

AN EVALUATION OF A NON-DICTATION METHOD OF SPELLING
WITH JUNIOR-HIGH-SCHOOL PUPILS

by

John J. Lasher

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CHAPTER I

I. INTRODUCTION

A. The Problem

In many schools formal instruction in spelling ceases at the end of the sixth year. Beginning with the seventh grade or the first year of the junior-high school, spelling is frequently taught incidently with other subjects. Most teachers mark the misspelled words which they find in the pupils' written work, but when these pupils get into senior-high school or accept a position which requires accurate spelling, they are found wanting. One reason for not giving formal instruction in spelling is that the curriculum is already overcrowded. This investigation is an attempt to find out whether there is not some method of spelling aside from the usual dictation method which would consume less of the teacher's time and be as effective as the dictation method.

This new method, called the non-dictation method, is largely self-administering, and thus requires less of the teacher's time. The author has attempted to arrive at some conclusions on "An Evaluation of a Non-Dictation Method of Spelling with Junior-High-School Pupils."

B. Scope of Study and Schools Included in Study

One pre-test¹ of one hundred words, sixteen weekly units¹ of spelling of twenty-five words each, and a final examination¹ of one hundred words were given to two-hundred forty-nine pupils in the seventh grades of Deming School, (Sections A and B), Otter Creek, Glen, Sugar Grove, and Rankin Schools. One group, consisting of Deming (Section B), Otter Creek, and Rankin Schools, used the dictation method and are designated as Group A. The other group, consisting of Deming (Sec. A), Glenn, and Sugar Grove, used the non-dictation method and are designated as Group B. These schools are located in Terre Haute, or within a radius of six miles of Terre Haute. Of the two hundred forty-nine pupils who participated in part or all of this experiment one hundred thirty-one belonged to Group A and one hundred eighteen to Group B. For various reasons which will be mentioned later not all of these cases will be considered in the final averages. Comparisons of Groups A and B were made on the following bases:

- (1) The averages of the scores on the pre-tests of both groups as a whole.
- (2) The averages of the scores on the weekly units of both groups as a whole.

¹F. L. Wells and F. B. Knight, Basic Spelling Units.

- (3) The averages of the scores on the final examinations of both groups as a whole.
- (4) The averages of the scores on the pre-tests of the girls of both groups.
- (5) The averages of the scores on the weekly units of the girls of both groups.
- (6) The averages of the scores on the final examinations of the girls of both groups.
- (7) The same comparisons for the boys as for the girls in (4), (5), and (6).
- (8) The average of the scores on pre-tests of the upper one-fourth of each group.
- (9) The average of the scores on the weekly units of the upper one-fourth of each group.
- (10) The averages of the scores on the final examination of the upper one fourth of each group.
- (11) The same comparisons for the lower one-fourth as given in (8), (9), and (10).
- (12) The averages of the scores on the units of the matched groups, that is, of those in one group whose scores in the pre-test were the same as the pre-test of those in the other group.
- (13) The averages of the scores on the final examination of the matched group.

C. Reasons for Carrying on Experiment in the Limited Area
of Terre Haute and Vicinity

1. The success of the experiment depends largely on keeping all factors, such as the time, assignment, words, etc., uniform except the manner of giving out the words. Having the schools near together made it possible for the writer to exercise close personal supervision which would not have been done by correspondence.

2. The human mind is subject to certain psychological laws which function the same regardless of geographical locations.

D. Reasons for Having One Teacher Use only One Method
Instead of both Methods

1. If one teacher had used both the dictation and non-dictation method, there would have been danger of teachers getting the two methods confused, and the success of the experiment depended on teachers' carrying out of the instructions very carefully.

2. There is a possibility that some teachers might have had a strong preference for one method and a strong dislike for the other method. This would likely have affected the reliability of the results. In this experiment teachers were permitted to select the method they wished to use.

E. Why No Intelligence Tests Were Given to the Pupils
Prior to the Spelling Experiment

In this experiment no intelligence tests were given to the pupils prior to the experiment because eminent authorities in the field of spelling, such as Horn, Hollingsworth, and Guiler, are agreed that there is only a slight correlation between general intelligence and ability to spell. To quote Hollingsworth:

"The data her under consideration serves to show, at all events, that children of the same mental age, the same intelligence quotient, and the same school training, may and do differ from each other very greatly in ability to spell; that a child of good intellectual quality may fall far below a child of poor intellectual quality in spelling ability; and that it is unsafe to make "a priori" inferences about a child's general ability to spell, or about his ability to spell on the basis of his general ability."¹

Horn says: "Students of less than average (but not subnormal) intelligence as measured by Terman's Scales may show no inferiority in ability in learning to spell."²

Guiler says: "Intelligence seems to bear no significant relation to ability to spell."³

¹L. S. Hollingsworth, Psychology of Special Disability in Spelling. p. 15

²Ernest Horn, Eighteenth Year Book, N.E.A., Part II, p. 64

³W. S. Guiler, "Improving Ability in Spelling," Elementary School Journal, Vol. XXX, April, 1930, pp. 594-603

CHAPTER II

I. METHODS AND MATERIALS USED IN GIVING TESTS AND COLLECTING DATA

A. Directions to Teachers

The purpose of this investigation is to make a comparison of a dictation and of a non-dictation method of spelling and to determine, if possible, which of the two methods is the better. The group using the dictation method will be Group A; those using the non-dictation method will be Group B.

No comparison of schools will be made.

A preliminary test of 100 words will be given to determine the spelling ability of the pupils before studying the words. The investigation will cover a period of sixteen weeks. One unit of twenty-five words will be given weekly. A final test of 100 words will be given at the end of the experiment to measure improvement made by pupils. These words will be of equal difficulty of the words used in the preliminary test. The units for Group A will consist of the same words as the units for Group B, but the dictation method will be used for Group A, and the non-dictation method for Group B.

Teachers of Group A will ⁱdictate words to the pupils, after which teachers will spell each word correctly and have each pupil correct his own misspelled words. The pupil then copies the correct form of all his misspelled words in his individual spelling notebook.

Teachers of Group B should furnish pupils with lists of words spelled in three different ways and have them write the correct spelling of each word after its corresponding number in the column at the left. After all words have been spelled, the teacher should spell all the words correctly and have each pupil correct his own misspelled words. Each pupil should then copy the correct form of all the words he has misspelled in his individual spelling notebook. Then pupils should hand in their papers to the teacher, together with spelling instructions, after the final spelling of the words.

Teachers should check pupils' work to see that the correct forms of all misspelled words are written in the spelling notebooks. Teachers should instruct pupils in regard to procedure and see that instructions are carried out. Remember that any word which has been changed, erased, or corrected is to be considered as a misspelled word.

Teachers should discuss the instructions and suggestions for spelling with the pupils at the outset of the experiment, as they would any other lesson. After that the teacher gives no more attention to the rules and instructions, but she may answer questions raised by pupils concerning the instructions and suggestions. Each pupil will be supplied with a copy of instructions and suggestions for studying spelling which he should keep and refer to frequently.

After the second spelling the teacher merely collects the papers and notebooks. Investigator will score the papers.

Teachers should not tell pupils this is an experiment, because if pupils know this, some might put in more effort than they would under normal conditions.

B. Pupils' Spelling Instructions

Group A

Your teacher will dictate twenty-five words which you are to write on the paper furnished you. After you have finished writing the words your teacher will spell all the words correctly for you, and you will check your errors. Place an X before the number of each misspelled word. Also check with an X (1) any words you have changed, erased, or corrected; (2) any words of which you guessed the correct spelling. Next copy the correct form of all misspelled words in your individual spelling notebooks. Then hand to your teacher both your spelling paper and these instructions. You should now master the words in your spelling notebooks.

