CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

THE EFFECT OF TWO INSTRUCTIONAL STRATEGIES ON ACHIEVEMENT IN SPELLING

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts in Education, Elementary

by

Neal Robert Pohl

May, 1975
The thesis of Neal Robert Pohl is approved:

California State University, Northridge
May, 1975
DEDICATION

This thesis is dedicated to my typist, my friend, and my lover, who are all one in the same - Susan, my wife.

NRP
ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to the following people who gave their time and energy in support of this thesis:

Dr. James Shanks, committee chairperson, whose encouragement, generous and valuable assistance, and cooperation guided me through this study.

Dr. Walter Nelson, committee member, for directing my attention to this study and thesis.

Dr. Seymour Metzner, committee member, for an inspiring class and for serving on this committee.

Dr. James Foster, superintendent of Saugus Union School District, for approving my study within the school district.

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Mr. Robert Moloznik, principal of Valley View School, for his democratic attitudes and relaxed nature.

Mrs. Constance Anderson, Mrs. Joan Folse, and Mrs. Linda Lynch, fellow staff members at Valley View School, whose positive attitudes and cooperative natures allowed them to say, "We'll help!"

The one hundred eleven children whose participation in this study will lead to future endeavors.
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ABSTRACT

THE EFFECT OF TWO INSTRUCTIONAL STRATEGIES ON ACHIEVEMENT IN SPELLING

by

Neal Robert Pohl

Master of Arts in Education, Elementary

May, 1975

The purpose of this study was to identify and to compare two methods of spelling instruction within the classrooms of the elementary school. The effects of the two instructional strategies on achievement in spelling were examined carefully. The two techniques employed were the following: 1) Treatment A - basal spelling book program, and 2) Treatment B - individualized selection list. The control group received Treatment A and the experimental group received Treatment B.

This study was conducted for six months. The differences in the post-test mean growth scores were analyzed through the use of the t test. The pre-tests and the post-tests measuring the growth were the California Test of Basic Skills "Language Spelling", the Wide Range Achievement Test "Spelling", and the Diagnostic Reading Test by Kottmeyer and Ware.
When the total control group and the total experimental group were compared on the post-test, there was no significant difference in spelling achievement at the 0.05 level of significance. When the control group and the experimental group were compared on the post-test by classrooms, the control group in Classroom One significantly outperformed the experimental group at the 0.05 level, the experimental group outperformed the control group in Classroom Two, and there was no significant difference in spelling achievement at the 0.05 level of significance in Classrooms Three and Four.

It would appear from the study that varying the methods of instruction may have an effect in some classrooms and may not have an effect in other classrooms. Therefore, another variable must exist in the classroom which was not held constant or accounted for in the study.
CHAPTER I

THE PROBLEM

Introduction

Many educators, scholars, and parents of school-age children have indicated the need for a better spelling program. Much has been written and debated about the use of various techniques, but comparatively little has been done to further the investigation of spelling improvement devices. Since many children and a large number of the adult population have difficulty spelling, other methods of instruction must be developed and compared. Some feel this difficulty stems from the fact that little choice or individualization is allowed for within a basal spelling book approach.¹

Statement of the Problem

The purpose of this study was to identify and to compare two methods of spelling instruction within the classrooms of the elementary school. The effects of the two instructional strategies on achievement in spelling were examined carefully. The two techniques employed were the following: 1) Treatment A - basal spelling program, and 2) Treatment B - individualized selection list.

¹
Limitation of the Problem and Assumptions

This investigation was conducted within the Saugus Union School District, a small elementary school district in northern Los Angeles County. The Saugus district is basically comprised of white middle class children. The sample was limited to children in grades four through six, involved one hundred eleven students, and utilized the services of four volunteer classroom teachers. The instructional program was one academic semester, which began in September, 1974 and ended in January, 1975.

Each of the two groups was tested in September and January; the scores were recorded both times and used for grouping the students in September and for comparison of their achievement in January. Although children were placed according to the achievement test given in September, the following statements indicate those factors which were not considered when placement occurred: 1) socioeconomic standing, 2) sex, 3) family unit stability, 4) sibling placement, 5) teacher personality, 6) previous methods of instruction, and 7) pupil honesty. These factors were not considered since classroom lists were already formulated.

Rationale

Many teachers and interested groups of people have identified spelling as an area of concern and confusion.
Some feel spelling competency is closely related to and correlated with reading competency, and therefore cannot be taught separately from reading or cannot be taught at all. Many children have indicated their fondness or dislike for this area of the curriculum usually depending upon their previous experiences with the subject.

Many companies, seeing the need for and the movement toward "individualization", are developing or have developed "independent" spelling programs. Despite all the confusion and controversy, little has been done in the area of specific research to improve the methods of instruction or to clarify the facts concerning spelling instruction. This study attempted to make clear what will and will not work within the classroom in terms of specific spelling instruction aimed at increasing the number of words a child has committed to memory and at increasing skill attainment, according to scores on an achievement test.

Statement of Hypothesis

The intent of the study was to test and analyze the following null hypotheses:

Hypothesis One. There will be no significant difference in achievement on the post-test mean scores between the two groups in the total sampling after receiving spelling instruction in one of the prescribed fashions.
Hypothesis Two. There would be no significant difference in achievement on the post-test mean scores between the two groups within each classroom after receiving spelling instruction in one of the prescribed fashions.

The null hypothesis was the prediction; in the past, varying the methods of instruction only, within a classroom or within a large group, rarely produced a significant difference (0.05) in achievement. 

