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Retention in Spelling Learning Through Isolation vs. Context Thesis

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RETENTION IN SPELLING

LEARNING THROUGH ISOLATION VS CONTEXT

THESIS

Submitted to the Graduate Committee of the

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in Partial Fulfillment of the Requirements

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by

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Abstract

This study was conducted to gain insight as to whether students retain spelling better if they learn the words through the context of literature or through the use of words in isolation.

The students used in this study were heterogeneously grouped eighth graders who attended a rural high school in western New York. Two English classes with the same teacher were used for a total of 40 students. The students were given six spelling lists. Three of the lists were taken from the novel Across Five Aprils which was being read and studied at the time. The other three lists were phonically similar words with no attachment to literature. Each week the students were given a pretest, a practice test and a final test. The weeks that the contextual lists were used, there were several activities that the

students engaged in using the words and the literature. The weeks of isolation there was no extra practice. After the sixth week the students no longer were given spelling lists. However, seven weeks after the last test, they were given a final test consisting of eight contextual words and eight words from the isolation lists. The results of this test were used to evaluate which method helped the students retain spelling words better.

The results of this study indicated that in relation to spelling retention there was no statistically significant difference between the literature based approach and the traditional isolation approach.

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CHAPTER I

Statement of the Problem

Purpose

The purpose of this study was to determine if students retain spelling words for a period seven weeks more effectively through isolated study or through the use of context.

Overview

An educational practice that has been deeply ingrained in the schools of America is the traditional weekly spelling test, where spelling has been viewed as a task of rote memorization. According to Frisbee and Cantor (1995), this dictation approach is still widely accepted and widely used partly because it requires students to produce the correct spelling of

a word rather than to recognize the correct or incorrect spellings. As a result, some spelling programs have words that may have a common letter pattern or sound pattern, but which have no immediate use across the curriculum (Matz, 193). However, since the inception of whole language some teachers started using a different approach to teaching spelling. This approach is one that combines spelling with reading and writing. The students learn their spelling through context rather than through isolation. Many teachers gather words from subjects of reading, science and social studies or from the child's original writing (Matz, 1993). Using this approach, the students can attach meaning with the word as well as spelling it. Graham's study (as cited in Diaz, McLaughlin, & Williams, 1990) stated that

spelling is an integral part of the writing process not a discrete skill, and that students need considerable practice in applying their spelling skills by writing. A spelling program should provide practice designed to ensure that spelling skills learned in isolation can be used successfully during writing. (p. 348)

The present study investigated two spelling approaches: learning through isolation and learning in context. Is either of these approaches more effective in helping students retain their spelling knowledge?

Research Question

Is there a statistically significant difference in the retention of how words are spelled by students who are exposed only to spelling words in isolation as opposed to students who learn spelling words through a variety of different contexts?

Need for the Study

Spelling has been a part of students' learning for many years. In the past, most students learned spelling through the traditional approach, when a list of words in isolation was given to each student to study and to learn. At the end of the week students were tested and given a grade. Those words were never seen by the students again because an entirely new list was given to them the next week - whether they mastered the previous list or not.

Research is needed to determine whether this traditional approach to spelling, that has been used for many years, is as effective as taking and using the spelling words from context materials.

Definition of Study Terms

context - the parts of a discourse that surround a word or passage and can help in determining a word's meaning

orthography - correct or standardized spelling according to established usage in a given language. (Harris & Hodges, 1995, p. 174)

whole language - A set of applied beliefs governing learning and teaching, language development, curriculum and the social community. (Harris & Hodges, 1995, p. 279)

Limitations of the Study

Time restraints allowed for retention to be tested only after a 7 week break from both sets of spelling words.

Summary

This study's primary focus was to determine if students retain spelling better when learning the words through words in isolation lists or through words used in the context of their reading and writing. This study would offer insight as to the effectiveness of each spelling approach in direct correlation to the retention of the words.

Chapter II

Review of Literature

An Introduction to Spelling

Studies done by Cramer and Cipielewski (1995) and Hodges (as cited in Froese & Straw, 1981) agreed that there is a great emphasis on spelling in society today. People judge educational qualifications and even intelligence on the basis of how well a person spells. Hodges notes (as cited in Froese & Straw, 1981) that because of this social stigma, competence in spelling should be considered an important component to literacy. According to Krashen (1993), the public has the impression that literacy standards are declining.

