THE INFLUENCE OF THREE LISTENING-ENVIRONMENT FACTORS ON LISTENING COMPREHENSION OF FOURTH-GRADE STUDENTS

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THE INFLUENCE OF THREE LISTENING ENVIRONMENT FACTORS ON LISTENING COMPREHENSION OF FOURTH GRADE STUDENTS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

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Denton, Texas

August, 1969
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CHAPTER I

INTRODUCTION

Listening is basic to language development, is the first learned of the language arts, and lays the groundwork for subsequently learning to speak, read, and write (13). Listening is a vital part in the learning process because "it has always been and continues to be the most widely used human means of receiving information" (4, p. v).

In one of the early studies in this field Rankin (10) demonstrated that of the total time spent in communication, listening occupies almost three times as much as reading and four times as much as writing. Wilt (18), in a more recent study, discovered that children spend 57.5 per cent of their school day in one form or another of listening activity. Silverman (14) estimated that the average individual spends approximately 45 per cent of his day listening.

Educators are concerned not only with the quantity of listening that school children must endure but they are even more concerned with the quality of listening that takes place in the nation's schoolrooms. On every school level, the good listener has a distinct learning advantage over the poor listener (6). It appears also that the listening level of most adults is quite low. Nichols (8) found that immediately
after the average adult listens to a short talk, he remembers only about half of what he heard; two months later the listener remembers only 25 per cent of what was said. Stevens agrees that "Unfortunately most of us listen at a 25 per cent level of efficiency" (15, p. 42). This condition exists despite the fact that very little disagreement about the feasibility of teaching listening exists (7).

Great impetus was given to the beginning of a listening movement in 1945, when at the annual convention of the National Council of Teachers of English, a nationwide committee was set up to promote listening as an integral part of the language arts program. Since that time, the teaching of listening has been emphasized and more teachers have attempted to improve pupil's ability to listen. Four basic reasons were given for stressing listening in the schools: (a) listening is the most used of the language arts, (b) it exerts a tremendous influence in life today, (c) it is often poorly done, and (d) evidence suggests that listening habits can be improved through training (2).

General awareness of the importance of listening has increased the attempts to discover more about the listening process. Some research has been directed toward this goal. However, after reviewing the literature in the field, Hampleman (5), among others, found that relatively little research was available on the factors that contribute to listening ability. He stressed the need for more studies of listening, particularly
with elementary school children as subjects. Brown (1) stated that numerous experiments in listening have been done but they have been so inconclusive regarding many aspects of this fundamental skill that the need for further research is great. Devine (3) also reported extensive research in listening but found it to be atomistic, uncoordinated, and repetitive. Russell (12, p. 262) chose the words "sporadic, atomistic, and inconclusive" to describe the listening research on the existence and nature of listening ability.

After reviewing the listening literature, Petty (9) found that more articles on listening were finding their way into educational journals, but

Few of these articles, however, report the results of research—a deficiency that appears to be directly related to the lack of specific knowledge about listening and how the skills of this receptive language activity may be taught (9, p. 574).

Ross summed up the need for further research by saying:

Teachers are constantly being alerted to the importance of helping children listen better. Yet relatively little research is available on the factors that contribute to listening ability (11, p. 369).

In a recent review of research studies in the field of listening, Weiss concluded that "Since a large percentage of one's time is devoted to listening activity it seems important that attention be directed toward a better understanding of how the listening process operates and how listening comprehension can be improved" (17, p. 645).
The present study was directed toward establishing a better understanding of the listening process by investigating the effect that three listening environmental factors have on listening comprehension.

Statement of the Problem

The problem of this study was to determine what effect purpose, background and distractions have on the effectiveness of the listening act.

More specifically the problem was as follows:

1. To determine if being given a specific purpose for listening causes students to listen more efficiently than students who are not given a specific purpose.

2. To determine if receiving background information about the subject of the presentation, prior to the listening act, causes students, who receive such information, to listen more efficiently than students who are not given this information.

3. To determine if children who are distracted when listening comprehend less well than those who are not distracted.

4. To determine if there is any interaction among the three independent variables.

Hypotheses

The following hypotheses were tested by statistical analysis of the data collected:
1. Students who are given a purpose for listening, before the listening act, will have significantly higher listening comprehension scores than those not given such a purpose.

2. Students who are furnished background information prior to the listening experience will score significantly better on a listening comprehension test than students who are not furnished such information.

3. Students who are not distracted while listening will achieve significantly higher listening comprehension scores than students who are distracted.

4. There will be no significant interaction between purpose and background.

5. There will be no significant interaction between purpose and distractions.

6. There will be no significant interaction between background and distractions.

7. There will be no significant interaction among the three main variables: purpose, background, and distractions.

Significance of the Study

Since 1945 when the National Council of Teachers of English began promoting listening as an essential part of the language arts program, teachers have been urged by scores of educational articles to aid children to become more competent listeners. Proof of this statement can be found by examining Dr. Sam Duker's 1964 annotated listening bibliography (4).
This fine work contains annotations of 880 articles and studies directly related to listening. Many of these articles are directed to teachers. For the most part they are concerned with changes which need to take place within students if they are to become better listeners. A few general articles point out how readiness and the listening environment affect listening comprehension. These articles, however, are apparently based on observation, for few experimental studies are cited by the authors to back up the statements made.

The significance of this study was that it investigated specific factors within the listening situation: purpose, background, and distractions, which students cannot directly control. It was an effort to define to what extent the factors themselves determine listening effectiveness. These factors are, for the most part, within the control of teachers.

If no significant difference in listening comprehension is found between students who have a purpose for listening and those who are not told the reason for the listening experience, this study would suggest that the time spent establishing purpose for listening could be spent more profitably in some other classroom activity. If, however, a significant difference is found between these two groups of students, the study would give credence to the theory that purpose is an important part of the listening experience.

If students who were given background material before the listening experience do not score significantly better in
listening comprehension than those who were not exposed to such material, this study would suggest that the value of background material might not be as great as many educators now believe. If, on the other hand, a significant difference is found in favor of background material, the study will lend support to those who believe that background material is essential to the listening act. More attention to listening readiness might then result in better listeners.

If, in this study, no significant difference in listening comprehension is found between distracted students and the non-distracted students, such results would suggest that students can somehow manage to filter out distractions and comprehend listening material despite the unfavorableness of the circumstances. If a significant difference in listening comprehension is found between these two groups, this study would suggest that some means should be found to remove distracting elements from the classroom environment so that better listening could take place. If this is the case, poor listening might more appropriately be blamed on the environment than on the listener.

The study is also significant in that the three listening factors were studied simultaneously rather than separately.

Definition of Terms

For the purpose of this study, the following definitions of terms will be used:
1. **Listening comprehension.**—The individual student's score on a test designed by the examiner over the listening material presented by magnetic tape to twenty-four classroom groups.

2. **Listening.**—The process of hearing, recognizing, and interpreting the spoken word.

3. **Providing a purpose.**—Twelve classes were told prior to the listening act that they would be tested after listening to a taped presentation as part of an experiment which was to determine if some classes within the city listen better than others. Their purpose was to listen for factual information in order to score well, on a test which determined their class ranking in a listening experiment conducted throughout the city. The other twelve classes were not given a reason for listening to the taped material nor were they told in advance they would be tested over the material.

4. **Background information.**—The information that the teacher read to her class to prepare her students for the listening experience. A copy of this material is in the Appendix.

5. **Distractions in the environment.**—Sounds and activities designed to divert attention away from the taped listening material while it was being presented to the classroom group. Twelve of the twenty-four classes were exposed to distractions while listening to the taped story. A distraction plan was devised so that distractions were
held constant. The distraction plan is presented in the Appendix.

Limitations of the Study

This study was limited to the listening performance of pupils enrolled in twenty-four fourth-grade classrooms in a large metropolitan public school system during the spring semester of the 1968-1969 school year. Application of the findings and conclusions may be made only to pupils enrolled in classes similar in composition to those studied.

The study is limited further in that only one measure of the dependent variable was taken.

Basic Assumptions

It was assumed that by the random assignment of classroom groups to the various treatment conditions, there were no other forces operating which gave one class a significant advantage over any other.
CHAPTER BIBLIOGRAPHY


CHAPTER II

RELATED LITERATURE

Many opinions have been advanced to account for the varying degree of listening ability that is found in most elementary school classrooms. Some of these opinions are based upon studies that have been done in the field of listening, but most are based on observation or experience.

Several authors have compiled lists of factors which influence listening. Four major factors were listed by Bird (5): (a) factors in the speaker, (b) factors in the listener, (c) factors in the speech, and (d) factors in the situation.

The St. Paul Public Schools (41) condensed the list of factors which influence listening to three major ones: (a) the physical conditions within the listener and the physical environment in which listening takes place, (b) psychological factors, and (c) the experimental background which some writers call "set."

Wiksell's (47) list is more lengthy. He included (a) an adequate hearing acuity, (b) a recognition on the part of the listener of the problems and obstacles which he must overcome in order to listen effectively, (c) the specific kind of listening situation and the listener's
adaptation to it, (d) the relationship between listening and vocabulary, and (e) the listener's ability to judge what is heard.

Eleanor Johnson (26) suggests yet another list of influencers which affect listening comprehension. Her list, which is more specific, includes maturity level, general ability, experience background, interest, kind of material, motivation, room conditions, the quality of teaching, listening readiness, and established listening habits.

Carpenter not only made a list of influencing factors but made specific suggestions for promoting good listening.

The degree of attention and amount of interpretation which the child can and will exert in listening are related to his purposes. Goals here, as always, are influenced by motivations and interests. These in turn depend on the difficulty of the material, the degree of physical comfort, and the emotional climate in which the listening experience occurs. In fostering effective listening, then, it is important to: (a) control the physical conditions for ease and comfort in listening, especially at first; (b) begin with easy experiences and gradually increase the difficulty; (c) discuss the purposes and techniques of listening before each lesson; (d) work to create the attitude that skillful listening is rewarding fun, and important to growing up (8, p. 26).

Two excellent studies, using college students as subjects, were conducted by Nichols (33) and by Brown (6). Nichols' doctoral study was one of the pioneering efforts to identify factors which influence classroom comprehension. He had 200 college freshmen listen to six ten-minute informative speeches by six different instructors and take objective tests over the material presented at the conclusion
of each speech. The subjects then rated factors which possibly influenced their listening comprehension. The twenty students who earned the highest scores and the twenty students earning lowest scores on the tests were individually interviewed; the instructors of these forty students were also interviewed. Results from standard tests on ten different skills and attributes were assembled for the 200 subjects, and a comparison of these skills and attributes was made with the scores of listening comprehension from the six listening tests previously taken.

1. The evidence from the study indicated that several factors influenced the listening comprehension of the students who took part in the study. These factors were
   a. intelligence,
   b. reading comprehension,
   c. recognition of correct usage,
   d. size of the listener's vocabulary,
   e. ability to make inferences,
   f. ability to structuralize a speech,
   g. listening to main ideas as opposed to specific facts,
   h. use of special techniques while listening to improve concentration,
   i. real interest in the subject discussed,
   j. emotional adjustment to the speaker's thesis,
k. ability to see significance in the subject discussed,

l. curiosity about the subject discussed,

m. physical fatigue of the listener, and

n. audibility of the speaker.