Definition of Terms

The following definitions apply to the terms used in this design:

1. **Treatment A** - the basal spelling book approach used within the state of California and the Saugus Union School District; Basic Goals in Spelling by Kottmeyer and Ware

2. **Treatment B** - the individualized selection approach - On the first day of the week each child selects twenty-one words from a source he is currently using in the classroom, such as a reading book, social studies book, magazine, newspaper, etc. The words selected should be ones that the student would like to learn and/or are giving him trouble. During the week, the child practices using these words through a variety of activities. On the last day of the week, the child is given a spelling test by his partner, who corrects his paper and records his
score. (See Appendix)

Summary

Since many educators and parents have indicated their concern over spelling achievement and many children have shown their displeasure for spelling as an academic area, research must provide some answers which will establish better skill attainment for and greater motivation by the student. This study attempted to analyze and compare the results of two strategies of spelling instruction on achievement in the Saugus Union School District. Because there is so much controversy over spelling, many educators and writers have said much about the methods of instruction and research which has been employed in the elementary schools. Some of this information is included in Chapter II.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Whenever one asks another what his favorite or least favorite subject in school was, one of the answers will be spelling, depending upon the success or failure of the individual. Since this particular academic area is remembered so vividly by adults, the impact in their early schooling must have been great. To find out more about achievement, strategies of instruction, research, teacher behavior and other information concerning spelling, literature needed to be examined carefully in order to comprehend the concern.

Spelling Instruction

Until recently, individualization of the curriculum was limited to reading and mathematics, perhaps because these are looked upon as skill-oriented programs. Educators and scholars could "individualize" these programs by placing skills on a hierarchy of levels of difficulty, test children, place them within a teacher prescribed program, and allow the children to move through the treatment at their own pace. This movement toward "programmed practice"
was what "individualization" was about. 7

As a result, many felt spelling was the next logical academic area to adopt this method, since it also was skill-oriented. 8 What occurred in many cases, was the lack of the human element in instruction. Children moved through the program, but either quickly forgot the knowledge gained, or had difficulty applying the skills learned in spelling to their written work. 9

Another method used to teach spelling was the basal text method. It was assumed that each child in the classroom could learn to spell and could memorize spelling words at the rate of ten or twelve or fifteen or more words per week for thirty-six weeks, because predetermined, manipulative exercises found within the basal texts would help him to do so. 10 However, research has proven that in all areas of the curriculum, children have their own unique and individualized modes of learning style. 11

It becomes evident that newer methods for spelling instruction were needed. The new methods would have to allow for the individualization of instruction so that each child could master the techniques of spelling in his own unique way. As with reading, research has still been unable to discover the exact ways a child learns to spell, but it has shown that a child who receives instruction, is surrounded by "the need to spell", and is afforded the opportunity to spell will learn faster than a child who
receives none of the above. 12

Various techniques have been attempted, but there is little evidence of one method being better than another except at Ohio State University, where three programs were tested. The treatment which allowed children to select their own spelling words, showed a significant difference in achievement at the end of the experiment. 13 In another study, children who were "below average spellers" and who could choose the words they would learn from a larger list presented by the teacher, "liked spelling better and tried harder", according to an interest survey by the instructor. 14

In another investigation, children who received individual comments on their tests rather than a grade, improved significantly over a control group, which received only a grade. 15 Another experiment showed that a group which only studied words and were not given tests during the year improved considerably when compared to a group which received a test every week. 16 Finally, another study demonstrated that children who selected misspelled words from their own written language assignments improved significantly in achievement scores when compared to a group using the basal spelling series. 17

Although research has not discovered how spelling is learned, 18 the above studies all indicate one vital importance. Children who are allowed to decide what and how
they will learn outperform those children who are not allowed to make such decisions. Jerry Converse, in a speech made at the International Reading Conference in 1970 said, "Children must be taught responsibility for their learning. Passive learning and teacher selection has proven to be the least effective way to teach any language arts subject."¹⁹

Teachers, parent groups, and others have questioned the need for spelling as part of the curriculum. In a study conducted by a job referral agency in New York City in conjunction with a team of experts from New York University, applicants who made several mistakes on written job applications were treated less satisfactorily than those who made no spelling errors on the job application.²⁰ This single fact seems to indicate that spelling ability is recognized as important by society and the school must continue to teach and improve spelling and skills instruction.

Additional studies have indicated that teacher behavior or teacher personality shows a relationship to the achievement and the attitudes of the student toward spelling. Researchers and educators have been unable to completely agree upon those teaching behaviors which will elicit the most student learning. Peck and Veldman felt criteria other than student growth on achievement tests must be identified and used.²¹
Research studies have indicated a variety of behaviors to be acceptable for teachers. J.N. Liebermen, in an analysis of teacher traits which influenced pupil behavior, listed the following eight components: 1) sense of humor, 2) kindness, 3) cheerfulness, 4) enthusiasm, 5) flexibility, 6) imagination, 7) relaxation, and 8) entertainment. The Teaching Situation Reaction Test (TSRT) built upon the idea that objectivity, empathy, control, confidence, and creativity were essential factors for effective teaching.

"The teacher who is well organized, 'nips potential problems in the bud', and has well established routines for handling procedural matters tends to be more successful in producing learning gains." The ability to give clear directions without becoming overly repetitive was also an important teacher behavior. On one hand, a study by C.A. Moore demonstrated that experienced teachers were more effective teachers, and on the other hand, a group of teachers ranked "teaching experience" as the least important criteria to improve student learning.

In a final study, women who were self-doubting, psychologically passive, and unhappy appeared much more likely to generate high pupil gains than women with children, confident, and prone to cope with problems in a self-reliant manner on the Metropolitan Achievement Test. Research was unclear as to what makes a "good"
Testing Procedures and Methods

In order to determine which instructional treatment is best, children must be tested before and after receiving one of the strategies of instruction. The tests selected for this investigation were three. The first test given was the Comprehensive Test of Basic Skills (CTBS). Form Q, Level 2 was used as a pre-test and a post-test. The "Language Spelling" section consists of thirty test items. (See Appendix) The student must either identify the misspelled word from a group of four words or must recognize that none of the four words is misspelled. According to J.S. Ahmann, the CTBS "Language Spelling" section tests those spelling words a child has committed to memory and tests which spelling generalization rules a child has learned.

