# A STUDY TO DETERMINE THE EFFECTIVENESS OF STORYTELLING AS A METHOD OF TEACHING LISTENING VOCABULARY TO EDUCABLE MENTALLY RETARDED CHILDREN

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the Faculty of the Department of Psychology

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by

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# CHAPTER I

## DEFINITION OF THE PROBLEM

Mentally retarded children are generally deficient in language,[1] and this is reflected in the low quantity and quality of their speaking and listening vocabularies. The language deficiency is not entirely a function of their mental retardation, because most function lower than their ability would warrant.[2] Samuel Kirk believes that in many cases this is a result of poor home backgrounds.[3] Trying to increase the language efficiency of these children, then, becomes one of the problems faced by teachers of the educable mentally retarded. They know children's listening and speaking vocabularies should be increased,[4] and the improvement of language deficiencies becomes a major curriculum goal. It is believed that

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[1] Samuel A. Kirk, Teaching Reading To Slowlearning Children (Cambridge, Massachusetts: Houghton Mifflin Company, 1940), p. 48.

[2] Catherine E. Chipman, "The Vocabulary of Mental Defectives," American Association on Mental Deficiency (April, 1935), pp. 485-504.

[3] Kirk, loc. cit.

[4] Glendoris Caauwe and Clara Cantrell, "Interrelating Reading and Listening," Reading and the Language Arts (December, 1963), pp. 56-68.

language ability can be increased with training. Of particular interest is storytelling as a method of instruction in increasing this ability in normal children, especially what is heard and understood.[5] This would lead to questioning the possible use of storytelling with retarded children. It would seem that storytelling could be an effective method of teaching listening vocabulary to mentally retarded children.[6]

## Statement of the Problem

It was the purpose of this study to determine whether storytelling could be an effective method of teaching listening vocabulary to mentally retarded children. This "effective method", as measured by an author constructed test, was determined on the basis of six group comparisons. The first group (Group 1) were those who heard the story five times in different ways. The second group (Group 2) were those who heard it once using the book pictures for illustration. The third group (Group 3) heard it once with flannel board and characters used to illustrate it. The fourth group (Group 4) heard the story once and interpreted it kinesthetically with finger plays. The fifth

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[5]Mary E. Pennell and Alice M. Cusack, The Teaching of Reading for Better Living (Boston: Houghton Mifflin Company, 1935), p. 171.

[6]Ibid.

group (Group 5) heard the story once and it was illustrated using puppets. The sixth group (Group 6) did not hear the story at all, but was given the tests.

## Definition of Terms

To insure clarity of thought throughout this study, it is felt certain terms should be defined.

Effective. An increase in the test score (above chance level) that is made between two tests.

Finger plays. Actions involving primarily the arms, hands, and fingers used to illustrate parts of a story.

Flannel board. A fiber board covered with flannel material upon which characters or figures made of felt can be placed for illustrative purposes.

Level I. Primary level enrolling mentally retarded pupils whose chronological ages are six to nine and possibly ten.[7]

Level II. Intermediate level enrolling mentally retarded pupils whose chronological ages are ten to twelve and possibly thirteen.[8]

Listening vocabulary. Words for which a child can indicate a meaning when he hears it by marking the most appropriate of three picture responses.

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[7]Marguerite Thorsell, Planning for Educable Mentally Retarded in Kansas Schools (Topeka: Kansas State Printing Office, 1960), p. 19.

[8]Ibid.

Mentally retarded children. Mentally retarded children are defined by Kansas statutes as

> . . . children who: (a) are at least six but under twenty one years of age; (b) are educable; (c) have been found by individual psychometric and other examinations given by a competent authority approved by the director to be best educated in a special class rather than in a regular school classroom.[9]

"The I.Q. limits are approximately fifty to seventy-five plus, on approved psychological tests."[10]

Puppet. A figure that is placed over the hand like a glove and is used to represent a story character.

Significance. Significance is operationally defined for this study as that level of conficence where $p \leq .05$.

Special class. Special class is defined by Kansas statutes as

> a school class: (a) established by a school district for the special education of mentally retarded children; (b) having an enrollment of at least eight but not more than fifteen mentally retarded children; (c) for which a separate classroom is provided by the district; (d) for which full-time instruction is provided by a certified teacher or teachers with qualifications approved by the division; (e) having a curriculum, facilities, equipment and supervision which the director shall find sufficient for the purpose of giving adequate instruction to the pupils enrolled.[11]

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[9] Adel F. Throckmorton (superintendent), School Laws of Kansas (Topeka: Kansas State Printing Office, 1963), p. 336.

[10] Thorsell, op. cit., p. 7.

[11] Throckmorton, loc. cit.

Two-sample t Test. It is

> . . . a test concerning the difference between the means of two normal populations having the same standard deviation; it is based on independent random samples from the two populations.[12]

## Hypotheses

The following are the specific null hypotheses that were tested by this study.

1. There is no statistically significant difference among the mean scores of the pretest (test 1) among any of the groups.

2. There is no statistically significant difference among the mean scores of the first posttest (test 2) among any of the groups.

3. There is no statistically significant difference among the mean score of the second posttest (test 3) among any of the groups regardless of the means of presentation.

4. There is no statistically significant difference between the mean scores of the pretest (test 1) and the second posttest (test 3) in any group.

## Assumptions

The researcher made three assumptions in this study. (1) Children in special classes are mentally retarded. (2)

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[12] J. E. Freund and F. J. Williams, Dictionary / Outline of Basic Statistics (New York: McGraw-Hill Book Company, 1966), p. 108.

Teachers participating in this study did follow the prescribed procedure for establishing rapport with the children and in presenting the story. (3) A test is an accurate measure of listening vocabulary because of the use of such tests as the Peabody Picture Vocabulary Test. The Peabody is administered orally to retarded children and they point to the correct picture. The results are used to determine verbal intelligence.[13]

## Limitations

For the purposes of this study, the influence of age, sex, socio-economic background, interests, motivation, individual intelligence, teacher differences, and numerous other influences that undoubtedly play some part in each individual child's perception and response to the presentation of the story and the evaluation were not considered. It was the primary concern of this study to determine whether storytelling could be effective in teaching listening vocabulary, and if one of the four specific methods (use of the book illustration, flannel board, finger plays, or puppets) was more effective than the other three.

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[13]Lloyd M. Dunn and Sayde T. Brooks, "Peabody Picture Vocabulary Test Performance of Educable Mentally Retarded Children," The Training School Bulletin (August, 1960), p. 35.

The population was limited to those children enrolled in the special classes in various Kansas schools during the 1966-1967 school year as defined by Kansas State Law and the administrative guide for educable mentally retarded in Kansas schools, who were between the ages of six and thirteen.

## CHAPTER II

## REVIEW OF LITERATURE

Very little actual research in teaching listening vocabulary to mentally retarded children has been reported, but opinions and studies cited below lead the writer to believe research in this area is needed and could be profitable.

Learning to read involves an understanding of the English language, and Glendoris Caauwe and Clara Cantrell point out:

> Differences in experiential background and maturity, differences in habits and attitudes, and differences in mental abilities make planned instruction in reading and listening necessary if the child is to read and listen effectively.

Paul Rankin found people spend 42 percent of the time they are awake listening,[15] and research at the University of Minnesota indicates listening can be taught as a skill and will also lead to an increase in reading level.[16] Vocabularies for speaking and reading can not

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[14]Glendoris Caauwe and Clara Cantrell, "Interrelating reading and Listening," Reading and The Language Arts (December, 1963), p. 58.

[15]Paul Rankin, "The Importance of Listening Ability," English Journal, XVII (October, 1928), pp. 623-630.

[16]James I. Brown, "Listening, the New Frontier in Reading," Reading and The Language Arts (December, 1963), p. 52.

be built until a substantial listening vocabulary has been established.[17] If a child understands a word that is presented orally to him, it is more easily recognized when the child comes upon it in print. For the child who has not yet begun to read, storytelling would not only build vocabulary but also promote word recognition and reading readiness.[18]

In a junior high school in Pennsylvania a teacher of mentally retarded children and a librarian cooperated in a project of teaching social studies and literature by means of storytelling. Stories were told in person and with tape recordings. Since variety was also needed, pictures, films, and filmstrips were supplied for the project.

The results were promising, and some were surprising. New interests were stimulated where none had been displayed before, and the tape recorded stories were the most popular. This could have been because of the novelty of the machine and being allowed to assume the responsibility for using it.

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[17] Ruth Seymour, "Listening Vocabulary," Instructor LIV (April, 1964), p. 56.

[18] J. D. McAulay, "Storytelling and Storyreading," Peabody Journal of Education (January, 1966), p. 214.

> . . . It appears that storytelling is an effective means of instruction with the mentally retarded and has great potential for enrichment of experiences for these students.[19]

From the previous statements one is able to conclude that language development depends upon (1) background, maturity, habits, attitudes, and mental ability. (2) Listening vocabulary comes before speaking or reading vocabularies. (3) Words recognized orally are easier to recognize in print. (4) Of the time a person is awake 42 percent is spent listening. (5) The skill of listening can be taught. (6) Planned instruction in listening is necessary. (7) Storytelling helps to build a child's listening vocabulary. (8) Storytelling has been used as a teaching method with mentally retarded children in junior high school and judged effective. Thus storytelling appears to be a promising method of teaching listening vocabulary to elementary school age mentally retarded children.

