self-contained with some departmentalizing beginning in firth grade. The writer had been designated as a floeting teacher in fifth through seventh grade for the academic year. As such, the writer taught social studies, science, and art to the fifth grade, spelling to the sixth grade, and literature to the seventh grade.

As the sixth grade spelling teacher, the writer questioned some of the middle grade teachers in the school concerning their method of spelling instruction. It was noted that spelling was taught as somewhat of an independent activity approach. It was assumed that since the school used an excellent early phonics program, most of the phonics the middle school and older students needed was minimal reinforcement in the phonics > ules and spelling generalizations. Thus, most of the spelling instruction in the middle grades had been approached as an indepen-

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dent student activity.

If this approach were successful, then spelling achievement should have been high. A close look at the scores and other performance records showed this was not always the case. Observations from the writer's sixth grade spelling class showed mine students not performing at grade level in spelling. The students' daily assignments were not being completed or were not completed satisfactorily. The students earned failing grades on their weekly tests. The mine students showed a generally megative attitude toward spelling, often coming to class without spellers, and without a pencil or paper. The students garned poor scores on most writing assignments.

The students' cumulative records were examined. On national standardized tests, the students scored from a low percentile ranking of 12 percent to a high ranking of 61 percent. Their IQ's as metaured on the Otis-Lennon School Ability Test were all within the mormal range.

Hillerich(1982) suggested that educators should move in the direction of criterion-referenced tests and away from norm-referenced tests. He felt that

at the 65th percentile, at 4.6, or in the sixth stanine, but rather at what level of difficulty in terms of list words the child can function. (p. 140)

The writer compiled such a criterion-referenced test. The Informal Spelling Inventory was based on the Follett basal spelling series which the students used(APPENDIX A). On this test, seven scored below the second grade level and two scored at the fourth grade level for a mean achievement level of 1.7. An analysis of their errors is listed in APPENDIX B. It revealed a general lack of understanding of the basic rules of phonics and of spelling generalizations.

It is during grades kindergarten through second that the parochial school uses the Open Court system of reading, which is a high-powered phonetic reading approach. Investigation of school attendance records revealed that of the nine targeted students, two had attended the school since kindergarten, one more entered at the first grade level, and the other six came to the school in either the fifth or sixth year. Thus, seven of the targeted students virtually missed out on the early foundation in phonics.

A normal functioning class of sixth graders at the midpoint of the year should have performed at a grade

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level of 6.5. The mean achievement level of the target group was 4.8 years below grade level expectations.

The practicum project attempted, then, to solve the problem of the sixth grade spelling students who performed two to five grade levels below the general achievement level of the remainder of the sixth grade class.

Active intervention was definitely needed to remediate the large discrepancy between the target group and the regular class members. The projected outcomes the writer expected to achieve through such intervention were the following:

- After a welve week period of remediation, students in the target group will improve their spelling achievement on the informal Spelling Inventory by a minimum of three grade levels.
- 2. After a twelve week period of remediation, students in the target group will demonstrate more positive attitudes toward spelling as evidenced by teacher interviews of the students before and after implementation, showing a mean score improvement of at least 50%.
- 3. After a twelve week period of remediation,

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students in the target group will show 50 percent improvement in directed writing skills as evidenced by a weekly number and error analysis of their spelling errors.

2. Research and Solution Strategy

The author conducted research into current spelling practices and investigated possible alternative approaches. Research showed the paradox between what is and what should be. According to Wallace and Larsen(1979:363) "the ability to spell is one of the most basic and essential skills in the language arts curriculum." All would agree it should be a valued characteristic of well-educated people. Gerber and Hall(1987) would have expected this subject to be one of the most well-anderstood, best developed, and most successful parts of the normal elementary curriculum. But in reality, Wallace and Larsen (1979) asserted that in comparison to reading, spelling had received little attention by educators. Gerber and Hall(1987) found that teachers spent very little time actually teaching spelling, depended heavily on commercial materials that appeared to make little<sup>5</sup>difference in group outcomes, and they disre-

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garded empirically valid techniques for teaching spelling even when they were aware of these techniques. Thus, in choosing an approach to use on the target group, the writer studied a variety of approaches.

A traditional approach would have retained the formal spelling program now used in the school. The school setting uses the Follett series. For most teachers, including the writer, this involved introducing the unit on Monday, pretesting on Wednesday, and giving a final test on Friday. Garber(1987) found that use of such basal spellers was not realistic since they were not used in the adult real world. Instead, Garber felt that the middle school program should provide transition from school to life and should produce life-long learners. Hillerich(1982) added that independent workbook completion such as practiced today was of questionable effectiveness.