The second test given was the Wide Range Achievement Test (WRAT). Level I was used as a pre-test and a post-test. The "Spelling" section consists of three parts. (See Appendix) On the first part, the student must correctly copy eighteen symbols placed in a box. The second part requires the student to correctly write and spell his first and last name. The final part is a series of
forty-five words. The teacher says the word to be spelled, uses the word in the sentence supplied on the directions, and repeats the word again. A pronunciation key is given so that each teacher says the word in the same manner. The student must spell each word correctly. The total points possible were sixty-five.

According to Robert L. Thorndike the WRAT was recommended for the following reasons: it has value in a clinical or research setting in which one is testing persons of such diverse background or ability that one cannot tell in advance what level would be appropriate. The teacher would need to get a quick estimate of each student's general level of ability and educational background. In addition, the 1966 test version was an improvement over the 1965 version since it divided the battery into two levels.

The third and final test used was called Diagnostic Spelling Test, supplied by Basic Goals in Spelling by Kottmeyer and Ware, (DST). "List 2" was used as it applies to students above grade three. (See Appendix) The test consists of thirty-two words which are recited by the teacher. This person says the word, uses it in the sentence provided in the test information, and repeats the word. The total points possible were thirty-two. The test was used so that one could check to see if the subjects of the design were learning the basal words incidentally, that is without direct instruction or introduction by the teach-
All three test scores were totaled together on the pre-test and then again on the post-test. Three tests were used so that more information could be obtained on the number of words committed to memory by each child and the number of spelling generalization rules mastered by each student. Since no words were repeated on either the WRAT or the DST, no child could be rewarded twice for knowing the word nor penalized twice for not knowing the word. A final reason three tests were used was so that more actual test items were available. The total raw score points possible was now one hundred twenty-seven. This would provide a more accurate assessment of the students' spelling achievements.

A longitudinal approach was used since one academic semester best suited the purposes of this study. It was felt that one semester of instruction, September, 1974 to January, 1975, could produce the best results for two reasons. First, a shorter time span would not have allowed sufficient time for the students to get used to and to be comfortable with Treatment B, since this strategy was new to the students. Second, a longer span of time would have made necessary a prescribed method of instruction during the next semester. If one of the treatments proved detrimental to learning or to a particular group of students in some way, teachers could provide new
and different spelling experiences to remedy any problems which arose during the experiment prior to the close of the academic year.

Summary

Spelling instruction must be maintained in the schools; however, studies have indicated the need for a change in teaching strategies since spelling achievement gains need to be improved. Those methods which allowed pupils to make individualized decisions about their learning showed higher achievement levels than those methods which did not allow pupils to make such decisions. In addition, teacher attitude, personality, and behavior in the classroom affected student achievement. In order to test the gains made in spelling achievement, methods were designed and are reported in Chapter III. The literature indicated the need for further testing to determine if better methods for spelling instruction were possible.
CHAPTER III

DESIGN OF THE STUDY

Introduction

The literature reviewed indicated the amount of concern and confusion over spelling as an academic subject. It demonstrated the justification of the methods and procedures which were used in this investigation. The purpose of this study, which was to investigate the effect of two instructional strategies on spelling achievement, was worthwhile. The methods employed, instruments and procedures developed, and populations used are discussed within this chapter of the study.

Design, Methodology, Population, and Time Schedule

The study consisted of four classrooms of children within Valley View School (Saugus, California). The four classrooms and learning center made up the "Upper Pod" at Valley View School, so that all four teachers worked closely together with the children. The grade levels were 4-5, 5-6, 5-6, and 5-6. At the beginning of the academic year, September, 1974, each child was tested on the "Language Spelling" section of the CTBS, the "Spelling" section of the WRAT, and the Diagnostic Spelling Test of
Basic Goals in Spelling. Each teacher administered the tests to his class and followed the directions in the teacher's manual. (See Appendix)

Children had already been placed in classrooms prior to the testing. The child with the highest raw score in Classroom One received Treatment B, the child with the second highest raw score in Classroom One received Treatment A, the child with the third highest raw score in Classroom One received Treatment B, and so on to the child in Classroom One with the lowest raw score. The children in Classrooms Two, Three and Four were placed in Treatments A and B in the same fashion. Only those students present for both the pre-test and post-test were included in the study, although more than the one hundred eleven students were involved in the study. Table 1 shows the specific number of pupils involved in the control and experimental groups in the total sampling and in each classroom.

The intent of the study was to test and analyze the following null hypotheses:

Hypothesis One. There will be no significant difference in achievement on the post-test mean scores between the two groups in the total sampling after receiving spelling instruction in one of the prescribed fashions.

Hypothesis Two. There would be no significant difference in achievement on the post-test mean scores be-
Table 1
Comparison of Control and Experimental Groups:
Number of Students in Study

<table>
<thead>
<tr>
<th>Classroom/Total Sample</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom One</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Classroom Two</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Classroom Three</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Classroom Four</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total Sample</td>
<td>55</td>
<td>56</td>
</tr>
</tbody>
</table>
tween the two groups within each classroom after receiving
spelling instruction in one of the prescribed fashions.

After classroom lists were formulated, the children
were exposed to the prescribed treatments for one aca-
demic semester from September, 1974 through January, 1975.
L.W. Sontag indicates this longitudinal method works best
when trying to determine which strategy of instruction had
been most effective; the longitudinal method is needed in
order to evaluate achievement scores. The independent
variable was the two methods of instruction, and the de-
dependent variable was the achievement as measured by the
scores.

Each teacher taught his own class for the full aca-
demic semester, to negate a possible "Hawthorne Effect".
Formal spelling instruction ranged from a maximum of
thirty minutes per day, five times per week to a minimum
of twenty minutes per day, three times per week. All
groups received approximately the same amount of instruc-
tion as indicated by teachers' records and plans. Teachers
using Treatment B were given special inservice training
prior to commencing with the type of instruction they were
to utilize. (See Appendix)

The Control Group

The control group, which received Treatment A, con-
sisted of 55 students in the fourth, fifth, and sixth grade.
The four teachers' basic method of instruction was to follow the teacher's guide supplied with the state spelling series *Basic Goals in Spelling*, grades 4, 5, or 6. Children were placed in the series at the appropriate grade level. The teachers did not always use all the steps provided in the guide, but did follow the pattern of one unit per week.

