In the last decade, curriculum specialists in the Language Arts have expanded the field to include listening. A compelling reason for increasing the listening training of first grade and preschool children lies in their "listening readiness." They are required to listen for information in order to learn, follow directions, participate in discussion and planning, etc. The relationship between listening test scores and various abilities and characteristics of the listener have often been investigated. Some factors in the listener found to be influencing comprehension are recognition of correct English usage, size of the listener's vocabulary, ability to make inferences, and ability to structuralize speech. Factors in the speech, such as difficulty and organization of content, and environmental factors, such as closeness of speaker, play an important part in determining listening effectiveness. Four different approaches to teaching listening are noted in this paper: direct, indirect, integrated, and eclectic. The field of listening has catapulted into language arts prominence in the last 15 years. Irrefutable findings are few, and those reported here represent only a start in a promising art. (CK)
THE IMPLICATIONS OF EARLY EDUCATION STIMULATION IN LISTENING FOR TEACHER EDUCATION

Dwight L. Freshley and Richard Rea

In the last decade, curriculum specialists in the Language Arts have expanded the modern trivium of reading, writing, and speaking to include listening. The logic of this development is clear. If reading is the receiving counterpart of the "sending art" of writing, then listening should be recognized as the counterpart of speaking.

But recognition as a family member does not solve the definition problem let alone the problems of curricular construction and implementation. Like any new progeny, this latecomer into the Language Arts must be named and nurtured.

It will be the purpose of this paper to define listening as a process, classify its types, demonstrate need for its improvement, summarize some of the results of research in the area, and describe selected methods of teaching it.

DEFINITION

Listening will be defined as the selective process by which sounds coming from some source are received, recognized, and interpreted by a person in terms of past experience and future action. Though the term auding has been introduced (14) to eliminate the ambiguity of the word listening, it has not gained wide acceptance.

Though the index in Duker's Listening Bibliography (25) lists thirty-nine kinds of listening, the classification of Barbe (7) into appreciative, critical, and discriminative is most useful.
NEED FOR LISTENING IMPROVEMENT

In determining reasons for the teaching of listening we are inevitably taken back to Rankin’s 1928 study (73) which pointed up listening in adults as the most frequently used communication skill, comprising 42 per cent of the communication time as compared to reading 15 per cent; talking, 32 per cent; and writing, 11 per cent. Miriam Wilt’s classroom observations led her to conclude that 54 per cent of the elementary children’s classroom time was spent listening to the teacher. (87) This is not to infer that we should spend a proportionate amount of time on listening instruction. There does not, however, seem to be any standard offering for teacher training if Markgraf’s 1960 study (61) is representative. He found that 84.3 per cent of his educator respondents believed that high school and elementary teachers should endeavor to teach listening, but only 44.5 per cent of the instructors included a unit on methods of teaching listening in either Speech, English, or Education courses.

A compelling reason for increasing the listening training of first grade and pre-school children lies in their "listening readiness." Armstrong (5) estimated the listening vocabulary of the six and one half-year-old at 3048 with a contrasted 648 visual vocabulary. To benefit from this head start aural vocabulary, pretested, successful listening methods need to be introduced and efficient listening habits inculcated early. Further, since parents and teachers do not seem to agree on identifying poor listeners (80) it would seem that the sooner the child is exposed to the more receptive environment, the better.

When we ask simply why children listen the need is again underscored. They are required to listen for information in order to learn. They need to be able to listen in order to follow directions, to participate in
discussion and planning, to become courteous, to become discriminating and
critical, and to use listening for appreciation and enjoyment. Those, then,
should be the basic goals of any listening program.

That we fail to achieve these objectives in early school is apparent
in the number of poor listeners we confront as adults. According to Nichols (66),
who has published more than anyone else on this subject of listening, ten poor
listening habits are: (1) calling a subject dull, (2) criticizing a speaker,
(3) getting over stimulated, (4) listening only for facts, (5) trying to
outline everything, (6) faking attention, (7) tolerating distraction
(8) choosing only what is easy to listen to, (9) allowing emotion-laden
words to interfere with listening and (10) wasting the time differential
between speech and thought speed.

As Sister Mary Weir expressed it, "A world that listens nearly half the
waking hours needs teachers who think skill in listening is important." (82)
For this and the other reasons above, the need for programs of listening
seems valid.

FACTORS AFFECTING LISTENING

Factors in the speaker.

