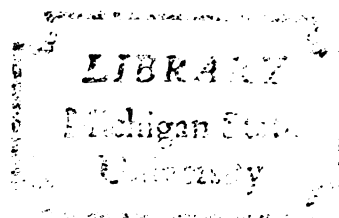


DESIGNING SELF-STANDING LISTENING
PROGRAMS FOR THIRD GRADERS

Thesis for the Degree of M. A.
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THESIS



ABSTRACT

DESIGNING LISTENING PROGRAMS FOR THIRD GRADERS

By

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In 1923 Carl C. Brigham tested 1047 English speaking adults and found that a large percentage responded poorly to oral directions, possibly because of poor listening skills. Other research indicates that listening develops on a maturational schedule, and that teachers can facilitate effective listening. In particular, third graders are experiencing significant changes in their listening perceptions.

Research indicates several significant events happening to the third grader as well as information concerning the types of roles listening plays in the development of children. There are physiological developments in third graders which shift their perception of listening. Third graders are more sociable than first or second graders and therefore need a larger socialization base in their expression. Coupled with the physiological developments and socialization characteristics is the shift in language-interpretation from semantic meanings to syntactic meanings. These changes are reflected in the third graders shift to conceptual problem solving. Up to this time, students' depend on literal interpretations of things or events.

To solve this problem of how to institute listening programs in the classroom of third grade teachers, a questionnaire was designed, Appendix A, to see what the needs of the teachers are: how they perceive listening problems of their students, and if they would be interested in implementing their own listening programs.

To find out what could be expected from third grade students in terms of physiological and cognitive changes, the Michigan State Library was used to research the areas of listening and third grade learning objectives.

The research data provides helpful information for aligning student needs with what is happening to the student as potentials for effective adult communication are developed.

This research, and the data received from practicing teachers indicates that there is a need to design listening programs which focus on interesting areas of instruction while developing listening skills. This approach is necessary because students need to learn to listen in order to function effectively in the environment of human experience.

By using an instructional development design, one that fits into the teachers usual classroom routine, teachers can modify their learning situations to include the development of listening skills. For this reason, I have designed a sample model, Appendix G, for teachers to follow when implementing self-standing, audio tape listening instruction into their usual classroom procedures.

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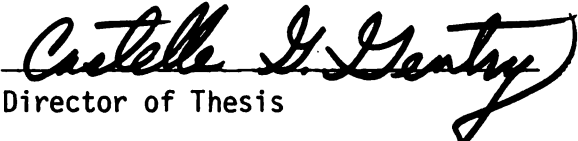
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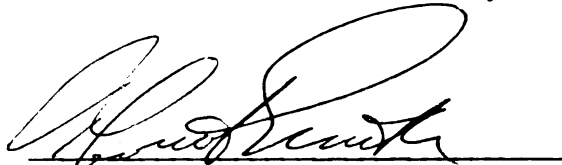
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CHAPTER I

INTRODUCTION

Because coding embraces an unbroken continuum of language, the customary practice of dividing language into comprehension and use may be a convenience but it is not consistent with our knowledge that modification of comprehension goes on throughout the act of oral expression. From initial discrimination in analyzers outside the CNS (central nervous system) to the oral utterance of the sentence, perception is being modified. The only possible rationale for such a division might be based on the assumption that measures differ in their value on the denominator of comprehension-use. No test measures exclusively comprehension or use, and no single test can be said to measure all aspects of comprehension and use (Mildred Berry, 1969, p. 254).

The problem in oral communication is the perception and/or transmission of oral messages. How sending and receiving perceptions are modified in the act of communication determines the extent of success or failure of one or both sides of the communication. In other words, the simple act of giving directions can become a complex task when one person is familiar with a situation and the other is not. The person giving the directions, while ignoring the stranger's lack of local knowledge, inadvertently confuses the stranger. That is, the local resident must give directions which correspond to the stranger's perceptions of the environment, and the stranger's ability to interpret the message given. Or, the stranger must adjust his perception in order to give himself a chance of understanding the directions he is being given. The

task seems simple for those of us who decode messages easily, however, our ability to accurately decode messages is dependent upon many physiological and learned characteristics.

The development of this paper is motivated by the common complaint of teachers expressing dissatisfaction over the inability of normal children to follow directions.

One approach to the solution of poor listening is to devise programs which develop "comprehension-use" of incoming aural information so that teachers and school administrators develop listening programs involving the processing of incoming information. The "comprehension-use" approach challenges the "Do you hear it?" approach to teaching listening skills. If learning to listen is more important than hearing, then teachers should facilitate more effective listening skills in students.

Teachers who develop strategies for listening skill improvement must be aware of three conditions which influence listening development. First, listening is part of a sophisticated decoding system. Second, listening is the communication act of effectively interpreting oral messages. Hence, listening in this context becomes a behavior that is relatively easy to identify but impossible to treat in isolation. Third, listening involves the transfer of symbols which may become distorted by perceptual problems due to the environment or physiological capabilities related to learning.

This paper is concerned with how teachers can effectively develop instruction for teaching listening behaviors in third

graders. The first portion discusses three reasons why teachers should deal with listening behaviors of third graders.