Hillerich(1982) further suggested a visual memorykinesthetic approach. This method suggested that since English spelling is so irregular, it is necessary to approach it from a standpoint of basic memorization. Marino(198.) stated, however, that research showed "that spelling is more than a mere memory task

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and that different kinds of spelling errors should suggest different approaches to instruction.

이가 가지 않는 것 같은 것 같은 것이 같은 것을 알았다. 지수가 많은 것을

Another alternative researched was an auditory approach focusing solely on correct pronunciation and the relationship of the sounds in words to the letters that represent them. Sears and Johnson(1986) found this method used alone was the least useful in effecting recall for spelling purposes.

Yet another alternative might have been to have had a totally individualized approach. Such an approach would have utilized the student's own use of language. This would certainly have increased interest and motivation. But Garber(1987) felt that the weakness of an individualized program lies in record keeping. With nine students in the target group, there were other alternatives that made more economic use of the writer's time and energy.

Current research has shown that spelling is a developmental process. Gentry(1982) identified five stages of development in learning to spell -

- 1) Pre communicative stage
- 2) Semiphonetic stage
- 3) Phonetic stage
- 4)  $^{\frac{1}{2}}$  Transitional stage

### 5) Correct stage.

As a student progresses through those developmental stages, Gentry(1982) pointed out that learning to spell isn't simply memorizing words, but rather developing orderly, progressive =4(1); in English orthography. Henderson(1986:314) expanded that idea by asserting that "the process of learning to spell may be seen as a progressive cognitive mapping of a comple but orderly system." He also four i that such learning is an active process. Progress in spelling entails word knowledge derived from reading and application of knowledge to purposeful writing experiences. Acquiring that knowledge would come from "a study of words and the complex relationship among letters, letter patterns, and meaning units."Henderson(1982:314)

and the second second

Having understood the nature of developmental spelling and having acquired a grasp on current empirically incorrect teaching methods as described above, the method the writer chose to use on the target group was a cognitive approach to teaching spelling and use of an eclectic strategy approach that research had proven to be successful.

According to Wong(1986): Spelling is a cognitive activity in which the 14

child coordinates several sources of word knowledge. These sources of word knowledge include knowledge of individual phonemes in words, knowledge of relations between phonemes within the word, knowledge of orthographic or spelling patterns, and syntactic and semantic knowledge of the words. (p. 169)

The cognitive approach to spelling further stressed that after a word was spelled, the child should check it himself and decide if the spelling was correct. The misspelled word is then written correctly. According to Allred(1984), research had definitely established the value of the self-corrected test as a learning device. Graham(1983) added that the corrected test method was advantageous because it allowed the student to see his difficult words and then correct the errors. Nulman and Gerber(1984:328) concluded that self-correction was "the single most important factor in learning to spell."

Allred's(1984) research had also shown that there were ten rule generalizations that could be of value to the speller. The rule generalizations are included in APPENDIX C.

Included in this cognitive approach are strategies the student uses in spelling. According to Nolen and McCartin(1984', the fifth grade seemed to be a turning point in how many children think about spelling. They pointed to a shift to visualization as a primary strategy at this level. Thus, the approach used on the target group included visualization strategies. Sears and Johnson(1986) found that spelling is a visual activity. They suggested using directed visual imagery as a technique to improve recall of spelling words. Garvey's(1984) research into the self-corrected test showed that this visual imagery strategy was needed. He found that the more often children saw a correct spelling, the more likely they would remember it.

Underlying the cognitive approach and basic to it all was the understanding that as they were completing the cognitive tasks presented, students in the target group would be asked to apply their spelling skills by writing. Lutz(1986) reiterated the view held by Gentry that purposeful writing assignments were the key to cognitive growth in spelling. Lutz suggested such activities as writing messages, plans, signs, letters, stories, songs or poems.

These strategies would also help to promote positive attitudes toward spelling. According to Graham(1983), spelling consciousness could further be stimulated by - limiting instruction to relevant and

critical skills, emphasizing student progress, studying only those words that were most likely to occur in student's present and near-future writing endeavors, providing students with efficient learning techniques, using a variety of interesting activities and games, structuring tasks so students could succeed, showing students the importance of correct spelling in practical and social situations, and encouraging pride in correctly spelled papers.

This cognitive approach to teaching spelling and an eclectic approach to spelling strategies appeared to be the most appropriate for the target group. An outlay of time and expenditures was cost effective. Scheduling the instruction and monitoring student progress would take place during the regular spelling class. There would be no additional texts to secure or funds to disburse. All of the remediation work could take place with available sources. The assessment test would be an informal spelling inventory compiled by the practicum writer.