2. There was evidence available which suggested, but did not establish, that other factors influenced the listening comprehension of the subjects. Included were

a. speaker effectiveness,

b. admiration for the speaker,

c. respect for listening as a method of learning,

d. susceptibility to distraction,

e. parental occupation,

f. sex of the listener,

g. room ventilation and temperature,

h. use of only the English language at home,

i. rearing in an only-child home environment,

j. high school scholastic achievement,

k. high school speech training, and

l. experience in listening to difficult expository material.

3. There was evidence to indicate that certain other factors did not importantly influence the listening comprehension of the subjects. These were

a. listener buoyance and optimism,

b. social ease of the listener,
c. family relationships of the listener,
d. self-satisfaction of the listener,
e. economic attitudes of the listener,
f. hearing acuity of the listener,
g. general state of the listener's health,
h. distance of the listener from the speaker,
i. worries of the listener about personal problems,
j. note-taking ability or methods of the listener,
k. previous training of the listener in the subject discussed, and
l. size of the listener's family beyond the minimum of two children.

Brown's (6) study was motivated by the assumption that listening involves a number of sub-skills and attitudes and that if the more important factors involved in listening comprehension could be found, then the technique of teaching listening could be refined. Three questions aroused the curiosity of the writer:

1. How important is the anticipatory set in listening?
2. How important is theoretical interest in listening?
3. How important is word association in listening?

Brown defined anticipatory set as the listener's anticipation of what the speaker will say which he then compares with what the speaker actually says. This anticipation and comparing of expectation with outcome, he hypothesized, causes the listener to pay attention to see if he is right.
Forty-one freshmen students were used in the study and were administered both forms of the Princeton Educational Testing Services listening test. The excerpts of form IA were prefaced by a statement of the purpose of the selection and the listening time required for that selection. The excerpts of form IB were not prefaced by such comments. One half the students were given form IA first; the other half received form IB first.

Thirty-three of the forty-one students made higher scores on the test in which the excerpts were prefaced with comments, two students made the same score, and six made lower scores. The observed difference between the mean scores of the test prefaced by introductory remarks and the scores of the test where the remarks were deleted was statistically significant at the 1 per cent level.

The second part of the study was designed to see if theoretical interest was related to listening comprehension. Test scores of forty-seven freshmen students who took form IA of the Princeton Educational Testing Service listening test and the Allport, Vernon, Lindzey Study of Values test were compared. The correlational results suggested that the theoretical interest of college freshmen was not significantly related to their listening comprehension.

To test the hypothesis that good listeners make more associations with a word than poor listeners do, Brown administered both forms of the Princeton listening test to two
groups of students. In addition, the students listened to a tape recording of forty-five words spaced twenty-five seconds apart. The students were instructed to write during the twenty-five seconds between words as many words as the stimulus word aroused. The word association scores of the better listeners were compared with the word association scores of the poorer half of the listeners. The mean difference was in favor of the better students but was too small to be significant statistically.

Results of Brown's studies suggest that there is little relation between the quantity of word association and listening, little relation between theoretical interest and listening comprehension, and considerable relation between anticipatory set and listening comprehension.

Recurring throughout the literature as causes of poor listening comprehension are three general factors: (a) failure to establish a purpose for the listening act, (b) the lack of previous background information or experience, and (c) some type of distractive force within the environment.

Purpose

Several educational writers cite purpose as a prerequisite to good listening. Barbe and Myers (3) stress the importance of having a different purpose to govern each of the several kinds of listening. They reason that much of what teachers identify as lack of ability and inattention in
children is really failure of both the child and the teacher to identify the purpose for the listening activity. The National Council of Teachers of English (11) agree that when an individual knows what his purpose in each listening situation is and adapts his technique to his purpose, he will improve in listening ability.

Further agreement that purpose governs listening comes from Stodola (44), and Dallman (12). Wittick (48) also agrees but adds that the listener's background, his interest in the topic, and the listening situation itself are determining factors also.

Elwell (19) lists purpose as one of her ten criteria for setting up a favorable climate for listening in the classroom. She cautions teachers to include definite purposes and standards for listening when they plan listening lessons. When teaching the lessons, definite purposes for listening should be established in much the same way that purpose is established for silent reading lessons.

In its 1952 report, the Commission on the English Curriculum of the National Council of Teachers of English offered much the same advice to teachers. This report stated that "Purposeful listening demands both motive and a consciousness of purpose on the part of teachers and pupils" (10, p. 333).

In a study by Kelly (28), experiments were conducted with several types of groups to determine the effects of "testing set" on listening comprehension of adult subjects.
Some groups of subjects were unaware that they were to be tested over orally presented material until after the presentation. Subjects in other samples were told in advance that they were to be tested. In two out of three experiments the subjects who received advance warning that they were to be tested over orally presented material produced statistically significant improvements in listening comprehension (.05 and .01 levels).

Background

Furnishing a background for the listening material is another factor which several authorities believe is essential to good listening comprehension. Some authors prefer to use the terms "readiness" or "mind-set" when discussing children's previous background of experience or knowledge.

In studies with college students Nichols (34) found that in listening training courses, listening ability improved when people were given an outline of the talk before it was made. From her study on the influence of interest and set on listening effectiveness, Karraker (27) found that the chances are about three to one that experience will lead to interest rather than disinterest.

Several writers urge teachers to provide children with the necessary background or readiness for each listening activity. Berry (4), Dallman (12), and Strickland (45) suggest that the introduction should catch and stimulate children's interest.
Dallman (12) advises that the child who lacks experience background is not likely to be greatly interested in a large variety of listening experiences. This is also the opinion expressed by a curriculum bulletin of the St. Paul Public Schools (41) which states that a lack of interest may be the result of little or no experience in the area in which listening takes place.

Concerning readiness, Dawson and Dingee (13) state that when important listening is eminent, the teacher has a real job in bringing children to a receptive mood. The material must be suited to their maturity and partially familiar through previous experiences. She must see that the children have a purpose for listening which will cause them to do the kind of listening that will be involved. Children listen best when they know that what they hear will be put to immediate use in some enterprise.

Distractions

In considering distractive forces within the listening environment, Silverman (43) found that lighting, ventilation, noise from the outside, pictures and displays in the room all affect listening. Dawson and Zollinger (14) advise teachers to provide a classroom environment conducive to easy listening by shutting out noises from hallways and playgrounds, seeing that pupils' desks are free of attention-distracting materials, avoiding the use of unseemly gestures, and developing a pleasant voice.
Anderson and Frackenpohl (2) suggest that uncomfortable room conditions and loud background noise adversely affect listening. Wittick (48) recommends that teachers can improve the efficiency of classroom listening by eliminating distractors. Anderson (1) agrees with her. Dallman (12) advocates relative quiet, a comfortable position, and proper temperature for good listening. She cautions, however, that in this age of mass communication children need to develop in ability to listen even if complete silence does not characterize the background for the listening situation.

In listing the physical conditions for good listening, Strickland (45) included a relaxed, quiet atmosphere; a comfortable physical setting; and a minimum of distraction. Taylor (46) used the term "masking" to denote a condition in which the message to which the subjects listened is made less audible by the superimposition of other sounds. He believes that in the classroom, background noise and nearby conversation can have the effect of masking the voice of the speaker. For this reason noise should be kept to the minimum. Many improvements, he thinks, can be made in listening by careful consideration of the quality of the listening climate.

Another opinion submitted by Taylor is that binaural hearing enables the listener to keep separate two or more sound sources. When the average listener is in the presence of two or more conversations he should be able to direct his attention to one conversation, suppress the others, and shift
his attention from one to the other. This ability to separate sound sources and shift attention should enable listeners to keep messages straight. The less capable listeners have difficulty doing this. They are also more easily distracted than the more advanced students.

Dawson and Dingee (13) suggest that children sometimes become irritated by distracting noise. When this happens they fail to hear much of what is said. The National Council of Teachers of English (10) believe, however, that children in school must learn to work in one part of the classroom while talking is going on in another part.

In describing an attentive listener, Duker (17) said that the listener must be able to be sufficiently selective in his listening to shut out extraneous noises, audience disturbances, and other distractions. When Nichols compared good and poor listeners he found that

Good listeners make quick adjustments for any personal hearing disability; for poor room ventilation or temperature; for problems arising through noisy neighbors; for unnecessary room noises which distract attention. Poor listeners are inclined to tolerate or even create distractions which needlessly impair listening efficiency (34, p. 277).

This same thought was expressed even more strongly in another statement by Nichols when he said:

Poor listeners find some talk "too hard to listen to" so they turn their thoughts to pleasant subjects of their own. Good listeners do not tolerate distractions if something can be done about them. If nothing can be done to lick the distractions then they mentally shut out the distractions and turn full attention to the talker (35, pp. 111-112).
The review of the literature uncovered only one study that was somewhat similar to the study under consideration. Charles Lindseys' (29) study had for its purpose the determination of the effects of certain interruptions upon intermediate grade pupils' listening comprehension when listening to teachers read stories to the class.

The subjects involved were 210 fourth-, fifth-, and sixth-grade pupils divided into control and experimental groups and equated on the basis of mental age and reading age. In the first part of the investigation the control group listened to the reading of stories without interruptions, while the experimental group listened to the same stories with common elementary school interruptions. Pupils were interrupted by (a) music being played over the public address system in an adjoining room, (b) two announcements being made over the public address system, and (c) pupils entering and leaving the room for the purpose of delivering messages. After listening to each story the groups were immediately administered a multiple-choice test designed to measure the pupils' comprehension of the stories. The same tests were administered a week later to estimate delayed recall of the story content.

In the second part of the investigation the group roles were reversed. New stories were read and the children were again tested as before.
Using the equivalent group method for comparing the means of any two groups of test scores, Lindsey found:

1. The effect of listening to a story while music was being played continuously in an adjoining room when compared with a story heard without the interruption depended more upon the interest level of the story than on the interruption.

2. The two interruptions for announcements over the public address system did not adversely affect listening comprehension.

3. The effect of interruptions by pupils entering and leaving the room while a story was being read to the class depended more upon the interest level of the story than on the interruptions.

The results imply that, in general, pupils' listening comprehension is more dependent upon the interest level of the material presented, except where the interruption is continuous, than upon the interruption.

Theoretical Literature

Over a period of several decades careful study by psychologists has identified a number of factors which influence the quantity and quality of learning. Some of those factors, especially those related to learning set, are relevant to the present study.

Garry concluded, from a review of experiments with teaching procedures, that thirteen general statements could
be made about learning. Only the first three are pertinent to this study.

1. **Establish a predisposition to learn.** If the learner sees purpose in what he is learning and has some knowledge of the value of the task, he will pay attention and learn more. Attitude is a generalized set. Lack of confidence, dislike of school or teacher, and failure to find value in assignments unfavorably affect children's efforts to learn.

2. **Clarify the task; define the purpose.** The learning situation should be such that unnecessary errors are avoided. Errors which contribute to knowledge of results may help, but those which result from confusion only produce more confusion.