Literacy in spelling begins at an early age. Children go through predictable stages and do so at their own rate. According to Routman (1991) research clearly demonstrates that all children go through the same stages in learning how to spell. Therefore, the question becomes "not whether to teach spelling as an integrated, developmental part of the language arts but how to accomplish this goal most effectively" (Routman, 1991, p. 238). Research done by Gentry (as cited in Routman, 1991) states that there are five developmental stages of learning to spell. They include:

1. <u>Prephonemic spelling</u> - The child scribbles, makes letters and strings them together with no awareness of what the letters represent or how they sound.

2. <u>Early phonemic spelling</u> - The child makes attempts to represent phonemes with letters. (ex. tn for town)

3. <u>Phonetic spelling</u> - The child understands the concept of a word and can represent most phonemes, but is not quite reading.

4. <u>Transitional spelling</u> - The child begins to use spelling patterns and rules, but not always correctly. As the child reads and writes more rules and patterns evolve.

5. <u>Standard spelling</u> - The child spells most simple words correctly and is ready to move on to irregular spellings, homonyms, contractions, etc.

According to Routman (1991) until educators have read the research on how children learn to spell, it will be very difficult for the education system to

move away from the highly structured spelling programs to a holistic program that allows for inventive spelling and a meaningful list of words for each child. Many of the spelling practices that are in place today go against the current research and theories of how children learn to spell. "A secure knowledge base of how all language - including spelling is learned is necessary (Routman, 1991, p. 239).

Preview Types of Spelling Research

An educational practice that was deeply ingrained in the schools of America was the traditional weekly spelling test, where spelling was viewed as a task of rote memorization, with students told to independently learn words in isolation and not taught to think about the relationships that existed

between the words (Bolton & Snowball, 1993). Words were given to the students with no apparent connection to curriculum. According to Frisbie and Cantor, (1995) the dictation test is still widely accepted and widely used partly because it requires students to produce the correct spelling of a word rather than recognize correct or incorrect spellings.

Comparisons were made of several different types of spelling formats, and overall, no single objective format stood out from the others. However, some demonstrated superiority to the dictation format on several dimensions. These findings were reiterated in a study conducted by Wallace, Shorr and Williams (1995) where no evidence was found that the standard procedure for administering a spelling test is any less effective that those utilizing additional visualization and vocalization components.

However, Graham and Miller (as cited in Dangel, 1989) noted that the single most important component to students' learning to spell is to have the students correct their own spelling test.   Sherman (as cited in Allred, 1987) found that the traditional test-study-test method was superior to the study-test method.

Philosophies of Spelling

Although it has long been found that teachers are reluctant to change from a traditional teaching method, they are now having concerns that the traditional way of teaching spelling is not effective. At present two philosophies of spelling education are pulling in opposite directions.   Whole language and traditional views of spelling education have crisscrossed in an "inextricable tangle of theories attitudes and myths"   (Gentry & Gillet, 1993, p. 2).

Gentry and Gillet also believe that one model should not be kept and the other tossed aside; rather both models must be used in conjunction with each other to balance the teaching of spelling. Research conducted by Klesius, Griffith, and Zielonka (1991) found that in comparing the whole language approach to spelling with the traditional approach to spelling that there was no significant difference. "It appeared that understandings about phoneme-grapheme relationships which are being taught through direct skill instruction can also be learned indirectly through the reading and writing experiences provided in whole language classrooms" (p. 59).

There is research that supports the combining of the traditional words in isolation with the whole language, contextual way of learning to spell. The research concluded that spelling words should be

presented in a form that helps students understand spelling generalizations. For this reason, it is advantageous to the student to present the spelling words in a list. Research by Henderson, Thomas, and Gentry and Gillet (as cited in Cramer, 1985) found that students need to see the words in patterns as in could, would, should or weigh, sleigh, eight and neighbor. In this form, students can make generalizations about spelling. According to Cramer, (1985) in developing lists, the words used must be in the students' speaking and writing vocabulary and must be words that students are likely to use frequently in their daily language activities. Diaz, McLaughlin & Williams (1990) noted that spelling instruction should include opportunities for students to utilize their spelling knowledge within the context of a sentence to ensure that the students are making

the transfer from the list.