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[19] Joan Pressler, "A Storytelling Project for Slow Learners," ALA Bulletin LVII (February, 1963), pp. 168-169.

# CHAPTER III

# DESIGN OF STUDY

## Introduction

Catherine Woolley's The Lighthearted Wolf was chosen for telling for several reasons, among them were high appeal the story has for children in the primary grades, the vocabulary includes words that would be new to the young listeners, and after several repetitions the story would still hold their attention. The five methods chosen to present the story are: (1) using the illustrations in the book as the story is told, (2) making characters and mounting them on felt to use on the flannel board as the events occur, (3) using finger plays which involve the pupils kinesthetically in the actions of the characters, (4) telling the story using handmade puppets and (5) letting one of the groups use the puppets to tell the story. The puppets were made by the writer and assistants and represent only the six major characters in the story. They were William the lighthearted wolf, Mother and Father Wolf, Raven, Crabby Caribou, and Grizzly Bear. The presentations were designed to emphasize the twenty-five words to be tested. The words were: lighthearted, brave, wolf, serious, earn, raven, loping, insulting, chuckling, skittering,

nervous, personal, cackling, fierce, stock, crabby, caribou, nibbling, antlers, scowling, somersault, enemy, starve, racing, and astonishing.

The storytellers included the writer and the regular classroom teachers. In the groups in which the regular teacher was the storyteller, he was given all the necessary materials and complete directions as to how the presentation should be made.

Five groups were presented the story and a sixth was not. One group had all five presentations. Four of the six groups had the story presented only once. In one group only the book illustrations were used, and so on. All classes had their regular teacher as the storyteller except two in Group one.

To determine the effectiveness of the methods, all groups were given a pretest. The same test was used for the posttest and again a month later for a second posttest. The pretest was given to obtain information about the children's knowledge of the words before the treatment. The first posttest was compared with the pretest to determine the amount of gain, if any. The second posttest was compared with the pretest as a measure of learning of the twenty-five words.

## Subjects

The findings of this study can be generalized to mentally retarded boys and girls between the ages of six and thirteen from the schools and classes chosen. The children were not randomly assigned to groups. Classes as they existed at the time the data was gathered were used. Results were averaged so the performance of the class was measured, not that of an individual within the group. The method of storytelling and the number of presentations were randomly assigned. Therefore, all classes had an equal chance of being a control group or an experimental group.

In this study the control group was not presented the story. The control group was used to indicate any change that might be attributed to normal growth and development, incidental learning, and the effect any experience other than the planned treatment might have had on the results.

## Instrumentation

The data gathered were test scores from a picture vocabulary test. The twenty-five word test was developed specifically from The Lighthearted Wolf. Only those words emphasized in the story were chosen.

The instructions for the test were recorded on magnetic tape to be played on a tape recorder to insure uniform administration, even though other conditions could not be as closely controlled. A test booklet was given to each subject, and he marked his answers in it. There were three examples plus the twenty-five stimulus words, such as 'antlers'. The responses for the stimulus word 'antlers' were pictures of a beak, ears, and a pair of antlers. There were three possible responses for each of the words. A test booklet is included in Appendix A.

Because classes of mentally retarded children are involved and they are limited in number, it was not possible to give the test to retarded children for validation without deleting subjects from the study itself.

## Procedure

Selecting a story and choosing the words to be emphasized was the beginning of this project. After studying the story the author determined which methods of storytelling she wanted to use and prepared the necessary materials, method of preparation is given in Appendix B. The writer decided to use the book illustration, flannel board, finger plays, and puppets because they are methods available to any classroom teacher.

The limited selection of vocabulary made it necessary to construct a new picture vocabulary test using the chosen words. For uniformity the instructions and stimulus words were recorded and a test booklet prepared for each subject.

Letters were sent to the special class teachers of levels one and two in Kansas asking them to participate in the study. Those accepting were assigned to groups and mailed the instructions (Appendices C and D) and materials for the project. All materials were returned to the author, the tests were scored, and data compiled.

# CHAPTER IV

## ANALYSIS OF DATA

Each of the six groups was given the picture vocabulary test three times. Group one was given the first test (test 1) the day before the presentations were made. The second test (test 2) was given after the fifth presentation of the story. The third test (test 3) was given a month later.

The picture vocabulary test was given the day before any presentation was made to Groups 2, 3, 4, and 5; and test 2 was given after the presentation on the same day. Test 3 was given a month later. Group 6 did not receive a presentation but was tested in the same manner as Groups 2, 3, 4, and 5.

On the basis of these tests inter and intragroup comparisons were made and the _t_ test (Two-sample _t_ test) was used to test for a significant difference between two means. A _t_ test was run between the following tests for comparative purposes: Group 1 test 1 and Group 2 test 1, Group 3 test 1, Group 4 test 1, Group 5 test 1, Group 6 test 1; Group 2 test 1 and Group 3 test 1, Group 4 test 1, Group 5 test 1, Group 6 test 1; Group 3 test 1 and Group 4 test 1, Group 5 test 1, Group 6 test 1; Group 4 test 1 and

Group 5 test 1, Group 6 test 1; Group 5 test 1 and Group 6 test 1. These same comparisons were made for test 2 and for test 3. In addition the following intragroup comparisons were made: Group 1 test 1 to Group 1 test 3; Group 2 test 1 to Group 2 test 3; Group 3 test 1 to Group 3 test 3; Group 4 test 1 to Group 4 test 3; Group 5 test 1 to Group 5 test 3; Group 6 test 1 to Group 6 test 3.

From these obtained _t_ ratios the level of significance was found by entering it in a _t_ table with the given degrees of freedom. Then, from the level of significance the hypotheses were either accepted or rejected.

# CHAPTER V

## RESULTS

There was no statistically significant difference between any of the six groups on test one. Each of the six groups had a higher mean score on test two than on test one. All groups had a higher mean on test three than on test one, but the difference was statistically significant ($p < .02$) for Groups one, two, three and four only.

The author also secured the most recent I.Q. scores for each subject and compiled them in their appropriate groupings. Intergroup comparisons were made to determine whether one group had a statistically higher mean I.Q. score than the others. The results of the comparisons were not statistically significant, see Table 1. Thus greater intellectual ability of one group over another was eliminated as a possible reason for group differences.

The intergroup comparisons of the mean scores on test two indicated Group five did statistically better than Groups one, two, three, four, and six ($p < .05$); Group three did statistically better than Groups two and four ($p < .02$). There were no other significant differences among the groups on test two.

On test three there were statistically significant differences between the means of Group one and Groups two, four, and six ($p = .01$); Group five did statistically better than Groups two, four, and six ($p = .01$). There were no other significant differences between any of the groups on test three. This data may be found in Table 2, page 21.

Intragroup comparison of test one to test three for Group one was significant at the .01 level as was the intragroup comparisons for Group three and four. For Group two the level of significance was less than .02; the comparisons were not significant for Groups five and six.

TABLE I

INTERGROUP COMPARISONS OF MEAN IQ SCORES

| Group Comparison | | df | t | p |
|---|---|---|---|---|
| 1 | 2 | 94 | .113 | NS |
| 1 | 3 | 130 | 1.274 | NS |
| 1 | 4 | 128 | -.734 | NS |
| 1 | 5 | 74 | .851 | NS |
| 1 | 6 | 97 | -1.269 | NS |
| 2 | 3 | 113 | 1.663 | NS |
| 2 | 4 | 111 | -.594 | NS |
| 2 | 5 | 55 | .982 | NS |
| 2 | 6 | 78 | 1.418 | NS |
| 3 | 4 | 148 | -1.615 | NS |
| 3 | 5 | 92 | .736 | NS |
| 3 | 6 | 115 | .491 | NS |
| 4 | 5 | 90 | 1.537 | NS |
| 4 | 6 | 113 | 1.611 | NS |
| 5 | 6 | 57 | -.972 | NS |

TABLE II

INTERGROUP COMPARISONS OF MEAN SCORES ON TEST 1, TEST 2, AND TEST 3

| Group Comparison | | Test I | | | Test II | | | Test III | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | df | t | p | df | t | p | df | t | p |
| 1 | 2 | 94 | .054 | NS | 93 | -1.315 | NS | 67 | -2.758 | .01 |
| 1 | 3 | 130 | 1.579 | NS | 130 | .887 | NS | 113 | -1.811 | NS |
| 1 | 4 | 128 | -.196 | NS | 128 | -1.676 | NS | 111 | -3.343 | .01 |
| 1 | 5 | 74 | .933 | NS | 72 | 2.244 | .05>t>.02 | 54 | .783 | NS |
| 1 | 6 | 97 | 1.359 | NS | 95 | -.475 | NS | 67 | -2.906 | .01 |
| 2 | 3 | 110 | 1.508 | NS | 113 | 2.438 | .02>t>.01 | 94 | 1.120 | NS |
| 2 | 4 | 108 | -.241 | NS | 111 | -.185 | NS | 92 | -.161 | NS |
| 2 | 5 | 54 | 1.041 | NS | 55 | 3.260 | .01 | 35 | 3.288 | .01 |
| 2 | 6 | 77 | 1.362 | NS | 78 | .885 | NS | 48 | -.227 | NS |
| 3 | 4 | 144 | -1.829 | NS | 148 | -2.935 | .01 | 138 | -1.646 | NS |
| 3 | 5 | 90 | -.031 | NS | 92 | 2.117 | .05>t>.02 | 81 | 1.875 | NS |
| 3 | 6 | 113 | .092 | NS | 115 | -1.459 | NS | 94 | -1.301 | NS |
| 4 | 5 | 88 | 1.041 | NS | 90 | 3.396 | .01 | 79 | 2.872 | .01 |
| 4 | 6 | 111 | 1.540 | NS | 113 | 1.118 | NS | 92 | -.039 | NS |
| 5 | 6 | 57 | .083 | NS | 57 | -2.778 | .01 | 35 | -3.304 | .01 |

Group one consisted of three level one classes and two level two classes and received five presentations. The mean scores on tests one, two, and three were 15.5, 18.3, and 19.6 words respectively. The difference between the mean score on test one and the mean score on test three was significant at the .01 level. Figure 1 pictures this graphically.