- Significant physiological listening events are taking place in listening development of third graders, and
- Third grade students can effectively participate in whole communication experiences, and
- In third grade something can be done to facilitate effective listening-learning habits.

The second part of the paper is concerned with designing a method by which teachers can implement programs which develop third grader listening skills. The development of the program is based on the effective use of audio tape and instructional development techniques when implementing listening programs for third graders.

Listening Perceptions

Oral Communication and Adult Listening Behavior

Before considering the problems of instructing children in listening skills, an examination of a study about adult listening performance reveals some interesting listening characteristics which are indicative of childhood experiences.

Carl C. Brigham's study, "Study of American Intelligence," deals with the ability of adults to follow oral directions. Brigham tested 1047 individuals born in English speaking countries. Of the twelve oral directions, the two which follow are representative of the directions given:

Item 2. Time limit: 5 seconds.

Draw a line from circle 1 to circle 4 that will pass below circle 2 and above circle 3.

Item 10. Time limit: 15 seconds.

Put a 4 or a 5 in each of the two larger parts and any number between 6 and 9 in the part next in size to the smallest part (Carl Brigham, 1923, p. 5).

The individuals being tested were not under any particular time pressure. There was more than enough time to complete each of the operations. Following directions was the purpose of the test.

The results of Dr. Brigham's test, Appendix D, Figure 1, shows how the scores fell. An analysis reveals that fewer than 50 percent of the respondents (711) were able to respond accurately to half of the oral directions. Three-hundred-thirty-six of the participants responded correctly to more than 50 percent of the oral directions. Breaking the chart down and examining correct responses between questions 5, 6, and 7 of the 12 directions, reveals that 346 respondents were able to respond accurately to about 50 percent of the questions. Less than 50 percent accuracy in following oral directions is not acceptable. Considering 80 percent comprehension to be mastery, the cut-off point on Brigham's scale would be 9.6 correct responses. The results of Brigham's test indicates that only 93 of the 1047 adults tested would have responded effectively to oral directions if 80 percent comprehension was considered an effective listening level. The result of Brigham's test suggest that training is needed to stimulate more effective oral comprehension. Poor performance by adults is indicative of inadequate childhood training.

In terms of the study, adult interpretation of oral stimulus is not particularly impressive. Brigham's study does point out a

need for the development of strategies for improving the listening habits of children.

Teacher Opinions and Practices Concerning Listening

As part of developing a plan for teacher-produced listening programs, questionnaires were circulated to several of the schools in the Lansing area, Appendix A. From the response to the questionnaire some assumptions can be made about teacher interests in listening programs and their perceptions about listening skills and program development.

The questionnaire was concerned with two areas: how teachers perceive the listening skills of their students and whether or not third grade teachers are interested in producing and implementing their own listening programs. An analyses of the responses broke teacher responses into two categories: opinions and practical responses.

Teachers had the following opinions about the listening problems of their students:

1. Some students give and follow oral directions more effectively than others because of their ability.
See Appendix
2. There is a positive relationship between poor listening skills and academic success,
3. There is a difference between affective and effective listening,
4. Listening is an active process, and
5. Students who listen well and orally communicate effectively are usually good or excellent readers.

In addition the teacher responses pointed out the following:

1. Teachers did not have a clear idea of the response of right and left ears.
2. All of the teachers indicated a need for listening programs.

As far as practice is concerned:

1. Teachers generally used questioning strategies when asking oral questions.
2. Teachers indicated that they avoided questions requiring "yes" or "no" answers and instead ask thought-concept questions.
3. All but one of the teachers said they had assessed the listening needs of their students. The assessment indicated that:
 - a. Students have different skill levels, and
 - b. Students need to be motivated toward improving their listening skills.

The responses to the questionnaire indicate that teachers are aware of the role listening plays in the academic development of their students, however, teachers have a great deal of difficulty determining what listening behaviors they can develop and how they can develop those behaviors once they know what they are.

A later section of this study will identify specific listening behaviors of third graders and a process teachers can use for implementing self-standing, teacher-produced listening programs.

Interest in Implementing Their Own Listening Program

Teachers have the following opinions about implementing their own listening programs.

All teachers are willing to make their own listening program if given an instructional development model to follow.

None of the teachers felt that the development of listening skills was the area of the audiologist. However, all of the teachers said they would use an instructional sequencing tool for developing a listening program for these students. Only one teacher had not used an instructional sequencing and all but one teacher felt instructional sequencing had been successfully used by their students.

Given the existing teacher practice of developing their own listening program, it can be assumed that they can effectively implement listening programs which are based on a procedural model, such as those presented in this paper.

Additional data was gathered which indicated teacher influence on listening program development. This information falls into these five categories.

1. The degree of satisfaction teachers exhibit toward listening programs they now use.
2. Teacher awareness of third grader listening skills.
3. How teachers think listening skills should be taught.
4. How much teachers know about the development of listening skills.
5. Equipment at the teacher's disposal.

All of the teachers responding to the questionnaire, expressed a need for programs which will improve student listening skills. Teachers indicated that they spend between zero and 30

minutes each week working with listening skill development. This response may indicate that little time is spent on listening skill development.