C. Pupils' Spelling Instructions

Group B

The words in the units are spelled in three ways. Only one spelling of each word is correct. The others are ways in which junior-high school pupils frequently

misspell that word. Select the correct spelling and copy it after its corresponding number in the column at the left. You will be given five minutes in which to write the twenty-five words. Then your teacher will spell each word for you correctly. Place an X before the number of each misspelled word. Also check with an X (1) any words you have changed, erased, or corrected; (2) any words of which you guessed the correct spelling. Next copy the correct form of all misspelled words in your individual spelling notebooks. Then hand both your spelling paper and these instructions to your teacher. You should now master the words in your spelling notebooks.

D. Pre-test and Final Test

Before the weekly spelling units were used a pre-test of one hundred words was given to the pupils to determine their spelling ability before they had studied the words. The same words were given to both Group A and Group B. The dictation method was used for both groups in the pre-test. The words in the pre-test were selected from the four hundred words in the spelling units.

After the sixteen units were given to the pupils, a final examination of one hundred words was given to both groups. The same words were given to both groups and the dictation method was used. The words of the

final examination were of equal difficulty as the words of the pre-test. The words in both the pre-test and final examination were selected from the four hundred words in the units. The difficulty of the words was determined by consulting the Iowa Spelling Scales⁴ (Grade VII) by Ernest J. Ashbaugh of Ohio State University. These scales definitely determine the word difficulty for pupils of the seventh grade and the words used in this experiment range in difficulty from 25% to 99%. The Iowa Spelling Scales show that out of a large number of seventh-grade pupils who attempted to spell the word "rheumatism" only 23% spelled it correctly. Of a large number of seventh-grade pupils who attempted to spell the word "answer", 99% spelled it correctly.

The final examination consisted of one hundred words of equal difficulty as the words in the pre-test. For example, the words "schedule" and "recommendation" each have a spelling difficulty of 25%. "Schedule" was used in the pre-test and "recommendation" in the final examination. The teachers dictated the words at the rate of one every ten seconds or six per minute on both the pre-test and final examination.

⁴E. J. Ashbaugh, "Iowa Spelling Scales." Grade VII

1. THE WORD DIFFICULTY OF EACH WORD IN PRE-TEST AND

FINAL TEST

<u>Pre-test</u>	<u>Spelling Difficulty</u>	<u>Final Test</u>
1 schedule	25	1 recommendation
2 essential	27	2 chautauqua
3 unnecessary	32	3 characteristic
4 correspondence	33	4 committee
5 fundamental	37	5 analysis
6 thesis	39	6 scientific
7 recommend	39	7 courteous
8 convenient	39	8 canvass
9 immense	40	9 acquaintance
10 privilege	41	10 enthusiasm
11 notary	43	11 judgment
12 especially	43	12 epidemic
13 circuit	43	13 anticipate
14 leisure	44	14 assessment
15 immediately	46	15 disappointed
16 professional	48	16 merely
17 responsibility	49	17 materially
18 license	49	18 enormous
19 sincerely	50	19 regretting
20 communication	50	20 bureau
21 permanent	51	21 financial
22 campaign	51	22 arrangement
23 superintendent	52	23 associate
24 geometry	53	24 extension
25 agricultural	53	25 advertisement
26 straightened	54	26 quantities
27 preliminary	54	27 personally
28 occasion	54	28 athletics
29 official	55	29 installment
30 catalogue	55	30 acceptance
31 opportunity	56	31 meter
32 specification	57	32 remittance
33 legislation	57	33 grateful
34 carnival	57	34 ballot
35 maturity	58	35 individual
36 consultation	58	36 consequently
37 talent	59	37 secretary
38 inducement	59	38 acquire
39 supervisor	60	39 inferior
40 exhibit	60	40 demonstration
41 decision	60	41 allotment
42 attorney	60	42 beginning
43 assigned	60	43 assume
44 organize	61	44 losing
45 heretofore	61	45 certificate
46 possession	62	46 interfere
47 readily	63	47 civics
48 basis	63	48 auditor
49 generally	64	49 executed
50 electricity	64	50 corporation

<u>Pre-test</u>	<u>Spelling Difficulty</u>	<u>Final Test</u>
51 capacity	64	51 attitude
52 surplus	65	52 succeeded
53 prefer	65	53 illustrated
54 experience	65	54 exclusively
55 sympathy	66	55 succeed
56 subscription	66	56 preparation
57 mechanical	66	57 assignment
58 welfare	67	58 constitution
59 engineering	67	59 substitute
60 successful	68	60 label
61 niece	68	61 separate
62 various	69	62 stomach
63 similar	69	63 invoice
64 equipment	69	64 equally
65 choir	69	65 candidate
66 benefit	69	66 accordingly
67 splendid	70	67 premium
68 practice	70	68 literature
69 furniture	70	69 evidently
70 disgusted	70	70 contrary
71 usually	71	71 strictly
72 senior	71	72 reservation
73 principal (chief)	71	73 personality
74 democrat	71	74 control
75 confirming	71	75 business
76 barely	71	76 assurance
77 respectfully	72	77 reference
78 really	72	78 qualities
79 illustration	72	79 glorious
80 fortunate	72	80 extreme
81 examine	72	81 elsewhere
82 disagreeable	72	82 believing
83 based	72	83 applicant
84 announce	72	84 accordance
85 vicinity	73	85 type
86 prosperous	73	86 profitable
87 previous	73	87 ninth
88 issued	73	88 government
89 fashionable	73	89 enrollment
90 coupon	73	90 commercial
91 worrying	74	91 valuable
92 territory	74	92 remedy
93 illustrating	74	93 honorable
94 frequently	74	94 expensive
95 envelope	74	95 employer
96 transit	75	96 signature
97 series	75	97 relieve
98 journal	75	98 explanation
99 expensé	75	99 duplicate
100 discontinued	75	100 confidence

E. The Spelling Schedule

1. Glenn School Schedule

Use exactly fifty minutes per week on Monday and Wednesday.

Monday

5 minutes for spelling new words.¹

5 minutes for correcting errors.²

5 minutes for writing correct form of misspelled words in notebook.

Plus
10 minutes for studying words missed on Monday.³

Wednesday

20 minutes for studying words missed on Monday.

5 minutes for writing words.

Note:

After the second unit was given the following changes in the spelling schedule of all schools were made:

- ¹The five-minute period for spelling the new words was changed to eight minutes.
- ²The five-minute period for correcting errors was changed to seven minutes.
- ³The ten-minute period for studying the words missed on the first spelling was changed to five minutes. These changes were made because the time for spelling new words and correcting errors was not sufficient.

2. Deming School, Groups A and B

Schedule

Use exactly fifty minutes per week on Monday and Tuesday.

Monday

5 minutes for spelling new words.

5 minutes for correcting errors.

5 minutes for writing correct form of misspelled words in notebooks.

10 minutes for studying words missed.

Tuesday

20 minutes for studying words missed on Monday.

5 minutes for writing words.

3. Sugar Grove School Schedule

Use exactly fifty minutes per week on Monday, Tuesday, and Wednesday.

Monday

Five minutes for spelling new words.

Five minutes for correcting errors.

Five minutes for writing in notebooks the correct form of misspelled words.

Five minutes for studying words missed.

Tuesday

Ten minutes for studying words missed on Monday.

Ten minutes to be used by teacher in any work she pleases, independent of this experiment.