Group two consisted of three level two classes, and received only one presentation. The mean scores on tests one, two, and three were 15.6, 17.1, and 17.4 words respectively. The difference between the mean score on test one and the mean score on test three was significant at less than the .02 level but greater than the .01 level. This is pictured in Figure 2.

Group three consisted of one level one class and five level two classes, and received only one treatment. The mean scores on tests one, two, and three were 16.5, 18.9 and 18.3 words respectively. This is pictured in Figure 3. The difference between the mean score on test one and the mean score on test three was significant at the .01 level.

Group four consisted of two level one classes and four level two classes and received only one presentation. The mean scores on tests one, two, and three were 15.4, 17.1, and 17.2 words respectively. This is graphically

pictured in Figure 4. The difference between the mean score on test one and the mean score on test three was significant at the .01 level.

Group five consisted of three level two classes and received only one presentation. The mean scores on tests one, two, and three were 16.4, 20.2, and 20.5 words respectively. Figure 5 pictures this. The difference between the mean score on test one and the mean score on test three was not significant at any level.

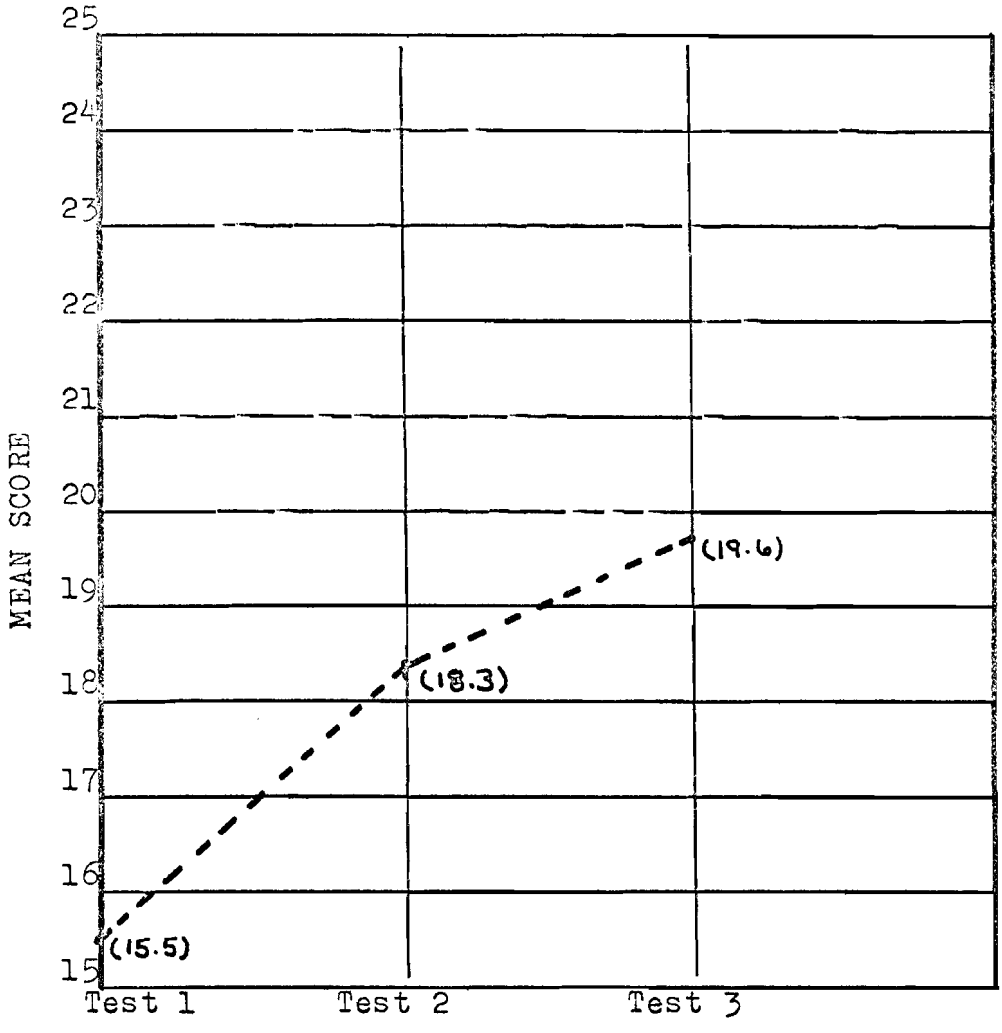


FIGURE I

GROUP L MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 1 received five treatments using (1) book illustrations (2) flannel board and characters (3) finger plays (4) puppets (5) telling it themselves using the puppets.

There were two level two classes and three level one classes in the group.

The number of subjects taking test 1 was 58; test 2 was 56; and test 3 was 44.

The difference between the mean score on test 1 and the mean score on test 3 was significant at the .01 level.

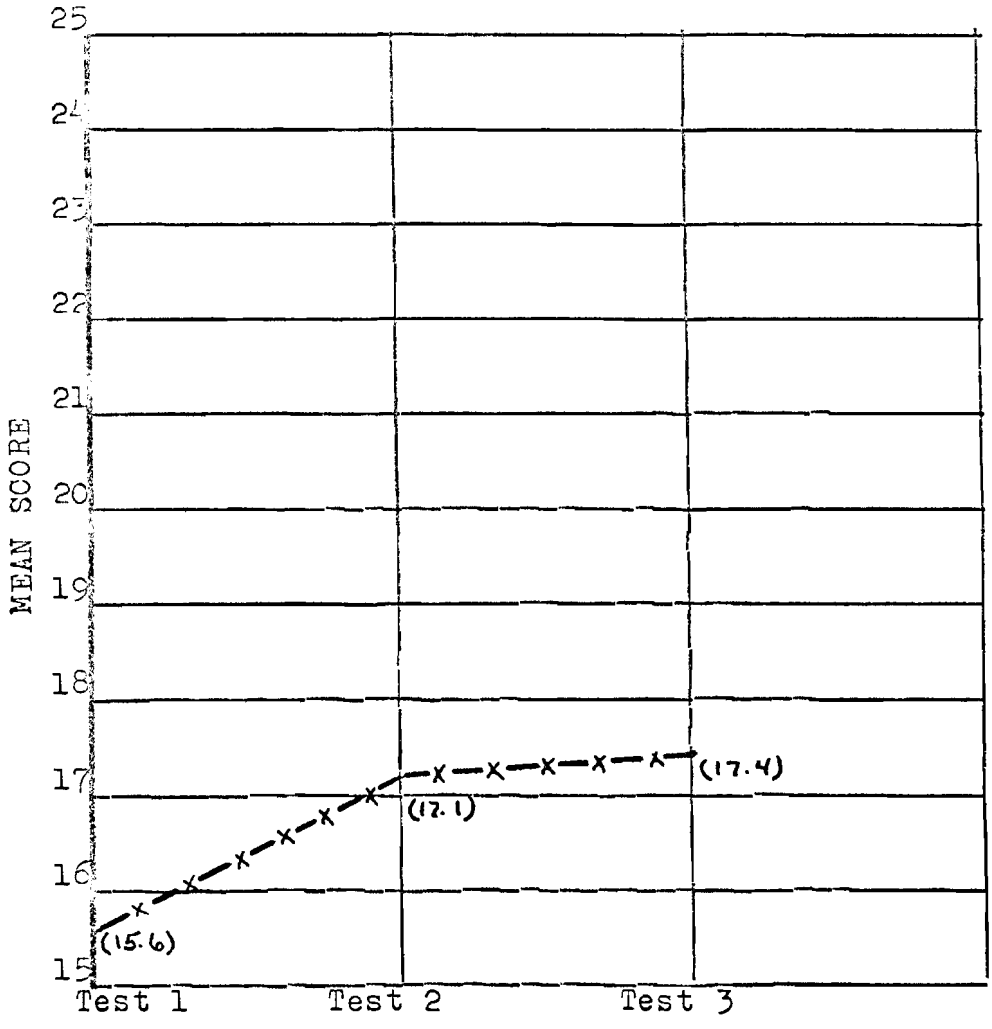


FIGURE 2

GROUP 2 MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 2 received only one treatment using the book illustrations.