Teacher Awareness of Third Grader Listening Skills

Teachers were fairly evenly divided in saying they did or did not know about the "normal" physiological listening development of third graders. All of the teachers considered listening to be an active rather than a passive process. However, there was a split concerning the knowledge of dominant right or left ear audiological perceptions. The teachers considered students who listen well to be good or excellent readers. Only one teacher did not know that there is a difference between affective and effective listening. All of the teachers considered listening to be a combination of cognitive, affective, and psychomotor skills. In practice all but one teacher assessed the listening needs of her classroom. Those who did assess their classroom needs found that their students have different listening needs and that active involvement in listening brings about the best results. There is no doubt that regular classroom teachers have the perception necessary to recognize the basic listening needs of her class.

How Teachers Think Listening Programs Should Be Taught

Going further, teachers have their own ideas about what listening skills should be taught. The elements which teachers feel will make a listening program effective are as follows:

1. Hierarchy of skills.
2. Diversity of ideas within the listening program.
3. Sequencing of skills.
4. Readily available materials.
5. A checking device.
6. Carry over students can recognize.
7. High interest materials.
8. Regular and short practice sessions.
9. Reinforcement.
10. The student must understand what is being said.

In summary, teachers are saying that listening should be taught like all other subjects.

Concerning what listening programs should concentrate on, most of the teachers didn't know.

Most of the teachers did not have an idea about listening behaviors of third graders. Several teachers said following a series of directions and drawing inferences and conclusions from the spoken word is an important listening behavior.

As far as teaching itself is concerned, most teachers think listening instructions should be both an individualized and a group instruction. Teachers were fairly well split on the type of support needed for listening programs and teachers were equally split on the degree of supervision the listening programs would require.

Questions 29 and 30 appear to reflect the teachers' lack of knowledge about the degree of involvement necessary in developing listening programs. All of the teachers already use appropriate

questioning strategies. These strategies should be easily transferred to listening programs for the difficulty in developing listening programs is not as great as teachers may suspect.

How Much Teachers Know About Listening Development

As far as instructional development is concerned, teachers don't openly exhibit knowledge about Terminal Performance Objectives (TPO's) and Enabling Objectives (EO's). However, overall performance on the questionnaire indicates a high degree of sensitivity toward assessing student needs. All of the teachers have the equipment necessary to design and implement self-produced listening programs in their classrooms.

Listening Development

Research in the areas of speech and language development indicates patterns of growth which are first influenced by environment (home) factors. Upon entering school a child's perception of his environment starts changing as he interacts with people in social settings. By third grade, ages eight and nine, significant patterns of socialization, communication, and learning are taking place.

Oral language serves many purposes in the daily life of a group of children in the primary school. They use language in at least the following ways and probably others as well.

Talking	Explaining
Conversing	Sharing
Planning	Evaluating
Discussing	Solving Problems
Reporting	Expressing Creative Thinking

(Ruth G. Strickland, 1951, p. 101).

All of these ordinary communication tasks require interactions on a mutual plane of understanding. When first and second graders interacting in a classroom situation are observed, it is often found that situations involving expression and interpretation cause communication conflicts.

The basic reasons for confusion in sending and receiving oral messages in the early grades is the students' dependence on egocentric language and values. The use of egocentric language changes with age. Robert M. Krauss and Sam Glucksberg examine some of the age differential characteristics of children's messages which may underly differences in communication accuracy.

In our earliest study, done with nursery school children, we observed that the absurdly poor communicator performance of our subjects seemed to form the idiosyncratic or egocentric nature of their messages. This observation was reinforced by the finding that the same messages which communicated poorly or not at all to both young and adult listeners resulted in extremely accurate choice behavior when they were addressed to the subject who initially had uttered them. Clearly the messages were in some sense "meaningful;" but their meaning was essentially private--which is simply another way of saying that they were not effective in an interpersonal communicative context (Robert M. Krauss and Sam Glucksberg, 1972, p. 371).

These findings indicate the communication problem children face when given an unfamiliar situation. The "private" language that is functional in a familiar environment (home or friends) is not functional in an unfamiliar environment.

The lack of effectiveness of young speakers derives not from a deficiency in the comparison stage (comparable to our editing process), but rather from the acuity of the repertoire from which

the speaker samples (Kraus and Glucksberg, 1972, p. 380). In simple terms this means that speaker effectiveness is dependent on how accurately the message is aimed. Cohen and Klein's suggestion of a lack of acuity strongly indicates that "aiming" is largely determined by maturation and experience of the speaker and listener. If there is a mutual understanding between the listener and the speaker, communication effectiveness is evident.

For the purposes of this paper, it is important not only to note that changes are taking place in language use by early elementary children, but that specific changes are taking place in the third grade.

It is fairly easy to demonstrate that the ability of children to communicate increases with age. Figure 2 indicates this, plotting the number of errors as a function of repetitive trials in our communication task for children in kindergarden, first, third, and fifth grades. A similar result is obtained when one varies the grade of speaker and listener independently. Figure 3 shows the mean number of errors for first, third, and fifth grade speakers who are communicating to first, third, or fifth grade listeners. Note that there is an effect for speaker's grade and for listener's grade, both effects in the direction of increased accuracy with increasing age (Kraus and Glucksberg, 1972, p. 374).