Wednesday

Fifteen minutes for studying words missed on Monday.

Five minutes for writing words.

4. Rankin School Schedule

Use exactly fifty minutes per week on Monday, Tuesday and Wednesday.

Monday.

Five minutes to pronounce words and have pupils write the words.

Five minutes for teacher to spell and pupils check errors.

Five minutes for pupils to write in their notebooks correct forms of misspelled words.

Five minutes to study words missed.

Tuesday

Ten minutes to study words missed on first day. The remaining ten minutes of the period teacher may do whatever work she pleases wholly apart from the experiment.

Wednesday

Fifteen minutes for studying words missed on Monday.

Five minutes for pronouncing words.

5. Otter Creek Schedule

Use exactly fifty minutes per week on Monday, Tuesday and Wednesday.

Monday.

Five minutes to pronounce words and have pupils write them.

Five minutes for teacher to spell and pupils check errors.

Five minutes for pupils to write in their notebooks correct forms of words they misspelled.

Five minutes to study words missed.

Tuesday

Ten minutes to study words missed on first day. The remaining ten minutes teacher may do whatever work she pleases, wholly apart from spelling experiment.

Wednesday

Fifteen minutes for study.

Five minutes for pronouncing words.

F. Distribution of Time in the Spelling Experiment

1. Otter Creek and Rankin

Fifty minutes per week were devoted to this spelling experiment by each school, but the distribution of time was not the same for all schools. Otter Creek and Rankin used twenty minutes on Monday, ten minutes on Tuesday and twenty minutes on Wednesday. These schools had spelling daily for a period of twenty minutes. The teachers were free to devote the remaining fifty minutes per week to spelling as long as it was wholly apart from the experiment.

2. Deming School, Sections A and B

The schedule at Deming called for two periods per week of twenty-five minutes each. The spelling days were Monday and Tuesday. The entire spelling time at Deming was taken up by this experiment.

3. Glenn School

The program at Glenn School called for fifty minutes per week, twenty-five minutes on Monday and twenty-five minutes on Wednesday.

4. Sugar Grove

Sugar Grove School had a twenty-minute spelling period daily. The time devoted to this experiment was twenty

minutes on Monday, ten minutes on Tuesday, and twenty minutes on Wednesday.

Otter Creek, Rankin, and Sugar Grove Schools had daily spelling periods, but it was probably less confusing to the teacher if the three spelling days were consecutive. To have used ten minutes daily would not have been satisfactory, because the periods would have been too short.

At Deming School and Glenn School the schedule for spelling was already determined, namely Monday and Tuesday for Deming and Monday and Wednesday for Glenn.

G. Cases not Considered in Final Tabulation of Results

In the tabulation of the final results the following cases were not considered:

1. Those who missed six or more units and either the pretest or final examination, or both.

2. Those who made less than 10% on pre-test and less than 10% on the final examination, and not over 30% on any of the units.

3. Those who made above 90% in the pretest, and made very high scores on the units.

The reasons for throwing out those cases where scores were very low or very high is because this experiment is a test in method and not in achievement. These cases were exceptional and not typical of the group. The extremely dull pupils would not have learned by any method, and the very bright pupils would have made a good record with either method, as they were able to spell more than 90% of the words in the pretest without any preparation.

CHAPTER III

I. FINDINGS OF THE INVESTIGATION

This chapter is divided into two parts. The first part deals with the scores made on the pre-test, units, and final examination of pupils of the six schools concerned in this study. The data are presented in Tables I to VI inclusive (pp 21-26). Table I should be read as follows:

Pupil No. 1 in school No. 1 made the following scores:

4 on the pre-test, 11 on the final examination, 84 on the first unit, 72 on the second unit, 68 on the third unit, 88 on the fourth unit, 80 on the fifth unit, 52 on the sixth unit, 28 on the seventh unit, 52 on the eighth unit, no score on the ninth unit as pupil was absent, 80 on the tenth unit, 56 on the eleventh unit, 56 on the twelfth unit, no score on the thirteenth unit as pupil was absent, 68 on the fourteenth unit, 64 on the fifteenth unit, 48 on the sixteenth unit, and an average of 64 on the fourteen units.

The remainder of Table I and the following five tables should be read in a similar manner.

The second part deals with the significant ratios¹ between Groups A and B, on the pre-test, units, and final examination. Tables VII to XII inclusive (pp 27-32) show the comparison of the scores made by the different groups.

¹H. E. Garrett, "Statistics in Psychology and Education."
pp. 128-136

A. Tables

TABLE I

THE PRE-TEST, UNITS, AND FINAL EXAMINATION OF SCHOOL NO. 1, GROUP A

PN*	PT*	FT*	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	AV of Units
1	4	11	84	72	68	88	80	52	28	52	80	56	56	68	64	48	64.00		
2	6	33	68	52	36	80	40	40	36	40	52	64	48	48	60	28	60	48	50.00
3	65	79	96	96	100	100	96		84		96	88	100	100	96		96		95.66
4	75	93	92	96	100	100	100		100	100	100	92	96	100		100	100	100	98.28
5	41	58	96	72	88	92	88	72	84	92	84	96	96	84	88	68	92	88	86.25
6	26	62	96	84	88		88	88	84	80	80	92	88	80	72	88	88	80	85.06
7	25	58	60	84	72	76	80	76	72	72	84	96	96	84	92	88	88	68	80.50
8	75	90	96	100		100	100	100	96	100	96	100	96		100	92	96	96	97.71
9	90	99	100	100	100	92	100	100	96	100	100	100		100	100	92	100	100	98.66
10	71	90	88	100	96				84	100	88	92	100	100	100	96		100	95.33
11	7		56	44	32	56	32	44	12	24	20	40	40	56		28	28	32	36.26
12	61	84	100	96		96	96	76	84		96	84	92		96	88	88	96	91.38
13	55	75	96	100	100	100	88	96	92	80	84	96	92		96		92	92	93.14
14	28	57			72	52	60	68	52	76	72	76			76	80	92	68	70.33
15	7	15	74	40	60	48	36	20	28	48	48			52	68	68	68		50.61
16	53		96	96	96	100	96	88	76	96	92		96		92	92		92	92.92
17	7	16	60	72	64	68	40	28	28	64	64	84	88	72	68	36	72	48	59.75
18		59	84		88	88		52		84	92			80	88	80	80	80	81.45
19	9	26	52		36	48	32	32	36	28			20	20	44	36	56	36	36.61
20	33	76	100	100	100	96	96	84	96	96	96	100	96	92	100	100	100	92	95.50
21	5	8	60	68	68	88	80	60	40	64	52	72	52	92	80	72	64	64	67.25
22	46	75	92	92	100	92	92	84	80	96	88		84	96	68	92	100	96	91.46
23	51	59		80	76		68		84	64	72	88	92	88	92	92	80		81.33
24	28	67	92	88	96	96	88	92	84	84	84	100	92	88	88	92	88	88	90.00
25	39	57	88	96	96	100	92	52	56	80	64	84		76	80	80	64	84	79.46
26	11		80	24	28	40	52	40	28	48	32	72	44		36	56	40		44.28
27	14	31	84	84	60	76	76	60	16	76	52	68	68	52	52	52		56	62.13
28	28	57	84		72	76		60	20	68	68	88	92	60	64	92	72	44	68.57
29	61	78	100	96	92	92	76	64	100	96	92	92	100		100	92	100	96	92.53
30	3	19	96	60	64		80	68	40	80	76	72	80	88	96	88	84	88	77.33
31	4	17	92	76	40		48	60	40	88	72	76	76		92	84	64	68	69.71
32	17	29	68		28	44	40	44	44	44	40	52	56	44	64	40	48	48	46.93
Average																			75.98