#### 3. Methodology

The first task of the implementation stage was to compile a criterion-referenced informal spelling inventory(APPENDIX A). Mann and Suiter(1974) provided a set of simple and straightforward directions for constructing an ISI. It included determining the number of words taught at a particular level and dividing by 20. The list consisted then, of every 25th word. The writer selected approximately 100 words from grades two through eight of the Follett series, the basal speller in use at the school.

Week I - Implementation began by the writer administering the ISI to the entire population of grade six. This involved 19 students. Wallace and Larsen(1979) suggested several ways of administering the informal spelling inventory to any student in grade five or above, which the practicum writer followed. The teacher began with level three words. The teacher used the dictated word format: 1)said the word alone, 2)used the word in a sentence, and 3)said the word again. Students' achievement level was determined by finding the highest level at which a score of 90-100 percent was obtained. This infor-

mation was recorded and used as a basis of comparison between the target group spellers and the non-target group. It was also used as a basis of comparison for the post-test(APPENDIX D). Students who scored below grade level were placed in the target group. Their teaching level was determined next by finding the highest level at which a score of 75-89 percent was obtained. Finally, a careful analysis of errors was taken for use in the instructional phase and was broken down into categories(APPENDIX E).

The remaining sessions of the first week were spent reviewing basic phonics. Students made phonics cards on 48 of the 70 common phonograms and practiced them with each other at various times during the twelve week remediation period.

Instruction totalled 75 minutes a week. Johnson, Langford, and Quorns(1981' had suggested this amount of time be used on spelling instruction.

Week II - Session I began with instruction of the first rule that students in the target group missed most often on the ISI. This was the rule on root words and endings (APPENDIX C; Rule 1-c). The rule was presented by the teacher and kept by the students in a

journal book. Ten representative words from the students' teaching level were given in list form in the journals. They were written in syllables to reinforce the visual aspect of spelling. These words were used as the study text by the target group and were the spelling words for the week.

Session II - Individual help was administered with students using instructional sheets from language textbooks.

Increased word power was also obtained through spelling activities suggested by Swither(1984) such as <u>Crossroads</u>(APPENDIX G). This session had a directed writing assignment. Student errors were monitored(APPENDIX F).

Session III - A proficiency test on the rule for the week was given to the target group. Criter.on for proving proficiency was 8/10 or 80 percent. Upon completion of the test, students in the target group self-corrected their tests. Any missed word was written correctly and was put on the student's list for the next week.

Total time for the week - 75 minutes.

Week III - The rule governing the use of root  $\lesssim$ 

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words ending in y was taught(APPENDIX C; Rule 1-5). The same procedure as in week two was followed.

Week IV - The rule concerning one syllable words,ending in a consonant with one vowel before it, wastaught(APPENDIX C; Rule 1-d). The same procedure asin week three was followed.

Week V - Mid-point evaluation - A self made test reviewing the three rule generalizations studied to date was administered. One change was made as to the number of words given. Students wanted more of a challenge and asked for twenty words. Some individualized help was administered to several students in the target group who needed help as evidenced by their proficiency test records.

Week VI - Rule 1 - e(APPENDIX C) concerning root words of more than one syllable and the method of adding suffixes was presented. Twenty words were presented to the target group for testing that week. Individual help was administered to two students who were not proficient in the use of root words and suffixes. Instructional time was again held to 75 minutes.

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Week VII - Rule I - a was presented. This rule concerned itself with root words ending in silent e. The same procedure as week six was followed.

Week VIII - Rule 6 and the use of contractions was the subject of week eight instruction. Writing assignments showed three or four students who were consistently misplacing the apostrophe. For this week, the word list was cut back to 15 words. A writing assignment was given and analyzed for the three day instructional period.

Week IX - The use of ei and ie was presented. Students were reminded of the rule, "i before e except after c" and were taught a sentence helping them to remember some exceptions to that rule. 15 words were presented for study. Another writing assignment was given and analyzed.

Week X - The use of the apostrophe to indicate possession was taught here. 20 words were presented and tested, and a writing assignment was given.

Week XI - The writer introduced a set of ten demon words, a term coined by Ley and others(1982), that were troublesome and that defied scientific know-

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ledge and rules. These words followed no pattern or rules, and their spelling made no sense. Learning the words involved sheer memory. Barbe(1985) suggested making some mnemonic devices for hard words (APPENDIX H).

Session II - Instructional games were used with some of the mnemonic devices. A directed writing assignment was given. Student errors were monitored.