**The Experimental Group**

The experimental group, which received Treatment B, consisted of 56 students in the fourth, fifth, and sixth grades. The four teachers followed the instructions received at the inservice meeting held prior to the start of the experiment. (See Appendix)

The students selected twenty-one words on the first day of the week, then were encouraged to select three or four activities found on the spelling sheets and to complete these by the last day of the week. At that time, each student was given a spelling test by his partner; the partner also corrected the test.

In the beginning, teachers may have helped individual students select specific tasks to complete in order to expose the students to the large variety of ideas. After several weeks, students were not only responsible for their own words and task selections, but were made responsible for the completion of assignments. Students were encour-
aged to select words from many sources used in the classroom and the school, and some may have chosen incorrectly spelled words from compositions or reports done in class. At no time were pre-determined or teacher-made word lists used. The students were allowed to select any words they deemed important to them at that time.

Equating of Groups

The control group and the experimental group were found to be comparable in spelling ability. Table 2 shows the mean raw scores for the students at Valley View being studied. Table 2 is concerned with the comparison of the mean spelling scores for both the total experimental and total control groups. Using the CTBS, the WRAT, and Kottmeyer and Ware Diagnostic Spelling Test as a measure, there is no significant difference in spelling ability demonstrated between the subjects in the control and experimental groups.

Tables 3, 4, 5, and 6 show the mean raw scores for the students in each of the four classrooms involved in the study. These tables compare the mean spelling scores for both the experimental and control groups in each of the four classrooms. Using the CTBS, the WRAT and the Kottmeyer and Ware Diagnostic Spelling Test as a measure, there is no significant difference between the subjects of the control and experimental groups within each class-
Table 2

Comparison of Control and Experimental Groups in the Total Sampling:
Pre-test Mean Raw Spelling Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>89.636</td>
<td>12.087</td>
<td>.128*</td>
</tr>
<tr>
<td>Experimental</td>
<td>89.929</td>
<td>12.017</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the 0.05 level
Table 3
Comparison of Control and Experimental Groups in Classroom One:
Pre-test Mean Raw Spelling Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>77.077</td>
<td>16.316</td>
<td>.205*</td>
</tr>
<tr>
<td>Experimental</td>
<td>78.467</td>
<td>19.572</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the 0.05 level
Table 4

Comparison of Control and Experimental Groups in Classroom Two:
Pre-test Mean Raw Spelling Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>92.333</td>
<td>14.92</td>
<td>1.136*</td>
</tr>
<tr>
<td>Experimental</td>
<td>91.357</td>
<td>13.911</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the 0.05 level
Table 5
Comparison of Control and Experimental Groups in Classroom Three:
Pre-test Mean Raw Spelling Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>84.273</td>
<td>12.849</td>
<td>.671*</td>
</tr>
<tr>
<td>Experimental</td>
<td>87.75</td>
<td>11.91</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the 0.05 level
Table 6
Comparison of Control and Experimental Groups in Classroom Four: Pre-test Mean Raw Spelling Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>101</td>
<td>10.822</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>101.8</td>
<td>9.82</td>
<td>.216*</td>
</tr>
</tbody>
</table>

*Not significant at the 0.05 level
room as to spelling ability.

Summary

This chapter discussed the design of the study. The procedures employed for the control and experimental groups were discussed and the tools for measurements were described. The comparability of the total sampling and the comparability of the groups within each classroom with regard to spelling ability were shown. This comparison showed that the students of all five groups, the total group and each classroom group demonstrated no significant differences in spelling achievement at the beginning of the study. It was felt that since the control and experimental groups were comparable, the results of the study would reflect the experimental factor. Chapter IV discusses the results obtained.
CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

The research design and the procedures for gathering and analyzing the data have been described. In the present chapter the results are presented, there is discussion of the statistical techniques used, and the data is analyzed and summarized. The hypotheses are examined in view of this information.

Treatment of the Data

In order to test the hypotheses, it was necessary to make certain that the selection procedures had succeeded in equalizing the control and experimental groups involved in the study. As was shown in Tables 2, 3, 4, 5, and 6 the control and experimental groups demonstrated no significant differences in their spelling achievements. The results of these analyses indicate that the two groups were equivalent. Tables 7, 8, 9, 10, and 11 reflect the experimental factor by comparing the two groups after the treatments were administered.

The t test for uncorrelated data was used to compare the post-test raw score growth for the control and experi-
mental groups. The level of significance necessary to reject the null hypotheses was set at the 0.05 level. Each hypothesis was treated independently. When the t test ratio was found to be significant for a given hypothesis, the null hypothesis was rejected.

**Presentation of Data for Hypothesis One**

The null hypothesis stated there would be no significant difference in achievement between the control and experimental groups on the post-test mean raw growth scores after receiving spelling instruction. The teachers used Treatment A with the control group and Treatment B with the experimental group. The statistical data on Table 7 shows the results of the t test.

The post-treatment mean raw growth scores for the control and experimental groups were compared by a t test. Table 7 shows that the results of this comparison were not significant at the 0.05 level of significance. It becomes evident from an examination of the t test values that neither the control group nor the experimental group had established a superiority in achievement over the other group. As a result, Hypothesis One was accepted.

**Presentation of Data for Hypothesis Two**

The null hypothesis stated there would be no significant difference in achievement between the control and
### Table 7

Comparison of Control and Experimental Groups: Post-test Mean Growth Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>*t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>7.073</td>
<td>5.954</td>
<td>.153*</td>
</tr>
<tr>
<td>Experimental</td>
<td>7.232</td>
<td>4.91</td>
<td></td>
</tr>
</tbody>
</table>

*\( t > 0.05 \) not significant at the 0.05 level
experimental groups on the post-test mean raw growth scores after receiving spelling instruction. The teachers used Treatment A with the control group and Treatment B with the experimental group. The statistical data on Tables 8, 9, 10, and 11 show the results of the t tests in Classrooms One, Two, Three, and Four respectively.