See Appendix D for Figures 2 and 3.

Sara W. Lundsteen conducted a study in 1970 which implies that the content, the concepts, the process and the abilities in critical listening appear to be amenable to empirical analysis and can be improved by practice. Lundsteen's premise is based on the correlational and factor analysis studies that suggest that there may be a constellation of interrelated listening abilities and that critical listening may be included in the constellation. "The

purpose of the study was to explore critical listening abilities as part of a general listening ability, a part that could be tested and improved by well-planned instructional procedures and materials (Sara Lundsteen, 1970, p. 132).

Cohen and Klein as well as Kraus and Gluckesberg provide information relative to maturational processes of listening skills which the Lundsteen study states that despite maturation, listening skills can be improved by accessing the listening characteristics of a group and designing procedures to improve those skills.

Development of Syntax

By developing awareness of listening skills and implementing a listening program, teachers can improve the listening development of their students. "Oral language is a 'structured system of arbitrary vocal sounds and sequences of sounds that is used in interpersonal communication and which rather exhaustively catalogues the things, events, and processes of human communication (Tina E. Bangs, 1968, p. 7).

This is exactly what the third grader is doing when responding to or giving oral communication; however, the cataloguing systems children use has advanced beyond that of restricted earlier speech and interpretive patterns. By third grade the student is beginning to deal with syntax as well as semantics.

Contrary to the commonly held view that a child has mastered the structure of his native language by the time he reaches the age of six, we find that active syntactic acquisition is taking place up to the age of nine and perhaps even beyond. Second, our observations regarding order

and rate of acquisition for related structures in different children are in agreement with the findings of investigators who have worked with younger children. By tracing the child's orderly progress in the acquisition of a segment of his language, we are able to observe, for a set of related structures, considerable variation in rate of acquisition in different children together with a common, shared order of acquisition. Quite simply, although we cannot say just when a child will acquire the structures in question, we can offer a reliable judgment about the relative order in which he will acquire them (Carol Chomsky, 1969, p. 8).

Syntax plays a dramatic role in perceptual understanding and the transmission of information (Franklin S. Cooper, 1972, p. 25). A child who does not understand syntactic use of the language may become confused about how he is expected to perform. Adults exhibit the same problem in communication when confronted with technological or social terms which may not be familiar. In both cases the problem is the same. The respondent does not know how to act because the semantic application of the word does not make sense or the syntactic meaning is not apparent. Consequently, performance is diminished because of a lack of understanding of word meaning.

In order to test the preference of syntactic structures in listening John N. Bohannon and Bernard Z. Friedlander administered selective listening tests to 60 elementary children and determined that kindergarten and first-grade children use flat intonation pattern as a cue to choose the more meaningful story version, and there is a significant development toward more decisive selection for meaning in the higher grades (John N. Bohannon and Bernard Z. Friedlander, 1973, p. 675). See Figure 4, Appendix D.

20 - 2 and 3-year-old children were presented with simple questions and commands in the context of an at-home play situation. The questions and commands were spoken in varying degrees of word-order distortion in order to evaluate the communicative effectiveness of word order in the children's comprehension and meaning. The majority of the nonfluent children responded appropriately to both normal and scrambled sentences. Only the fluent children's response scores were significantly lower to scrambled sentences than to normal. Data suggests that young, non-fluent children's receptive language processing is focused on familiar semantic elements rather than on syntactic framework (Harriet S. Wetstone and Bernard Friedlander, 1973, p. 734).

The findings of Wetstone and Friedlander support the premise that young children develop from no language and interpretation to ego-centric language and interpretation to more social and syntactic language use and interpretation. The role of growth from single to group word meanings for interpretation is an indication of growth in language acquisition.

So far comments have been concerned with the use and influence of environmental factors on the listening performance of children. As expected, there are other changes taking place which effect the ability of a child to perform certain types of listening tasks.

Development of Dichotic Listening

Observing the actions of first and second graders reveals the large degree of attention a child places on an activity while he is performing that activity. Very rarely does a first or second grader engage in two activities at one time. In most cases the child does one thing at a time. Of course, this is true with

listening. When first and second grade students want to listen to a story they will often silence or attempt to silence all other avenues of interference. This behavior points out the nature of one channel listening of first and second graders. This listening behavior is an interesting characteristic which parallels reliance on semantic meanings. Duality starts playing a strong role in the development of children at about the third grade age as dichotic listening begins to develop. For all practical purposes, dichotic listening is the "cocktail effect" or the ability to understand, listen to, be aware of, or interpret two simultaneous sound sources at one time, or to carry on a conversation and listen to music at the same time with discriminative listening (Charles I. Berlin, 1973, p. 4).