3. **Provide a model, a demonstration, verbal guidance, and cues.** A demonstration of the skill provides a model to be simulated; verbal guidance and cues help the learner direct his effort by informing him of what to do and how to do it (22, p. 76).

Burton listed twenty-two general principles of learning upon which psychologists generally agree. Three of these are similar to the previous statements made by Garry.

1. The learning situation is dominated by a purpose or goal set by the learner, or accepted by him, and should lead to socially desirable results. The purposes and goals arise in the life of the learner.

2. The learning situation, to be of maximum value, must be realistic to the learner, meaningful, and take place within a rich and satisfying environment.

3. The learning experience, initiated by need and purpose, is likely to be motivated by its own incompleteness, though extrinsic motives may sometimes be necessary (7, p. 105).

Gagne and Bolles concluded from the evidence they gathered that

... there are few principles which can be directly applied to the problem of making learning
efficient. The findings concerning the nature of the learning process in human beings are primarily suggestive for the problem rather than productive of verified practical rules for the control of conditions of efficient learning. . . . On the other hand, our review of the factors in efficient learning shows us that there are quite a number of these factors which may, in any given situation, be manipulated to affect learning efficiency (21, pp. 50-51).

The authors concluded that efficiency of learning depends upon (1) the individual who does the learning, (2) the nature of the task to be learned, and (3) the conditions under which learning occurs.

Most theorists seem to agree that in learning the individual must actively seek some goal or incentive. There must be present in the human subject a conscious intent to learn (40).

Sawrey and Telford agree with this statement and assert that

Next to the intellectual level of the learner, the most important factor influencing the rate of learning is the attitude with which the student approaches the learning task. . . . Dozens of experiments and hundreds of incidental observations have demonstrated the enormous advantage of an active, aggressive attitude with a high level of concentration as contrasted with a passive, listless attitude and its accompanying low level of concentration (42, p. 179).

In a study by MacDougal and Smith (31) the subjects were instructed to repeat over and over to themselves a list of thirteen nonsense syllables that were presented to them one at a time. Under these conditions, with no particular intent to learn, from eighty-nine to 100 trials were required
for the students to master the list. When these same students were given another list with instructions to learn it in the shortest possible time, from nine to thirteen repetitions were sufficient for mastery.

Another study which illustrates this point was done by Myers in 1913 (40). Subjects were instructed to count the number of O's distributed among letters printed in color on colored paper. When asked later what other letters were present, what color they were, and on what color paper they were printed, their answers showed that they had learned little of the material to which they had been exposed without instruction to learn.

In studies by Postman and Senders (39), and Postman and Adams (38), it was found that when no specific instructions were given, the subjects attained only a general comprehension of the material. When exact instructions were given about what to learn, they learned what was specified in the instructions.

Caswell and Foshay (9) state that economical and effective learning require that the learner have a definite purpose for learning which he believes that he can achieve. Though it is probably of greater importance in complex life-like situations, experiments have shown it to be of great significance in limited and artificial settings.

One such study was made by Peterson (36) who had the members of a class copy twenty words from the blackboard
which they believed would be used later in an experiment. After writing the words, the subjects were directed to turn the page and write as many of the words as they could recall. The class was then given another list of words of equal difficulty and were told that they would be required to reproduce the words. On the second test the students recalled 22 per cent better than on the first, and after forty-eight hours the recall of the words used in the second trial was 50 per cent better. The difference was attributed to having a purpose for learning.

Another important factor affecting the efficiency of learning, according to Ruch (40), is teacher guidance. The problem for teachers is how much guidance helps learning most? Too much guidance kills student initiative, and too little guidance leaves students to flounder and waste time. It has been found that guidance, when given early, can help establish correct habits from the start. Such guidance may include pointing out general principals and identifying errors. In addition to making certain that students understand underlying principles, the teacher can help them learn by relating new knowledge to what is already known.

Many studies employing both meaningful and nonsense materials have demonstrated clearly that the rate of verbal learning depends greatly upon the meaningfulness of the material. In Lyon's 1914 study (30), a group of subjects learned 200 nonsense syllables, 200 single digits, 200 words
of meaningful prose, and 200 words of meaningful poetry. The
meaningful prose and poetry were learned more readily than
either the nonsense syllables or the digits. Dowling and
Braun (16, p. 226) found that as meaningfulness decreases,
more trials are required for learning and there is more
variability from trial to trial.

Some writers group certain of the factors discussed
above under the title "learning set." Most agree that set
is important to learning although the research is somewhat
contradictory and many types of set have been suggested (18).

Thorndike listed "set or "attitude" as his second
subordinate law. This principal states that learning is
guided by a total attitude or set of the organism. The
attitude or set determines what the person will do and what
will satisfy or annoy him (24, p. 21).

Woodworth, who had been interested in the concept of
"set" since the days of his early experiments on imageless
thought, introduced in 1937 what he called "situation-set"
and "goal-set." The situation-set refers to adjustments
to environmental objects, while the goal-set refers to "the
inner 'steer' which gives unity to a series of varied but
goal directed activities" (50, p. 338).

Several older studies on learning set support McGeoch's
statement that "instruction and set to learn are more effec-
tive for learning than is the set merely to observe"(32,
p. 224). He cites three studies. Milhall discovered in
his 1915 study that sorting materials with intent to memorize the material is greater than sorting without it. Wohlgemuth found that forms and colors observed under instruction to assume a passive attitude are learned less well than when observed under instruction to learn. Maso gave subjects twelve pictures of objects and a like number of cards with the names of the objects but in a mixed-up order with reference to the pictures, and instructed them to match the pictures and the names. The control subjects were given the already matched pictures and names and were told to examine them attentively. The experimental group, which had to search for the answers, learned more than the control group which was more passive.

Woodworth (50) found evidence to support the belief that specific instructions and sets exercise a very specific influence on the subject's learning. He read a list of twenty pairs of unrelated words to adults and instructed them to learn the combinations so that the second word could be recalled when the first was given as a stimulus. The subjects were tested in this way after three repetitions of the list, but were also tested by being given the second word of a pair and asked to give the first word of the following pair. The second words, which they had been instructed to learn, were recalled in 74 per cent of the cases. The first member of the next pair, which they were not specifically told to learn, had only a 7 per cent recall. The subjects
reported that they tried to connect the members of each pair and had neglected to learn the sequence of the pairs because they did not consider it important.

The formation of conditioned responses has been shown to be influenced by set. Grant (23), who instructed subjects to assume an expectant attitude and await the stimuli, found that formation of conditioned eyelid responses was more frequent and more stable than when the instruction was to adopt a passive attitude.

Wittrock (49) investigated the influence of set on student teaching. He defined set as referring to the temporary influence upon the behavior of student teachers, which was produced by certain verbal statements designed to make explicit a particular teaching objective. An experimental group of student teachers, matched with a control group of student teachers, was told that their final course grade depended upon the gain that their secondary school students made on standardized tests given as pretests and posttests. It was hypothesized that this set to teach for pupil gain would result in a change in the teacher's behavior which would produce greater pupil gain than would a comparable procedure without this set.

The difference of the scores between pretest and posttest for the experimental and control groups was in favor of the experimental group as predicted (p<.001). Some negative effects were noted upon the attitudes of one group
of secondary students toward one of the subjects taught to them. Wittrock concluded that by making goals evident and explicit the behavior of teachers can be changed, but sometimes the changes bring about undesirable effects upon the attitudes of the students.

From his study of set, Wittrock identified six forms of set: motor set, learning set, response set, task set, methods of problem solving aroused by directions or by problem situations, and goal set. Though there has been much research in psychology on set, he noted that comparatively little attention had been given to it in education, although teachers give sets to children almost daily.

An effort was made in the present study to use competition as a factor in establishing purpose for listening. Two studies, one by Hurlock and another by Maller give credence to the theory that competition and rivalry helps motivate learning.

Hurlock (25) divided 155 fourth- and sixth-grade pupils into matched rivalry and control groups and compared their progress in learning addition. The rivalry subjects were subdivided into two competing groups. Each day, for five days, the names of the members of the winning group were posted and read aloud at the beginning of the next practice period. The gains and the average scores of the rivalry group each day exceeded those made by the control group who had no special motivation.
Mailer (20), divided 814 pupils in grades five to eight into groups which allowed him to test (1) no special motivation, (2) individual competition for a special prize, and (3) group competition for a class prize. Both of the latter groups performed better on addition exercises than did the group with no special motivation. The subjects working for an individual prize did better than those working for a group prize.

In summary, the preceding review of the listening literature suggested that many factors influence listening comprehension but general agreement is lacking as to which specific factors are most important. There is little empirical evidence available, yet, for the most part, articles on the teaching of listening emphasized classroom environment, setting purposes, providing background material, and the importance of eliminating distractions. It is obvious, then, that many of the leading authors in the field of listening believe these factors to be important determinants of listening comprehension.

The research literature on learning is very extensive and contains many research studies. The small sample included in this chapter considers only those aspects of learning which are important to the present study. These include (1) a predisposition to learn, (2) a definite purpose for learning, (3) teacher guidance, (4) meaningfulness of the assignment, (5) an active attitude, and (6) learning
set. All of these are basic considerations of learning because they influence the rate and quality of the learning that takes place.
CHAPTER BIBLIOGRAPHY

1. Anderson, Harold, "Teaching the Art of Listening," 

2. Anderson, Lorena and Helen Frackenpohl, "Listen My 
   Children and You Shall Hear," Reading Newsletter 
   XXVI, Huntington, N. Y., Educational Development 

3. Barbe, Walter B. and Robert M. Myers, "Developing Lis-
   tening Ability in Children," Elementary English, XXXI 
   (February, 1954), 82-84.

4. Beery, Althea, "Listening Activities in the Elementary 
   School," Elementary English, XXIII (February, 1946), 
   67-69.

5. Bird, Donald E., "Bibliography of Selected Materials 
   About Listening," Education, LXXV (January, 1955), 
   327-333.


7. Burton, William H., "Basic Principles in a Good Teaching-
   Learning Situation," Readings in Educational Psychology, 
   edited by Harold W. Bernard and Wesley C. Huckins, 

   The Instructor, LXXV (December, 1965), 26-27, 46.

9. Caswell, Hollis L. and A. Wellesley Foshay, Education in 
   the Elementary School, New York, American Book Company, 
   1950.

10. Commission on the English Curriculum of the National 
   Council of Teachers of English, Language Arts for 
   Today's Children, New York, Appleton-Century-Crofts, 
   1954.

11. Commission of the English Curriculum of the National 
    Council of Teachers of English, The English Language 


CHAPTER III

METHODS AND PROCEDURES OF THE STUDY

Description of the Population

The subjects involved in this study were 692 fourth-grade children enrolled in six public schools of a large metropolitan school system in north-central Texas during the school year of 1968-1969. The subjects represented the total number of children in attendance in the twenty-four classrooms on the days the various class groups were tested. The schools involved in the study were selected from high-middle socioeconomic areas of the city by a committee of advisors with special knowledge of the city.