According to a study conducted by Ehri and Wilce (1980) there are benefits to learning spelling through context and isolation. When students practice spelling through context they learn more about syntactic and semantic identities, whereas students who read the words in isolation learn more about their spellings and how the orthographic forms symbolize pronunciation. However, Peters (1967) notes that even if lists are used it is necessary to give the students explicit instructions as to how to learn the words in the list.

Matz (1993) found that many of the traditional approaches have consistently shown themselves to be of questionable effectiveness. He believes that teachers can help children to spell more proficiently merely by providing them with strategies that good

spellers use and by giving them plenty of opportunities to use those strategies in authentic and meaningful ways. Moffett and Wagner (as cited in Manning & Manning, 1986) suggested that through reading, students strengthen their spelling by developing visual images of regular and irregular words. Teachers should include words from stories being currently read or content areas. In order for students to retain spelling, it is important that the skill be fostered throughout the content areas. This helps students see that spelling is an integral part of the entire curriculum and embraces all the language arts. In this way, words are not studied in isolation but also in context of literature, nonfiction, and subject-area lessons. Speaking and writing vocabularies are enhanced as children study and see the same words in their natural contexts (Gentry &

Gillet, 1993).

> Methods of spelling instruction favor whole
> language learning, beginning with sentence level
> language units or greater. Orthographic
> principles are presented as the child encounters
> a need as an integrated part of the writing
> process. The emphasis is on (refining) spelling
> (Norris, 1989, p. 98).

According to Norris (1989), when attempting to

facilitate the development of spelling, general

principles of whole language learning can be

incorporated into instruction such as using contextual

language, communication through writing and that

spelling instruction should begin with the child's

current level of spelling knowledge. This can be

determined by reviewing the predictable stages.

Modifications can be made to accommodate children at

different ages and/or developmental levels. These

principles are based upon the premise that spelling is

a communicative act and that it evolves

developmentally through the process of interaction. Several researchers concurred that language is learned in context. "Just as speech develops in young children as they attempt to negotiate meaning within a complex situational and linguistic context, spelling also develops in context" (Norris, 1989, p. 99). Opportunities should be provided to write stories, letters, notes, messages, plans, and other exchanges of information. By contextualizing spelling instruction, children discover the structure of words while attaching meaning and use to the process of spelling (Norris, 1989).

According to Graham & Harris (1989) correct and fluent spelling is a writing skill that is especially difficult for students with learning disabilities. They typically misspell two to four times more words in their writing than their normally achieving peers.

The poor spelling performance of these students provides considerable challenge for classroom teachers. The traditional approach of teaching spelling vocabulary has not been successful with students with learning disabilities; the common weekly assignment to memorize 15 to 20 unrelated words overwhelms and frustrates them (Graham & Voth, 1990, p. 447).

Graham and Voth (1990), also concur with Gentry, Gillet (1993), and Norris (1989), in that spelling lists should be compiled of words related to specific content area or of words that are familiar in the students everyday language. If spelling instruction is to be effective, students need to have a meaningful context in which they can use words they have learned to spell. "Like other production skills in writing, spelling is a means to an end, not an end unto itself" (Graham & Voth, 1990, p. 454). Students need to write frequently, and their writing should be designed to serve a real purpose. According to Cramer (1995) by emphasizing early writing, students have gotten a

head start in spelling, reading and writing. "Writing is crucial to an integrated approach to literacy" (Cramer, 1995, p. 81).

CHAPTER III

Design of the Study

Introduction

The purpose of this study was to determine if students retain spelling words for a period of seven weeks more effectively through isolated word study or through the use of words in context.

Research Question

Is there a statistically significant difference in the retention of spelling words by students who are exposed only to spelling words in isolation as opposed to students who learn words through a variety of different contexts?

Methodology

Subjects

The subjects of this study included two eighth grade classes, totaling 40 students, heterogeneously grouped by random computer selection. The students were from a high school in a rural community in western New York.

Materials

The spelling lists that were given to the students were teacher-made. The contextual spelling words were randomly chosen from a novel that the students were reading at the time entitled Across Five Aprils by Irene Hunt. The spelling words for the isolation lists were derived by choosing phonically similar words of

approximately the same level of difficulty as the words from the novel. Both word lists can be found in the Appendix.

Procedures

The students were given three tests weekly. The first weekly test was an initial knowledge test. Students were asked to spell words without prior study. A practice test of the same words was given in the middle of the week to indicate to the students what words were causing them difficulty. A final test was given at the end of the week. Each test consisted if 15 words. One week the students would be given spelling words used from the context of the novel Across Five Aprils, and the next week's spelling words were phonically similar words in an isolation list.