Session III - The ten demon words were tested. Each student self-corrected his test.

Week XII - Ten new demon words were introduced and presented in the same manner as the previous week. The post ISI was administered on an extra day granted the writer by their regular classroom teacher. The test was compiled by taking the total nomber of words taught at the sixth grade level and then subtracting 20, the number of words used from the sixth grade level on the pre test. 480 was now divided by 20. The list consisted of every 24th word. Interviews of the students were conducted to determine if their attitude toward spelling had changed. Teacher observation records were reviewed as well.

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### 4. Results

The methods the writer used to evaluate the project included a test design using a criterion as a standard in which there is pre and post testing, a pre and post implementation interview, and a weekly journal tracking individual student progress.

The writer used a criterion referenced test to evaluate Objective I. Pre-testing using 100 words from lists ranging from first through sixth grade level words showed a mean achievement level of 1.7. Post-testing using 100 different words revealed a mean achievement level of 4.1, a gain of 2.4. This was short of the three grade levels the writer had hoped to gain. A look at the individual student scores, however, revealed some interesting data. The greatest gains were scored by the students who scored the poorest on the pre-test. Two of them had net gains of five grade levels; one had gained four grade levels. Four other students who initially scored at the first grade level, had gains of two grade levels. Of the two remaining students in the target group who originally scored at the fourth grade level, one achieved a net gain of one grade level; the other lost a grade level. The latter was a young man who really did not

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feel he belonged in this "remedial" (or slow) group, as he called it. He did not cooperate well and spoke negatively about what the writer tried to accomplish on a weekly basis. In retrospect, it might have been better to have placed him back in the regular group.

Objective II met with much more positive results. A pre-implementation interview was held with each of the nine students in the target group. It revealed a mean score of 3.3 on the rating scale(APPENDIX J). This meant that most of the students felt somewhat indifferent about their skill as spellers and leaned towards negativism. Post-testing showed a mean score of 1.6, an improvement of 52%. It was with objective II that the author felt the most pride. The author could see it in the faces of the target group that they enjoyed being in class. The students were succeeding at their developmental levels, levels of difficulty at which they could function.

The third objective did not meet with the expected 50% improvement which the writer had anticipated. When comparing the scores of the first half of the remediation period with the second half scores, only two group members surpassed the 50% mark and another came very close. But as the writer looked at some

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intangibles, it was observed that the target group's attitude toward writing improved drastically. At the begirning of remediation, an announcement of a writing assignment met with moans and groans. About three weeks into the implementation period, students begged for a writing assignment and appeared enthusiastic about doing one.

### 5. Recommendations

Spelling difficulties can be very easily assessed in any classroom. The ISI provided more usable information regarding a student's level and specific needs than either purchased achievement tests or diagnostic tests. The procedures outlined in this practicum were cost effective and easily done. The writer would recommend the ISI use to any classroom teacher.

The writer learned many important pieces of information from the practicum assignment. These will be shared with teachers during a faculty meeting. The writer also intends to share a handout of research implications in the teaching of spelling. These research implications are the following:

1)  $^{5}$  The basal speller can be abandoned. There

are too many more meaningful activities and games the classroom teacher can use to teach a list of words.

- 2) The spelling list should comprise words that are used most frequently by the students and may come from the words the learner frequently misspells.
- 3) Research into self-correction of tests has been empirically shown to be the single most influential variable affecting the ability to learn spelling.
- 4) The test study test method is superior to other methods because it allows the student to learn words that they actually need to learn to spell.
- 5) The time spent on spelling each week should be between sixty and seventy-five minutes. Increased time is not associated with improved performance.
- 6) Teaching spelling via phonics generalizations is research-based and should include visual strategies as well.