Does the speaker's behavior affect the listener's recall and retention?
No studies have shown this on the primary level, so other representative
findings will be noted. Knower, et al. (51) found that, where there is equal
quality of performance, speaking from memory is more effective in securing
comprehension and retention by the listeners than reading a speech from a
text. Nichols (66) found the audibility of the speaker to be an influencing
factor although Kavanaugh's (48) investigation of the most comfortable
listening levels for the speech revealed a wide variation among listeners.
Fergen (35) presented material orally at 80, 130, 180 and 230 words per minute and found that listening comprehension was best at 130 words per minute with satisfactory comprehension at all speeds. Compressed and "chopped" speech studies show promise of increasing the words per minute. At a given speed the degree of intelligibility of speeded speech is significantly higher when the tape is chopped than when the tape is merely run rapidly. The size of the chop is the critical factor. (36, 37) Adding key redundant words increases comprehension. (32)

Factors in the listener.

The relationship between listening test scores and various abilities and characteristics of the listener have often been investigated. Since 1948, for example, thirty-one studies have included correlations between intelligence and listening. All of the correlations the writers could locate were positive with fifteen being above .50. Fourteen of the studies used elementary school populations. In the Fergen study above, though intelligence appeared to have a positive relationship to listening at each rate of oral presentation, at no rate did the relationship appear substantial enough to justify the use of an intelligence test as an instrument for the prediction of listening comprehension. Also, Pratt concluded that the effectiveness of instruction in listening was shown to be independent of levels of intelligence (72). Finally, it seems to be a fact that those of lower intelligence tend to depend more on listening than on reading.

A different result appears in the relationship of listening and school achievement. When the effect of mental ability was held constant, Baldauf found that the relationship was very low. (6)

In Kegler's study (49) of grades 8, 10, and 12, he concluded that students (especially boys) who are poor readers are likely to have larger listening vocabularies than reading vocabularies. Though most studies show no sex
differences in listening King found boys tend to return high mean scores on oral tests and girls on the visual tests. (50)

Other factors in the listener found by Nichols to be influencing comprehension are recognition of correct English usage, size of the listener's vocabulary, ability to make inferences, ability to structuralize a speech, listening for main ideas as opposed to specific facts, use of special techniques while listening to improve concentration, real interest in the subject discussed, emotional adjustment to the speaker's thesis, ability to see significance in the subject discussed, curiosity about the subject discussed, and physical fatigue of the listener. (66)

Factors in the speech.

Under this general heading are found studies concerning difficulty, organization, and repetition of speech content. For example, Goldstein (39) found, as one might predict, that superiority of listening is greater when easy materials are used than when difficult materials are used. Beighley's experiment (11) with college students showed that the degree of organization of a speech had little effect on comprehension and Ehrensberger (31) reported that repetition either early or late in a speech has a positive effect on recall.

Factors in the situation.

Environmental factors sometimes play an important part in determining listening effectiveness. Henneman (45) and Nichols (66) found that distraction does interfere significantly with listening comprehension and O'Neill (68) showed that college speech students were more proficient in listening to consonants, vowels, words, and phrases, when they could see the speaker at close range than when they did not see him.
Relation to other Language Arts.

Though it is not the purpose of this paper to consider this broad topic at any length, two or three observations should be made. The oral presentation seems to be most effective with children with a mental age of 13 and below. Those above 13 do better with visual presentation. (18) As a result of Welsh's factor analysis of sixty first through third graders, he concluded that listening ability is a central factor with no direct relation to reading ability. (83) This is not borne out by Hall, for example, who states that listening is not a generalized ability but a cluster of specific abilities closely related to the listening task. (41) Other studies show that the poorest readers tend to be the best listeners.

The same kind of contradiction occurs in trying to synthesize other research. Following a review of research done to determine whether reading or listening was superior, Witty concluded that any difference in learning efficiency may be traced not to the visual or to the auditory presentation but instead to factors such as the difficulty or nature of the material to be learned, the way in which it is presented, and its suitability in terms of the experience and interests of the group. (68) We would concur with Witty's further observation that we should stop trying to assign superiorities and begin to assess what relative emphasis should be given to silent and oral presentations throughout the elementary grades.

METHODS OF TEACHING LISTENING

If the need for better listening is pressing and results of research indicate significant improvement from training in listening, when and how, then, should we teach this skill?