Fourth-grade children were chosen for these reasons:

1. The nature of the experiment demanded that the twenty-four classroom groups be as alike as possible. For this reason only one grade-level was used.

2. In his experimental study on listening attention, Farrow (8) found that the listening attention of fourth-grade students was significantly inferior to that of fifth- and sixth-grade students. This suggested the likelihood that fourth-grade children might be more strongly affected by listening-environment factors than would older intermediate-age children, and this would, in turn, accent any possible differences between the groups studied.
3. Due to their rather limited backgrounds, taped listening material was available on a subject which was unfamiliar to most fourth-grade students.

Procedures for Conducting the Study

The basic experimental design employed was a two by two by two factorial with unequal cell frequencies. By using a table of random numbers, the twenty-four classrooms selected for testing were equally distributed among the eight different treatment conditions generated from this factorial design, with three classrooms assigned to each treatment. Each of the eight groups thus formed listened to a twelve-minute-taped dramatization about the Constitutional Convention of 1787 under a set of conditions that differed from each of the other groups.

Three listening-environment factors were examined.

1. The effect of having a purpose for listening was examined. One half of the classes were given a reason for listening to the dramatization and were told that they would be tested afterward. For the other students a purpose for listening was not established nor were they told they would be tested over the material.

2. The importance of establishing a background before listening to orally presented material was studied. Background material about the Constitutional Convention was read to four of the treatment groups but not to the other four.
3. Distractability of the students was tested. One half of the classes were exposed to several distractions during the listening experience; the other half were kept as free from distractions as possible.

The eight listening conditions were as follows:

Group I was given a purpose (reason) for listening to the taped dramatization, was furnished background information about the subject, but was subjected to distractions on the tape and to common classroom distractions as well.

Group II had a purpose for listening, received no background information, and was subjected to the distractions.

Group III was not given a purpose, received background information, and was distracted.

Group IV did not have a purpose for listening, received no background information, and was distracted.

Group V had a purpose for listening, received background information, but was not distracted.

Group VI had purpose but no background, and was not distracted.

Group VII did not have a purpose, received background information, but was not distracted.

Group VIII received neither purpose nor background, and was not distracted.

The eight treatment conditions are shown in Figure 1.
After listening to the taped story, "A Mighty Document" from the Look What We Found Series of the Minnesota School of the Air, the subjects were asked to respond to a twenty-item, four-option, multiple-choice test. The test was especially constructed for this study to determine the subjects' comprehension of the story content after listening to the taped material.

The investigation was conducted during the month of February, 1969, at the convenience of the schools involved in the study. As the experiment was carried out in each school, all the fourth-grade classrooms in that school were tested.
simultaneously. This was necessary because some classrooms were not given a reason for listening to the story and were not told in advance that they were to be tested after hearing the taped dramatization.

Each of the twenty-four teachers involved in the study was provided with a packet which contained

a. directions for conducting the study,
b. test answer sheets,
c. a sheet of distraction procedures (where applicable),
d. background information sheets (where applicable), and
e. a copy of the appropriate tape.

Two kinds of magnetic tape were provided: distracted and non-distracted. Distracted tapes contained several sounds designed to draw student attention away from the story content. For two-thirds of the tape an almost inaudible sound was superimposed over the dramatization. This did not prevent students from hearing the story but was a nuisance to them. Several other sounds were put on the distracted tapes. Six coughing sounds were scattered throughout the story. Two door slams, a slight bell clang, five seconds of a softly whistled tune, and five gentle taps on the microphone were other background sounds that could be heard. None of these were loud enough to interfere with the students' ability to hear but were provided to distract the listeners' attention.

The non-distracted tapes were clear reproductions of the original tape.
The twelve distracted classrooms were not only subjected to extraneous material on the tapes but were also exposed to three typical classroom distractions. Two minutes after the tape began a sixth-grade child opened the classroom door, entered the room, and delivered a 3" x 5" card to the teacher. She accepted the card, looked at it, and silently thanked the messenger. This was accomplished without any exchange of words. Four minutes later the school principal tapped the microphone of the school intercom system with his finger three times, paused for one second, then tapped it three more times. The expected announcement, however, was not made. Four minutes later another sixth-grade child vigorously rapped five times on the door. When the teacher answered his summons, she whispered briefly to him then closed the door. These actions, which were carried out with the tape running, did not interfere with the students' ability to hear the story. No audible sounds were exchanged between teachers and message carriers. The vigorous raps on the door were delivered during musical portions of the story.

The twelve non-distracted classrooms were kept as free from distractions as possible. The listening environment varied, however, for some received a purpose for listening and/or background information while others received neither.

The teachers of the twelve classrooms which received background material read to their students the "Background Material" information found in the Appendix. The other
twelve classrooms did not receive any information prior to the listening act.

The teachers of the twelve classrooms which received a purpose for listening to the taped material read to their students the following:

Next year you will study American history and since the subject is studied in the fifth grade we don't talk about it very much in the fourth grade. However, we do want to expose you to some history from time to time so you can build up a background of knowledge about the subject.

Today I am going to play a short tape about the Constitutional Convention of 1787, then I will give you a test over the taped material to find out how well you understood what you heard. This is an experiment that is being tried out in several schools to find out if some classrooms listen better than others.

In the classrooms which were not given a purpose for listening to the tape, the teacher was instructed to set up the recorder in front of the class, start it, and retire to the back of the room until the dramatization was finished. She then passed out the answer sheets, which had been kept out of sight, and announced the test.

Development of the Test Instrument

Because the subjects had to be tested in order to determine the degree of comprehension each had of the story content and since no standardized testing instrument was available for this purpose, a suitable test instrument had to be devised. The first step in developing the test instrument for this study was to find a way to establish the validity of the test.
Leona Tyler in discussing test validity said:

If we intend to use a test to measure achievement rather than aptitudes a different kind of validity evidence becomes relevant. The main question is whether the content of the test really samples the subject matter in question. We can tell something about this by examining the questions. But we also need to get information about how the items included in the test were selected and who did the selecting (14, p. 59).

She then outlined five steps in constructing a sound educational test.

1. Set up a committee of competent teachers to discuss the testing problems and come to some conclusions about what is to be measured.

2. Once this agreement is reached and a working outline is derived, clear, fair, and meaningful test items should be written.

3. Once the items have been written, a trial test should be administered to several hundred people of the proper age or class for which the test is intended.

4. The responses to each test item are then tabulated, and from these tabulations, indexes of difficulty and discrimination are derived.

5. Once a satisfactory set of items has been assembled, the testmaker must explore reliability and express it as a reliability coefficient, or standard error of measurement.

An advisory committee consisting of three competent fourth-grade teachers, four central-office elementary consultants, and two central-office administrators was formed.
All members of this committee served on some phase of the test construction process, but none served on every phase due to the difficulty of getting such a busy group of people together at one time.

Specifications for the test and a preliminary test outline were written. Decisions were made as to the best form for the test and the most effective way of insuring complete coverage of the material.

The multiple-choice type test was selected for several reasons (10, 7):

1. The multiple-choice is the most valuable and the most widely applicable type of test item.
2. It is highly objective in scoring.
3. It is not difficult for pupils to use and understand.
4. It can be readily scored.
5. It is adaptable to a wide variety of subject matter.
6. Multiple-choice items are less open to guessing than alternate-response items. Correction for chance is not necessary when four or five alternatives are provided for each item.
7. It is well adapted to measuring understanding, discrimination, and judgment.

All of the applicable suggestions made by Cook (7, pp. 1469-1470) for constructing multiple-choice items were followed. He advised:
1. Only one type of multiple-choice item should be used in the same section of a test.

2. Use at least four or five possible responses in order to minimize chance successes.

3. Arrange the correct response to occur in the same position not more than two or three times in succession.

4. Make the first, second, third, and fourth possible response the correct one in about equal numbers.

5. Guard against any tendency to make the decoys so plausible, even to superior students, that they will result in a negatively discriminating item.

6. Use the direct question form when possible because it is less likely to be ambiguous and is the most natural form for the pupil.

7. Avoid wording statements in such a way that clues are provided through word matching, grammatical consistency, or textbook phraseology.

Members of the advisory committee were given written copies of the narrative material which was used in the study and were asked to write enough suitable four-option, multiple-choice test items to cover the material.

Eighty-nine test items were submitted by this group. From this list of proposed items, a twenty-eight item test was devised. This test was administered to 317 fourth-grade students in four of the city's schools.
An item analysis of each test item was done and indexes of difficulty and discrimination were derived. Item difficulty was determined by the formula:

\[ P = \frac{Nr}{Nt} \]  

(100)

where

\( P \) = percentage of pupils who answer the test item correctly,
\( Nr \) = number of pupils who answer the test item correctly, and
\( Nt \) = number of pupils who attempt to answer the test item. (2).

Since a range from 30 per cent difficulty to 70 per cent difficulty is considered acceptable for a well-developed test, these minimum and maximum limits were accepted for this study (1, 12).

In order to find out which of the twenty-eight items discriminated between the superior students and the inferior students, the discriminating power of each test item was determined. Students who scored in the upper 27 per cent on the test were compared with those who scored in the lower 27 per cent. This percentage and the formula that follows were suggested by Ahmann and Glock (2).

\[ D = \frac{U-L}{N} \]

where

\( D \) = index of item discriminating power,
\( U \) = number of pupils in the upper group who answer the item correctly,
L = number of pupils in the lower group who answer the item correctly, and
N = number of pupils in each of the two groups.

With the maximum size of the D-value being +1.00 and the minimum value being -1.00, Ahmann (1, p. 37) suggests that in a well-developed achievement test, more than 50 per cent of the test items should have D-values exceeding +0.40; less than 40 per cent should have D-values between +0.40 and +0.20; and less than 10 per cent should have values between +0.20 and 0. There should be, of course, no negative values.

When the twenty-eight test items were compared with the above criteria, only ten items were acceptable. A further item analysis of the distractors used in the unacceptable test items caused ten of the items to be discarded and eight to be modified. Eight new items were selected by the test committee, and these, along with the ten proven test items and the eight modified items from the first trial test, were assembled into a second trial test.

The second trial test was administered to 253 fourth-grade students in three additional city schools. Again test-item difficulty and an index of item discriminating power were computed for each of the test items. On the basis of this evidence, six items were eliminated from the test, leaving twenty items for the final form of the test to be used in the study.
Table I shows the index of item discriminating power and the test-item difficulty for the twenty-item final form of the test that was used in the study. It will be noted that all items have D-values of +0.40 or higher, with a mean of +0.54. This exceeds the previously mentioned standard for a well developed achievement test which was proposed by Ahmann.

The table also shows that the P-values obtained for this final form of the test were within the 30 per cent minimum and 70 per cent maximum limits set down by Ahmann (1) and by Payne (12). Since the obtained P-value range of 31 per cent to 65 per cent meets this criterion, the index of difficulty for the final form of the test was acceptable.