There were three level two classes in the group.

The number of subjects taking test 1 was 38; test 2 was 39; and test 3 was 25.

The difference between the mean score on test 1 and the mean score on test 3 was significant at less than .02 level but greater than .01.

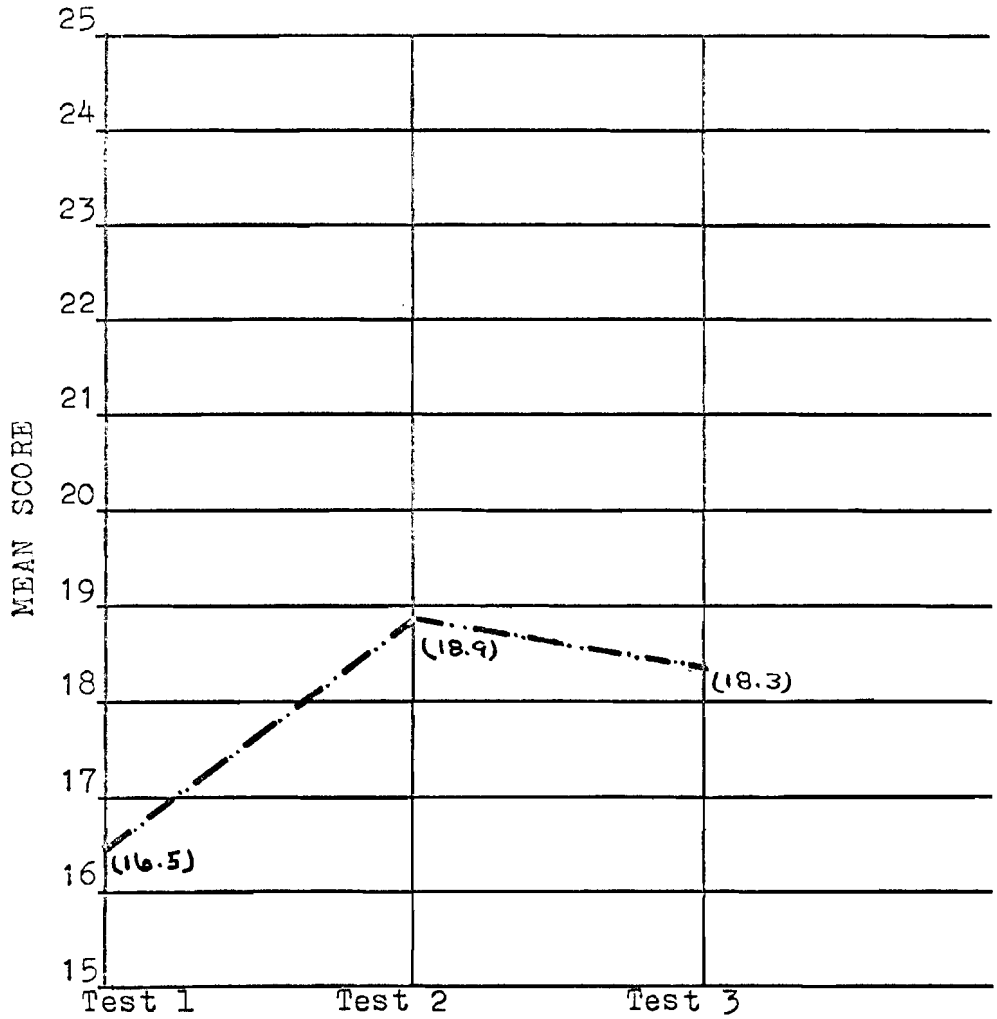


FIGURE 3

GROUP 3 MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 3 received only one treatment using the flannel board and characters.

There was one level one class and five level two classes in the group.

The number of subjects taking test 1 was 74; test 2 was 76; and test 3 was 71.

The difference between the mean score on test 1 and the mean score on test 3 was significant at .01 level.

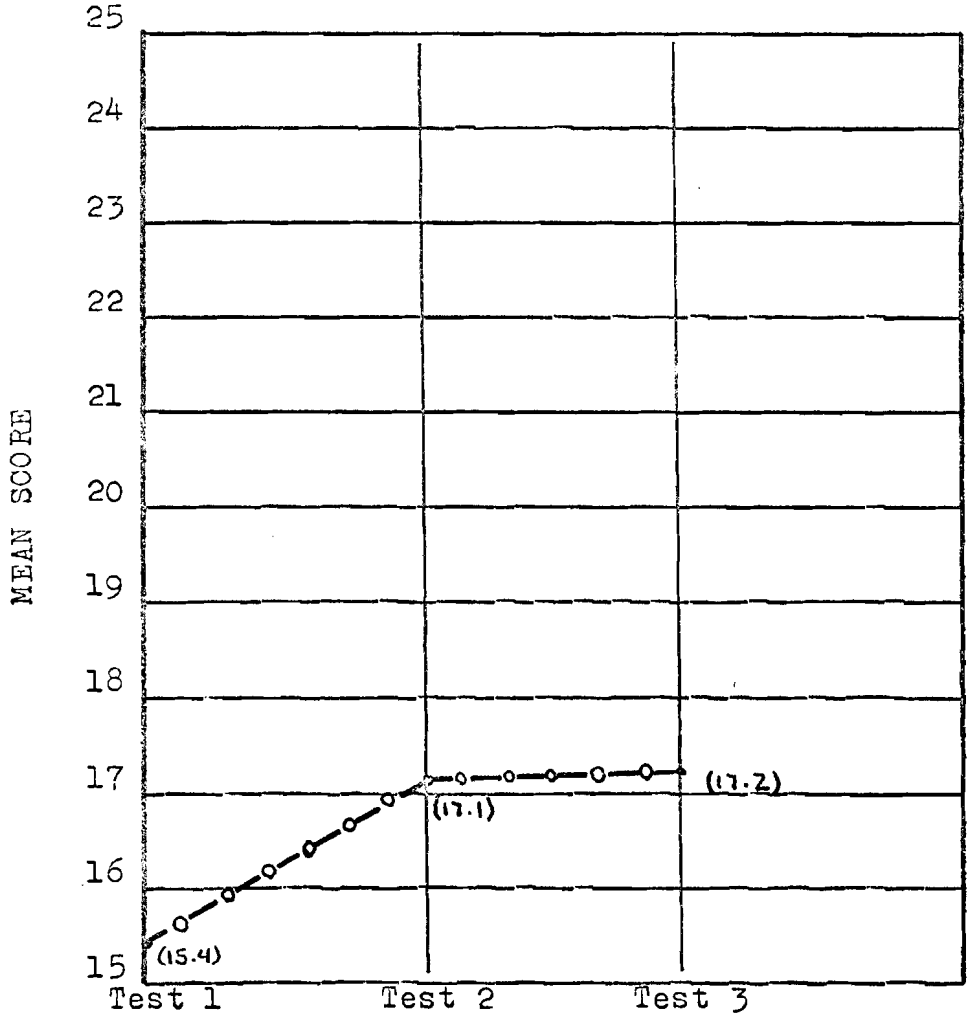


FIGURE 4

GROUP 4 MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 4 received only one treatment using finger plays.

There were two level one classes and four level two classes in the group.

The number of subjects taking test 1 was 72; test 2 was 74; and test 3 was 69.

The difference between the mean score on test 1 and the mean score on test 3 was significant at the .01 level.