Classroom One. The post-treatment mean raw growth scores for the control and experimental groups were compared by a t test. Table 8 shows the results of this comparison were significant at the 0.05 level of significance. It becomes evident from the examination of the t test values that the control group had established significant growth in spelling achievement at the 0.05 level of significance. The control group made higher gains in spelling achievement as measured by the CTBS, the WRAT, and the Diagnostic Spelling Test by Kottmeyer and Ware.

Classroom Two. The post-treatment mean raw growth scores for the control and experimental groups were compared by a t test. Table 9 shows the results of this comparison were significant at the 0.05 level of significance. It becomes evident from the examination of the t test values that the experimental group had established significant growth in spelling achievement at the 0.05 level of significance. The experimental group made higher gains in spelling achievement as measured by the CTBS, the WRAT, and the Diagnostic Spelling Test by Kottmeyer and Ware.
Table 8

Comparison of Control and Experimental Groups
in Classroom One:
Post-test Mean Growth Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>11.538</td>
<td>6.416</td>
<td>2.228*</td>
</tr>
<tr>
<td>Experimental</td>
<td>7.533</td>
<td>5.619</td>
<td></td>
</tr>
</tbody>
</table>

* \( \alpha < 0.05 \)  significant at the 0.05 level
Table 9

Comparison of Control and Experimental Groups in Classroom Two:
Post-test Mean Growth Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>4</td>
<td>4.108</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>9</td>
<td>3.359</td>
<td>3.604*</td>
</tr>
</tbody>
</table>

* $t < 0.05$ significant at the 0.05 level
Classroom Three. The post-treatment mean raw growth scores for the control and experimental groups were compared by a *t* test. Table 10 shows that the results of this comparison were not significant at the 0.05 level of significance. It becomes evident from the examination of the *t* test values that neither the control group nor the experimental group had established superiority in achievement over the other group. As a result, Hypothesis Two for Classroom Three was accepted.

Classroom Four. The post-treatment mean raw growth scores for the control and experimental groups were compared by a *t* test. Table 11 shows that the results of this comparison were not significant at the 0.05 level of significance. It becomes evident from the examination of the *t* test values that neither the control group nor the experimental group had established superiority in achievement over the other group. As a result, Hypothesis Two for Classroom Four was accepted.
Table 10
Comparison of Control and Experimental Groups in Classroom Three: Post-test Mean Growth Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>7.182</td>
<td>6.644</td>
<td>1.597*</td>
</tr>
<tr>
<td>Experimental</td>
<td>4.25</td>
<td>4.728</td>
<td></td>
</tr>
</tbody>
</table>

*$t > 0.05$ not significant at the 0.05 level
Table 11
Comparison of Control and Experimental Groups in Classroom Four:
Post-test Mean Growth Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>±</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>4.013</td>
<td>1.036</td>
<td>.854*</td>
</tr>
<tr>
<td>Experimental</td>
<td>4.497</td>
<td>1.161</td>
<td></td>
</tr>
</tbody>
</table>

* $\mathcal{L} > 0.05$ not significant at the 0.05 level
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study investigated the effects of two different strategies of spelling instruction in four elementary classrooms. The study was based upon the assumption that students who are able to choose their own spelling words and who are made responsible for their own learning (Treatment B), would significantly improve their spelling achievement mean raw growth scores on the CTBS, the WRAT, and the DST when compared with the control group (Treatment A).

The students in this study were one hundred eleven fourth, fifth, and sixth grade students from the Saugus Union School District in Saugus, California. The sample was randomly divided so that fifty-five students received Treatment A as the control group and fifty-six students received Treatment B as the experimental group. Treatment A used the basal spelling book approach and Treatment B used the individualized selection approach. The two groups showed no significant difference between them prior to the treatments. Students within each of the four classroom control and experimental groups also showed no
significant difference between them prior to the treatments.

A pre-test and post-test were utilized with the use of the $t$ statistic to compare the two large groups and the classroom groups. The CTBS, the WRAT, and the DST were used for the pre-test and the post-test. Following the pre-test, both groups experienced their respective treatments for the next six months, September, 1974 through January, 1975. The $t$ test was applied to test the hypotheses. In each instance the level of significance necessary to reject the null hypothesis was set at 0.05. Each hypothesis was treated independently.

Hypothesis One was accepted.

Hypothesis Two for Classroom One was rejected.

Hypothesis Two for Classroom Two was rejected.

Hypothesis Two for Classroom Three was accepted.

Hypothesis Two for Classroom Four was accepted.

Hypothesis One was accepted. There was no significant difference between the control group (Treatment $A$ - basal spelling book) and the experimental group (Treatment $B$ - individualized selection) in spelling achievement on the post-test mean raw growth scores.

Hypothesis Two for Classroom One was rejected. There was a significant difference between the control and experimental groups in spelling achievement on the post-test mean raw growth scores. Treatment $A$ was found superior
to Treatment B; the control group proved superior in achievement to the experimental group.

Hypothesis Two for Classroom Two was rejected. There was a significant difference between the control and experimental groups in spelling achievement on the post-test mean raw growth scores. Treatment B was found to be superior to Treatment A; the experimental group proved superior in achievement to the control group.

Hypothesis Two for Classroom Three and Classroom Four was accepted. There was no significant difference between the control and experimental groups in spelling achievement on the post-test mean raw growth scores.