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APPENDICES

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### APPENDIX A

### ISI Developed Upon the Follett Basal Spelling Program

Lev	el II		Lev	el III		Levi	el IV	
1.	pick		1.	paid		1.	lifeg	uard
5.	neat		2.	each		2.	waltz	
3.	choose		3,	chief		3.	rewri	te
4.	brown		4.	SEW		4.	wishe	5
5.	haunted		5.	sink		5.	caref	ul
6.	bottle		6.	loose		6.	plann	ing
7.	skate		7.	also		7.	quart	
8.	ladder		8.	famous		8.	cherr	ies
9.	1°m		9.	shadow		9.	moist	
10.	mice		10.	fruit		10.	towel	
11.	fringe		11.	hottest		11.	excit	ing
12.	piece		12.	what's		12.	sligh	tly
13.	afternoon		13.	tries		13.	refun	d
14.	dare		14.	dripped		14.	heel	
15.	squirrel		15.	shawl		15.	hadn'	t
16.	Halloween		16.	lodge		16.	dicti	onaries
17.	storm		17.	quiz		17.	coffi	n
18.	limb		18.	mirror		18.	wrink	le
19.	horseback		19.	waste		19.	dairy	
20.	months		20.	usual		20.	thief	
1	- 1 44	1	_1 117			-1 117 7		-1 11777
	el V		el VI			el VII		el VIII
1.	weight	1.	vacati		i.	jukebox	1.	asparagus
1. 2.	weight science	1. 2.	vacati compet	e	1. 2.	jukebox conceited	1. 2.	asparagus punctual
1. 2. 3.	weight science untrue	1. 2. 3.	vacati compet memori	e es	1. 2. 3.	jukebox conceited pact	1. 2. 3.	asparagus punctual reject
1. 2. 3. 4.	weight science untrue style	1. 2. 3. 4.	vacati compet memori postpo	e es ne	1. 2. 3. 4.	jukebox conceited pact irreplaceable	1. 2. 3. 4.	asparagus punctual reject pewter
1. 2. 3. 4. 5.	weight science untrue style darkness	1. 2. 3. 4. 5.	vacati compet memori postpo univer	e es ne se	1. 2. 3. 4. 5.	jukebox conceited pact irreplaceable conservation	1. 2. 3. 4. 5.	asparagus punctual reject pewter relationship
1. 2. 3. 4. 5.	weight science untrue style darkness managing	1. 2. 3. 4. 5. 6.	vacati compet memori postpo univer remove	e es ne se	1. 2. 3. 4. 5. 6.	jukebox conceited pact irreplaceable conservation garment	1. 2. 3. 4. 5. 6.	asparagus punctual reject pewter relationship reinforce
1. 2. 3. 4. 5. 6. 7.	weight science untrue style darkness managing attempt	1. 2. 3. 4. 5. 6. 7.	vacati compet memori postpo univer remove stall	e es ne se d	1. 2. 3. 4. 5. 6. 7.	jukebox conceited pact irreplaceable conservation garment hasten	1. 2. 3. 4. 5. 6. 7.	asparagus punctual reject pewter relationship reinforce receipts
1. 2. 3. 4. 5. 6. 7. 8.	weight science untrue style darkness managing attempt companies	1. 2. 3. 4. 5. 6. 7. 8.	vacati compet memori postpo univer remove stall unveil	e es ne se d	1. 2. 3. 4. 5. 6. 7. 8.	jukebox conceited pact irreplaceable conservation garment hasten thermometer	1. 2. 3. 4. 5. 6. 7. 8.	asparagus punctual reject pewter relationship reinforce receipts subtitle
1. 2. 3. 4. 5. 6. 7. 8. 9.	weight science untrue style darkness managing attempt companies thought	1. 2. 3. 4. 5. 6. 7. 8. 9.	vacati compet memori postpo univer remove stall unveil lovabl	e es ne se d	1. 2. 3. 4. 5. 6. 7. 8. 9.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion	1. 2. 3. 4. 5. 6. 7. 8. 3.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	weight science untrue style darkness managing attempt companies thought compound	1. 2. 3. 4. 5. 6. 7. 8. 9.	vacati compet memori postpo univer remove stall unveil lovabl cylind	e es ne se d	1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle	1. 2. 3. 4. 5. 6. 7. 8. 3. 10.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	weight science untrue style darkness managing attempt companies thought compound spying	1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal	e es se d d e er	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought	1. 2. 3. 4. 5. 6. 7. 8. 3. 10. 11.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	weight science untrue style darkness managing attempt companies thought compound spying remarkable	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua	e es ne se d e er tion	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon	e es se d e er tion	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate	1. 2. 3. 4. 5. 6. 7. 8. 3. 10. 11. 12. 13.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif	e es se d e er tion	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	asparagus punctual reject pewter relationship receipts subtitle satisfaction faithful author frying communicate frustrated
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion shaken	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif dolphi	e es se d e tion lower n	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief confident	1. 2. 3. 4. 5. 6. 7. 8. 3. 10. 11. 12. 13. 14. 15.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate frustrated secretary
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion shaken independence	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif dolphi pistol	e es se d tion lower n	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief confident bifocal	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate frustrated secretary century
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion shaken independence prolong	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif dolphi pistol happin	e es se d tion lower n	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief confident bifocal carpenter	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate frustrated secretary century coarseness
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion shaken independence prolong arnounce	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif dolphi pistol happin theory	e es se d tion lower n	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief confident bifocal carpenter connection	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate frustrated secretary century coarseness consecutive
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	weight science untrue style darkness managing attempt companies thought compound spying remarkable export suggestion shaken independence prolong	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	vacati compet memori postpo univer remove stall unveil lovabl cylind steal gradua sermon caulif dolphi pistol happin	e es se d tion lower n ess ement	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	jukebox conceited pact irreplaceable conservation garment hasten thermometer cushion pickle drought shown congratulate mischief confident bifocal carpenter	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	asparagus punctual reject pewter relationship reinforce receipts subtitle satisfaction faithful author frying communicate frustrated secretary century coarseness