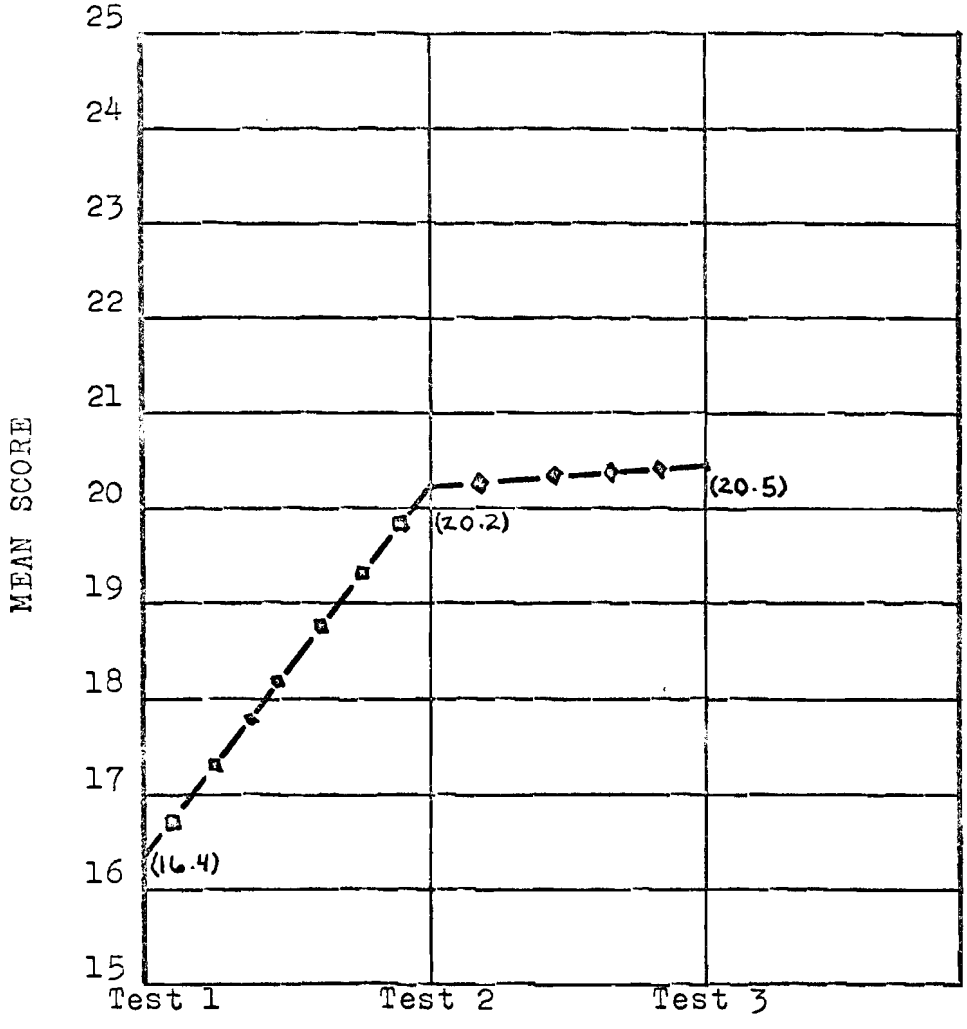


FIGURE 5

GROUP 5 MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 5 received only one treatment using puppets.

There were three level two classes in the group.

The number of subjects taking test 1 was 18; test 2 was 18; and test 3 was 12.

The difference between the mean score on test 1 and the mean score on test 3 was not statistically significant.

Group six consisted of one level one class and two level two classes, and did not receive any presentations. They were given the tests and their mean scores on tests one, two, and three were 16.5, 17.9 and 17.2 words respectively. Figure 6 pictures this graphically. The difference between the mean score on test one and the mean score on test three was not significant at any level.

Figure 7 graphically pictures the mean scores of each of the six groups on the three tests. It is evident that Group five had the highest test two and test three means. Group one made the same amount of score gain (4.1 words) between test one and test two as did Group five, and a greater gain between test two and test three (1.3 as compared to 0.3 words). Of the groups that received treatment, Groups one through five, only Group three had a mean score decrease on test three from the test two level. Group one had a mean increase of 1.3 words on test three above the test two level. Groups two and four made the smallest mean gains from the test one level to test two, 1.5 and 1.7 words respectively.

The control group, Group six, had a 1.4 word gain above the test one level on test two, and a 0.7 word loss from the test two level on test three. Thus there was no statistically significant difference between mean scores on test one and test three.

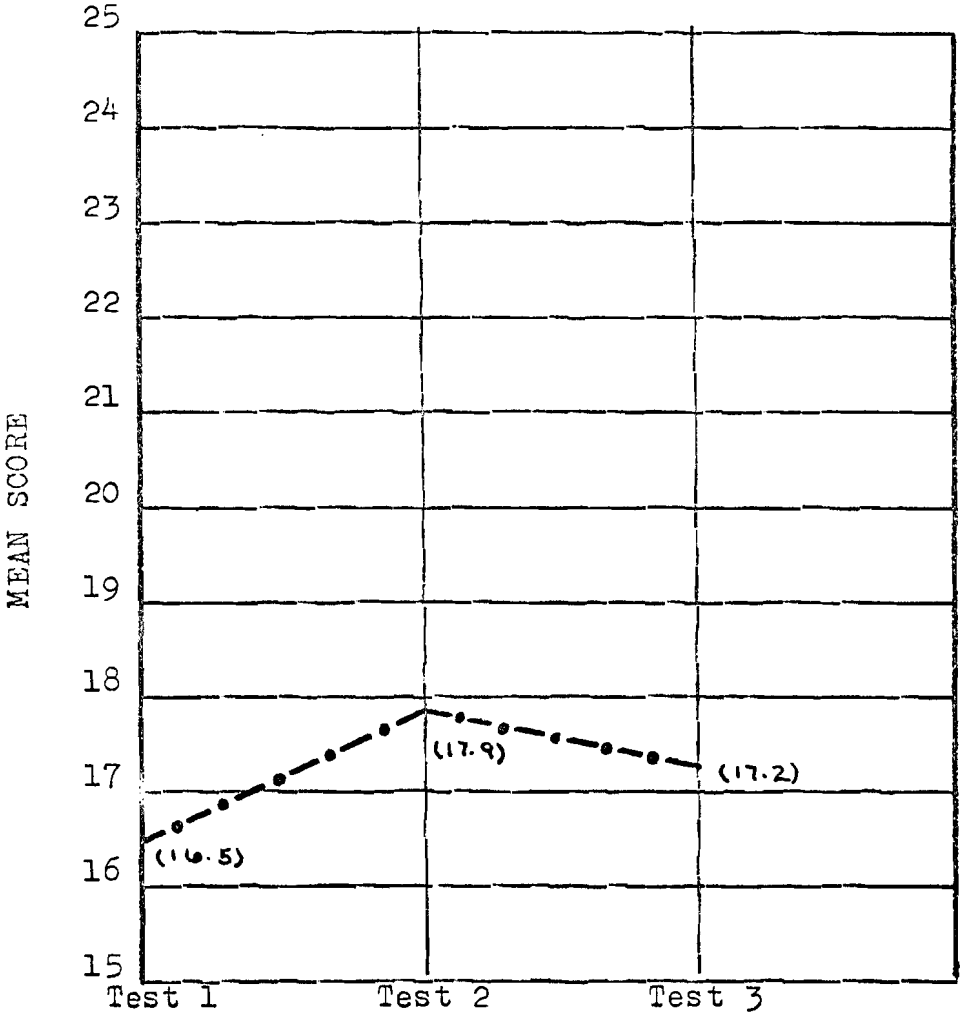


FIGURE 6

GROUP 6 MEAN SCORES ON TESTS ONE, TWO, AND THREE

NOTE: Group 6 was the control group and received no treatment.

There was one level one class and two level two classes in the group.

The number of subjects taking test 1 was 41; test 2 was 41; and test 3 was 25.

The difference between the mean score on test one and the mean score on test 3 was not statistically significant.

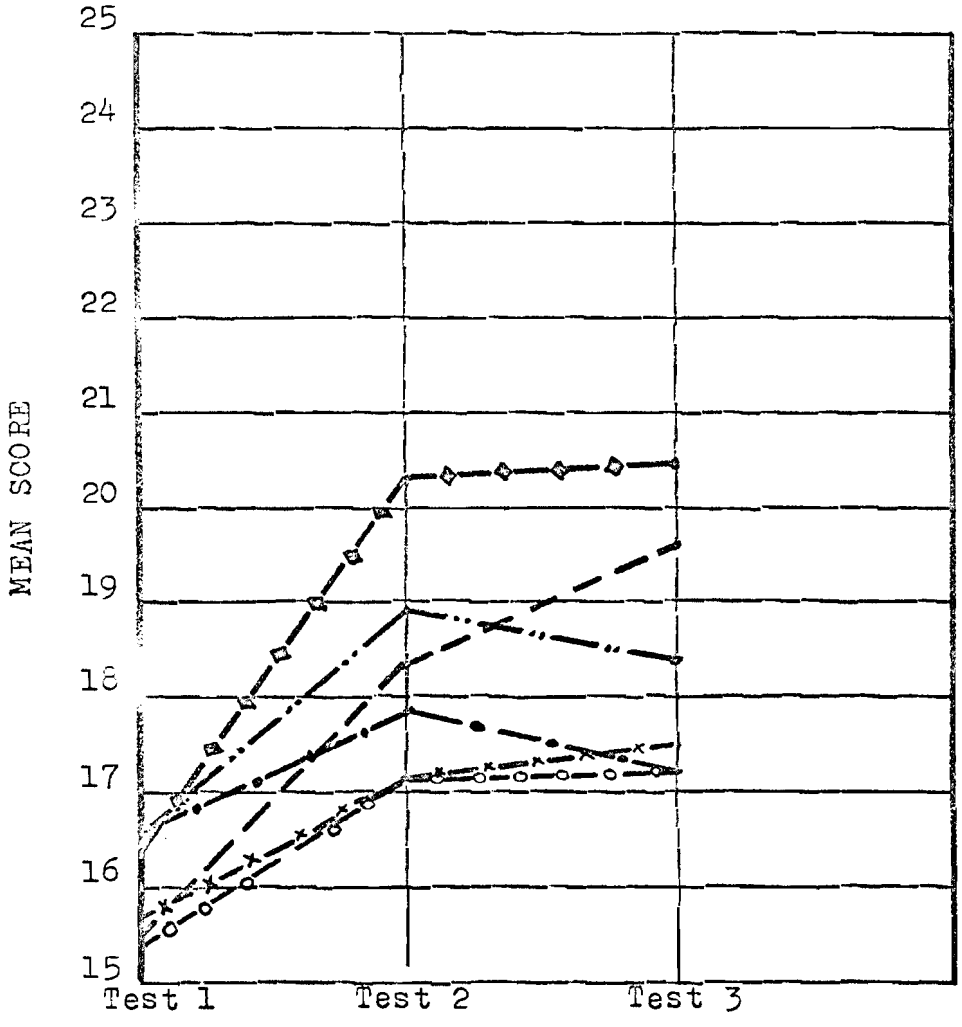


FIGURE 7

COMPARISON OF TESTS ONE, TWO, AND THREE
OF THE SIX GROUPS

LEGEND:

Group 1 - - -
Group 2 - x - x -
Group 3 - .. - .. -
Group 4 - o - o -
Group 5 - ◇ - ◇ -
Group 6 - ● - ● -

The author accepts hypothesis number one, page 5, and fails to accept hypotheses two, three, and four. Hypotheses two, three, and four cannot be accepted because statistically significant differences were found among some of the mean scores.