Determining Validity of the Test Instrument

The five steps outlined by Tyler for constructing a sound educational test, which were listed on page 48, were followed in constructing the test instrument used in this study. A committee of competent school people was set up to act as advisors in carrying through the various stages of building the test instrument. The testing problems were discussed and decisions were made as to what was to be tested. Types of tests were considered and agreement was made to use the four-option multiple-choice test. Items were submitted by several committee members and twenty-eight items were selected from this list and assembled into a pre-test, which
### TABLE I

**INDEX OF ITEM DISCRIMINATING POWER AND TEST-ITEM DIFFICULTY OF THE TWENTY-ITEM FINAL TEST OF LISTENING COMPREHENSION**

<table>
<thead>
<tr>
<th>Test Item Number</th>
<th>Total Number Marked Correctly</th>
<th>Number Marked Correctly By Upper 27% (68)</th>
<th>Number Marked Correctly By Lower 27% (68)</th>
<th>Index of Item Discriminating Power</th>
<th>Index of Test Item Difficulty</th>
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<tr>
<td>1</td>
<td>116</td>
<td>39</td>
<td>15</td>
<td>0.44</td>
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<td>2</td>
<td>162</td>
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<td>25</td>
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<td>65%</td>
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<td>58</td>
<td>22</td>
<td>0.45</td>
<td>55%</td>
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<tr>
<td>4</td>
<td>142</td>
<td>61</td>
<td>14</td>
<td>0.63</td>
<td>56%</td>
</tr>
<tr>
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<td>78</td>
<td>34</td>
<td>8</td>
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</tr>
<tr>
<td>6</td>
<td>123</td>
<td>54</td>
<td>15</td>
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<td>7</td>
<td>96</td>
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</tr>
<tr>
<td>8</td>
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<td>10</td>
<td>0.60</td>
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<td>84</td>
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<td><strong>46.65%</strong></td>
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</tbody>
</table>
was administered to 317 subjects. Indexes of difficulty and discrimination were derived from the responses and only ten items were accepted. Eight items were modified, ten additional items were written, and another pre-test, containing twenty-six items, was assembled. This test was administered to 253 additional subjects and new indexes of difficulty and discrimination were determined. Twenty of the twenty-six items were found to be acceptable according to the criteria set down by Ahmann (1) and by Payne (12). The last step, exploring reliability of the final set of items, was taken and is discussed in the next section.

In her discussion of validity, Tyler concluded:

"Content validity rests on the whole set of procedures used in planning and constructing the test . . . if sound decisions about what is to go into the test have been made all along the line, content validity is insured (14, pp. 67-68).

Every effort was made while constructing the test instrument used in this study to follow Tyler's suggestions "all along the line" in order to insure validity.

Smith (13) recommends that the criterion of internal consistency can be used where no external criteria are available for validating a test. This procedure involves the administration of a large number of tentative test items and then using, in the final selection, only those items which distinguish between the subjects with high scores and those with low scores. Green, Jorgensen, and Gerberich (10) refer to this method as "a means of determining the validities
of individual items" and believe that it pays significant dividends in improved pupil measurement if followed.

This method was also one of Tyler's suggested steps and was done for both pre-tests. Only items with a +0.40 discrimination index or higher were used in the final form of the test.

Because the suggestions of Tyler, Smith, and Green, Jorgensen, and Gerberich for validating a test were followed, it is believed that content validity was achieved.

Determining Reliability of the Test Instrument

The second pre-test, which contained twenty-six test items, was re-scored as a twenty-item test. The six unacceptable test items discussed on page 52 were eliminated and the scores of the 253 subjects who took the twenty-six item test were recomputed. These adjusted scores were then used to determine the reliability of the test instrument.

Statistical analysis of the test data revealed the following information:

1. The raw scores ranged from one to nineteen.
2. Mode = 7.0.
7. $\pi pq = 4.84$. 
The Kuder-Richardson Formula 20 was applied to this data in order to obtain a statistical estimate of the reliability of the final form of the test instrument. This formula estimates test reliability on the basis of consistency of pupil performance from item to item within the test and for this reason is considered to be a very precise method (2, p. 321; 12, p. 138). Borg states that "Formula 20 is considered by many specialists in educational psychological measurement to be the most satisfactory method of determining reliability" (5, p. 86).

The K-R formulas are not only precise, but they generally yield a lower reliability coefficient than would be obtained by other methods (5). Mehrens (11), in fact, states that K-R 20 coefficients are never overestimates.

Payne (12) expresses the Kuder-Richardson Formula 20 as

$$ r_{tt} = \sqrt{\frac{k}{k-1}} \sqrt{\frac{S_{X}^2 \Sigma pq}{S_{X}^2}} $$

where

- $k$ = the number of items in the test,
- $p$ = the proportion of examinees answering item correctly,
- $q = 1-p$, and
- $S_{X}^2$ = the variance of the total test raw scores.

With twenty items in the final form of the test, a variance of 16.60, and a $\Sigma pq$ of 4.84, application of the formula produced a reliability of .75. Since Kuder-Richardson reliability values as low as .70 are considered acceptable for
a single educational test, the .75 estimate or reliability of the twenty-item final form of the test was accepted as reliable for this study.

Treatment of Data

The data for this study were obtained from the twenty-item multiple-choice test which was administered to 692 subjects in February, 1969. After the test answer sheets were graded, the raw scores were put into frequency distributions by treatment groups. The experimental data were then analyzed by analysis of variance using the least squares solution for unequal cell frequencies described by Winer (16). The tenability of the hypotheses was decided by F tests, which determined the main effects of the independent variables. A significance level of P .05 was required for rejection of the null hypotheses.
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CHAPTER IV

PRESENTATION OF THE FINDINGS AND
ANALYSIS OF RESULTS

This study was concerned with the influence that purpose, background, and distractions have on listening comprehension of fourth-grade students. Twenty-four classrooms of children, evenly divided into eight treatment groups, were tested for listening comprehension after hearing a taped dramatization. Each of the eight treatment groups was exposed to a different combination of the three independent variables. It was predicted that children who had a purpose for listening would score better on the listening test than children who did not have a purpose for listening; that children who had background information about the subject would comprehend better than those children who did not have this information; that distractions in the listening environment would negatively affect listening comprehension. It was also postulated that there would be no interaction among the independent variables.

The cell data for the eight treatment conditions are recorded in Table II. The summed raw scores (ZX) for each cell are the total number of correct responses recorded by the subjects in that cell on the listening comprehension test that was constructed for the study. In addition to the number of
subjects (N) and summed raw scores for each cell Table II also contains the mean (M) and standard deviation (SD) for each treatment combination, and the combined means for the three main variables.

**TABLE II**
NUMBER OF SUBJECTS, SUM OF THE SCORES, MEANS, AND STANDARD DEVIATIONS FOR THE EIGHT COMBINATIONS OF FACTORS; AND THE COMBINED MEANS OF THE MAIN VARIABLES

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Background Distractions</th>
<th>No-Background Distractions</th>
<th>Combined Means for Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>92</td>
<td>79</td>
<td>87</td>
</tr>
<tr>
<td>SX</td>
<td>613</td>
<td>999</td>
<td>944</td>
</tr>
<tr>
<td>M</td>
<td>6.66</td>
<td>12.65</td>
<td>6.80</td>
</tr>
<tr>
<td>SD</td>
<td>2.76</td>
<td>3.20</td>
<td>2.65</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No-Purpose</th>
<th>Background Distractions</th>
<th>No-Background Distractions</th>
<th>Combined Means for No-Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>77</td>
<td>93</td>
<td>84</td>
</tr>
<tr>
<td>SX</td>
<td>504</td>
<td>915</td>
<td>962</td>
</tr>
<tr>
<td>M</td>
<td>6.55</td>
<td>9.84</td>
<td>6.91</td>
</tr>
<tr>
<td>SD</td>
<td>2.87</td>
<td>3.81</td>
<td>3.02</td>
</tr>
</tbody>
</table>

Combined Means for Background-No-Background 8.93 9.00
Combined Means for Distractions 6.73
Combined Means for No-Distractions 11.20
It will be noted in Table II that the number of subjects in the eight treatment cells were unequal. This did not affect the data but did determine the method for analyzing the data.

A comparison of the mean scores of the Purpose-No-Purpose cells revealed a very slight difference of .11 in the Background-Distractions cells and a larger difference of 2.81 in the Background-No-Distractions cells. Both differences were in favor of the Purpose groups. The reverse effect was found when the mean scores of the No-Background-Distractions and the No-Background-No-Distractions groups were compared. The differences of .11 and .60, though small, favored the No-Purpose groups.

A comparison of the Background mean scores with the No-Background mean scores of the individual cells favored the No-Background groups in three of the four comparisons. The single exception, the Purpose-No-Distractions difference, was also the largest difference found (1.80). The mean difference between the Purpose-Distractions groups was .14, between the No-Purpose-Distractions groups was .36, and between the No-Purpose-No-Distractions groups was 1.61, all in favor of the No-Background students.

The mean scores of the No-Distractions students were greater, in every instance, than the mean scores of the Distructions students. The Purpose-Background difference of 5.99 was the greatest difference found in all the various
comparisons. The Purpose-No-Background difference was 4.05, the No-Purpose-Background difference was 3.29, and the No-Purpose-No-Background difference was 4.54.

The combined means for the Purpose groups was greater than the combined means of the No-Purpose groups by only .55. The difference between the combined means of the Background-No-Background groups favored the No-Background groups by .07. The No-Distractions combined mean score exceeded the Distractions mean score by 4.47.

In order to determine if the observed differences between the various groups were significantly different, the experimental data presented in Table II were analyzed by analysis of variance using the least-squares solution with unequal cell frequencies described by Winer (24). A summary of the analysis of variance is presented in Table III.

The seven hypotheses which were tested by this study are represented, in numerical order, in Table III by the capital letters P, B, D, PB, PD, BD, and PBD. P in every case represents Purpose, B stands for Background, and D designates Distractions.

In all seven cases, the degrees of freedom were one and 684. To be significant at the .05 level, under these conditions, required an F ratio of 3.84. A ratio of 6.64 was required for significance at the .01 level.
TABLE III
ANALYSIS OF VARIANCE OF THE EFFECTS THAT PURPOSE, BACKGROUND, AND DISTRACTIONS HAVE ON LISTENING COMPREHENSION

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Purpose</td>
<td>25.625</td>
<td>1</td>
<td>25.625</td>
<td>.041</td>
</tr>
<tr>
<td>B Background</td>
<td>0.568</td>
<td>1</td>
<td>0.568</td>
<td>.001</td>
</tr>
<tr>
<td>D Distractions</td>
<td>3,349.997</td>
<td>1</td>
<td>3,349.997</td>
<td>5.339*</td>
</tr>
<tr>
<td>PB</td>
<td>81.171</td>
<td>1</td>
<td>81.171</td>
<td>.129</td>
</tr>
<tr>
<td>PD</td>
<td>78.102</td>
<td>1</td>
<td>78.102</td>
<td>.124</td>
</tr>
<tr>
<td>BD</td>
<td>4.740</td>
<td>1</td>
<td>4.740</td>
<td>.008</td>
</tr>
<tr>
<td>PBD</td>
<td>182.272</td>
<td>1</td>
<td>182.272</td>
<td>.290</td>
</tr>
<tr>
<td>Within Cell (Error)</td>
<td>429,165.827</td>
<td>684</td>
<td>627.435</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>432,888.305</td>
<td>691</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant at P < .05.