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### APPENDIX B

### Examples of the Sixth Grad# Target Group Spelling Errors and Their Classification

coffin1kaufenphonetic substitutionthief1theifreversalpaid1payedadditionchief4chifenonphonetic substitutionsew5scwphonetic substitutionsink1skinreversalloose3loseownetic substitutionsink1skinreversalloose3loseownetic substitutionshadow2shawdononphonetic substitutionfamous4famusphonetic substitutionshadow2shawdononphonetic substitutionfruit2funutunrecognizablefruit2funutunrecognizablehottest4hotestownissionhottest4hotestownissionhottest3whot'sphonetic substitutionhotesownissionhotestownissionhotistphonetic substitutiontry'sapostrophetries5tryesphonetic substitutiontries5tryesphonetic substitutiondripped3dripedomissionshawl7slowelmonphonetic substitutionlodge5laguedunrecognizableurigenonphonetic substitutionshawomissionguize3dripedomissionguize3dripedphonetic substitutionguize3driped<	Level 4	Frequency	Misspelling	Classification
Level 3       paid     1     payed     addition       chief     4     chife     nonphonetic substitution       cheif     reversal       sew     5     sow     phonetic substitution       sink     1     skin     reversal       loose     3     lose     omission       also     1     alsow     addition       famous     4     famus     phonetic substitution       shadow     2     shawdo     nonphonetic substitution       fruit     2     fhuut     unrecognizable       fruit     2     shawdo     nonphonetic substitution       fruit     2     fhuut     unrecognizable       fruit     2     fhuut     unrecognizable       fruit     2     fhuut     unrecognizable       hottest     4     hotest     omission       hottest     5     tryes     phonetic substitution       hotes     omission     mat's     phonetic substitution       hotes     omission     shawl's     phonetic substitution       tries     5     tryes     phonetic substitution       shawl     7     slowel     unrecognizable       shawl     7     slowel	coffin	1	kaufen	phonetic substitution
paid1payedadditionchiefYeversalnonphonetic substitutionsew5scwounrecognizablesink1skinreversalloose3loseomissionalso1alsowadditionfamous4famusphonetic substitutionshadow2shawdononphonetic substitutionfruit2funutunrecognizablefruit3whot'sphonetic substitutionfruit3whot'sphonetic substitutionfruit3whot'sphonetic substitutionhottest4hotestomissionhottest5tryesphonetic substitutionhottes3whot'sphonetic substitutionfruit2funutunrecognizablefruit1shawdononphonetic substitutionfruit2funutunrecognizablefruit1shawdononphonetic substitutionhotesomissionhotestomissionhottes3dripedomissiontries5tryesphonetic substitutionshawl7slowelunrecognizablelodge5laguedunrecognizablelodge5laguedunrecognizablelodgenonphonetic substitutionlogenonphonetic substitutionguizz3quizeadditionguizz3merrowunrecognizable<	thief	1	theif	reversal
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sow phonetic substitution soe phonetic substitution sink 1 skin reversal loose 3 lose omission also 1 alsow addition famous 4 famus phonetic substitution famous 4 famus phonetic substitution shadow 2 shawdo nonphonetic substitution fruit 2 funut unrecognizable friut reversal hottest 4 hotest omission hotist phonetic substitution tries 5 tryes phonetic substitution try's apostrophe trys phonetic substitution shawl 7 slowel unrecognizable shawl nonphonetic substitution shawl 5 phonetic substitution shawl 7 slowel unrecognizable shawl nonphonetic substitution dripped 3 driped omission shawl 7 slowel unrecognizable showl nonphonetic substitution shawl nonphonetic substitution ghue 5 gauge phonetic substitution shawl nonphonetic substitution ghue 5 gauge phonetic substitution ghue 7 slowel unrecognizable showl nonphonetic substitution guiz 3 quzi reversal quize addition mirror 3 merrow unrecognizable			cheif	reversal
sink1soephonetic substitutionsink1skinreversalloose3loseomissionalso1alsowadditionfamous4famusphonetic substitutionshadow2shawdononphonetic substitutionfruit2funutunrecognizablefruit2funutreversalhottest4hotestomissionhottest3whot'sphonetic substitutionhotss3whot'sphonetic substitutiontries5tryesphonetic substitutiontries7slowelunrecognizableshawl7slowelunrecognizablelodge5laguedunrecognizablelodge7slowelunrecognizableguiz3quizreversallodge5laguedunrecognizableshawl7slowelunrecognizablelodge5laguedunrecognizablelodge5laguedunrecognizablelodge7slowelunrecognizablelodge7laguedunrecognizablelodge1quizeadditionmirror3merrowunrecognizablelodge3quizeadditionlogenonphonetic substitutionlogelodge3merrowunrecognizable	Sew	5	SONO	
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lodge     5     lagued     unrecognizable       lowad     unrecognizable       ladge     nonphonetic substitution       loge     phonetic substitution       loge     phonetic substitution       loge     nonphonetic substitution       loge     phonetic substitution       loge     nonphonetic substitution       quiz     3     quzi       mirror     3     merrow			shall	phonetic substitution
lodge5laguedunrecognizablelowadunrecognizableladgenonphonetic substitutionlogephonetic substitutionlougenonphonetic substitutionquiz3quziquizeadditionmirror3merrow			shaw	omission
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ladge     nonphonetic substitution       loge     phonetic substitution       louge     nonphonetic substitution       quiz     3     quzi       quize     addition       mirror     3     merrow	lodge	5	lagued	unrecognizable
loge     phonetic substitution       louge     nonphonetic substitution       quiz     3     quzi       quize     addition       mirror     3     merrow			lowad	unrecognizable
lougenonphonetic substitutionquiz3quziquizeadditionmirror3merrowunrecognizable			ladge	nonphonetic substitution
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quize addition mirror 3 merrow unrecognizable			louge	nonphonetic substitution
mirror 3 merrow unrecognizable	quiz	3	quzi	reversal
			quize	addition
🐔 mirrow nonphonetic substitution	mirror	3	Merrow	unrecognizable
	۴.,		mirrow	nonphonetic substitution