Conclusions

After analyzing and evaluating the data and the results of this study, several conclusions can be reached. First, the notion that spelling can only be taught and students can only learn in terms of "patterning" seems to be negated. "Patterning" is based upon the theory that teaching a group of words which match a spelling generalization or rule will help students to see the patterns in written language. The experimental group was free to choose any words from any available classroom source. Children were not encouraged to use, nor did the teachers in any of the four classrooms have, pre-selected or teacher-made spelling lists based upon spelling patterns.
Since both the control and the experimental groups achieved almost the same mean raw growth scores (see Table 7), this theory of patterning seems to be only one way in which children learn to spell.

The second conclusion follows and relates to the first conclusion. Since the pupils who received Treatment A used Basic Goals in Spelling, a spelling program based upon "patterning" and since most spelling series are based upon the same theory, it would appear that school districts are spending millions of dollars annually on programs which may or may not result in the highest spelling achievement rate possible. It appears that giving a student paper to write down the words he would like to learn and giving him additional sheets on which to do his work in order to learn his words, is just as effective as a costly spelling book. Perhaps school districts should be spending money for different items to help teach spelling.

Third, it is apparent that individualized instruction and student selection is not detrimental to learning. Large group instruction and small group instruction can be effective. Individualized learning can be just as effective in terms of achievement. The members of the control group met in small groups with the teacher depending upon the level of spelling book. The members of the experimental group met individually with the teacher in order to
get words and work corrected. In addition, student selection of words proved as effective as predetermined selection of words. This demonstrates the fact that students who are made responsible for their own learning will become responsible for their learning and achieve as well as students who are placed in pre-arranged learning situations.

Fourth, each classroom in the experiment must be examined separately. Classroom One showed the greatest spelling achievement growth rate when comparing the mean raw growth scores of Classroom One to the total group. Classroom Four showed the least spelling achievement growth rate when comparing the mean raw growth scores of Classroom Four to the total group. Classroom Two showed the greatest spelling achievement growth rate for the experimental group. Classroom Three showed the least spelling achievement growth rate for the experimental group. Classroom One showed the greatest spelling achievement growth rate for the control group. Classroom Two showed the least spelling achievement growth rate for the control group. (see Tables 7, 8, 9, 10, and 11)

Fifth, the control group in Classroom One received Treatment A (basal spelling series approach). The mean raw score for this group before the treatment was 77.077 or 12.559 raw score points below the mean raw score for the entire control group. After the treatment, this
group showed a mean raw growth score of 11.538. It appears that a basal spelling series works best with groups below the mean (below average groups).

The experimental group in Classroom Two received Treatment B (individualized selection approach). The mean raw score for this group before the treatment was 91.357 or 1.428 raw score points above the mean raw score for the entire experimental group. After the treatment, this group showed a mean raw growth score of 9. It appears that an individualized selection of words approach works best with groups close to the mean (average groups).

The control group in Classroom Four received Treatment A; the mean raw score for this group before the treatment was 101 or 11.364 raw score points above the mean raw score for the entire control group. The experimental group in Classroom Four received Treatment B; the mean raw score for this group before the treatment was 101.8 or 11.871 raw score points above the mean for the entire experimental group. After the respective treatments, the control group showed a mean raw growth score of 4.013, and the experimental group showed a mean raw growth score of 4.497. There was no significant difference at the 0.05 level of significance between Treatment A and B in Classroom Four. It appears that either or any program might be successful with groups above the mean (above average groups).
Finally, the statistical data confirms the following:

1) below the mean groups attained a higher rate of achievement by showing a higher mean raw growth score, 2) above the mean groups were not as successful. This may have been caused by several of the following factors: 1) Low achieving students forget more information over the summer. 2) Many of the high achieving students went "off the scale" in one or more of the tests. These people could have easily shown no gain or a full grade level less by missing one word. 3) The teacher and teaching techniques in these classrooms was different in some way.

Several questions may come to mind when reflecting upon the above comparisons, such as the following: 1) Was it I.Q. which led to the differences? 2) Were the best learners placed in one classroom? 3) Were all the remedial spellers placed in one classroom? 4) Was it teacher behavior, attitudes, or personality that affected the learning? 5) Was it the teaching style that affected the learners?

The answers to these and many other questions cannot be arrived at without further studies and investigations. In Classrooms One and Two the achievement of one group was significant at the 0.05 level of significance over the other group; however, in Classroom One, the control group which received Treatment A had a higher growth in achievement, whereas in Classroom Two, the experimental group
which received Treatment B had a higher growth in achievement.

The variable in each of these classroom may be the teacher. Did the teacher attitude affect the learners? Did teacher personality affect the learners? Did teacher behavior affect the learners? Did teaching style affect the learners? R.E. Hodges, in his "Report on the Literature Search in the Area of Teaching Behavior in Spelling Instruction" found, "... no evidence available that serves to identify affective teaching behavior in the teaching of spelling." It seems that one area in need of further research is one that would make clear the effect of teaching style as it relates to student achievement in spelling.

Recommendations

The following are recommendations for future research which could extend and clarify the research of this particular study:

1) Different spelling achievement tests could be used that might have measured spelling achievement more accurately.

2) Other grade levels should be included in a study to discover whether student selection of spelling words would be a successful method of instruction.

3) More classrooms should be included to broaden the sampling of students.
4) Varying groups of socioeconomic levels should be studied to determine the effects of this technique.

5) Further studies should determine whether there are some methods that work better for below average groups, average groups, and above average groups in spelling achievement.

6) Further research should study the influence of teacher behavior, attitudes, and personality on achievement.

7) Further studies should examine the influence of teaching style on spelling achievement.

8) The present study could be duplicated to verify the results found in this investigation.
FOOTNOTES


12. Peters, _op. cit._ 2, p. 94.

13. ____________, "A Comparison of the Effectiveness of Three Spelling Programs of Elementary School_


25. Ibid., p. 27.


32. Ibid., p. 23.


35. Ibid.


37. Kottmeyer, William and Kay Ware, "Diagnostic Spelling Test", Basic Goals in Spelling, (Sacramento, California: California State Department of Education, 1967)


39. Ibid.

41. Hodges, op. cit. 29, p. 5.
BIBLIOGRAPHY


"A Comparison of the Effectiveness of Three Spelling Programs of Elementary School Spelling". ERIC, Columbus, Ohio: Ohio State University, 1971.