Effect of Purpose on Listening Comprehension
It was stated in Hypothesis 1 that students who were given a purpose for listening before the listening act would have significantly higher listening comprehension scores than those students not given such a purpose. The findings shown in line P did not support this hypothesis. It was noted in the data pertaining to Hypothesis 1 in Table III that the F ratio was not significant. Pupils who were given a purpose for listening to the taped dramatization did not do significantly better on the listening test than pupils who were not
given a reason for listening to the taped material. The small difference between the two groups was in favor of the subjects who had a purpose for listening.

Both the listening literature and the theoretical literature espouse the need for establishing purpose as a prerequisite for the contemplated act. Stodola (21), Dallman (4), Wittick (25), Elwell (9), and the National Council of Teachers of English (3) agree that purpose governs listening. The findings of the present study did not bear out this claim.

In Kelly's study (14), subjects who were told before listening that they would be tested over the material did significantly better on two of the three tests given. In the present study there was no significant difference found between those who were told in advance that they would be tested and those who were not given this information.

The students who were in the Purpose groups were encouraged to do their best because the listening comprehension mean score would be compared with the mean scores of other classes from various parts of the city. This was an effort to use competition between groups as a factor in establishing purpose for listening. Though the studies of Hurlock (12) and Maller (10) indicate that competition does spur learning, it did not appear to do so with the subjects tested. However, Maller found that group competition was rather weak in comparison to individual competition; perhaps the group incentive
method was insufficient to produce a significant difference between fourth-grade groups of subjects.

Effect of Prior Background Information on Listening Comprehension

The prediction was made in Hypothesis 2 that students who were furnished background information prior to the listening experience would score significantly better on a listening comprehension test than students who were not furnished such information. The data in Table III, line B, did not support this hypothesis. The F ratio was not significant and the hypothesis was rejected. The observed mean difference between the Background and No-Background groups, though unimportant in size, was in favor of the No-Background group.

These findings, like those for purpose, are not what would be expected from the listening literature. Karraker (13) found in her study that background experience leads to interest in a topic. The listening ability of Nichols' (16) subjects improved when they were given an outline of the talk before it was made. Several writers, notably Berry (1), Dallman (4), and Strickland (22), advise that experience background promotes interest.

The learning literature also leads one to expect that having prior background material should cause subjects to be more successful. Garry (11) urged that learners be provided a model, a demonstration, verbal guidance or cues. Burton (2)
advocated that the learning situation must be realistic to the learner. Meyers' (20) study illustrated the importance of instructions to the subjects. The Postman and Senders (19) and Postman and Adams (18) studies verified Meyers' findings.

Lyon's (15) study demonstrated that the rate of verbal learning depended upon the meaningfulness of the material. Dowling and Braun (7) corroborated Lyon's work when they found that as meaningfulness decreased, more trials were required for learning.

Numerous writers have studied and written about the importance of "set." Though there is apparently no agreement among them as to the definition of set, all agreed to its usefulness in promoting efficient learning.

Effect of Distractions While Listening on Listening Comprehension

It was postulated in Hypothesis 3 that students who were not distracted while listening would achieve significantly higher listening comprehension scores than students who were distracted. The F ratio in line D of Table III for Distractions-No-Distractions (F = 5.339, df = 1, 68) was greater than the 3.84 required for significance at the .05 level of confidence. Since the difference in mean scores was in favor of the non-distracted students in every case, Hypothesis 3 was accepted.

These findings are in agreement with the listening literature and, at the same time, are in disagreement. Several
writers (6, 25, 22, 5) stressed that distractions should be eliminated from the listening environment in order to increase listening efficiency. As expected, the mean scores of the non-distracted students were significantly higher on the listening test than those for the distracted students.

Disagreement between the literature and the study findings is found in the opinions of Taylor (23), Duker (8), and Nichols (17). Taylor opined that when in the presence of two conversations, the binaural hearing of the average listener enables him to shift his attention from one conversation to another, suppressing one while attending to the other. This ability should also allow him to eliminate some distractions. Duker describes an attentive listener as one who is sufficiently selective in his listening to shut out distractions. Nichols stated that good listeners adjust to poor conditions, while poor listeners tolerate or even create distractions.

A review of the individual listening scores of the distracted and non-distracted students of the present study confutes the opinions expressed above. Of the 349 students who were distracted, only one had a score as high as fifteen on the twenty-item listening test, and only thirty-eight had scores above ten. In comparison, of the 343 students who were kept as free from distractions as possible, one had a score of twenty, 195 scored over ten, and forty-eight had scores above fifteen. Assuming that there were some good listeners in all
the classes tested, it would appear that the good listeners did not, or could not, shut out the distractions or adjust to the unusual conditions imposed upon them.

Interaction Between Purpose and Background

It was stated in Hypothesis 4 that there would be no interaction between purpose and background. The $F$ ratio on line PB of Table III was not significant, and the findings supported the null hypothesis of no difference.

Interaction Between Purpose and Distractions

The prediction was made in Hypothesis 5 that there would be no interaction between purpose and distractions. The $F$ ratio on line PD in Table III was not significant, and the null hypothesis of no difference was accepted.

Interaction Between Background and Distractions

It was stated in Hypothesis 6 that there would be no interaction between background and distractions. The data in Table III supported this hypothesis. The $F$ ratio on line BD was not significant, and the null hypothesis of no difference was accepted.

Interaction Among the Three Main Variables

Hypothesis 7 predicted that there would be no interaction among the three main variables: purpose, background, and distractions. The $F$ ratio on line PBD in Table III was not significant, and the findings supported the null hypothesis of no difference.
The data of the study supported five of the seven hypotheses presented. Of the three factors studied, only distractions was found to have a significant effect on listening comprehension. Having a purpose for listening and receiving background information prior to the listening experience did not significantly affect listening comprehension of the students who were tested. For the most part the study findings did not agree with the literature cited in Chapter II. Agreement was found with some of the literature regarding the destructive effects that distractions in the listening environment have on listening comprehension.
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CHAPTER V
SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS
AND RECOMMENDATIONS

Summary

The problem of this study was to determine what effect purpose, prior background information, and distractions have on listening comprehension.

The subjects were 692 fourth-grade children enrolled in twenty-four classrooms in six public schools in a large metropolitan school system located in north-central Texas. The twenty-four classrooms of students were randomly assigned to eight different treatment conditions with three classrooms in each treatment group. Each of these eight groups listened to a twelve-minute taped dramatization about the Constitutional Convention of 1787 under conditions which differed from those for all other groups.

One half of the classes were told, before listening to the tape, that they would be tested over the material after the listening experience, and were given further reasons for listening. The other classes were not told why they were being exposed to the taped material and were not told beforehand that they would be tested over the material at the conclusion of the story.
Background material about the Constitutional Convention was read to four of the eight treatment groups before they listened to the taped material. The other four groups did not have the benefit of this background information.

One half of the classes were subjected to distractions on the Constitutional Convention tape and to common classroom distractions as well. The other classes were kept as free from distractions as possible.

After listening to the taped dramatization, the subjects were asked to respond to a twenty-item, four-option multiple-choice test which was especially constructed for the study to measure the subject's comprehension of the story content.

The investigation was conducted during the month of February, 1969. All the fourth-grade children who were in attendance on the day their school was scheduled were tested simultaneously.

The magnetic tape to which twelve of the classrooms listened had some aural distractions recorded on it. With the tape playing, the students in these rooms were also subjected to (a) a child entering and leaving the room to deliver a message, (b) a silent message delivered to the teacher after her attention had been gained by a rapping on the classroom door, and (c) six tapping sounds heard over the school's intercommunication system. The other classrooms were kept as free from distractions as possible.
Because no standardized testing instrument was available to measure the subjects' listening comprehension of the taped material, such an instrument had to be developed. Leona Tyler's five steps for constructing a sound educational test were followed in order to achieve test validity.

An advisory committee was formed, which helped establish the test outline and contributed test items. A trial test consisting of twenty-eight multiple-choice items was assembled from the eighty-nine test items which were considered. This test was then administered to 317 fourth-grade students who were in attendance at four of the city's schools.

Indexes of difficulty and discrimination were derived for each test item. When Ahmann's criteria for difficulty and discrimination was applied only ten of the twenty-eight items were found to be acceptable. These ten items, plus eight others which were modified, were put into a new pre-test. Eight new items were selected and this twenty-six item test was administered to 253 additional fourth-grade students. After item difficulty and discriminating power were computed, twenty items were found to be acceptable and became the final form of the test which was used in the present study.

All items in this final test had discriminating values of +0.40 or higher with a mean of +0.54. Since the item difficulty values ranged from 31 per cent to 65 per cent, all were within the 30 per cent minimum and 70 per cent maximum
limits advocated by Ahmann and by Payne. The mean P-value was 46.65 per cent.

An estimate of the reliability of the final form of the test instrument was determined by the Kuder-Richardson Formula 20. A reliability coefficient of .75 was obtained and was accepted because K-R reliability values as low as .70 are considered acceptable for a single educational test.

After the test answer sheets were graded, the raw scores for the 692 subjects were put into frequency distributions by treatment groups. The experimental data were analyzed by analysis of variance using the least-squares solution for unequal cell frequencies described by Winer. A significance level of P≤.05 was required for acceptance or rejection of the hypotheses.

Findings

1. It was expected that students who were given a purpose for listening prior to the listening act would have significantly higher listening comprehension scores than those students not given such a purpose. The findings did not support this hypothesis.

2. It was predicted that students who were furnished with background information prior to the listening experience would score significantly better on a listening comprehension test than students who did not have this advantage. Analysis of the data revealed no significant difference between the groups examined.
3. Students who were not distracted while listening were expected to achieve significantly higher listening scores than students who were distracted. A significant difference between the groups was found and the difference did favor the non-distracted subjects. The difference was significant at the .05 level of confidence.

4. It was postulated that there would be no interaction between purpose and background, and no significant interaction was found.

5. No interaction was expected between purpose and distractions, and none was found.

6. The prediction was made that there would be no interaction between background and distractions, and the data revealed no significant interaction between the two variables.

7. It was also maintained that there would be no interaction among the three main variables: purpose, background, and distractions; and, again, no significant interaction was found.

Conclusions

Based on the data presented in this study and within the limitations of this study, the following were concluded:

1. Having a purpose for listening does not appear to increase the listening efficiency of fourth-grade students to a significant degree.
2. Reading background information to the subjects before a listening exercise does not seem to significantly affect the subjects' listening comprehension.

3. Distractions in the listening environment do significantly decrease the listening efficiency of fourth graders.

4. There is no significant interaction among the three main variables.

Implications

The results reported in this study suggest that there is little relation between purpose for listening and listening comprehension of fourth-grade children. A similar statement can be made about the relation between prior background material and listening comprehension. The results, which do not agree with the opinions expressed by the writers cited in Chapter II, imply that the time spent in establishing a purpose for listening and in building background for the listening experience is largely wasted unless it is more adequately done than it was in this study.