* Note: In the following tables:

PN = Pupil Number

PT = Pre-test

FT = Final Test

TABLE III

THE PRE-TEST, UNITS, AND FINAL EXAMINATION OF SCHOOL NO. 3, GROUP A

PN	PT	FT	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Av of Units
1	70	95	92	100	100	100	100	88	96	100	96	100	96	100	88	96	92	100	96.50
2	15	70	96	88	92	60	76	84	76	88	80	92	84	96	68	88	92	92	84.50
3	47	76	100	92	88	88		100	92		88	96		96	96	80	100	92	92.92
4	61	95	100	100	100	100	88	100	96	100	92	100	100		96	100	100	92	97.60
5	30	57	96	84	88	88	96		92	92	88	92	96	88	96	64	92	96	89.86
6	32		96	88	92	88	92	84		92	84	88	96	80	68	88	88	96	84.33
7	39		100	100	100	92	100	92	100	96	100	96	100	100	100	100	96	96	98.00
8	71	87	96	96	100	96	92	96	100	100	100	96	100	96	96	88	100	92	96.50
9	23	45	84	100	92	84	76	84	96	92	76	88	68	84	88	88	92	92	86.50
10	39	61	100	88	96	96	96	92	92	96	76	96	96	92	96	100	92	88	93.25
11	56	79			100	96	96	96	96	100	100	96	92	100	100	92	100	96	97.14
12	68	81	100	96	96	96	92	96	96	92	92	92	88	92	84	96	88	96	93.25
13	52	72	80			92	100	88	92	92	96	100	96	96		100	96	92	93.84
14	52	74	100	96	100	92	100	96	96	96	88	96	96	96	100	100	100	92	96.50
15	46	79	96	92	96	92	100	96	92	96	92	100	96	100	92	100	96	100	96.00
16	22	53	96	84	88	100	96	96	100	96	96	92	96		96	96	96	100	95.20
17		33	100	80	80	88	96	96	96	96	88	92	96	92	84	92	92	92	91.25
18	66	78			96	88	96	96	100	96	88	96	88	80	92		96	92	92.61
19	13	34	76		44	60	48	68	60	40	40	72	48	68		52	48	48	55.14
20	70	86	100	92		84	96	96	100	96	96	88		96	100		100	100	95.19
21	29	60	84	88	88	84	84	80	80	92	92	92	96	84	72	92	100	84	87.00
22	6	14	36	84	48	40	48	36	24	32		52		32	44	40	44	28	42.00
23	19	53	96	96	100	100	96	96		96			96	96	84		88	92	84.66
24	61	88	96	68	100	92	96	96	88	92	96	92		96	92	100	100	96	93.33
25	9	16		88	44	48		24		20	40	56		32	52	52	52	32	47.27
26	6	29	60	84	84	80	68	52	68	60	44	76	64		56	68	64	60	65.86
27	30	54	96	80	60	72	68	36	64	52	52	76	92	84	100	100	100	96	76.75
28	83		76	96	80		72	48	56		64	52	72	52	72	88			69.00
29	66	75	92	92	92	84	96	100	92	96	100		96	88	100	96	88	96	93.86
30	10	34	96	80	60	72	60	44	88	68	80	96	68	84	76	80	84	72	75.50
31	51	83	100	96	100	88	100	92	96	100	96	92	96	88	96	100		100	96.00
32	30	44	52	76	76	64	72	68	56	44	56	80	68	68	64	64	64	64	64.75
33		90				100	100	92	92	100	92		100	100	100	100	100	96	97.66
Average																			85.91

TABLE IV

THE PRE-TEST, UNITS, AND FINAL EXAMINATION OF SCHOOL NO. 4, GROUP B

PN	PT	FT	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Av of Units
1	26	37	84	92	88	80	88	60	92	68	72	84	84	76	68	96	76	60	79.25
2	41	61	100	84	88	76	88	92	92	88	76	80	84	76	100	100	96	96	88.50
3	42	71	100	96	92	84	88	72	68	92	88	96	92	96	100	96	92		90.13
4	28	55	88	88	92	88	92	88	68	92	76	92	88	88	92	100	88	92	89.50
5	7	12	84	60	92	72	68	88		80	60	80	96	96	80	68	80	44	70.13
6	11	27	76	84	92	64	80	80	56	64	60	72		32	64		76	48	67.71
7	11	23	52	76	80	88	92	88	68	92	80	80	88	64	92	96	68	84	81.75
8	16	39	64	80	80	92	92	80	76	72	68	88	84	64	96	92	80	80	80.50
9	65	78	100	100	100	100	96	100	96	96	96	100	100	96	100	92	96	84	97.00
10		72		92	92	76	96	92	96	96	92	100	96	96	96	100	100	92	94.13
11	48	79	100	100	92	92	100	92	92	88	88	96		96	88	76	80	96	91.73
12	10	33	96	84	96	84	100	88	76	96	72	88		76	80	96	76	88	86.40
13	13	36	92	96	92	92	100	96	96	100	96	88	100	100	100	92	100	100	96.25
14	57	74	76	72	80		96	72	88	76	92	88	92	52	84	92	76	84	81.33
15	11	33	52	84	84	64	80	88	68	92	80	84	60	72	72	80	64	64	74.25
16	23	44	88	88	80	76	72	76	72	76	72	84	72	72	76	76	76	74	76.25
17	24		84	100	88	96	96	92	92	88	88	92	92	92	92	96	84	72	90.00
18	22	55	80	76	88	80	68	80	84	80	80	76	84	64	88	76	88	76	79.25
19	21	40	80	72		84	88	64	64	84		76	80	64	68	68	80	68	74.28
20	22	62	96	84	80	80	76	68	52	88	80	84	84	76	76	84	80	80	79.25
21	24	45	96	76	88	80	84	80	84	88	84	92	84	88	88	88	84	84	85.50
22	10	29	76	56	72	84	76	88	76	76	56	84	84	76	80	64	92	84	76.50
23	56	79	96	96	100	96	96	92	100	100	100	100	96	100	100	96	100	92	97.50
24	20	41	80	84	92	84	92	88	84	92	84	92	88	96	88	92	84	76	87.25
25	15	36	100	92	88	92	96	80	92	84	96	88	88	88	88	100	96	88	91.00
26	72	84	88	84	96	96	68		88	84	88	100	92	84	92		92	88	88.57
27	55	63	100	96	96	96	96	84	92	100	92	88	84	96	100	92	100	80	93.25
28	57	76	96	96	76	92	96	92	88	80	84	80	100	92	92	92	88	100	90.25
29	20	54	76	80	64	88	96	84	84	100	92	92	92	88	88	100	84	84	87.00
30	37	66		60	96	92	84	76	68	84	68	76	68	68	88	92	80	80	78.66
31	4	24	80	64	72	72	88	84	76	84	76	88	72	76	84	88	76	60	77.50
32	60	84	96	100	100	96	100	96	100	100	96	100	96	100	100	92	96	100	98.00
33	74	82	76	88	100	96	96	92	88	88	80	84	96	88	84	92	96	92	89.75
34	14	29	88	44	68	64	88	68	80	76	52	76	88	76	92	80	56	60	72.25
35	11	31	92	96	84	80	92	68	76	76	92	80	72	68	88	80	84	64	80.75
36	66	78	100	92	96	96	96	100	96	96	96	100	96	100		100	100	96	97.33
Average																			84.93