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APPENDIX B (continued)

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	<b>*.</b> ,			

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### APPENDIX C

Allred's List of the Ten Rule Generalizations of Value to the Speller

- Some rules governing the addition of suffixes and inflected endings are:
  - a. Words ending in silent e drop the e when adding a suffix or ending beginning with a vowel and keep the e when adding a suffix or beginning with a consonant. bake baking baker manage managing management
  - When a root word ends in y preceded by a consonant, the y is changed to i in adding suffixes and endings unless the ending or suffix begins with i.
     fly flies flying study studying studious studies
  - c. When a root word ends in y preceded by a vowel, the root word is not changed when adding suffixes or endings. play playful monkeys
  - d. When a one-syllable word ends in a consonant with one vowel before it, the consonant is doubled before adding a suffix or ending beginning with a vowel.
     run running ship shipping shipment
  - e. In words of more than one syllabe, the final consonant is doubled before adding a suffix or ending if: (1) the last syllable is accented, (2) the last syllable ends in a consonant with one vowel before it, and (3) the suffix or ending begins with a vowel. begin beginning admit admittance
- 2. The letter q is always followed by u in common English words.

queen quiet

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APPENDIX C (continued)

- 3. No English words end in v. love glove
- 4. Proper nouns and most adjectives formed from proper nouns should begin with capital letters. America American
- 5. Most abbreviations end with a period. etc. Nov.
- 6. The apostrophe is used to show the omission of letters in contractions. don't haven't
- 7. The apostrophe is used to indicate the possessive form of nouns but not pronouns. boy's dog's its theirs
- 8. When adding s to words to form plurals or to change the tense of verbs, es must be added to word sending with the hissing sounds (x, s, sh, ch).
  plass plasses

watch watches

- 9. When s is added to words ending in a single f, the f is changed to v and es is added. half halves shelf shelves
- 10. When ei or ie are to be used, i usually comes before e except after c or when sounded like a. (Note these exceptions: leisure, meither, seize, and weird.) believ\_\_\_\_\_relieve meichbor\_\_\_\_weigh

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### APPENDIX D

### Table 1

### Pre and Post Test Achievement and Teaching Level From Informal Spelling Inventory

Student #	Pre- Achievement Level	Pre- Teaching Level	Post- Achievement Level	Net Gain
1.	ist grade		5th grade	+4
2.	ist grade		6th grade	+5
з.	4th grade	3rd grade	5th grade	+1
4.	1st grade		3rd grade	+2
5.	1st grade		3rd grade	+2
6.	1st grade		6th grade	÷5
7.	ist grade	yanun mann dalap yang mga maar	3rd grade	+2
8.	1st grade		3rd grade	+2
9.	4th grade	3rd grade	3rd grade	-1
	Mean 1.7		Mean 4.1	