Four different approaches to teaching listening have been noted: direct, indirect, integrated, and eclectic. (10) The direct method would include
such activities as these: 1. The teacher reads selections to the class and the children select the main idea from possible answers read to them. Allowing the children to prepare their own selections to be read to the class for purpose of selecting of main ideas may well follow. 2. While listening to a selection, the class lists the **transitional** words or phrases they hear. (14)

The indirect method assumes that in the teaching of other subjects, especially in the primary grades, there is inevitably a substantial amount of listening being taught since responses must be made to giving directions, requests to relate "what the story was about," and the like.

Sister Mary Weir has exemplified the integrated approach by making an analysis of the McKee English Series for activities which when used for one purpose can at the same time be used to develop listening skills. (62) In a columnar breakdown, she matches the texts' content with the following oral language situations:

A. Telling stories  
B. Using the telephone  
C. Making reports  
D. Following directions  
E. Enjoying poetry  
F. Participating in dramatizations  
G. Telling creative stories  
H. Telling riddles  
I. Making introductions  
J. Relating personal experiences  
K. Holding conversations  
L. Giving descriptions  
M. Improving one's vocabulary  
N. Using words correctly

In another column are listed the objectives for developing the specific skill desired. From this breakdown, the teacher should increase the skill of the child in six different types of listening: 1. Conversational; 2. Appreciational; 3. Creative; 4. Exploratory; 5. Critical; 6. Intent.

The eclectic approach purports to draw from all methods depending on the grade, subject, level of class, *etc.*
Basic principles of learning which seem to apply to the teaching of
listening in the elementary school have been stated by Lewis. (42)

A. Children learn what they practice.
B. Children need to understand what it is that they are trying to learn.
C. Children need to become aware of their ability to listen.
D. Children need opportunities to discover that they can improve
their listening ability.
E. Oral reading should be taught so that it fosters good listening.
F. Oral language is taught with an emphasis upon communication.
G. Children have opportunities to listen to difficult material read
to them by the teacher.
H. Individual differences in listening should be recognized.

How these principles are implemented in the curriculum illustrated by
experts from three schools' curriculum handbook or bulletin. (61)

A. New York City Board of Education, Language Arts, Grades 1-6.

1. Communication skills are interdependent.

2. They have three levels for grades one through six: listening
situations are offered as well as the characteristics for the good listener.

3. For example, at the first level (grades 1-2) the listening
situations presented included listening to: (1) the speaker in conversation
and dramatization, (2) the dictation of others, (3) simple directions
(4) stories, puzzles, and poems, (5) the teacher reading passages from books
to answer questions, and (6) mechanical devices such as radio, television,
records, sound motion pictures, public address systems, and such sounds as
bells, the wind, the clock, machinery, and birds in order to develop
concepts as louder, softer, harsh, and shrill.

1. Included in the handbook are the following suggestions for classroom teachers.

   (1) teachers should be sensitized to the importance of skillful listening as a factor in intelligent communication.

   (2) children should have more experiences in planned speaking and listening with their peer groups - with less time devoted to listening to the teacher.

   (3) group discussion should be emphasized.

   (4) oral reading should consist of materials that are fresh, interesting, and meaningful to the children.

   (5) a wide variety of listening experiences should be introduced into the classrooms.


1. The teacher plays an important role in preparing the class for listening. She can be most helpful in this respect if she: (1) Regards what the child has to say as important, (2) Helps the pupil choose content suitable to the interest and maturity of the group, (3) Plans with the children so that they sense the purpose for which they are listening in a given situation, (4) Helps the group set up standards for listening, (5) Provide many opportunities for child participation by answering, questioning, adding to, and discussing what they have heard, (6) Makes provision for children to participate in follow-up experiences in drawing, dramatization, telling, constructing and writing, (7) Guides children to judge the value of what they have heard, (8) Plans seating arrangements so that the children may face one another, and (9) Adjusts the length of listening time to the maturity of the group.
2. A list of questions are presented so that a child may check his own listening habits. Several of the more important questions are (1) Do I get ready to listen? (2) Do I look at the speaker? (3) Do I keep my mind on what is being said? (4) Can I select the main idea? (5) Can I recall in sequence? (6) Can I follow directions I hear? (7) Can I retell what I hear?

IMPLICATIONS

The necessity of relating results of studies directly related to listening has precluded our drawing from other potentially productive areas such as psychology, social psychology, psycholinguistics, etc., whose research in more basic processes such as perception and learning may well modify what we write tomorrow. Some studies mentioned here of course were based on the newer learning theories. In the annotated bibliography to follow, most studies are drawn from the elementary school level.