As far as third graders are concerned, this physiological change is a dramatic change in their listening ability. Not only is it a new tool, dichotic listening is also a new source of distraction. Previously auditory distraction wasn't a problem because either a student was or wasn't listening. Now, he can appear to be listening to one source of oral stimulus while he is actually concentrating on a second source. The result is what educators commonly refer to as inattention. The problem is not that the student is not paying attention but paying too much attention to too many separate stimuli and this characteristic is directly related to his ability to receive and transmit messages. The student who does not develop an ability to focus listening is faced with a high risk of

failure as a student, and later in life, as a successful wage earner (Leonard A. Marascuilo and Douglas A. Penfield, 1972, p. 5).

Leonard A. Marascuilo and Douglas A. Penfield conducted their tests on second, fifth, eighth, and eleventh grade students. They used prerecorded tapes and workbooks to improve the listening skills of student. There were eleven graduated tapes, workbooks for recording responses and time frames for the segments in order to require students to respond quickly to oral stimulus. Noise was introduced to the tapes as the project developed. There are two findings of interest: trained students outperformed untrained students and learning to tune out unwanted noise is influenced by maturation. The effect of training on older and younger students revealed improvement in trained younger students and no effect on trained older students. This finding suggests that influences that effect listening should be introduced at an early age, as latent improvement is minimal.

Students develop relevant concepts and appropriate "word labels" for those concepts they wish to express. This is one reason older children communicate more easily with adults. The older child has developed enough conceptual appropriateness to gear his message to an intended receiver. In other words, people use and interpret verbal messages based on a knowledge of formal grammar, on ordinary use of grammar, and on perception of the grammatical message. The transformation of word groups into meaning is dependent upon more than correct grammatical usage for "it is necessary that

a speaker have the ability to select out of that repertoire concepts that are at least potentially socially meaningful" (Krause and Glucksberg, 1972, p. 376). Conceptual listening is helped by maturing and physiological factors. Marascuilo and Penfield would probably say this is true, but would add, "students do not listen because they do not know how to filter out unwanted and unnecessary noise" (Marascuilo and Penfield, 1972, p. 6). This contention leaves the teacher with the problem of stimulating the student to use those listener skills which enable them to filter out distracting noise.

Reading and Listening

To develop appropriate listening instruction, the teacher needs to know about relationships between learning and listening skills. There is an obvious relationship between listening skills and academic success since listening is a corner stone for the conceptual development of skills which follow (Department of Education, 1961, p. 116). By listening, combining symbols, and forming associations, student learning development is transferred to performance skills. The process of acquiring word meaning, and interpreting sentences and phrases is most apparent as a student reads, however, the student's ability to interpret aural messages exceeds the ability to interpret the written word.

In third grade listening comprehension is superior to reading comprehension by a full year. When it comes to visual and auditory recognition of words by third graders (vocabulary development), the mean number of visually known words of third graders was 1,900 and the mean number of words auditorially known (including the visually known words) was 4,240 (Donald D. Durrell, 1969, p. 458).

Although reading and listening advantages of children are not equal until eighth grade, Table 1, (Durrell, 1969, p. 458), the findings of Durrell are strong indicators of the advantage of listening instruction in the elementary grades. See Appendix C, for Table 1.

As part of his findings Durrell stated that the student whose listening vocabulary was equal to his reading vocabulary was a marked "overachiever." Other research goes on to prove that listening improves with exposure to listening exercises (Taylor, 1964, p. 3), and that listening skill development improves reading (Braken, 1971, p. 59). Obviously a relationship exists between listening skills and performance in the classroom. The problem for the teacher is formulating a program which effectively generates listening skills.

Listening and Student Patterns of Growth

To begin teachers must ask "What can I reasonably expect in terms of performance?" This study will consider the listening skills third graders can develop. There is, in fact, a developmental schedule of language and understanding based on maturity and cognitive growth. The underlying factor of this maturational schedule is based on the necessity of comprehending language before language can be expressed (Eric H. Linneberg, 1972, p. 67). Evidence also shows that there is an orderly and constant progression in the development of understanding based on listening as the foundation for developing understanding (Linneberg, 1972, p. 67). Listening enables one to comprehend the meaning(s) of words and phrases which contribute to

understanding the meanings of aural communications based on the comprehension of words and phrases.

Since there is a logical pattern of growth in language acquisition and expression, teachers need to realize that they can influence the development of cognitive growth as it relates to listening. "Written language skills, the second great half of education's mighty cornerstone, do not normally become true tools of learning until the third or fourth grade" (T. Bangs, 1968, p. 3). A large portion of a child's early learning is dependent upon his perception of oral language. If the child can combine relationship with learned concepts, he stands a good chance of being successful.

Of importance for the third grade teacher is an awareness that integration of reading and listening skills is taking place in third grade. At this time students begin conceptualizing their expressions in relational terms and begin developing their own expressive concepts. These concepts surface as the student develops interpretive and expressive qualities in his verbal expressions. Robert M. Krauss and Samuel Glucksberg point out that just because one can speak does not mean one has communication competence (Krauss and Glucksberg, 1972, p. 263). The authors suggest that as maturity increases, so does the accuracy of communication between adults and children so that as children develop away from egocentric speaking and listening they become more socially acceptable in their speech and listening habits.