TABLE V

THE PRE-TEST, UNITS, AND FINAL EXAMINATION OF SCHOOL NO. 5, GROUP B

PN	PT	FT	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Av of Units
1	32	62	92	88	96	96	92		92	100	96	96	100	96	100	96	88	92	94.66
2	51	81	100	96	92	92	88	76	96	88	88	100	92	92	92	96	100	92	92.50
3	16	35	100	84	100	100	100	100	96	92	80	96	100	96	96	96	100	88	95.25
4	25		92	92	92	96	96	100	88	88	84	100	92	96	96	100	92	96	93.75
5	1	16	76	84	92	88	96	96	92	80	72	88	88	100	96	100	100	92	90.00
6	35	53	76	68	84	72	68	60	72	84	64	72		64	68		72	60	70.23
7	75	83	96	92	100	100	100	100	100	88	100	100		92	100	100	96	100	97.60
8	70	79	96	92	92	100	96	88	96	72	92	92	92	88	92	100	80	96	91.50
9	36	59	92	60	80	80	80	76	68		64	56	60				60	72	70.66
10	15	43	92	88	84	92	84		84	88	76	100	96	84	84	84	92	84	87.46
11	4		72	60	76	92	56	84	64	68	76	72		52	88		84	48	70.85
12	1	21	52	64	52	80	88	88	76	72	68	76		52	80		68	60	69.71
13	21	65	100	92	96	100	100	92	100	96	96	96	100	100	96	96	100	100	97.50
14	30	58	92	92	88	88	100	100	100	100	100	96	92	100	96	92	96	88	95.00
15	26	39	96	84	92	96	80	76	80	76	68	80		96	88	96		92	85.71
16	22		96	84	84	96	88	96	80	88	92	92	88	84	96	96	88	88	89.75
17	12	34	64	72	80	88	72	96	80	84	92	84	80	84	88	84		76	81.60
18	6	15	84	48	60	76	68	64	56	68	64	88	64	60	80	60	68	36	65.25
19	39	64	88	72	80	88	80	68	96	84	88	84		84	96	88	76	84	83.73
20		24	100	84	68	92	72	64	80	88	76	84	84	76	76	80	68	76	79.25
21	54	70	84	96	96	88	96		92	96	80	88	100	80	96	88	76	84	89.33
22	47	71	100	88	100	96	100	100	100	96	96	100	92		96	100	88	96	96.53
23	11	32	88	56	72	84	64	44	60		56	84	72		80	92	76	64	70.85
24	6	25	76	68	84	76	64	80	60	68	84	76	76	72	96	84	68	56	74.25
25	24		80		88	92	76		76	88	64	80	76			68	84	60	77.66
26	51	74	100	96	100	100	96	96	96	96	88	96	92	100	96	96	96	88	95.76
27	29	55	100	96	96	100	100	96	96	100	96	100	100	96	96	100	80	96	96.75
28	30	75	96	96	100	96	100	100	96	88	96	100	96	100	100	88	92	88	95.75
29	41	81	100	96	88	100	100	96	88	92	96	96	92	80	96	84	92	92	93.00
Average																			85.93

TABLE VI

THE PRE-TEST, UNITS, AND FINAL EXAMINATION OF SCHOOL NO. 6, GROUP B

PN	PT	FT	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	Av of Units
1	80		100	100	96	96	100	100	88	100	100	96	100	92	100				97.53
2	3	8	72	76	60		88	80	88	80	72	96	72	88	76	72	76	56	76.80
3	21	39	84	92	100	88	88	96	84	92	72	96	100	92	96	88	92	96	91.00
4	40	60	100	92		84	84	100	96	92					96	84	96	96	92.72
5	53	82	100	96	100	96	100	100	100	96	100	100	96	100	100	96	100	100	98.75
6	33	39	96	92	96	96	96	100	100	96	96	96	96	96	100		100	96	96.80
7	68	80	88	96	92	92	100	96	96	100	80	96	100	100	96	100	100	92	95.25
8	21	42	84	80	72	84	88	76	96	96	72	88	88	88	92		88	80	84.80
9	22	38	92	76	68	88	92	76	68	84	92	88	92	88	84		68	80	82.26
10	26	53	96	88	96	96	96	88	80	96	88	88	88	92	96	92	96	84	91.25
11	27	68	96		96	92	84	96	80	84	100	96	96	96	92	96	100	88	92.80
12	44	57	88	92	96	88	76	84	96	92	88	96	100	96	96			92	91.42
13	43	82	96	96	100	100	92	92	100	100	100	100	100	100	96	100	100	96	98.00
14	27	18	80	72	76	64	76	36	56	64	76	68	52	76	88	72	64	84	69.00
15	7	25	88	68	84	8	88	88	76	84	76	84	84	84	64	96	64	84	80.00
16	37	58	84	76	72	84	72	80	64	84	84	68	72	72	88	76	88	84	78.00
17	9	28	80		64	76	88	88	92	96	88	96	80	100		84	92	84	86.28
18	57	80	92	92	96	96	84	92	96	92	84	92	92	100	96	92	96	96	93.00
19	17	44	92	48	64	88	84	60	76	72	96	88	96	92	84	88	96	84	81.25
20	7	14	84	68	64	60	60	68	68	64	52		52	60	56	52	40	68	61.06
21	40	49	100	84	84	84	92	96	80	88	88	92	80	80	80	88	92	92	87.50
22	33		88	76	100	88	96	88	96	76	88	96	88	100	74	96	84	80	88.37
23	35	49	92	88	88	96	92	92	96	80	96	92	96	76	92	96	96		91.20
24	10	24	68	64	92	64	96	88	48		72	72	64	84	72	52	76		72.28
25	53	67	100	96	92	88	88	92	96	92	92	88	100	100	100	100	88	92	94.00
26	37	47	96	80	96	100	88	100	88	92		92	92	92	92	84	92	92	91.73
27	2	13	72	72		88	80	72	72	96	92	80	68	96	84	88	88	92	82.66
28	32	50	84	92	76	96			92		84	88	88	100	96	100	92	96	93.07
29	37	68	96	96	92	96	100	96	88	100	96	100	96	100		100	100	100	97.06
30	22	35	80	76	88	88	84	84	92	80	80	100	72	84	88	72		84	83.46
31	54	74	100	100	100	96	92	100	100	100	100		96	96		100	100	96	98.28
32	47	73	100	96	96	100	92	88	96	96	100	100	100	96	100		100	96	97.06
33	6	10	80	60	68	84	72	96	84	72	64	84	72	80	84	68	72	72	75.75
34	24	49	76	88	96	96	92	92	84	100	88	88	84	96	88	84	92	96	90.00
35		61	80	84	80	80	76	88	80	92	60	72	88	80	68	84	80	80	79.50
36	72	90	100	100	96	92	92	92	100	100	100	96	100	96	100		100	100	97.60
Average																			87.65

TABLE VII

SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS OF GROUPS A
AND B ON THE PRE-TEST, UNITS, AND FINAL EXAMINATION

A = Dictation Group

B = Non-dictation Group

Scores Made on	$M_A \pm PE_M$	$M_B \pm PE_M$	$Diff \pm PE_{Diff}$	In Favor of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff Is Greater Than Zero
1	2	3	4	5	6	7
Pre-test	36.74 \pm 1.63	31.24 \pm 1.38	5.50 \pm 2.13	A	2.58	95
Units	84.55 \pm .99	86.31 \pm .62	1.76 \pm 1.17	B	1.50	84
Final Exam	61.69 \pm 1.65	51.04 \pm 1.52	10.65 \pm 2.25	A	4.72	100

The data of Table VII seem to justify the following statements:

(1) The difference on the pre-test between Groups A and B is not significant, and the slight difference in favor of Group A is probably due to sampling, or the number of cases involved.