An interdisciplinary approach may well be the only answer to the continuing problem of definition which continues to plague the field. Exactly what skills does this part of the language arts include? By factor analysis, Welsh (83) concluded that auding ability is a central factor with no direct relation to reading ability. This was done before Brown and Carlsen or the STEP tests were standardized, however. Do most of the sub-tests on current listening tests simply measure intelligence? The vague fear that we may be chasing "aural shadows" prompts the author to want to isolate factors upon which "listening experts" can agree.

On the brighter side, certainly the advent of the "new English" with its emphasis on good literature will make listening, however it is defined, more attractive to teach. But if we have returned to the ancients (with Greek
mythology) for upgrading our content, we must anticipate the future in planning our methods. The trends of the recent past become the standard procedure in many cases of the future. For example, downgrading is implicit in this study. The next step will be to write a series of listening training exercises for kindergarten and/or nursery school children dealing with such factors as following directions, discriminating between sounds, identifying rhymes, grasping the main idea of a passage, recognizing relationships, using contextual clues to get a main idea, and drawing inferences. In devising methods of stimulation the possibilities of compressed speech, television and programed series, including vocabulary and storytelling lessons, are being considered.

Out of the training exercises might be developed a listening readiness test which would diagnose for listening deficiencies, help increase the efficiency of returning information, and would help predict reading readiness.

The field of listening has catapulted into language arts prominence in the last fifteen years. Irrefutable findings are few and those reported here represent only a start in a promising art. Our efforts will have to be redoubled to enable this art to provide students with new methods of efficiency to keep pace with the exploding knowledge about us.

The authors suggest that the most important emphases in teaching listening are on syntax and on evaluating speakers' ideas.


A compact statement of the essentials of the teaching of listening. Suitable for distribution to a school staff as an introduction to this topic.


Common factors in all language arts are vocabulary, auditory discrimination and organization of ideas. Physiologically and psychologically listening comes first and thus undergirds the whole language arts program. Listening is a difficult process of thinking; a process by which what is heard is weighed, analyzed, sorted, related, classified, evaluated and judged.

The primary-grade child is receptive to the teaching of listening skills when he is interested in what is being said and when the general atmosphere is conducive to listening.


Some specific techniques for teaching listening at the elementary school level: encourage children to have a purpose in listening; use the information listened to in some way; play listening games; have older children learn to make notes on speaker's remarks; urge children to see mental picture of what they are listening to and to evaluate the speaker and the content of the speech.


Using 200 students in grades 1-8 as subjects, the author found that differences in the means of auditory and visual vocabularies of children may be measured with high statistical significance for ages six to ten, and with a significance level of .03 or greater at ages eleven and twelve.
The following vocabulary developments were estimated:

<table>
<thead>
<tr>
<th>Age</th>
<th>Visual</th>
<th>Auditory</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 1/2</td>
<td>648</td>
<td>3048</td>
</tr>
<tr>
<td>7 1/2</td>
<td>1184</td>
<td>3476</td>
</tr>
<tr>
<td>8 1/2</td>
<td>1900</td>
<td>4240</td>
</tr>
<tr>
<td>9 1/2</td>
<td>4040</td>
<td>5120</td>
</tr>
<tr>
<td>10 1/2</td>
<td>6040</td>
<td>6600</td>
</tr>
<tr>
<td>11 1/2</td>
<td>6080</td>
<td>6640</td>
</tr>
<tr>
<td>12 1/2</td>
<td>7240</td>
<td>7480</td>
</tr>
</tbody>
</table>

The author concludes that the size of the vocabulary is direct evidence of potential improvement in ability to read and that visual vocabulary is itself a measure of reading achievement.


The author administered the STEP Listening Test, Stanford Achievement Test Battery, and the Otis Mental Ability Test to 352 Cedar Rapids, Iowa, fifth graders and made the following conclusions.

1. There is a strong relationship between listening and school achievement. (.82 correlation with total achievement battery.)

2. The relationship between listening and mental ability is substantial. (.59 correlation.)

3. The relationship between listening and school achievement with the effect of mental ability held constant is very low. The partial first-order coefficients between the scores on the listening test and the scores on the various subtests ranged from .03 to .29.

4. A centroid factor analysis suggests the presence of a general factor which was named verbal comprehension.


Teachers need to analyze their own listening habits and encourage thoughtful study of listening situations by children. As children develop concern for their own listening competence a more effective meeting of minds in the classroom will occur as a result.