In their study "Development of the Ability to Detect Linguistic Ambiguity," Thomas R. Shulz and Robert Pilon studied 6, 9, 12,

and 15 year olds. The results suggest that the ability to detect linguistic ambiguity develops at different rates depending on the type of ambiguity. Detection of phonological ambiguity appears first, with the largest improvement occurring between six and nine (grades 1, 2, 3, and 4) years. Second to appear was the detection of lexical ambiguity, which exhibited a linear increase with age. Detection of surface and deep-structure ambiguities did not occur until age 12 (Thomas Rishultz and Robert Pilon, 1973, p. 750).

These findings parallel those of Carol Chomsky who concluded that syntax plays a dramatic role in perceptual understanding of word meaning. Chomsky's conclusion is based on the investigation of a child's orderly development from semantic to syntactic language acquisition (Chomsky, 1969, p. 10). There is no doubt that language acquisition and use does develop in a logical pattern, and many of the significant changes that are taking place are occurring in the third grade.

Listening Programs

Interpretation and expression are the most important elements for communication development in third graders. The teacher must take the experiences of third graders and expand those experiences through expression and interpretation thus equipping students to communicate effectively. Robert M. Bloom suggests that oral English be paired with reading or writing and that immediate and personal situations be included as part of oral activities (Robert M. Bloom, 1967, p. 97). Including situations students can relate

to will make the listening lessons relevant to student experience and enable students to expand upon their comprehension bases rather than just developing new competencies without understanding how those competencies relate to their individual lives.

Any subject that involves interactions with students can be used as a basis for developing listening skills, and the proper interpretation of information is essential to success. For Piag  t, the distinguishing quality of human intelligence is the fact that man creatively acts upon his environment, and it is instruction that influences man's course of cognitive growth (Edward A. Chittenden, 1972, p. 171).

The teacher can promote the development of interpretive listening skills by providing an intellectual and assertively curious atmosphere in the classroom. To increase learning through listening, stimulate the student so the work of learning and expressing becomes a pleasurable task (Arthur W. Heilman, Elizabeth Ann Holms, 1972, p. 15). By providing an atmosphere of curiosity, the teacher stimulates the student into using expressive tools. The teacher's role is twofold: first as a stimulator and then as a facilitator of student inquiry (Hugh Baird, 1972, p. 6). The result will be the refined development of usable analytical skills for interpreting oral messages.

The development of language and interpretive skills does not happen "naturally."

Successful performance in creative problem solving of any complex nature is heavily dependent upon an adequate level of development of generalized master thinking skills. The various component skills--however highly developed each

alone may be--are not so likely by themselves to bring about creative problem solving. Effective education in creative thinking and problem solving, therefore, requires instruction both in the specific component skills and in the master thinking skill (Orville G. Brim, Jr., 1966, p. 38).

Listening skills act as the catalyst for this "master thinking skill" which Crutchfield refers to. Without good listening skills, there is no outlet for creative interpretation or expression.

Effective listening is the harmonic interplay of decoding mechanisms and like any skill, it needs to be developed. In terms of teaching, the teacher must identify those elements which will promote effective interpretation of aural stimulus (Brim, Jr., 1966, p. 40). When dealing with the listening skill mechanism, teachers encourage the development of perceptual tools which enable students to obtain the information necessary for creative thinking. "The listener's ability to plan, organize, mobilize, and deploy his repertory of specific skills in optimal attack on incoming information will influence his course of action" (Brim, Jr., 1966, p. 39). Therefore, listening is an integral part of the problem solving mechanism of human understanding. The efficiency with which listeners use listening skills has an effect upon their decision making processes. Listening development must not be left to chance.

Why Should Listening be Treated in any Special Way?

The reason for an analytical look at listening is because listening is a problem solving task. As the brain decodes audio cues, meaning is derived by values placed on the interpretation of

combined meanings. For example, reading. Where does the information to decode visual symbols come from? The visual codes of written language are analyzed according to the audio cues we received as we were learning to read. The meanings of written symbols are learned by combining visual and audio stimulus. The teacher says the sound representing a written symbol and the student looks at the symbol and soon, the sound and the visual symbol become the same, hence, one hears what one reads, as one reads. See Figure 5, Appendix .

By the third grade the student is fairly adapt at discriminating sounds and manipulating word phrases to come up with varied meanings. One reason semantic/syntactic interpretation plays an important role in the language use of third graders is because "The comprehension and expression of oral language becomes an ongoing process with a finite number of words to be learned and an infinite number of sentences to be generated from the words" (T. Bangs, 1968, p. 9). Until now learning the word has been the focal point of early elementary education. The emphasis of much vocabulary building is based on spelling and word recognition. All too often students do not know how to use a word or how its meaning may change as it is used. An effective vocabulary program needs to develop the conceptual use of words.

To develop conceptual learning the teacher asks questions in order to stimulate learning through listening. When students begin asking meaningful questions based on the information at their

disposal they are expressing their good listening skills and are exemplifying conceptual growth (T. Bangs, 1968, p. 27). When a child feels confident to ask questions and uses information effectively, academic success is probable. The student who can size up a communication situation and respond appropriately will do much better in life than a student who has only one method of expression and understanding. The object of listening instruction is not to put a premium on novel ideas, but on adaptive interpretation. "Listening is a multifaceted problem requiring a considerable degree of organization, clarification and a step-by-step attack" (Nila Banton Smith, 1971, p. 40).