During the weeks that the students were using words from context, they did several different exercises, along with taking the initial knowledge test, the practice test and the final test. The first exercise required each student or group of students to find a specific spelling word in the reading of an upcoming chapter in the novel <u>Across Five Aprils</u>. Once they found the word they would stand up, say the word, read it in the context that it was written, repeat the word and then sit down. This continued until all 15 words were found and used. Other exercises that the students were required to do were to write each of the spelling words in a sentence and write a creative paragraph or two using all of the spelling words.

During the week that the isolation words were used, no exercises were required except the initial test, the practice test and the final test. Students were exposed

to 15 spelling words a week which totaled 90 spelling words in a six week period.

Seven weeks after the last spelling test, the students were given a final test of 16 words, eight randomly chosen from the contextual lists and eight randomly chosen from the isolation lists. This test provided the final data to determine which approach was better for the retention of spelling words.

The data were analyzed using a 2 tailed $\underline{t}$ test.

CHAPTER IV

Statistical Analysis

Purpose

The purpose of this study was to determine if students retain spelling words for seven weeks more effectively through isolated study or through the use of context.

Null Hypothesis

There was no statistically significant difference between the test scores of the isolated and context based spelling words.

Analysis and Interpretation

A t test was used to compare the results of the two previously mentioned tests. The results are shown in Table 1.

Table 1

Statistical Comparison of Post Test Scores

- -

Source	Mean	Variance	Observations	df	t Stat
Context	77.5	303.846	40		
				39	1.126
Isolation	73.97	546.794	40		

t crit (39), a < .05 - 2.022

Analysis of the data from the 2 - tailed $\underline{t}$ test shows there is no statistically significant difference between the two approaches to spelling in relation to retention.

CHAPTER V

Conclusions   and   Implications

Purpose

The purpose of this study was to determine if students retain spelling words for seven weeks more effectively through isolated study or through the use of context.

Conclusions

The statistical results from the analysis of post test scores indicated that the two different treatments were both effective in helping students to retain spelling words.   The effectiveness of the two different approaches was exhibited through the increase in test scores from the initial test on Monday to the final evaluation on Friday.   There was no significant

statistical difference between the two treatments.

Although more research was found supporting the holistic approach to learning spelling than the traditional approach, it seems reasonable to assume that a combination of the two approaches would create a more well-rounded spelling program.

Classroom Implications

This study indicates that learning spelling through the context of literature and learning it through the use of isolation lists are both valuable ways to learn and retain spelling words. Students of all different levels of ability were able recall words from both the context lists and the isolation lists, seven weeks after the last words were given.

The information obtained in this study should indicate to educators that there are different ways to

help students learn to spell. By combining the traditional approach of isolation lists and the learning of spelling through reading and writing, a holistic approach is realized. This holistic approach includes the fundamentals of spelling and the opportunity for the students to put the words into meaningful context, therefore reinforcing the learning for better retention.

Research Implications

In future research, a study such as this should be conducted using a larger and more diverse population. The study should also be conducted over a longer period of time. The ideal would be to test the students at the beginning of a school year and again at the end.

Additionally, research combining the holistic contextual approach to spelling and the traditional isolation approach to spelling with students of all

abilities is needed.

References

Allred, R.A. (1987). <u>Spelling trends, content, and methods.</u> Washington, D.C.: National Education Association.

Bolton, F. & Snowball, D. (1993). <u>Teaching spelling: a practical resource.</u> Portsmouth, NH : Heinemann.

Cramer, B.B. (1985). The effects of writing with invented spelling on general linguistic awareness and phonemic segmentation ability in kindergarteners. Ph. D. diss., Oakland University: Rochester, MI.

Cramer, R.L. (1995) Making better spellers: integrating spelling, reading , and writing. <u>Spelling research & information: an overview of current research and practices.</u> Glenville, Ill.: Scott, Foresman and Company.

Cramer, R.L. & Cipielewski, J.F. (1995) Research in action: A study of spelling errors in 18,599 written compositons of children in grades 1-8. <u>Spelling research & information: an overview of current research and practices.</u> Glenville, Ill.: Scott, Foresman and Company.

Diaz, N.D., McLaughlin, T.F., and Williams, R.L.