Since listening and reading are closely related, the elementary school teacher should take advantage of this fact by developing both reading and listening simultaneously and not attempt to thwart a relationship between the two.


Specific suggestions for the teacher of listening at the elementary level include: sensing the relationship between listening and other phases of communication; understanding the psychological process of listening; providing conditions in the classroom that are conducive to listening; utilizing opportunities for listening; understanding the developmental levels and goals of the listening process; and being alert to new equipment and devices which will aid the program of teaching listening.


A twenty point list of essentials for a teacher of listening is given with emphasis on the need for integrating the teaching of listening with all other school subjects.


According to the author, the best way to interest teacher-trainees in learning about teaching listening is to give them an advanced level listening test. Eight-item bibliography.


Mispronunciation by young children may, in some cases, be a sign of difficulty in listening rather than speech difficulty. Cashman suggests giving listening practice in the elementary grades on three levels: specific concepts without details; with some detail; and with many details.

Material was presented visually, orally, and as a combination of visual and oral to 500 Kirkwood, Mo., elementary school children. For mental ages 11 through 15 reading-listening is the most effective means of comprehending material of the type used in this study. Children with mental ages above 13 did better visually than orally. The opposite was true of children with mental ages of 13 and below.


Using a group of 141 first-grade pupils in four classes as subjects, the author found that a 15-minute daily listening lesson for some groups resulted in substantially greater improvement for them in both reading and listening compared to the reading and listening ability of groups having only conventional language arts instruction.


This thought-provoking discussion of the role of listening in the elementary classroom deals with reasons for teaching listening, the nature of listening, conditions fostering effective listening, developmental levels in listening, classroom activities involving listening, and ways of improving listening ability. It is emphasized that listening should be developed in a general language arts context rather than as an isolated separate item in the curriculum.


Nine kinds of listening that should be taught in the elementary school are listed: casual, conversational, background, appreciative, creative, explanatory, interrogative, concentrated, and critical.


The authors suggest, as means for developing more effective listening on the part of pupils, that the classroom atmosphere be relaxed, comfortable, and quiet, and thus conducive to listening; that the teacher take advantage during the day of opportunities for listening; that children sense a suitable purpose for listening; that pupils be led to expect meaning whenever they listen; that pupils be prepared for what they are about to hear; that long periods of listening be broken up by other activities; that the occasion for listening suit the circumstances and the maturity level of the children; that pupils be guided in evaluation of what they hear; that opportunities be arranged for the reproduction of the material listened to; and that children set up standards for effective listening.

This is a good review of the importance of listening in various aspects of social living. A fourth grade program to improve listening is described. It included reading stories aloud, practice telephone conversations, following directions, emphasis on listening on trips, vocabulary practice, socio-drama to illustrate courtesy, and writing or taping contents of oral presentations.


Good speech patterns help listening habits grow. Speakers must be made aware of their responsibility to their listeners. Teachers should not insist that children listen to ill-prepared speakers or to material beyond their understanding. One of the best aids to oral reading is responsiveness of the listening group.


The ten qualities that should be developed in the elementary school teaching of listening skills are the art of actually listening, selective listening, skillful listening, critical listening, courteous listening, attentive listening, retentive listening, curious listening, reactive listening and reflective listening.


A description of the actual experiences in teaching listening of a group of elementary school teachers.


Duker establishes a definite relationship between the skills of a good listener and those skills which a science teacher now hopes to inculcate along with the learning of factual material, namely: critical, reasoning, problem solving.

He emphasized the responsibility the science teacher has in the teaching of listening and then lists the propositions derived from research on listening which he felt significant to the teacher who will teach listening. Following this, is a list of suggestions and practical methods for the science teacher (and other teachers) in giving students instruction in listening.
Some of the ways in which this may be done are as follows:

1. An emphasis on following oral directions accurately. Science experiments are ideally suited to this purpose. Directions should be given clearly and explicitly. The suggestion sometimes made that in order to improve listening ability the directions should not be repeated, does not appear to be well taken. Emphasis should, however, be placed on the desirability and necessity for attempting to understand them on the first occasion on which they are given.

2. Science lessons are ideally suited to teaching proper techniques of note-taking. Such note-taking can be very effective aid to efficient listeners when emphasis is placed on them as means of following the outline of what is being said.

3. The application of principles of scientific thinking to the analysis of radio and television speeches and discussion programs for the purpose of detecting propaganda devices and illogical non-sequiturs.