(2) The difference between the units of Groups A and B was not significant, the difference probably being due to sampling.

(3) On the final examination there was a significant difference in favor of Group A, a difference not due to sampling. This seems to indicate that the dictation method is superior to the non-dictation method.

TABLE VIII

SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS OF THE GIRLS
OF GROUPS A AND B IN THE PRE-TEST, UNITS,
AND FINAL EXAMINATION

A = Dictation Group

B = Non-dictation Group

Scores Made on	$M_A \pm PE_M$	$M_B \pm PE_M$	$Diff \pm PE_{Diff}$	In Favor Of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff Is Greater Than Zero
1	2	3	4	5	6	7
Pre-test	38.06 \pm 2.07	35.93 \pm 1.87	2.13 \pm 2.79	A	.763	69
Units	87.67 \pm 1.40	90.08 \pm .62	2.41 \pm 1.53	B	1.57	86
Final Exam	67.18 \pm 2.03	53.84 \pm 2.01	13.44 \pm 2.86	A	4.63	100

The data of Table VIII seem to justify the following statements:

(1) The difference between the dictation and non-dictation group on the pre-test for girls is not a significant difference, but is probably due to sampling.

(2) The difference between the dictation and non-dictation groups on the units for the girls is not a significant difference, but a difference probably due to sampling.

(3) The difference between the dictation and the non-dictation groups on the final examination for the girls is a significant difference in favor of the dictation group. This difference is not due to sampling and seems to indicate that the dictation method is superior to the non-dictation method.

TABLE IX

SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS OF THE BOYS
OF GROUPS A AND B IN THE PRE-TEST, UNITS,
AND FINAL EXAMINATION

A = Dictation Group

B = Non-dictation Group

Scores Made on	$M_A \pm PE_M$	$M_B \pm PE_M$	$Diff \pm PE_{Diff}$	In Favor Of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff is Greater Than Zero
1	2	3	4	5	6	7
Pre-test	33.90 \pm 1.40	27.21 \pm 1.11	6.69 \pm 1.78	A	3.74	99
Units	79.22 \pm 1.48	82.04 \pm .97	2.82 \pm 1.77	B	1.59	86
Final Exam	54.95 \pm 2.55	48.15 \pm 2.12	6.80 \pm 3.31	A	2.05	91

The data of Table IX seem to justify the following statements:

(1) The difference between the dictation and the non-dictation on the pre-test for boys is not a significant difference, but the chances for variation are small. The chances are 99 out of 100 that the difference in favor of the dictation group is not due to sampling.

(2) On the units the difference between the two groups is not significant, and the difference in favor of the non-dictation group is probably due to sampling.

(3) In the final examination the difference between the two groups is not a significant difference and is probably due to sampling. There is no significant superiority of one group of boys over the other.

TABLE X

SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS OF THE UPPER
 QUARTER OF GROUPS A AND B ON THE PRE-TEST,
 UNITS, AND FINAL EXAMINATION

A = Dictation Group

B = Non-dictation Group

Scores Made on	$M_A \pm PE_M$	$M_B \pm PE_M$	$Diff \pm PE_{Diff}$	In Favor Of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff Is Greater Than Zero
1	2	3	4	5	6	7
Pre-test	70.42 \pm 1.59	60.08 \pm 1.30	10.34 \pm 2.05	A	5.03	100
Units	96.25 \pm .82	94.14 \pm .24	2.11 \pm 1.11	A	1.90	90
Final Exam	87.92 \pm 1.88	77.43 \pm .84	10.49 \pm 2.06	A	5.09	100

The data of Table X seem to justify the following statements:

(1) The difference between the dictation and the non-dictation groups on the pre-test for the upper quarters is a significant difference in favor of the dictation group, and not a difference due to sampling. The dictation group was significantly superior to the non-dictation group to begin with.

(2) On the units the difference between the two groups is not significant, but is probably due to sampling, and in favor of the dictation group.

(3) On the final examination the difference between the two groups is a significant difference, not due to sampling and in favor of the dictation group.

TABLE XI
SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS OF THE LOWER
QUARTER OF GROUPS A AND B ON THE PRE-TEST,
UNITS, AND FINAL EXAMINATION

Scores Made on	$M_A \pm PE_M$	$M_B \pm PE_M$	$Diff \pm PE_{Diff}$	In Favor Of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff Is Greater Than Zero
1	2	3	4	5	6	7
Pre-test	8.68 \pm .52	7.58 \pm .50	1.10 \pm .72	A	1.52	84
Units	64.42 \pm 2.21	76.18 \pm 1.11	11.76 \pm 2.47	B	4.76	100
Final Exam	30.08 \pm 2.23	22.87 \pm 1.23	7.21 \pm 2.55	A	2.83	97

The data of Table XI seem to justify the following statements:

(1) The difference between the dictation and the non-dictation group on the pre-test for the lower quarters is not a significant difference, and is probably due to sampling.

(2) The difference between the two groups on the units is a significant difference in favor of Group B and not a difference due to sampling. This seems to indicate that the non-dictation method is superior to the dictation method.

(3) On the final examination the difference between the two groups is not a significant difference and is probably due to sampling.

TABLE XII

SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF THE MATCHED
 CASES IN GROUPS A AND B ON THE UNITS
 AND FINAL EXAMINATION

A = Dictation Group

B = Non-dictation Group

Scores Made on	$M_A \pm PE$	$M_B \pm PE$	$Diff \pm PE_{Diff}$	In Favor Of	Ratio of Diff to PE of Diff	Chances in 100 that True Diff Is Greater Than Zero
1	2	3	4	5	6	7
Units	89.09 \pm .98	90.40 \pm .73	1.31 \pm 1.22	B	1.07	76
Final Exam	66.82 \pm 1.77	59.94 \pm 1.84	6.88 \pm 2.55	A	2.69	97

No data for pre-test are given since the two groups were equal on the pre-test.

The data of Table XII seem to justify the following statements:

(1) In the units of the matched cases the difference between the two groups is not a significant difference, but a difference in favor of Group B probably due to sampling.

(2) In the final examination of the matched cases the difference is not a significant difference, but one due to sampling, and in favor of Group A.

B. Conclusions

The data as shown in this study seem to justify the following conclusions:

(1) The dictation method is slightly superior to the non-dictation method.

(2) The dictation group showed significantly higher scores than the non-dictation group in the final examinations for the groups as wholes, in the final examination for the girls, and in the final examination for the upper quarter. It should be noted, however, that in both the pre-test and the final examination the dictation method was used.

(3) The non-dictation group scored significantly higher in the units for the lower quarter than the dictation group. However, in the final examination for these groups the difference was in favor of the dictation group, but the difference was not a significant one. The superiority of the non-dictation group in the units is probably due to the fact that the non-dictation method provides for better opportunity for guessing than the dictation method.

(4) In the final examination the dictation group showed superiority over the non-dictation group in every instance, but the difference favoring the dictation group was not always a significant difference.

(5) In the matched cases the differences between the two groups was not significant, the scores on the units being slightly in favor of the non-dictation group, while the scores on the final examination were slightly in favor of the dictation group.

(6) While the data show that the dictation group was superior to the non-dictation group in the final examination, it should be noted that the dictation group was also superior to begin with, as shown in the pre-test. The superiority of the dictation group in the pre-test was practically the same as in the final examination.