(1990).   The effects of practicing words in sentences on generalization of spelling to written work with mildly handicapped students.   Psychology in the Schools, 27, 347 - 353.

Dangel, H.L.   (1989).   The use of student-directed spelling strategies.   Academic Therapy, 25, (1), 43-51.

Ehri, L.C., & Wilce, L.C.   (1980).   Do beginners learn to read function words better in sentences or in lists?   Reading Research Quarterly, 15, (4) 452-475.

Frisbie, D.A. & Cantor, N.K.   (1995).   The validity of scores from alternative methods of assessing spelling achievement.   Journal of Educational Measurement, 32, (1), 55-78.

Froese, V. & Straw, S.B.   (1981).   Research in the language arts.   Baltimore: University Park Press.

Gentry, J.R. & Gillet, J.W.   (1993).   Teaching kids to spell.   Portsmouth, NH: Heinemann.

Graham, S. & Harris, K.   (1989).   Cognitive training: Implications for written language.   In J. Hughes & R. Hall (eds.), Cognitive Behavioral Psychology in the Schools: A comprehensive handbook.   NY: Guilford Press.

Graham, S. & Voth, V. P. (1990). Spelling instruction: making modifications for students with learning disablities. Academic Therapy, 25, (4), 447 - 457.

Harris, T.L. & Hodges, R.E. (1995). The literacy dictionary. Newark: IRA.

Klesius, J.P., Griffith, P.L. & Zielonka, P. (1991). A whole language and traditional instruction comparison: overall effectiveness and development of alphabetic principle. Reading Research and Instruction, 30, (2), 47-61.

Krashen, S. (1993). How well do people spell? Reading Improvement, 30, 9-20.

Matz, K.A. (1993). Ten things they never taught us about spelling. Contemporary Education, 64, (3), 192-194.

Manning, M.M. & Manning, G.L. (1986). Improving spelling in the middle grades. Washington, D.C.: National Education Association.

Norris, J.A.   (1989).   Facilitating developing changes in spelling. <u>Academic Therapy</u>. <u>25</u>, (1), 97-107.

Peters, M.L. (1967). <u>Spelling: Caught or taught.</u> New York: Humanities Press.

Routman, R. (1994). <u>Invitations.</u>   Portsmouth, NH: Heinemann.

Wallace, R.R., Shorr, D.N. & Wllliams, H.S.   (1995). Spelling: Can different testing procedures improve scores? <u>Reading Improvement, 32</u>, 247-252.

Appendix   A

Contextual   lists

Test   #1

1. acknowledging
2. vigorously
3. paralysis
4. environment
5. schoolmaster
6. philosophy
7. circumstances
8. believed
9. vague
10. windowpane
11. monotonous
12. teased
13. impatient
14. gratitude
15. explosion

Test   #2

1. trembling
2. prophecy
3. childhood
4. embarrassed
5. astonishment
6. solemn
7. necessity
8. gracious
9. appreciative
10. nightmare
11. presence
12. endurance
13. prowlers
14. gullibility
15. anxieties

Test   #3

1. daredevil
2. contemptuous
3. exhibited
4. optimism
5. remembered
6. beginning
7. verified
8. predictions
9. victorious
10. strategy
11. pandemonium
12. roughly
13. embrace
14. fireside
15. concentrate

Appendix B

Isolation   Lists

Test #1

1.   humorously
2.   pneumonia
3.   synopsis
4.   contradiction
5.   headwaiter
6.   physical
7.   circumference
8.   received
9.   fatigue
10. airplane
11. delicious
12. reap
13. deficient
14. magnitude
15. temptation

Test #2

1.   fallacy
2.   grumbling
3.   headquarters
4.   independent
5.   bewilderment
6.   column
7.   species
8.   precious
9.   associate
10. lighthouse
11. present
12. unpleasant
13. scowl
14. flexibility
15. extremities

Test #3

1.   trustworthy
2.   demonstrative
3.   crochet
4.   pessimism
5.   recollected
6.   harassment
7.   purified
8.   contradiction
9.   laborious
10. straighten
11. condominium
12. trough
13. palace
14. lawmaker
15. concrete

Appendix   C

Final   Test

1. condominium

2. crochet

3. humorously

4. fatigue

5. magnitude

6. independent

7. column

8. species

9. paralysis

10. teased

11. childhood

12. embarrassed

13. nightmare

14. anxieties

15. contemptuous

16. roughly