4. Practice in distinguishing that which one already knows from what is being said.

5. Practice in listening for ideas as well as to ideas.

6. Practice in listening to other pupils as well as to the teacher.


Elementary school teachers should not talk continuously. They should use pleasant, modulated voices, not resort to tiresome repetition, and be more aware of the physical limitations of individual pupils. If good listening habits are to be taught, focus must be on listening throughout the day. A list of activities useful to the teaching of listening is given.


Using as subjects 340 fourth through sixth grade children in an eight week experiment, the author found that the experimental group made a significantly greater gain in listening ability. The results were measured by an author-made test. Listening was taught by practice on taped material: expository, continued story of adventure, unconnected paragraphs, and word lists. The listening test, the text of which is given, was designed to measure ability to observe single details, to keep related details in mind, to remember a series of details, to follow oral directions, to use contextual clues, to recognize organizational elements, to differentiate main and subordinate ideas, and to draw justifiable inferences.


With a population of 638 pupils in grades four, five, and six of four elementary schools in Western Pennsylvania, using the California Test of Mental Maturity (1957), the Iowa Basic Skills Test, and the Sequential Tests of Educational Progress (STEP) Listening Forms 4A & 4B, the following results were found in this study:

Correlations with listening ability declared significant at the one percent level were those of: mental age .451; reading comprehension .585; total language .537; arithmetic concepts .540; chronological age .280; and school grade .352.

Other conclusions warranted are.
1. Students who receive listening instruction evidence significant improvement, whereas those students who do not receive such instruction, do not.
2. Listening is a skill which can be improved through instruction.
3. Boys and girls do not differ significantly in listening ability.
4. Children's ability to use reference materials is significantly related to listening ability and the degree of relationship is higher than that between listening ability and language usage.
5. A child's report card grades in reading, language, and arithmetic are not so closely related to listening ability as scores obtained on standardized achievement tests in each of these respective areas.


Fessenden separates listening into levels saying, "The teaching of listening should tend to encourage variation in level, flexibility for shifting of levels, and the choice of the most appropriate level for the occasion. The first level is that in which we learn to isolate sounds, ideas, arguments, facts, organization, and the like. The second level is that in which we learn to identify or to give meaning to those aspects which we have isolated. The third level is that in which we learn to integrate what we hear with our past experiences. The fourth level is that in which we learn to inspect the new, and the general configuration of the new and the old data. The fifth level is that in which we learn to interpret what we hear. The sixth level is that in which we learn to interpolate comments and statements that we hear. The seventh level is that in which we learn to introspect as well as listen."


The hypotheses tested in this study were: (1) auditory perception has a significantly higher positive correlation with word recognition than does visual perception at the second grade level, and (2) categorization, one aspect of conceptualization, has a significant positive correlation with word recognition at this level. The study also examined individual and group profiles of subjects ranking high and low in word recognition ability for patterns of similarities and differences.

The subjects were eighty-three children in an average socio-economic neighborhood, reading on a second grade level.

Auditory perception correlated .235 with word recognition but was not significant at the .01 level. None of the correlations between auditory perception and the word recognition subtests were significant at the .01 level. Categorization correlated .614 with word recognition significant at the .01 level. All of the correlations of categorization with word recognition subtests were significant at the .01 level. Thus, the first hypothesis that auditory perception has a significantly higher correlation with word recognition than does visual perception at the second grade reading level was not upheld by the correlation analysis. The second hypothesis that categorization, one aspect of conceptualization, has a significant positive correlation with word recognition, was upheld.

The Hollow Listening Test was administered to 400 pupils. The author reports that direct instruction was significantly more effective than incidental teaching of listening skills.

From his study of 490 subjects, Hampleman reported that listening was superior to reading in the fourth and sixth grades: Listening superiority was more marked with easy materials than with difficult ones; length of passages had no effect on the relative merits of listening and reading; and increase in mental age and, to a lesser extent, chronological age decreases the differences between listening and reading comprehension. An excellent review and analysis of previous research on the relative merits of oral and visual presentation of material for learning is included.

Using 82 sixth grade pupils as subjects, Handcock reports that social leadership and responsibility, as measured by the Behavior Preference Record, increased after 24 lessons and discussions on these subjects.


This study developed measures of comparison between the reading and listening comprehension of primary grade children. Comprehension was assumed to involve visual or auditory perception of words; understanding of the idea expressed in a word or sentence; and enough understanding of the idea in relation to other ideas to classify it.