The findings further imply that distractions in the listening environment may be the most serious deterrent to learning in the elementary school classroom, especially among younger elementary-age children. The findings show that the mean test scores for non-distracted students were higher than the mean scores for distracted students in every instance.

The type of distractions that was used was typical classroom distractions. There was inaudible background noise
on the tape to simulate the usual classroom background noise that comes from the playground and from within the room. The interruptions by children entering the room or knocking at the classroom door and the interruption from the intercommunication system happen frequently in many schools. Despite the commonness of the distractions, the students who were distracted did less well than those who were not distracted. This implies that fourth-grade students have not, as yet, learned to adjust to distractions.

The impact of distractions on listening comprehension also emphasizes the need for better acoustical equipment in schools. Such equipment would include classroom and hall carpeting, acoustical tile, and air-conditioning.

Other distractive noises which could be eliminated are school bells and messages delivered over the school intercommunication system. The latter, especially, should be used only in emergencies.

Recommendations

While the evidence gathered in this study seems to support the argument that distractions in the listening environment do adversely affect listening comprehension to a significant degree, the effect of purpose and background is far from clear. Future research should include

1. studies to investigate the effect of purpose, using a more appropriate or a better defined purpose for the listening experience;
2. studies designed to investigate the effect that prior background material has on listening comprehension, using background material that is more stimulating than the material used in the present study;

3. studies which would compare the effects of aural distractions with visual distractions;

4. studies similar to the present investigation, but using older children, to determine, and compare, the distractability of children in higher grades;

5. studies which compare the effects of the various forms of distractions used in the study to determine which distracts children the most; and

6. studies which would determine to what extent listening centers and carrels counteract distractive forces in the listening environment.
DISTRACTION PROCEDURES

1. The tape recorder will be placed on a table near the classroom door and the children will turn their desks in that direction. The teacher will start the tape and immediately begin a two minute circuit of the room, walking slowly by each pupil's desk. She will repeat the circuit at three minute intervals. At the end of each circuit she will stand by the tape recorder for one minute but will not look directly at any of the children.

2. Two minutes after the taped story has begun, a sixth grade girl will enter the room quietly, walk to the teacher and hand her a 3" x 5" card. The teacher will read the card and nod to the messenger. The messenger will then leave the room.

3. At the six minute mark the principal will turn the public address system on, tap the microphone three times with his forefinger, pause for one second, then tap it three more times. No message will be transmitted.

4. Four minutes later a sixth grade boy will knock vigorously 5 times on the door. The teacher, will go to the door, whisper to the boy and close the door. The boy will walk away.
Several distractions are recorded on the magnetic tape. None of the sounds are loud enough to obscure the story.

1. The introductory music is scratchy and was recorded too slowly. It sounded rather comical.
2. A barely perceptual, unintelligible background noise can be heard through two-thirds of the story.
3. Coughing sounds are heard in the background six times during the presentation. They are scattered throughout the story.
4. Twice during the recording a door was slammed in the background.
5. At one point the recorder whistled a tune softly for five seconds.
6. The volume was turned up slightly for a second then turned back to normal on three occasions.
7. The microphone was tapped gently once for five taps.
8. A dinner bell was rung softly in the background on one occasion for two seconds duration.
BACKGROUND INFORMATION

Before we had a United States, this land belonged to England. Instead of fifty states, as we have now, there were thirteen colonies, each of which acted independently of the others. No two colonies were ruled in exactly the same way. However, in 1774 the colonies met together and drew up a statement of their rights and a list of complaints against how England was treating them. After this meeting, conditions got worse, rather than better, and in July, 1776, the colonies declared themselves to be independent of England and set up their own government which they called the Continental Congress.

England of course, didn't like this and a great war was fought to decide if America would be ruled by England or would be free to rule itself. This War for Independence, as it was called, was won by the Americans in 1781.

During the war men from the different states learned to know and respect one another. In 1787 a convention of representatives from the states met to form a new government because the government which the states had formed during the war was not working well. There were bitter quarrels between the states for the Congress had been given little power to make decisions or to act for the good of all the country.

The tape you are about to hear is about this convention.
DIRECTIONS TO THE TEACHER: PURPOSE, BACKGROUND, NO DISTRACTIONS

The statements below that are set off by quotation marks are to be read by the teacher to the class. The other directions are for the teacher only.

Set up the tape recorder in front of the class.

"Next year you will study American history and since the subject is studied in the fifth grade we don't talk about it very much in the fourth grade. However, we do want to expose you to some history from time to time so you can build up a background of knowledge about the subject."

"Today I am going to play a short tape about the Constitutional Convention of 1787, then I will give you a test over the taped material to find out how well you understand what you heard. This is an experiment that is being tried out in several schools in the city to find out if some classes listen better than others."

"In order to help you understand more about the Constitutional Convention, I will read some information about what happened just before the convention took place."

"Listen carefully to what I read to you. Then when I turn on the recorder, try to see in your mind what is happening."
Read the attached "Background Information," then start the recorder, and retire to the back of the room until the dramatization is completed.

After the story has been played, pass out the answer sheets and read these directions to the class:

"Write your name on the top line in the space provided."
"Write_____ (teacher's last name) after the word Teacher."
"Write_____ (school number) in the next blank."

"Now I will read the questions and answers to you. Each question will have four possible answers. You are to circle what you consider to be the best answer to each question. Circle only one answer to each question."

"Is everybody ready? I will read each question and its set of answers one time. Listen to all four possible answers before marking your answer. If you do not hear, or do not understand the question, I will repeat it one time."

Read the questions and answers to the pupils.

Take up the answer sheets.

Send to the principal's office:

1. The test directions
2. The test questions
3. The completed answer sheets
4. The re-rolled tape
DIRECTIONS TO THE TEACHER: PURPOSE,
NO BACKGROUND, NO DISTRACTIONS

The statements below that are set off by quotation marks are to be read by the teacher to the class. The other directions are for the teacher only.

Set up the tape recorder in front of the class.

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"Listen carefully to what you hear. When I turn on the recorder, try to see in your mind what is happening."

Start the recorder and retire to the back of the room until the dramatization is completed.

After the story has been played, pass out the answer sheets and read these directions to the class:
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Take up the answer sheets.

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2. The test questions
3. The completed answer sheets
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"In order to help you understand more about the Constitutional Convention, I will read to you some information about what happened just before the convention took place."

"Listen carefully to what I read to you. Then when I turn on the recorder, try to see in your mind what is happening."
Read the attached "Background Information," start the recorder, then follow the attached "Distraction Procedures" until the dramatization is completed.

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THE CONSTITUTIONAL CONVENTION

FINAL TEST

1. In what season of the year did the story begin?
   a. Spring
   b. Summer
   c. Fall
   d. Winter

2. How did Timothy Walker earn a living?
   a. He was a carpenter
   b. He was a gunsmith
   c. He was a blacksmith
   d. He was a shoemaker

3. What did Timothy Walker make for Mr. Reynolds?
   a. A pair of boots
   b. A musket
   c. A table
   d. A lock

4. Who told Timothy Walker about General Washington being in Philadelphia?
   a. George
   b. Harry
   c. Mr. Reynolds
   d. A soldier
5. How did General Washington come to Philadelphia?
   a. On a horse
   b. On the train
   c. Driving a wagon
   d. In a carriage
6. From what state did George say most of the delegates came?
   a. New York
   b. Pennsylvania
   c. Virginia
   d. Maryland
7. Which of these men were called by the title "doctor"?
   a. James Madison
   b. Benjamin Franklin
   c. Thomas Jefferson
   d. George Washington
8. What did Mr. Reynolds think was wrong with the old government?
   a. It was too weak
   b. It had too much power
   c. It spent too much money
   d. It favored the rich people over the poor.
9. What did Timothy Walker think the delegates would do at the convention?
   a. Leave the government as it was
   b. Make only a few changes in the government
   c. Set up a government ruled by a king
   d. Declare war on England
10. Which of these statements best describe Timothy Walker at the time the convention was in progress?
   a. He believed the men of the convention would do what was best for the country.
   b. He did not trust the delegates.
   c. He was not interested in what the men of the convention were doing.
   d. He thought it was best to wait until the meeting was over before forming an opinion.

11. Which of these statements best describe Mr. Reynolds?
   a. He was not as excited about the convention as Timothy Walker.
   b. He was well informed about what the delegates were doing.
   c. He was not as interested as Timothy in what the men of the convention were doing.
   d. He thought the government was strong enough as it was.

12. Who talked to George and Harry at Convention Hall?
   a. A delegate
   b. A soldier
   c. Mr. Reynolds
   d. The story didn't tell

13. What did George and Harry do when they left Convention Hall?
   a. They went fishing
   b. They went home to eat dinner
   c. They had a foot race
   d. The story didn't tell
14. Why was the discussion at the convention kept secret?
   a. The delegates planned to set up a monarchy.
   b. The delegates wanted to wait until they could present one finished work.
   c. The delegates did not think the people had a right to know what was going on at the convention.
   d. The delegates did not think the people were interested in what was going on.

15. What did Timothy Walker say he would do if the delegates tried to take over the government for themselves?
   a. Go back to England
   b. Argue with the delegates
   c. Vote against the new government
   d. Move to other parts

16. How long did the Constitutional Convention last?
   a. Three days
   b. A week
   c. Two months
   d. Six months

17. How did Timothy Walker find out the delegates were leaving town?
   a. He heard a rumor
   b. Mr. Reynolds told him
   c. He read it in the newspaper
   d. George told him
18. With what words did Timothy Walker describe the proposed constitution after he read it?
   a. "Fairly well written"
   b. "A noble document"
   c. "Pretty good - not too bad"
   d. "Too weak to ever work"

19. With what words did Timothy Walker describe the delegates?
   a. "They were a shameful bunch"
   b. "They worked real hard"
   c. "They did a good job"
   d. "No finer men ever walked the earth"

20. What did Timothy Walker do after he read the proposed constitution and talked it over with Mr. Reynolds?
   a. He ate his dinner
   b. He walked home with Mr. Reynolds
   c. He went to bed
   d. He went to the inn to celebrate
Narrator: On a morning in early spring in the year 1787, a carriage pounded its way over the streets of Philadelphia. Although one could only see a speck of a face through the window of the carriage that was all that was needed. The face within was too well known not to be recognized. And so it was not too long before the news reached the ears of Timothy Walker, a Philadelphia blacksmith. And of course the messenger who brought the news to Timothy was his own son George.

Timothy: Ah! There you are Mr. Reynolds. With that lock all fixed I challenge anyone to get into your bakery before you want them to.

Mr. Reynolds: Thank you Timothy. I wish I could catch the ruffians that broke in last night. Twelve loaves of bread are missing. Can you imagine?

Timothy: Well, with that lock you'll not have any uh----

George: Father! Father! I saw Him! I saw him!

Timothy: Saw who for pity sakes?

George: Him! I saw him!

Timothy: Now, now sit down and catch your breath. And I don't want to hear another word out of you until you're ready to talk sense. Do you understand?
George: But I---

Timothy: Mind now! I said sense.

George: It was General Washington! General George Washington!

Timothy: What?