Instructional Development Models for Classroom Use

Research and teacher feedback from questionnaire have indicated a need for teacher-produced listening programs. Using an instructional development model teachers can follow a patterned procedure which can be moulded to fit their classroom needs.

Teacher-produced listening programs have two distinct advantages for the classroom teacher. First, the teacher uses the students' immediate environment to reinforce concrete concepts, and later, can develop vicarious learning situations based on the students' earlier experiences. The teacher-produced program functions as an enricher of student experiences instead of an introducer of new experiences. The object of instruction is to enrich or develop student experience not to overwhelm the student with experiences removed from the students' perceived environment. The

second advantage is that the teacher controls the degree and the pace of student experiences by determining what will or will not be included in the lessons. Because teachers are able to control the motivational elements of the programs, instruction becomes personalized.

The advantages of utilizing student environments and teacher control effect student motivation. In addition to motivation students take an active role in the learning process. As the student manipulates the tapes and information, participation in the self-learning process is encouraged. Another motivational feature of teacher-produced listening programs is that programs can be developed in conjunction with subjects with high student interest, and can also contain a variety of subject areas. In producing listening programs the teacher can monitor the progress of her students and programs: and in relation to listening skills, the teacher's ability to design programs will increase with practice.

Developmental Model

There are many types of instructional development models for classroom use, and all are designed to provide systematic efficiency in learning situations. See Appendix E for example models used to construct the learning system prototype in Appendix G. These models have several elements in common:

1. They start with an element for determining and evaluating a problem for which a goal will be determined,
2. determine objectives for reaching the goal,
3. design a system,

4. evaluate the system,
5. and revise the system.

While each instructional development model is designed for instructional purposes, none of them specify procedures for teacher-produced listening programs. My study proposes one operational instructional development model designed specifically for teacher production of listening instruction. (See Appendix G.) This prototype is, of course, intended to serve teachers' listening program development needs, and includes all of the elements necessary for learning systems design. In addition to the prototype, an example module of a listening program has been included, and will be referred to (Appendix G).

Putting Listening Skills Into Context

The listening process involves the thinking process. In fact, much research is being conducted to determine how and where audio cues are processed by the brain (Hutchinson, 1974, p. 4). Educators are concerned with the proper combination of listening and thinking skills, or their research is concerned with a singular processing system. By developing one system the other develops as well, and since thinking and listening processes are connected, we must develop methods for combining the processes.

The problem teachers will encounter when putting together listening programs is not as great as the problem of putting listening into its proper context.

Listening development can easily be ignored because listening is regarded as a natural on-going practice and because

listening skills are difficult to define and test. By developing a framework in which listening skills can be developed while other subject areas are being taught, teachers have the opportunity to increase teaching effectiveness and student levels of academic performance. In addition these self-standing, teacher-produced listening programs will contribute to a library of independent instructional units.

CHAPTER II

DEVELOPING SELF-PRODUCED LISTENING PROGRAMS

Every teacher deals with the problem of listening. Listening problems usually emerge as the teacher notices the inability of a student or group of students to effectively follow directions. In response, the teacher may react by making directions more explicit or easier to follow, or a teacher may observe student's listening behavior. In third grade, teacher observation would reveal that students who are poor listeners have difficulty:

- paying attention,
- following a series of instructions, and
- performing in social and academic activities.

This student behavior reflects changes in the listening perceptions of third graders.

Two factors that influence listening behavior that teachers can deal with involve the student environment, and the physiological maturity of the child. Environmental factors which determine listening performance concern the child's acquisition of language because children use language as they hear language. Where the child develops language skills will affect how the child interprets language. A child who comes from a social environment rich in language use will usually have a relatively large vocabulary. This larger

vocabulary gives the child a greater word base from which meanings can be derived. A child coming from an environment where language is restricted to functional use will usually have vocabularies which limit the extent of aural expression. Consequently, the child's ability to deal with varied methods of expression is limited. During the first two years of school, most students exhibit similar egocentric tendencies in language use and interpretation, however, at the beginning of the third year, students will have egocentric speaking and listening habits. By the end of the school year, very few or none of the students will be primarily egocentric speakers and listeners.

As the child develops more social concepts in language use, simultaneous maturational events effecting learning take place. The obvious change is student interest in word meanings. Semantic¹ interpretation of words and sentences is replaced by an interest and understanding of syntactic meanings. This characteristic is exemplified by increased student interest in word games. This semantic to syntactic shift involves the development of interpretive meanings for words and expressions. When listening, a first or second grader will often interpret what is said literally. In general, if the teacher tells a first or second grader to "Go fly a kite," he probably would. However, a third grader would be more likely to understand the intended meaning. The third grader's ability to

¹Simply stated, semantic interpretation is denotative and syntactic interpretation is connotative.

correctly interpret such meanings is based on his ability to understand the syntax of a statement.