Comprehensive Tests of Basic Skills.


Frye, Helen B. "Development and Initial Validation of the Teaching Situation Reaction Test: A Measure of Teacher Effectiveness". ERIC, Dayton, Ohio: Dayton University, 1972.


Hodges, Richard E. "Theoretical Frameworks for English Orthography". Elementary Education, 49 (November,


Lesner, Julius. "The Effects of Pupil Corrected Tests and Written Teacher Comments on Learning to Spell in the


"NCTE/ERIC Report: Diserroneosopinglingitis or the Fine (Language) Art of Spelling”. Elementary English, 49 (February, 1972), pp. 245-53.


Personke, C.R. "Uses of Nonsense Words to Test Generalization Ability in Spelling”. Elementary English,


Valmont, W.J. "Active Pupil Involvement in Learning to

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<tr>
<td>B. California Test of Basic Skills, &quot;Language Spelling&quot; section, Form Q, Level 2</td>
<td>60</td>
</tr>
<tr>
<td>C. Wide Range Achievement Test, &quot;Spelling&quot; section, Level I</td>
<td>61</td>
</tr>
<tr>
<td>D. Diagnostic Spelling Test, List 2</td>
<td>62</td>
</tr>
<tr>
<td>E. &quot;Instructions for Using Treatment B&quot;</td>
<td>64</td>
</tr>
</tbody>
</table>
NAME ___________________________ SPELLING TASKS

DATE ____________ This is your new spelling assignment. You are to choose words from ___________________________. They should be words which are giving you trouble and/or which you'd like to learn. When you have studied them and feel that you know them, let your teacher know and you can take a test on them.

__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________

These are the activities to help you learn the words. Do the ones that are checked:

_____ Write the words in sentences that show you know the meaning of the word

_____ Write your words in thoughtful questions

_____ Use all your words in a fantastic story

_____ Write your words in alphabetical order

_____ Using the dictionary, define the words

_____ Use the dictionary to divide the words into syllables

_____ Use the dictionary to write the respelling of your words
Change all the singular nouns to plurals (usually you just add "s")

Change all the verbs to past tense (usually you just add "ed")

Scramble your words

Write all the words which are giving you trouble five times

Unscramble these words

Write all the words that have silent letters

Write all the words with seven or more letters

Write all the words with six or less letters

Write all the words with four syllables or more

Write all the words with three syllables or less

Write all the words with two vowels next to each other

If any of your words rhyme with each other, write them

If any of your words begin with the same letter, write them

For each of your words, write another word that means the same thing

Write a word that rhymes with each of your words

For each of your words, write a word that means the opposite

Write the words with the long vowel sounds

Write the words with the short vowel sounds

Hide your words in a picture

Add "ing" to words which will make sense with that ending

Find the root word for as many spelling words as you can

Write the words that are compounds
Add these prefixes to as many words as you can.

Write the words that have prefixes.

Add these suffixes to as many words as you can.

Write the words that have suffixes.

Make a puzzle using your words.

Write math word problems using your words.

Write the words that have consonant blends.

Write the words that have consonant digraphs.

For each of your words think of another word which begins with the same letter and has the same number of letters in it.

Practice with a friend by giving each other a test.