The author concluded that the test when standardized for grades 1-3 should help to determine (1) the significance of the difference between the individual child's listening and reading comprehension in terms of instructional planning; (2) the significance of no difference between the child's understanding of spoken and written language in terms of guidance practices; and (3) the possibilities indicated by a comparison of test scores for increased use of oral learning experience.


This is a description of a listening center made in the school shop and which enables a number of children to listen to recordings of literature on ear phones. This kind of activity aids in the development of listening skills.

Hollingsworth, Paul M. *A Study to Compare the Effect of Two Listening Programs on Reading Achievement and Listening Comprehension.* Doctoral dissertation. Tempe, Ariz.: Arizona State Univ., 1964.

The purposes of this study were to compare the effect of a Modified Educational Developmental Laboratories' Listening Program and a Modified Science Builders Program on reading achievement and on listening comprehension with a control group in which no formally planned listening program was presented.

After the rules for incomplete data were applied, 298 pupils remained in the sample. The materials used were commercial programs published by Educational Developmental Laboratories¹ and Science Research Associates.

The results of this study indicated that, using Form 3A of the STEP Listening Test, listening comprehension was not significantly affected by the two modified listening programs.


To investigate the use of a measure of listening ability in first grade reading, Sister Launderville constructed and administered a listening test called a Reading Readiness Listening Test. This test attempted to measure pupils' abilities in these areas of reading: following directions, noting details, concepts of sequence, resolving main ideas, and making inferences. The test employed pictorial representation of the correct answer and foils to each item.

Among her conclusions were: 1) a listening test of the type constructed in this study can be used to measure the varying listening comprehension abilities of beginning first grade pupils; 2) the test was as effective in predicting success in reading as was a standardized reading readiness test; 3) the rather low correlation (.235) between the two readiness tests and the fact that the multiple correlation is higher than when either of the readiness tests is used alone, warrants an attempt to build a reading test that combines the features of both.


The general purpose of this study was to explore the existence of critical listening abilities as part of general listening ability, a part which could be tested and improved by well-planned instructional procedures and materials. The abilities were: (1) Detecting the Speaker's Purpose, (2) Analyzing and Judging Propaganda, and (3) Analyzing and Judging Arguments. Critical listening was defined as the process of examining spoken materials in light of related objective evidence, comparing the ideas with some consensual data, and concluding or acting upon the judgment made.
Conclusions

1. Lessons were effective in promoting growth in critical listening abilities. For the control group, the difference in means between the initial and final scores on the "Lundsteen Test of Critical Listening" (79 items) was 5.8. The mean difference between the initial and final scores for the experimental group on the same test was 11.1. Between control and experimental groups, the difference in mean gains was 6.1. The analysis of variance gave a mean square ratio of 76.9 which is statistically significant (> .01 level) in favor of the experimental group.

From this study emerge several implications for theory and practice. There appeared to be evidence in support of the existence of related but separate critical listening abilities as part of general listening ability, a part which can be tested and improved.


Using the Kuhlman-Anderson as a test of intelligence, the Iowa Basic Skills as a test of reading and the STEP as a test of listening, McBrian gave a series of 21 lessons in listening to 164 fifth grade pupils. No significant differences were found to have occurred as a result of the lessons.


Experimental data is reported showing little difference in recall of material heard and read by fourth-grade children. In the fifth and sixth grades the recall was greater for reading.


A well-performed experimental study showed that a group of 44 students given systematic listening instruction over a period of six months gained significantly over a control group in total reading, reading sentence comprehension, and paragraph comprehension. Texts of tests used and of some exercises for teaching listening are included.


Using in her thesis the materials developed by McCormack, MacDonnell found that, as a result of three months of systematic listening instruction, the experimental group made significantly greater gains in reading and listening, but not in spelling, than the control group.

The improvement on a reading test by a group of 65 second grade pupils who had been given 30 practice exercises in listening was statistically significantly greater than that of a control group of the same size.


Using 100 fifth and sixth grade pupils as subjects, Marsden reports that systematic instruction in listening resulted in significantly greater gains in listening than when no such instruction was given. Measurements were made by the oral administration of the Chicago Reading Test.


Using 45 students as subjects, Marten found no relationship between interest inventories and pupils' skills in listening to materials dealing with those interests. A correlation of .65 is reported between listening and intelligence.


Moe reports on experimental findings that show that listening test scores and mental age together are better predictors of reading performance than either one of these alone.