# CHAPTER VI

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

## Summary

It was the purpose of this study to determine whether storytelling could be an effective method of teaching listening vocabulary to mentally retarded children. The review of literature indicated a need for research in this area for both normal and retarded children, and especially for retardates because many function linguistically lower than their ability would warrant.

Retarded children in levels one and two in various Kansas schools were used in the five experimental and one control group. The controlled variables in the groups were the number and method of presentation of the story. An author made test was used to measure the results of the treatment. The two-sample *t* test was used to make mean comparisons between and within groups in this study.

## Conclusions

In conclusion it was found that all groups which received a treatment made a significant mean score increase between test one and test three except Group five.

Although Group five made a large mean score increase, it was not statistically significant. The author feels this was because of the small number of subjects involved, especially on test three. It was also found that there was no significant increase in listening vocabulary without treatment as demonstrated by Group six.

The five repetitions of the story produced the largest mean score gain as demonstrated by Group one. The repetitions also seemed to increase the children's awareness of the use of the words in their environment, so learning continued after the treatment resulting in a mean score gain on test three, a month after treatment was completed.

From this study it is not possible to determine whether use of one of the storytelling methods (book illustrations, flannel board and characters, finger plays, or puppets) is more effective than another in teaching listening vocabulary. But it was found that only the groups who had been instructed made significant improvement in adding the twenty-five tested words to their listening vocabularies. Group one's continued score increase indicates more repetitions of the story produce longer lasting results. Thus storytelling is one effective method of teaching listening vocabulary to mentally retarded children.

## Recommendations

This study demonstrated the technique of various means of storytelling to teach educable mentally retarded children listening vocabulary. Another study might be conducted using only one of the methods and different stories.

Still another area of investigation might involve matched groups of subjects according to sex, mental age, and chronological age, and IQ rather than using groups as they are in the schools. Or the study could be confined to one level rather than using both levels one and two.

One might also choose to construct a story to tell based upon the words in a standardized vocabulary test such as the Peabody Picture Vocabulary Test.

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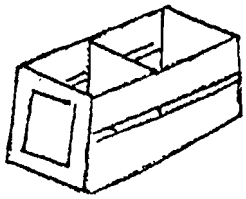
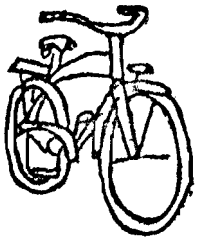
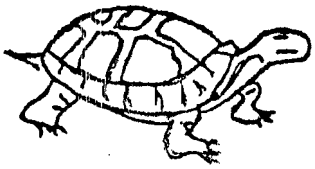
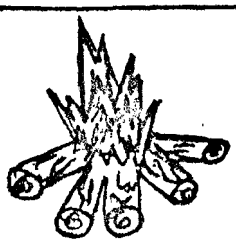
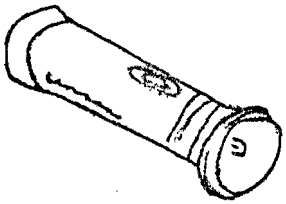
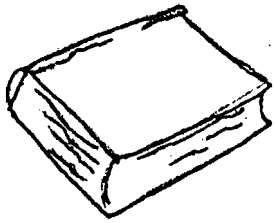
# APPENDIX A

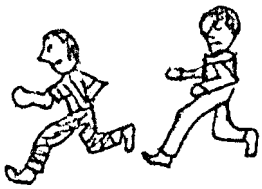
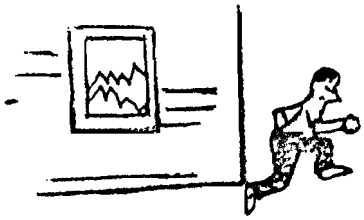


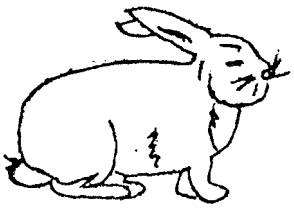
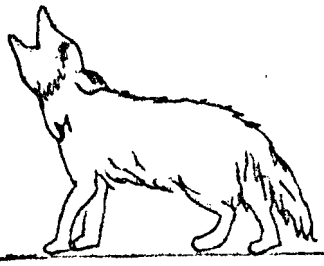
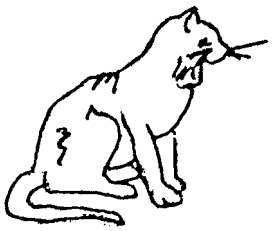


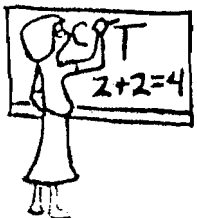





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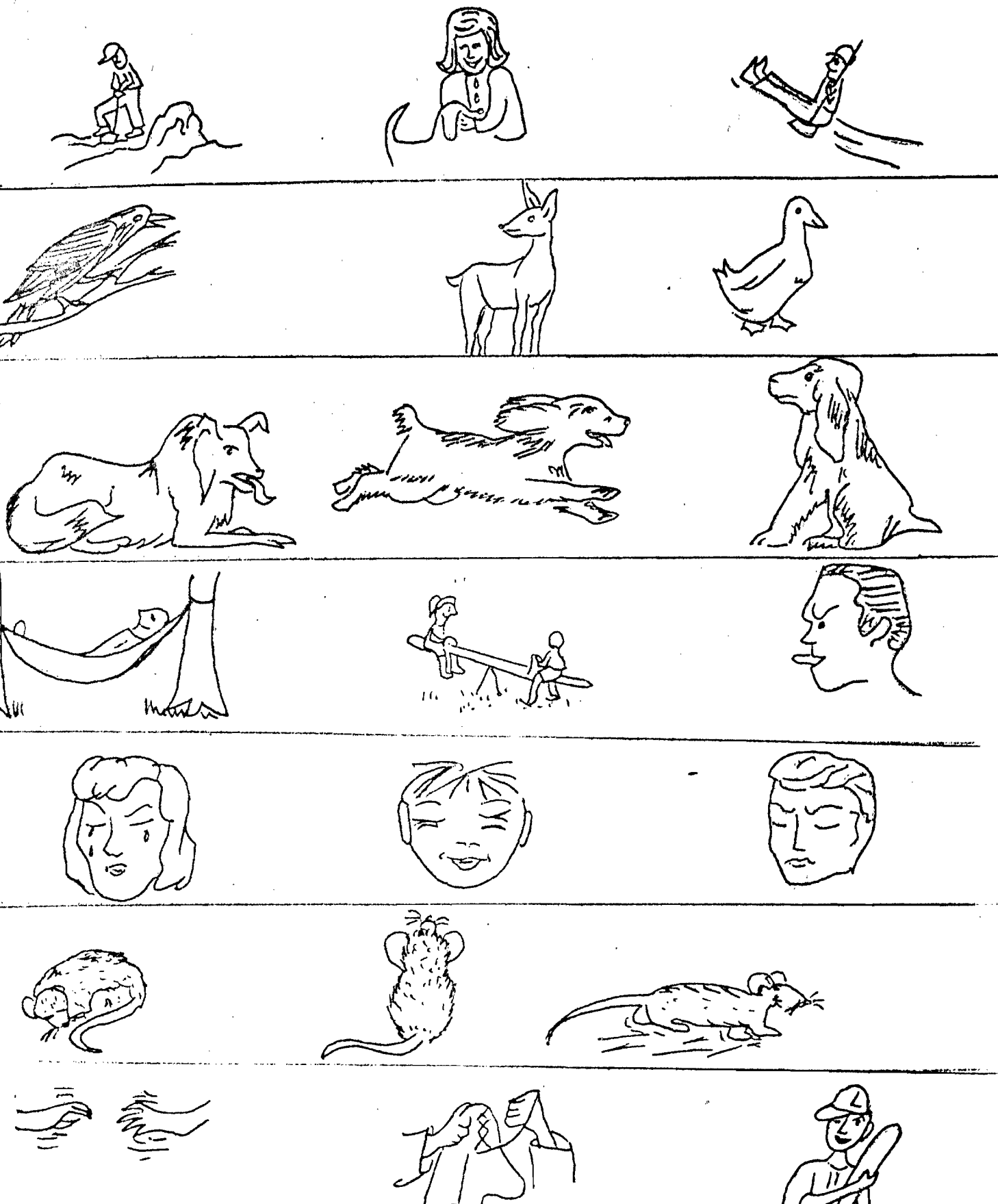