(7) The evidence as shown in the data does not seem to justify the statement that the dictation method has any decided superiority over the non-dictation method. Further study in this field will have to be made before it can be said that either method has definite superiority over the other.

SPELLING UNIT I

Group B

Name _____

School _____

City _____

Date _____

- 1..... scheduale schedule scedual
- 2..... cupon kupon coupon
- 3..... itim item itam
- 4..... imaginary imagenary imagenery
- 5..... benefit benefitt benifit
- 6..... adress address adres
- 7..... metter meter meeter
- 8..... tryangle triangle triangel
- 9..... official offisial offishal
- 10..... tipe type typ
- 11..... acquere acquire aquire
- 12..... pamphlit pamphlet pamphlet
- 13..... expens expense expence
- 14..... buoycott boycott boycot
- 15..... hostility hostelity hostillity
- 16..... civicks civiks civics
- 17..... experiment experment expirament
- 18..... annually annualy anually
- 19..... goverment government guvernment
- 20..... desision decision decishun
- 21..... purpose purpuse perpose
- 22..... auditor auditer audator
- 23..... sophomore sophmore sophamore
- 24..... pleasant plesent pleasant
- 25..... analisis analysis analyasis

SPELLING UNIT II

Group B

Name _____ School _____

City _____ Date _____

- 1.....control controll controle
- 2.....opposite oppisite opposite
- 3.....premeum premium premyum
- 4.....simpathy simphy sympathy
- 5.....immediately imediately immediatly
- 6.....judgment judgment jugment
- 7.....exhibit exhibit exhibbit
- 8.....antisipate antiscipate anticipate
- 9.....graduateing graduatting graduating
- 10.....ordinery ordinary ordinnary
- 11.....introduction interduction interduc-
shun
- 12.....signiture signature signacher
- 13.....anounce announse announce
- 14.....insurance insurence insurrance
- 15.....locle local locel
- 16.....too two to (meaning also)
- 17.....substetute substitut substitute
- 18.....demonstration demunstration demon-
straton
- 19.....fundamental fundamentel fundamental
- 20.....circuit sircut circuit
- 21.....autommatic automatic autamatic
- 22.....emence immence immense
- 23.....dayly daily daley
- 24.....probably probabley probly
- 25.....explaination explannation explana-
tion

SPELLING UNIT III

Group B

Name _____ School _____

City _____ Date _____

- 1..... illisttrated illustratted illustrated
- 2..... interesting intresting interresting
- 3..... thay thaey they
- 4..... inferior inferur infirior
- 5..... terittory territory teritory
- 6..... investegation investagation investigation
- 7..... architecture arkitecture architecher
- 8..... knowledge knowlege knowlegde
- 9..... destination destinnation destanation
- 10..... supose suppose suppoze
- 11..... grammer gramar grammar
- 12..... appreciateing apreciating appreciating
- 13..... welfair welfare wellfare
- 14..... constitution constitushion constitushun
- 15..... acceptance acceptance acceptence
- 16..... invitation invitashun invitaton
- 17..... accordance acordance accordence
- 18..... sanatary sanitery sanitary
- 19..... pracktise praktice practice
- 20..... associate assocciate assoshiate
- 21..... liability liabillity libility
- 22..... adittional adishinal additional
- 23..... assured asurred assurred
- 24..... sugestion suggestion suggesstion
- 25..... frequently freequently frequently

SPELLING UNIT IV

Group B

Name _____ School _____

City _____ Date _____

1.,.....paralel paralell parallel
2.prefer perfer prefur
3.endevor endeavor endeaver
4.barly barelly barely
5.referendum refferendum referrendum
6.straighite strate straight
7.Lattin Latin Laten
8.feild feeld field
9.liquid liquud licquid
10.remedy remidy remeddy
11.powwer powr power
12.citisen citazen citizen
13.bronkial bronchal bronchial
14.material matereal matterial
15.formula formmula formulla
16.salery salary sallery
17.casheer casher cashier
18.commercil commercial commershal
19.mekanical meckanicle mechanical
20.fertille fertile fertil
21.disappointed dissappointed disapointed
22.postive positive positive
23.chafeur chauffeur chauffur
24.asume assume asumme
25.electricity illectricity electricity

SPELLING UNIT V

Group B

Name _____ School _____
 City _____ Date _____

- 1..... gometry geomitry geometry
- 2..... agricultural agercultural aggricultural
- 3..... lutenant lieutenant lieutenant
- 4..... managment management manigement
- 5..... serius serrious serious
- 6..... womon women wimin
- 7..... strictly strickly strictlly
- 8..... confference conference conferance
- 9..... luxry luxery luxury
- 10..... happiness hapiness happyness
- 11..... really realy reely
- 12..... polecy policey policy
- 13..... ballot ballet ballit
- 14..... caracter character characture
- 15..... appeared apeared appered
- 16..... calfs calves calves
- 17..... absolutlly absolutely absolootly
- 18..... menes meanes means
- 19..... illustration ilustration illistratation
- 20..... sukceeded succeeded suceeded
- 21..... occassion ocassion occasion
- 22..... qualification qualefication qualifaca-
tion
- 23..... privilage privelege privilege
- 24..... universal universet universele
- 25..... shurely sureley surely

SPELLING UNIT VI

Group B

Name _____ School _____

City _____ Date _____

1.labal, label lable
2.epidemic epedemic eppidemic
3.advisible adviseble advisable
4.worreying worrying worring
5.demacracatic dimocratic democratic
6.gaurantee guarantee garantee
7.recient ressent recent
8.trancit transit transcit
9.recomend recommend reccommend
10.committee commite comittee
11.litterature literature literacher
12.reelize realize realize
13.evadence evidence evidance
14.alkohol alkihol alcohol
15.authorised authorized atherized
16.banqeut banquet banquet
17.asembly assembly asembly
18.superier superior supperior
19.essencial esenshal essential
20.recommendation ~~reccommendation~~ recommendation
21.usualy, ussualy ussully
22.earlyest earliest erliest
23.subscription subscripshun subscripton
24.perchase purchace purchase
25.generaly generally generaley

SPELLING UNIT VII

Group B

Name _____ School _____
 City _____ Date _____

- 1..... scientiffic scientific scientifick
- 2..... evedently evadently evidently
- 3..... liveing living livving
- 4..... expensive expencive expencive
- 5..... courtious courteous corteous
- 6..... circuler circular circular
- 7..... independance independence indipendence
- 8..... gloreous glorious glorious
- 9..... successful succesful successfull
- 10..... aprehension aprehenssion apprehension
- 11..... oppertunity opportunity oportunity
- 12..... referrence refrence reference
- 13..... arbytration arbitration arbitrashun
- 14..... satisfactory satisfactry satisfactery
- 15..... togather together together
- 16..... posession possession possesion
- 17..... dissagreeable disagreeable disagreeable
- 18..... prospereous prosperous prosperous
- 19..... organnize organize orgnize
- 20..... omitted ommitted oमित
- 21..... burow bereau bureau
- 22..... democrat dimocrat democrate
- 23..... apperatus apparatus aparatus
- 24..... duplicat duplikate duplicate
- 25..... fortunate forchunate fortchunate