Think of your own assignment and be creative.
<p>| 1 A | A does B eating C supper D cold E None |
| 2 F | F work G today H room J first K None |
| 3 A | A jump B dress C cow D direct E None |
| 4 F | F mine G upstairs H sure K None |
| 5 A | A toward B rough C shelter D attack E None |
| 6 F | F bet G reach H chose J spot K None |
| 7 A | A wire B chance C neighbor D subject E None |
| 8 F | F region G fool H among J hate K None |
| 9 A | A locate B question C tiger D rifle E None |
| 10 F | F coarse G eastern H terrible I main J None |
| 11 A | A English B auditorium C blanket D industry E None |
| 12 F | F invite G famous H sixteen I playmate J None |
| 13 A | A journey B event C contain D spoon E None |
| 14 F | F mud G pack H bit I cassel J None |
| 15 A | A point B hike C worse D unexpected E None |
| 16 F | F college G price H northern I sharp J None |
| 17 A | A cement B napkin C project D tobacco E None |
| 18 F | F wheat G ear H heels I club J None |
| 19 A | A park B January C office D family E None |
| 20 F | F report G lucky H become I winning J None |
| 21 A | A above B worst C health D arrive E None |
| 22 F | F dairy G comfort H model I deal J None |
| 23 A | A candle B farther C ought D angel E None |
| 24 F | F balloon G wade H rush I wonderful J None |
| 25 A | A outfit B strang C probably D capture E None |
| 26 F | F order G meant H central I expect J None |
| 27 A | A recall B excuse C creek D scene E None |
| 28 F | F unload G harvest H center I expect J None |
| 29 A | A crowd B understand C secretary D hunt E None |
| 30 F | F fortune G janitor H state I expect J None |</p>
<table>
<thead>
<tr>
<th></th>
<th>Spelling List and Pronunciation Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>go. Children go to school.</td>
</tr>
<tr>
<td>2.</td>
<td>cat. The cat has fur.</td>
</tr>
<tr>
<td>3.</td>
<td>in. We are in the room.</td>
</tr>
<tr>
<td>4.</td>
<td>boy. The boy plays ball.</td>
</tr>
<tr>
<td>5.</td>
<td>and. Bill and Bob play together.</td>
</tr>
<tr>
<td>6.</td>
<td>will. They will wait for you.</td>
</tr>
<tr>
<td>7.</td>
<td>make. She can make a dress.</td>
</tr>
<tr>
<td>8.</td>
<td>him. They saw him in town.</td>
</tr>
<tr>
<td>9.</td>
<td>say. Say it slowly.</td>
</tr>
<tr>
<td>10.</td>
<td>cut. Mother will cut the cake.</td>
</tr>
<tr>
<td>11.</td>
<td>cook. We cook our own dinner.</td>
</tr>
<tr>
<td>12.</td>
<td>light. The light is bright.</td>
</tr>
<tr>
<td>13.</td>
<td>must. We must do our work.</td>
</tr>
<tr>
<td>14.</td>
<td>dress. The dress fits well.</td>
</tr>
<tr>
<td>15.</td>
<td>reach. He couldn't reach the ball.</td>
</tr>
<tr>
<td>16.</td>
<td>order. The captain's order was obeyed.</td>
</tr>
<tr>
<td>17.</td>
<td>watch. My watch is fast.</td>
</tr>
<tr>
<td>18.</td>
<td>enter. Enter this way.</td>
</tr>
<tr>
<td>19.</td>
<td>grown. Potatoes are grown in the field.</td>
</tr>
<tr>
<td>20.</td>
<td>nature. The study of nature is interesting.</td>
</tr>
<tr>
<td>21.</td>
<td>explain. Explain how it happened.</td>
</tr>
<tr>
<td>22.</td>
<td>edge. He sat on the edge of the chair.</td>
</tr>
<tr>
<td>23.</td>
<td>kitchen. Our kitchen is small.</td>
</tr>
<tr>
<td>24.</td>
<td>surprise. He may surprise you.</td>
</tr>
<tr>
<td>25.</td>
<td>result. The result of your work is good.</td>
</tr>
<tr>
<td>26.</td>
<td>advice. My advice was forgotten.</td>
</tr>
<tr>
<td>27.</td>
<td>purchase. We did not purchase the car.</td>
</tr>
<tr>
<td>28.</td>
<td>brief. I received a brief note.</td>
</tr>
<tr>
<td>29.</td>
<td>success. Success makes people happy.</td>
</tr>
<tr>
<td>30.</td>
<td>reasonable. His request was reasonable and just.</td>
</tr>
<tr>
<td>31.</td>
<td>imaginary. He told us an imaginary story.</td>
</tr>
<tr>
<td>32.</td>
<td>occupy. We occupy a small apartment.</td>
</tr>
<tr>
<td>33.</td>
<td>character. Her fine character was praised.</td>
</tr>
<tr>
<td>34.</td>
<td>society. Every society has rules.</td>
</tr>
<tr>
<td>35.</td>
<td>official. An official invitation came today.</td>
</tr>
<tr>
<td>36.</td>
<td>recognize. He did not recognize me.</td>
</tr>
<tr>
<td>37.</td>
<td>familiar. We are familiar with the news.</td>
</tr>
<tr>
<td>38.</td>
<td>commission. The commission reported to the mayor.</td>
</tr>
<tr>
<td>39.</td>
<td>beneficial. Good food is beneficial to health.</td>
</tr>
<tr>
<td>40.</td>
<td>appropriation. Congress made an appropriation for schools.</td>
</tr>
<tr>
<td>41.</td>
<td>enthusiasm. People showed enthusiasm for the hero.</td>
</tr>
<tr>
<td>42.</td>
<td>criticize or criticise. It is easy to criticize others.</td>
</tr>
<tr>
<td>43.</td>
<td>prejudice. Prejudice is harmful to people.</td>
</tr>
<tr>
<td>44.</td>
<td>belligerent. The soldier was belligerent and brave.</td>
</tr>
<tr>
<td>45.</td>
<td>occurrence. War is a tragic occurrence.</td>
</tr>
</tbody>
</table>
DIAGNOSTIC SPELLING TEST, LIST 2

1. flower - A rose is a flower.
2. mouth - Open your mouth.
3. shoot - Joe wants to shoot his gun.
4. stood - We stood under the roof.
5. while - We sang while we marched.
6. third - We are in the third grade.
7. each - Each child has a pencil.
8. class - Our class is reading.
9. jump - We like to jump rope.
10. jumps - Mary jumps rope.
11. jumped - We jumped rope yesterday.
12. jumping - The girls are jumping rope now.
13. hit - Hit the ball hard.
14. hitting - John is hitting the ball.
15. bite - Our dog does not bite.
16. biting - The dog is biting on the bone.
17. study - Study your lesson.
18. studies - He studies each day.
19. dark - The sky is dark and cloudy.
20. darker - This color is darker than that one.
21. darkest - This color is the darkest of the three.
22. afternoon - We may play this afternoon.
23. grandmother - Our grandmother will visit us.
24. can't - We can't go with you.
25. doesn't - Mary doesn't like to play.
26. night - We read to Mother last night.
27. brought - Joe brought his lunch to school.
28. apple - An apple fell from the tree.
29. again - We must come back again.
30. laugh - Do not laugh at other children.
31. because - We cannot play because of the rain.
32. through - We ran through the yard.
INSTRUCTIONS FOR USING TREATMENT B

1) Have the student select a spelling partner who will be responsible for giving him his spelling test and who will correct it for him. The student will fulfill the same responsibilities for his partner.

2) On the first day of the week, students are to select 21 words which are giving them trouble and/or they would like to learn. The words may be selected from any classroom sources like books, magazines, newspapers, etc. No teacher-made lists or grade level lists are allowed for word selection. They should write them on the spelling sheets, along with their name, date, and word source and should staple them into their spelling folders.

3) The teacher should "OK" the words by checking each word to make sure spellings and letter formations are correct.

4) The students are to select 3 or 4 tasks which will help them learn their words. The teacher may guide task selection at the beginning to help students become familiar with the large number of activities. The tasks elected should be marked on the spelling sheets.

5) Collect and correct all work and discuss the student's progress with him in a personalized conference. At this time students should be encouraged and commended.
for outstanding work and/or effort.

6) On the last day of the week, the students are to take a test given and corrected by their partners.

7) The teacher should collect the tests, record the grades, and return the papers as soon as possible.