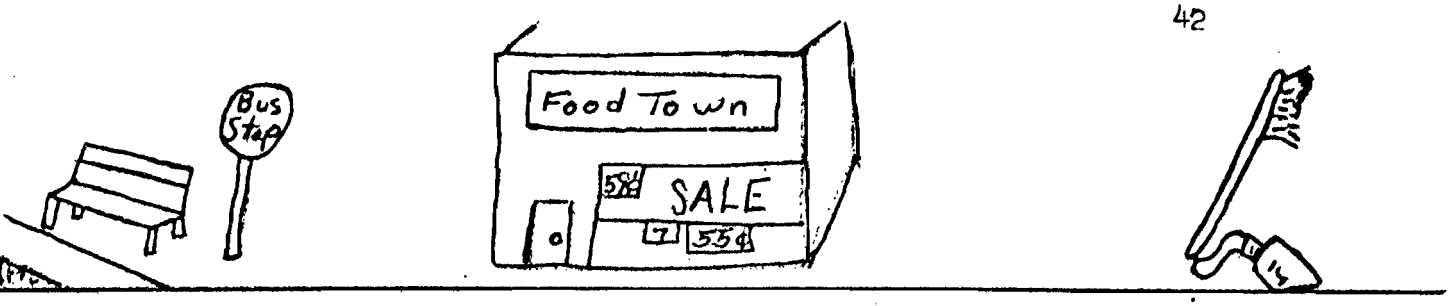
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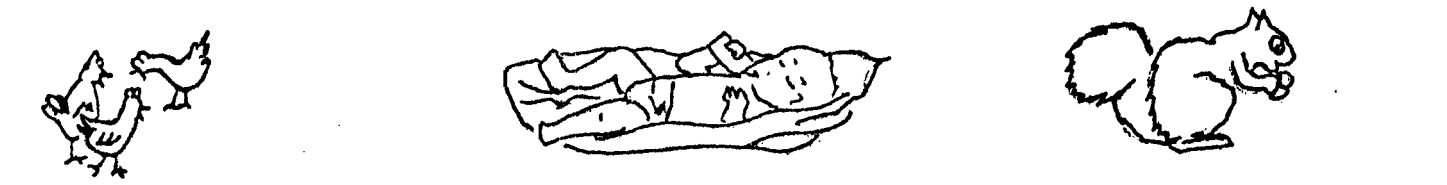

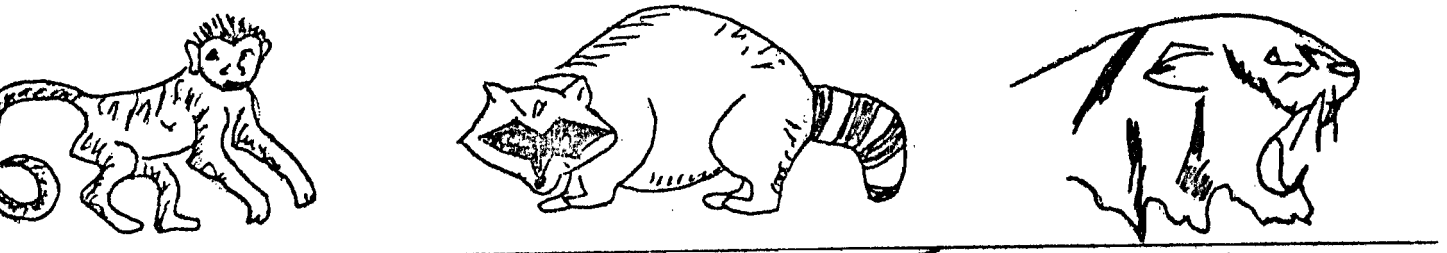

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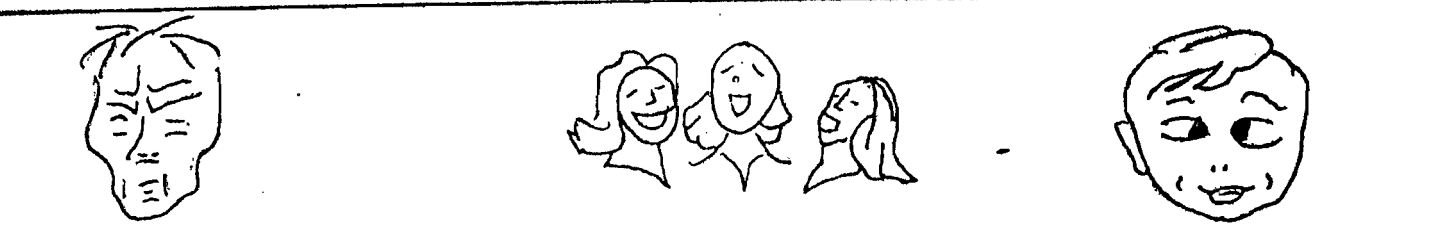
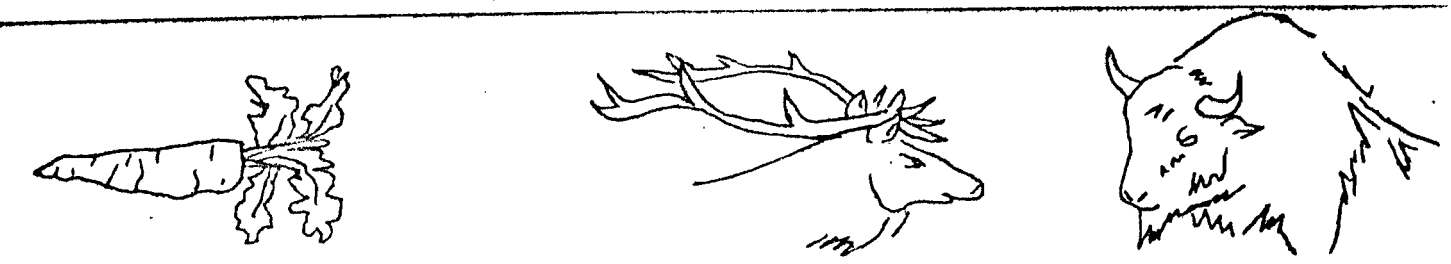
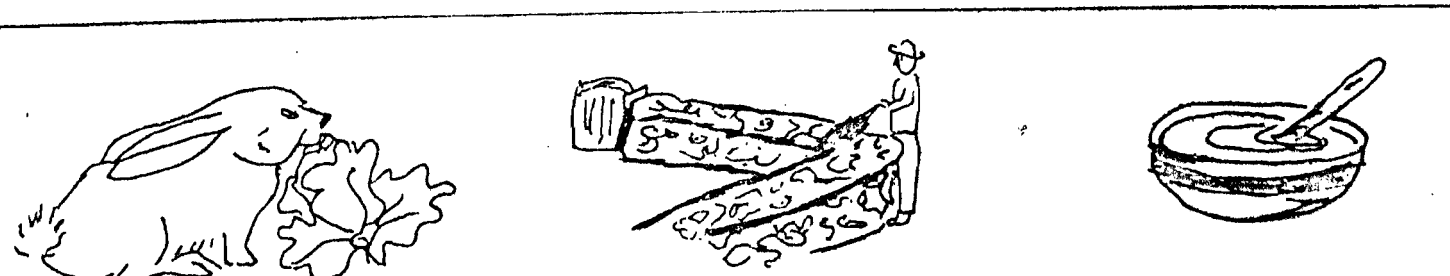






# APPENDIX B

# DIRECTIONS FOR MAKING MATERIALS

Puppets

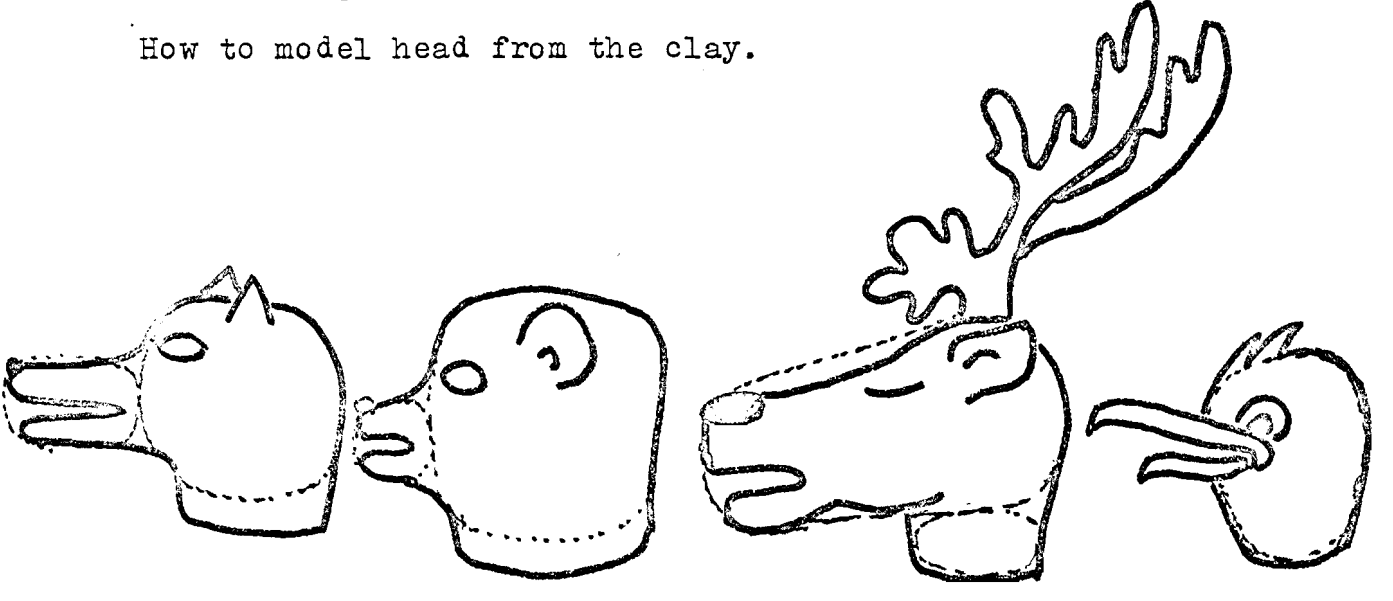
Materials:
Felt
Clay
Newsprint
Wall paper paste
Tempra paint