SPELLING UNIT IX

Group B

Name _____ School _____
 City _____ Date _____

- 1..... advantage advantage advantige
- 2..... genuine jenuine geniune
- 3..... assessment asesment assesment
- 4..... asignment assinement assignment
- 5..... assistance asistence assistance
- 6..... grattitude gratitude gratatude
- 7..... nervus nervous nervious
- 8..... equipment equipment equipement
- 9..... communicate comunnicate communicate
- 10..... regularly reglarly regularly
- 11..... respectfully respecfully respect-
 fully
- 12..... niece neice nece
- 13..... thogh though tho
- 14..... responsebility responsibility
 responsibility
- 15..... financial finanshal finansial
- 16..... anouncement announcement
 announsement
- 17..... loseing looseing losing
- 18..... invoice envoice invoice
- 19..... remittance remittance remittance
- 20..... communication communication
 communicashun
- 21..... accordingly acordinglly accordingly
- 22..... valuable valuble valuabel
- 23..... extention extension extenshun
- 24..... buisness busness business
- 25..... especially especialy espeshaly

SPELLING UNIT XI

Group B

Name _____ School _____

City _____ Date _____

- 1..... secratery secretery secretary
- 2..... defenete definete definite
- 3..... libbrary library librery
- 4..... servaces survices services
- 5..... garrage garage gerage
- 6..... symbol symble simbol
- 7..... wellth wealth welth
- 8..... furnitur furniture furnetur
- 9..... presadents presedents presidents
- 10..... personality personalety personalaty
- 11..... instence instance instince
- 12..... estemated estimmated estimated
- 13..... arrangement arangement arrangment
- 14..... corespondence correspondance correspon-
dence
- 15..... possbly possibly posibly
- 16..... inquirey inquiry inquiry
- 17..... transpertation transportation trans-
portashun
- 18..... declaration decleration declarashun
- 19..... development davelopment development
- 20..... readely readily readly
- 21..... ambishus ambitious ambitous
- 22..... choir choier quir
- 23..... attatude atititude attitude
- 24..... acquaintence acquaintance ackquaintence
- 25..... oblegation oblagashun obligation

SPELLING UNIT XII

Group B

Name _____ School _____

City _____ Date _____

1. determination determination
determenation
2. tallent talant talent
determanation
3. hypocrisy hipocrisy hypocricy
4. superviser supervisor supervisur
5. theator theater theatur
6. vasinity vecinity vicinity
7. basiiss basis bassis
8. notary notery nottery
9. serprise surprise serprize
10. experiance experence experience
11. surplus surpluss sirplus
12. lesure liesure leisure
13. based bassed basd
14. materially matteriely materialy
15. sattisfied satisfied satesfied
16. mereley merely mearly
17. corected correccted corrected
18. campane campaign campaine
19. confidence confidance confedence
20. suffisient sufficient suficient
21. heretoofor heartofore heretofore
22. funeral funral funerel
23. arival arrivle arrival
24. canadate candidate canidate
25. numrus numarous numerous

SPELLING UNIT XIII

Group B

Name _____ School _____

City _____ Date _____

1. extreame extream extreme
2. advertisement advertisment
adverticesment
3. established istablished esstablish
esestablished
4. cartune cartoon carttoon
5. catalogue catlog catalogue
6. detter debtor debter
7. requeste recquest request
8. encyclopedia ensyclopedia
encycloppedia
9. preliminary preliminary prelimnary
10. ninth nineth nienth
11. vessel vessle vessil
12. inventer enventer inventor
13. principal prinsipal princepal
14. linning lineing lining
15. exekutive executive eesecutive
16. providing provideing providding
17. unnecessary uncessary unnesesserv
18. professional proffessional
profeshionel
19. capacity capacity capasty
20. initials initalis innitials
21. contrery cuntrary contrary
22. licence license lisence
23. preperation prepiration preparation
24. senior seenior senier
25. creditt credit credit

SPELLING UNIT XV

Name _____ School _____

City _____ Date _____

1.maturety maturity maturaty
2.stashunary stationry stationary
3.relieve releive releve
4.preevious previous prevous
5.delinquent delinquent
delinquant
6.desine design dezine
7.peculiarities peculiarities
peculiarties
8.emploier employeer employer
9.miscellaneous misellaneous
miscelaneous
10.jurnel journal jurnal
11.issued ishued issued
12.braclet bracelet braselet
13.certificate certifcate
certifacate
14.stearing stereing steering
15.eleswhere elcewhere elsewhere
16.volyum volume volum
17.disgusted dissgusted disgustted
18.characteristic characturistic
characteristic
19.carnivel carnival carnaval
20.expression expresion exspression
21.beleiving believing beleving
22.fedaration fediration federation
23.themselves themselves themselvs
24.lieble libal liable
25.engineering engineereing
enginerring

SPELLING UNIT XVI

Name _____ School _____

City _____ Date _____

- 1..... corporation corparation corperation
- 2..... instalment installmint instalmunt
- 3..... exacuted exicuted executed
- 4..... administration administeration admini-
strashun
- 5..... atorney attorney atturney
- 6..... splendid splendud splended
- 7..... indusement inducement inducement
- 8..... concerning conserning conscerning
- 9..... confurming conferming confirming
- 10..... asurance assurance assurence
- 11..... patent pattent patant
- 12..... consequentlly consequently consequ-
entley
- 13..... chatauqua chautauqua chautauqua
- 14..... indeividual individuel individual
- 15..... representation repersentation
repersentashun
- 16..... stumach stommoch stomach
- 17..... foregner foriner foreigner
- 18..... manual manuel mannuel
- 19..... exclusivly exclusively exsclusively
- 20..... personelly personally personally
- 21..... applicent applicant aplicant
- 22..... pneumonia numonia neumonia
- 23..... litterary literery literary
- 24..... regreting regretting reggreting
- 25..... kanvass canvas canvass

B. Bibliography

- Ashbaugh, E. J., "Iowa Spelling Scales" (Grade VII) Public School Publishing Co., 1922.
- Brooks, W. S., "High School Spelling," School and Society, XXVI, September 10, 1927, pp. 335-36.
- Charters, W. W., Teaching the Common Branches, Houghton, Mifflin Co., 1924, Chapter I.
- Department of Superintendence, The Third Yearbook, N.E.A., 1925.
- Department of Superintendence, The Fourth Yearbook, N.E.A., 1926.
- Eighteenth Yearbook, Part II, N.S.S.E., Public School Publishing Co., 1920.
- Guiler, W. S., "Improving Ability in Spelling," Elementary School Journal, XXX, April 1930, pp. 694-703.
- Hilderbrant, W. L., "Can High School Pupils Spell?" School Review, XXXII, Dec., 1924, pp. 779-81.
- Hollingsworth, L. S., "Psychology of Special Disability in Spelling," Teachers College Contribution to Education, No. 88, 1918, Columbia University.
- Horn, Ernest, and Ashbaugh, E. J., "Lippincott's New Horn-Ashbaugh Speller for Grades One to Eight," Lippincott, 1926.
- McCowen, Annie M., "Professional Preparation for Teaching Spelling," The Elementary English Review, VII, June, 1930, pp. 139-42.

INDIANA STATE
NORMAL LIBRARY

Orleans, J. S. "Ability to Spell," School and Society, XXIII, March 27, 1926, pp. 407-408.

Pintner, Rudolph, Rinsland, Henry D., and Zubin, Joseph, "The Evaluation of Self-Administering Spelling Tests," Journal of Educational Psychology, XX, 1929, pp. 107-111.

Suzzallo, Henry, "The Teaching of Spelling," Houghton, Mifflin Co., 1913.

Tidyman, W. F., "The Teaching of Spelling," World Book Co., 1919.

Wells, F. L. and Knight, F. B., "Basic Spelling Units for Junior-High-School Students," Rand-McNally, 1929.

Wilson, G. M. and Hoke, K. J. "How to Measure," The Macmillan Co., 1920, Chapter II.