An extensive and extremely useful list of various techniques used in the teaching of listening.

This thesis, which is a pioneering and ground-breaking one on listening, is the most frequently referred to of any on the subject. Two-hundred college freshmen listened to six ten-minute lectures dealing with various curricular areas. In addition to being tested for comprehension and retention of material in the lectures, the subjects were given a battery of tests in various areas of skill and aptitude. Students submitted answers to questionnaires about their listening habits and procedures. The 20 lowest and highest students were interviewed in depth. In the judgment of these college freshmen, factors involving mental set and possession of certain skills were more important to listening ability than factors involving susceptibility to distractions or emotional maladjustment. Correlations of listening with intelligence of .53 and of listening and reading of .46 are reported.


The purpose of this study "was to determine the existence of a sensori-perceptual differential in children already known to be academically retarded within the framework of a vigorously controlled study. The criterion population was defined as children two or more years retarded in school, of average or better I. Q., and who exhibited no known physical or psychological disabilities that might account for their retardation. All children were submitted to a battery of tests consisting of sensory vision tests, perceptual tests, sensory hearing tests and various tests of eye, foot, mixed, and crossed laterality, and the subtests of the WISC. Point bi-serial correlations indicated a general substantiation of the hypothesis that the perceptual aspects of vision and hearing are more related to academic retardation than are the sensory aspects."


This study tried to determine whether training with the use of distortion-free, time-compressed speech could increase human capacity to receive spoken language without significant loss of comprehension. Male college students (16 in the experimental, 16 in the control groups) received systematic practice in listening to progressively increased rates of speech from 325 to 475 words a minute. Results indicated that increases up to double normal rate produced no significant loss in comprehension for experimental Ss; statistically significant differences between the performance of the experimental and control groups at higher rates indicated comprehension of rapid speech to be a trainable phenomenon. The data suggested that listening to speeded speech may have a beneficial effect on reading skill.

Owen states his conclusion that a combination of listening and intelligence tests yields the best prediction of reading achievement.


A description is given of a program for training first- and second-grade children in listening by means of tape recordings. The skills of following directions and self-checking of phonics were emphasized.


In a carefully performed and controlled experiment in 40 sixth grade classes, Pratt found that lessons in listening over a period of five weeks resulted in an improvement in listening skills, as measured by an author-made test, which was greater than that shown by the control group. Lessons and two forms of the test used are included.


The author develops a plan for teaching listening parallel to directed reading activity composed of readiness, concept development, listening, discussion, and re-listening when possible.


Using 224 fifth and sixth grade pupils as subjects, Schultz administered the vocabulary section of the California Test of Mental Maturity orally one month after the written administration of the test. The correlation between written and oral vocabulary was .69. Pupils scoring higher on the written test were significantly better readers. The group as a whole performed significantly better on the oral test. The author suggests that the oral test score may be a good predictor of reading potential.


In an uncontrolled experiment using 323 fifth and sixth grade pupils as subjects, Shepherd found that two weeks of intensive instruction in listening, which stressed reasons for listening and principles of listening, resulted in a statistically significant improvement in listening as measured by the STEP Test.


As the result of a factor analysis, the author concludes that listening ability is a central factor with no direct relation to reading ability and that it is adequately measured by the tests used.

The first step in teaching listening is for the teacher to examine her own listening habits. "Children learn best those things they live and do; they learn from each other. They cannot learn how to speak by listening entirely to the teacher speak, nor can they learn to listen to their peers when they seldom have the opportunity to listen to their peers." A number of activities useful in teaching listening are listed.


Although children listen when they first come to school, they do not do so objectively, appreciatively, or critically. To teach them to do so is the task of the school. That to which the child is asked to listen in school should be worthy of time and thought. Without pre- and post-discussion, listening skills will not improve by the mere act of listening.


A particularly harmful classroom practice is that of having children listen to material being read aloud that they have already read silently.


In answer to a questionnaire teachers estimated that elementary pupils spend 77 minutes per day in listening. Observations in 18 classrooms showed that children were expected to listen an average of 158 minutes a day. Of this time 54 per cent was spent in listening to the teacher. In response to the questionnaire 61 per cent of the teachers rated reading as the most important language art skill; 16 per cent ranked listening as the most important.


Some of the above annotations were taken from Duker's Listening Bibliography. The authors also want to express appreciation to Mrs. Janne Slocumb and Mr. Thomas Williams for their research assistance.