George: He rode up to the inn and I saw him get out and go inside. I did! Honest, I did!

Timothy: Uh, uh--did you hear that Mr. Reynolds? General George Washington here in Philadelphia, and my own boy had a chance to see him.

Mr. Reynolds: Yes, I heard him Tim, but I wonder what he's come to Philadelphia for.

George: He's not the only one. Dr. Franklin was here and a whole lot of other gentlemen, mostly from Virginia.

Mr. Reynolds: Ah, so that's it. I think I know now. They've come to change the government.

Timothy: They what? Change the government?

Mr. Reynolds: Now, don't get worried Timothy. It's all legal. The Congress has called this meeting for delegates from all the states and they're supposed to suggest changes in the Articles of Confederation that will make the government better.

Timothy: Well, who asked them to do that?

Mr. Reynolds: Well, there's been a lot of dissatisfaction.

George: No, not me.

Timothy: Now George, George, go inside. Your Mother has been calling you.

George: Yes, Father.

Timothy: So, ask again who's been dissatisfied with the Articles of Confederation? Not any of us common folk - no - it's the man with money.

Mr. Reynolds: You may be right at that Tim.

Timothy: Of course, I'm right. Why ever since the end of the Revolution they've been sweltering under all this talk of democracy. And now they want to change the whole government. Why you just watch and see if I'm not right.

Mr. Reynolds: You may be right Tim. But let's be fair about it. You know as well as I do that the national government under the Articles of Confederation doesn't have the power to shine its own boots.

Timothy: And what may I ask does it have to have power for?

Mr. Reynolds: Well, how in heaven's name are we going to deal with foreign countries? How are we going to trade with the rest of the world? How are we going to get any respect from any other country in the world? Why, they'll all just spit on us.
And all that after we just fought a war to be independent.

Timothy: But we also fought a war to be free men. We fought a war against British aristocracy and now they want to foist an aristocracy of their own on us.

Mr. Reynolds: Now hold on, Tim. Why don't we wait and see what comes of it. Let's not jump to any conclusions.

Timothy: All right, I'll wait. But I'll tell you this right now. If they try to take this country over for themselves, I, Timothy Walker, will personally, by myself, move to other parts.

MUSIC

George: That's the building, Harry. That's the one they all went into this morning.

Harry: Why that's the convention hall. That's where they drew up the Declaration of Independence. Let's move closer.

Soldier: Wait a minute! Where are you two going?

George: Harry! It's a soldier! Let's get out of here! Come on!

Harry: Wait a minute, George. Wait a minute. We weren't going any place in particular, Mr. Soldier. We just wanted to know what's going on in there.
Soldier: Oh, you did, did you? Well, I'll tell you. The
gentlemen in there are having a meeting. Now run along.

Harry: What kind of a meeting?

Soldier: Well they're meeting to----. Why you get along!
It's none of your business what they're meeting about! Go along now!

George: My Father says this country belongs to all of us. If those men are having a meeting to change the country, it is too our business.

Harry: That's right.

Soldier: Well, if you aren't a pair of bright boys. All right, what do you want to know? But mind you, don't tell anyone I've been talking to you.

Harry: What are they doing in there?

Soldier: I told you that. They're having a meeting. They're drawing up a new constitution for this country.

George: Who's doing that? What's the matter with the old one?

Soldier: Well, all the big men in the country—General Washington, Hamilton, Madison, Dr. Franklin, Governor Morse—they're all in there. They've decided that this country needs a stronger government than the one we have now.

Harry: Are all those men inside there?
Soldier: That's right.

George: Why can't we look at them? My Father says we're citizens of this country.

Soldier: Your Father couldn't look at them in that building, citizen or no citizen.

George: Why not?

Soldier: Because they won't allow anyone near the building. They don't want anyone to know what kind of a government they are considering.

George: My Father says they want to give us another king.

Soldier: Maybe so. Nobody knows.

Harry: Well, I don't think they're very smart! Why don't they tell people what they're thinking. Then everyone would know and there wouldn't be so much guessing.

Soldier: Oh, so you don't think that Dr. Franklin and General Washington and all those educated gentlemen in there are very smart. Is that it?

Harry: That's what I said.

Soldier: Well, I didn't know who I was talking to. Would you like to know why the gentlemen inside decided not to tell the people what they're doing?

George: Well, since they went to all the trouble to think up a reason, I suppose we ought to listen to it. Don't you think so Harry?

Harry: Well, all right, you can tell us.
Soldier: Thank you. They're going to wait until they finish their work. Until they've drawn up a new constitution for the United States. Then they'll explain and talk about it. But they want to draw it up first. That way they can argue amongst themselves in there, and they can compromise, and nobody will know about it. When the convention is over they can present one finished work that represents the thought of all those who sign it. How does that sound to you?

George: Well, it's not too bad. But my Father isn't going to like it. How about you, Harry? What do you think?

Harry: We'll let them give it a try. But they just better not forget about George and me. We're citizens of this country. We've got a right to be heard. They just better not forget about us. But if we can't get in----. Come on, George! I'll race you down to the bridge!

George: O. K.!

Soldier: No, they better not. Those men in there better not forget about those boys.

MUSIC

Timothy: Robert! Hey, Robert Reynolds! Come here a minute if you can.
Mr. Reynolds: Good morning, Timothy. Well, what is it this morning?

Timothy: The convention, Robert. The convention. They've been meeting for two months now and still not a whisper out of them.

Mr. Reynolds: Well, no news is good news. Isn't that right?

Timothy: Well, it may be, but I'm worried. There are enough rumors going around to excite an army let alone a strong blooded blacksmith like myself. Have you heard them?

Mr. Reynolds: The rumors? Yes, I expect I've heard them.

Timothy: I tell you, Robert Reynolds, I'd like to take this right arm and use it against all those men in that convention who are plotting to set up a monarchy. I tell you my blood is past the boiling point.

Mr. Reynolds: Now, Tim! Calm down a bit.

Timothy: Robert Reynolds, I ----.

Mr. Reynolds: I said calm down! I have something to say to you.

Timothy: All right! I'm as calm as I expect to get while this business is fresh in my mind.

Mr. Reynolds: Now, how do you know the Constitutional Convention is trying to set up a monarchy? Believe it when you see it. Believe it when the convention actually proposes one.
Timothy: Why, it will be too late then to do anything except buckle down under another king.

Mr. Reynolds: Now look, Timothy, I think you're getting a little out of hand. Now I'll admit it would be a lot better if the convention would tell the people what they're doing so there wouldn't be all this guessing. But they decided not to and they must have their reasons.

Timothy: Of course they have reasons! They know that the people wouldn't stand for it if they knew what was going on behind those doors.

Mr. Reynolds: O. K., Timothy!

Timothy: And then posting an armed guard to scare the living daylights out of our little boys like my George. I told you what happened to him, didn't I?

Mr. Reynolds: He didn't seem very scared when I talked to him.

Timothy: Why, he's a brave boy.

Mr. Reynolds: Oh, but, Timothy, can't I get you to talk sense?

Timothy: Sense! Why I am talking sense! Alright, now listen to this. You heard about that speech that Alexander Hamilton gave the other day?

Mr. Reynolds: Just rumors.

Timothy: And what else do we have to go on if they won't tell us anything? You heard what he said about not setting up a democracy. About how he was
in favor of setting up an aristocracy in this country. That Alexander Hamilton! He sounds like he thinks himself better than those who make his breeches. Locking themselves up behind those doors.

Mr. Reynolds: Now listen to reason! Listen to reason will you, Timothy!

Timothy: Eh?

Mr. Reynolds: I think you ought to try and cool off a little!

Timothy: Oh you do!

Mr. Reynolds: Yes, I do! There's nothing we can do until we hear the final report from the convention. So there's not much sense in getting so steamed up about it.

Timothy: All right, I'll wait! But those gentlemen in Convention Hall had better watch themselves. I may move in on them, anvil and all!

MUSIC

George: Father! Father!

Timothy: What is it now, George?

George: Father! The delegates are leaving town! They've finished the meeting!

Timothy: Oh ho! So they've finished at last. And they're leaving town you say?

George: Most of them are.
Timothy: Ah Ha! They've done their dirty work and now they're trying to get out of town quick.

George: Look! I picked one of these up from the printing shop.

Timothy: Oh, their proposal. That's what it is, their proposal. Let me see that, boy.

George: Here it is. There are a whole lot of them. They say it's going to be the new Constitution of the United States.

Timothy: Oh, they do, do they? Well, Timothy Walker is going to read it first, I'll tell you! Oh! The preamble is it? Well, let's see what that means. "We, the people of the United States." Oh! The people is it? Well! Can't say that they didn't go to the right place to form the government. The people! I didn't know they had a thought like that in them.

George: What does it mean there where it says "To secure the blessings of liberty to ourselves and our posterity"? What's posterity?

Timothy: Well, my boy. You might say that posterity is you. And when you get grown up, posterity will be your children and your children's children. That means all the future citizens of this country. That's what posterity means. Now, do you have any other questions?
George: Well, way down further I read something I didn't understand.

Timothy: Well, point it out, boy. Your Father will explain it to you.

George: Oh, here it is. It says, "No title of nobility shall be granted by the United States."

Timothy: Oh, Huh! Does it say that now? Does it? George, my boy, that means that in this country there can't be any lords, or barons, or dukes that make up the aristocracy of European countries. In this country, George Boy, all men are free and equal. And I'm glad that the gentlemen who wrote this document remembered that. Now what else, George? What else is it that bothers you?

George: Well, over here it says--Oh, look! Here comes Mr. Reynolds. And he's got a copy of it, too.

Mr. Reynolds: Timothy! Have you seen this?

Timothy: Indeed I have, Mr. Reynolds. A fine document it is, too.

Mr. Reynolds: Well, what do you think of the gentlemen of the convention now?

Timothy: Why, just what I always thought of them. There was never finer men that walked the earth and breathed God's air.
Mr. Reynolds: Oh? But what of the talk of the aristocracy? What about your strong right arm?

Timothy: Mrs. Reynolds! How dare you talk to me of aristocracy at a moment when this country is being given this noble document.

Mr. Reynolds: Ho, Ho, Ho.

Timothy: Why that's no better than profaning the fine name of the great gentlemen that gave us this constitution.

Mr. Reynolds: Ho, Ho, Ho. Yes, Timothy!

Timothy: Oh, it was a great day for the United States when those gentlemen came to this city to draw up this document.

Mr. Reynolds: Yes, Timothy!

Timothy: And don't you be forgetting it, Mr. Reynolds!

Mr. Reynolds: No, Timothy!

Timothy: And now that those men have taken care of our problems for awhile, I think it would be best for me to eat my dinner. Now, George, go up and wash for dinner.

George: Yes, Father.

Timothy: And good day to you, Mr. Reynolds. And let's have no more talk about monarchies and aristocracies. We have a constitution now. Good day, Mr. Reynolds.
Mr. Reynolds: Good day, Timothy. Good day.

MUSIC
BIBLIOGRAPHY

Books


Articles


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Reports

Publications of Learned Organizations


Encyclopedia Articles


Unpublished Materials