Method:

Cut body for puppet from felt using the pattern as a guide. Model head of puppet from clay (3 inch ball as base). For paper mache mixture begin by cutting newsprint into 1 inch strips and then tear into small pieces. Mix paste with water until it is creamy. Soak paper in paste until thoroughly saturated; remove paper from paste and remove excess paste as each strip is used. Cover the clay head with paper mache making two or three layers. Let head dry for at least three days. With a sharp knife split the head in half through the ears and remove the clay. Bind the head together with more paper mache mixture and let dry. Sand the heads and paint with appropriate tempra color. Attach head and body by sewing them together.

Color: crow-black, lighthearted wolf-grey-brown (light shade), mother wolf-beige, father wolf-grey, bear-brown, carabou-light brown.

How to model head from the clay.



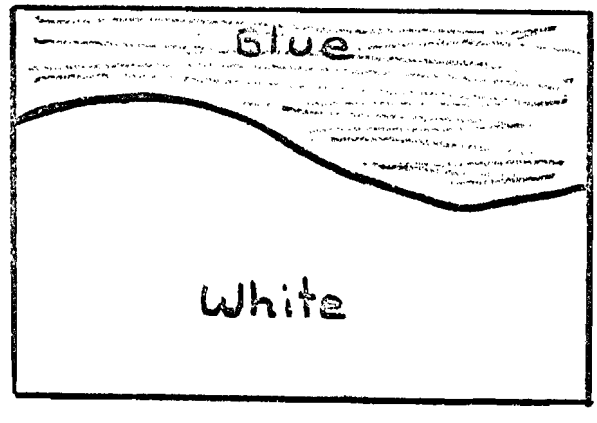
Flannel board

Materials:
Fiber board 2' by 3'
Flannel
  1 and 1/8 yds. of blue (light)
  1 and 1/8 yds. of white
staples or thumb tacks

Method:

Cut white flannel length wise so as to form a 'hill' on the left side of the material. Turn raw edge under and top stitch on blue. Cover fiber board so a snow scene is evident. Attach flannel on back with staples or tacks.

Flannel board characters can be made by drawing the figure on plain white paper, coloring with magic markers or water colors, and laminating. They should be cut out and have pieces of felt glued to the reverse side.



# APPENDIX C

# INSTRUCTIONS FOR PRESENTATIONS

To the Teacher:

As part of my thesis project I have choosen you and your class to participate in one of the control phases. To try to eliminate the effect of a strange person in the classroom, I would like you to tell the story rather than myself.

The pretest is recorded and test papers are included. It should be given the day before you present the story. It might be necessary to arrange children so they cannot see each other work and to remind them they must be very quiet and listen carefully because the tape recorder will not repeat if they should miss instructions.

The presentation of story should be made the following day. Please be familiar enough with the story so you can tell it and not have to read it. It is very important that the story be told as it is written to insure uniformity of material presented. The list of items included and instructions as to their use will be stated later.

The words being tested are: lighthearted, brave, wolf, serious, earn, raven, loping, insulting, chuckling, skittering, nervous, personal, cackling, fierce, stock, crabby, caribou, nibbling, antlers, scowling, somersault, enemy, starve, racing, and astonishing. After you have told the story begin with the word lighthearted and ask someone to tell you what it means. If an accurate definition cannot be given repeat that part of the story which contains it. Continue until all twenty-five words have been discussed. Below I have listed the explanation of the words which I have used in my discussions.

Lighthearted: Means to be free from care and to be gay. William was happy and liked to play. What kind of a face would he have? (happy) What are some of the lighthearted things he did?

Brave: Means not being afraid. Father wolf was a brave hunter. Policemen are brave, can you name others who are brave?

Wolf: This animal is like a wild dog. It is large and lives in the north.

Serious: Means not being silly, really thinking and working. Teachers are serious, good students and people who work are serious.

Earn: Means to work for something. Your father works and earns money. Have any of you earned anything?

Raven: This is a large black bird that is very much like a crow.

Loping: Means running, but not running as fast as one can. What are some animals that can lope?

Insulting: Means calling names, or making faces that would hurt someone's feelings or make them mad. Did William get mad?

Chuckling: Means laughing.

Skittering: Means running. Little animals like mice skitter.

Nervous: When a person is nervous their hands sometimes shake or they tap their fingers and are upset.

Personal: Means belonging to a person or having to do with him. What did William mean when he said to the mouse, "I have nothing against you personally"? Do you have anything that belongs only to you?

Cackling: This is a noise some birds make. Who made a cackling noise in the story?

Fierce: Means being mean. What kind of a voice did William use? Was it friendly?

Stock: Means a lot of food. At home mother puts it in a cupboard or in the icebox, where did the wolves put it?

Crabby: Means being grouchy or cranky. It is not friendly or happy.

Caribou: This is a big four legged animal that has big antlers on his head.

Nibbling: Means eating. What animals nibble their food?

Antlers: There are big dangerous horns on the head. Deer, moose, elk, and caribou have them. They are much bigger than a bull's or buffalo's.

Scowling: Means frowning or having a sour face.

Somersault: Can any of you turn a somersault--have it demonstrated if necessary.

Racing: Means running as fast as you can.

Enemy: This is not a friend. You must watch out for an enemy.

Starve: Means getting very hungry and skinny.

Astonishing: Means very surprising. What did William do that was astonishing or surprising?

After presentation and discussion administer test again exactly as you did the first time. It is not necessary to have children sign their names, but pretests should be kept together and marked; posttests should be kept together and marked also. Mail materials to the next person that evening. Time is a very important factor. We need to keep the materials moving rapidly. The completed tests should be wrapped in heavy paper and mailed to Mrs. Sharon Finuf, 1401 Merchant St., Emporia, Kansas 66801.

Thank you very much for your cooperation in this project. Should material be published I will let you know in which magazine and issue. I sincerely appreciate your help.

Yours truly,

Sharon Finuf

Specific instructions for:

Book - show illustration as story is told

Flannel Board.

As you tell the story use flannel board characters to illustrate the actions. Place the cave, young wolves, and mother at left, the caribou will be to the right. The scene is a snowy hill with blue sky.

Finger plays.

When the children hear the following words or phrases have them do the motions.

Lighthearted - smile

Raven - put hands under arms and flap like wings

Racing - pat knees very rapidly.

Loping - pat knees at medium running speed.

"He fixed the mouse (squirrel or rabbit) with big bad eye..." - lean forward and squint.

"and crept slowly up." - pat knees slowly

"He hit him on the head and ate him up." - hit one fist on top of another, as if it were a hammer, then act as if it were put into the mouth.

Puppets.

The six characters represented are: Mother and Father Wolf, William, Raven, Crabby Caribou, and Grizzly Bear. In order to use the puppets it will be necessary to have a table available to lay them on. Introduce them by name to the class--Mother is beige, William is grey and Father is black. Put William on your left hand if you're right handed and put another character on the right. As the story is told you'll have to change the characters on the right hand as appropriate.

Please return all materials and tests to Sharon Finuf at the Following address:

Mrs. Sharon Finuf

1401 Merchant

Emporia, Kansas 66801

# APPENDIX D

INSTRUCTIONS FOR TEST THREE

To the Teacher,

As a means of measuring retention of gains made in listening vocabulary as a result of the story project, I would like for you to administer the test once more. Administer it in the same manner as before, reminding the children to listen carefully because the recorder will not repeat.

Mark your group of posttests with your name and the level of your class, (one, or two). Since it seems to cost more to return the tests seperately than it does to mail the entire kit because of a special fourth class rating for sound recordings, just put the used tests with identifying information back in the kit and forward it to the next person. The last person can return it to me.

Many of you have sent comments about the materials and your class's reaction, I have enjoyed and appreciated them very much. I also greatly appreciate your cooperation in spending your time and money in helping me with this project. The response makes me very proud to be joining such a group of dedicated, professionally minded teachers.

Sincerely,

Sharon Finuf
1401 Merchant
Emporia, Kansas 66801