### APPENDIX E

### Table 2

Types of Errors by the Sixth Grade Target Group on the Informal Spelling Inventory - Levels 2, 3, & 4

ТҮРЕ	#
Nonphonetic Substitutions	22
Phonetic Substitutions	17
Unrecognizable .	12
Omissions	10
Reversals	Э
Additions	7
Other	2

### APPENDIX F

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### Error Analysis of Directed Writing Assignment

NOTE: I = percent of improvement

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### APPENDIX F (continued)

NOTE: I = percent of improvement

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. Eller All Marga

### APPENDIX F (continued)

NDTE: I = percent of improvement

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### APPENDIX 6

#### Spelling Activities - Sixth Grade

### by Karen Swisher, 1984 Instructor, 1984

ABC Order	Syllables	Pronunciation	Part of Speech	Definition
adhered carefully crotch	ad-hered care-ful-ly crotch	ad' hi( <b>e)red</b> 'ke(e)r fel le krach	verb adverb noun	stuck to anxiously angle formed by parting of two branches
Missing Lett	er	Word Scramble		Word Twist
_ N C L _ S D A _ L I _ G O V J _ S _ L _	- M E _	V N N E R O T E E S L C N O E P E T S J O G I N D A L G N		A B C X B P D E N O N E C O B C A G B T I W E R K A H E L E S S

Sentences - Have children write sentences with their spelling words.

Solve Sentences - Students write sentences with the spelling word omitted, supplying a blank where the correct word can be added. Another student can solve it.

- Antonyms, Symonyms, Homonyms Children make four columns on their paper, listing spelling words in ABC order in first column. Column two was headed "Antonyms," Column three "Symonyms," Column four "Homonyms." Can use a dictionary or thesaurus to help.
- Cereal Box Concoctions Make up a name for a new cereal. Draw a box and put the name along with any other information that would make a person try your cereal. Check a dictionary for spelling. List what's in your cereal under ingredients and nutrition information.
- Intriguing Initials Find as many initials as you can in magazines, T.V., newspapers, etc., and find and write the meanings next to them.
- Make a Silly Story Make a new story out of an old one by putting words from your word list into the places where a word is underlined. It can be as funny as you want, but words must be spelled correctly.

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### APPENDIX H

### Mnemonic Devices

### Instructor, 1981

1. Cue Sentences - To help spell arithmetic, teach students this sentence -

All rats in Tom's house may eat Tom's ice cream.

2. Spot smaller words inside larger ones -

potatoes	=	potato toes
apologize	=	polo
believe	=	lie
separate		a rat
shepherd	=	herd

3. The more ridiculous an aid is, the easier it is to remember -

committee - It means a group, so letters are paired - 2 m's, 2 t's, 2 e's

opposites - The first four letters are opposites op-po

privileged - A privileged character is well guarded - 2 i's guard the v; 2 e's guard the g.

4. Deliberately use an exaggerated pronounciation or incorrect pronunciation to facilitate spelling.

fatigue		fat-i-gue
often	je na	of <u>t</u> en
cupboard	· ·	cu <u>p</u> board
salmon		sa <u>l</u> mon

그 여행 방법이 가슴을 가 없다.

#### APPENDIX I

### Interview Questions About Attitude Toward Spelling

Pre-Implementation

1. How do you feel about yourself and your skill in spelling?

2. Please rate these subject areas in degree of importance:

math	social studies
science	English
spelling	reading

Post-Implementation

1. How do you feel about yourself and your skill in spelling?

2. Please rate these subject areas in degree of importance:

math	social studies
science	English
spelling	reading

Rating Scale:

1 - Positive; 2 - Somewhat positive; 3 - Indifferent4 - Negative;

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### APPENDIX J

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Student #	Pre- Implementation Response	Post- Implementation Response
1	3	1
2	4	2
З	2	2
4	4	1
5 .	4	2
6	2	1
7	4	1
8	4	2
9	3	2
	Mean Score 3.3	Mean Score 1.6
Rating Scale:		
1 - Positive; 4 - Negative	2 - Somewhat posit	ive; 3 - Indifferent;
Pre-Implementa # of times 3		top 3 subject areas
Post-Implement # of times 5		top 3 subject areas

Pre and Post Implementation Attitude Response