Another change is the onset of dichotic listening. This characteristic enables the student to actively participate in more than one aural stimuli. Teachers usually refer to this characteristic as inattention, when in fact, the student is developing a mechanism for listening to several sound sources at one time. Dichotic listening characteristics are not always manifested while the student is supposedly listening. The physiological development of dichotic listening characteristics do show up in the student's academic performance. Suppose Johnny is given some verbal information as the class is going to recess. Johnny wants the information, listens attentively but misses the point of the extra instruction. What is Johnny's problem?

Look at the overall situation, remember that the class is going to recess. Johnny's friends are choosing positions for a team sport--Johnny is interested in their discussion, too. Johnny has difficulty concentrating on one message and has not developed the skills necessary for listening to both messages at one time. Johnny has developed the physiological ability to hear both aural messages but has not learned how to listen to both messages.

To solve environmental and maturational listening problems requires specific teacher skills. Included among the solutions for these problems are strategies that develop listening skills and efficiently use the teacher's time. Since listening performance affects academic performance, and teachers have a limited amount of

time to devote to instruction, teachers need to incorporate listening skill development as part of their regular instruction.

Listening skills are important in all learning and one strategy that provides students with an opportunity to effectively develop their listening skills are self-standing² teacher-produced instructional audio tapes. By producing their own instructional audio tapes, teachers will conserve teacher time, provide a motivational avenue for student expression and interpretation, provide a device for monitoring student listening and subject area development, enrich the learning experience of students, and relate learning experiences to the student environment.³

To successfully produce listening programs, the teacher needs skills in three areas: determining what listening skills third graders should develop, planning strategies for developing listening skills, and producing listening programs that are self-standing. To develop listening programs for third graders, teachers must become aware of semantic to syntactic shifts in language use and dichotic listening behaviors of their students. See Appendix G p. 82-87. The development of syntactic meaning results from the practice of special skills. To help teachers identify specific semantic and syntactic listening skills, a list of semantic and syntactic skills is included in Appendix G.

²A self-standing program is a learning module that does not need teacher supervision in order to be effective.

³Since language acquisition is tied directly to environmental factors, the teacher can build language skills based on known student experiences. This practice will help prevent student resistance to new experiences.

The skill of dichotic listening involves filtering out unwanted noise,⁴ and enables students to effectively listen and interpret more than one sound source at the same time. The object of dichotic listening skill development is to train students to filter out unwanted noise and to evaluate several sound sources at one time. Types of dichotic listening skills are illustrated in Appendix G.

Listening is considered an incorporated⁵ skill because teachers can develop listening programs that incorporate semantic, syntactic and dichotic listening with other subject areas. Once students master basic listening development, see Appendix G. the roles of syntactic and dichotic listening can play an important role as a motivational element. For example, a five minute listening lesson involving Science, Geography, and semantic, syntactic and dichotic listening skills, would be serving three subject areas at one time. The Geography and Science lessons develop regular academic learning units, and the only change in the presentation of the lesson is the inclusion of sentences or phrases which have syntactic meanings. These interpretive phrases serve as components for testing student listening response. For example, as the lesson begins the teacher might explain the types of stimulus the student will be receiving and how the student is expected to perform. Since

⁴Noise is any unwanted source of sound.

⁵Since normal avenues of learning involve listening, any subject can be combined with listening in a way that promotes development of skills in a subject area as well as listening skill development.

the teacher will want to be sure the student has the necessary pre-requisite behaviors for succeeding in the task to be undertaken, administering a pretest is important. The pretest for the Geography and Science lesson may include an aural message that has noise accompanying the message. If the student is able to demonstrate the lesson's skills at an acceptable, preestablished level, permit the student to go on to the next unit or lesson.

The audio taped lesson might initially deal with information related to the Geography objectives. After the Geography lesson has run for about thirty seconds, the Science lesson begins so that it runs concurrently with the Geography presentation. After both lessons run to completion, the post test can be administered. At first, teachers will want the sound level⁶ of each lesson to be separate but remain constant throughout the lesson. After students master interpretation of two simultaneous and stable sound sources, teachers will want to vary the sound levels for the lessons. Arbitrarily varying the sound levels makes the lessons difficult and challenging. Increasing the complexity of the lessons will serve two purposes. The students will be motivated because of the listening and academic challenge presented, and will improve in listening behavior. In addition, teacher-produced listening programs will result in improved student performance in the academic areas of Science and Geography.

⁶The presence of one sound over another. For practical purposes a layering of sound.

Knowing what listening skills can be developed and a general idea of how listening programs can develop, teachers need to produce programs that motivate students, serve student academic and listening needs, and are self-standing instructional units.

The process described in Appendix G provides teachers with basic guidelines for developing and producing self-standing listening programs. The process is based on a study of several learning system design models, see Appendix E, p. 71-74. By applying Learning Systems Design to developing third grade listening skills, a prototype and components have been developed to illustrate how learning and instructional needs can be served through a self-instructional learning program. See Appendix G.

Since flowcharts are often confusing, a process was developed so teachers can design and produce their own self-standing listening programs. As an example, the flowchart has been reduced to a procedural example teachers can follow to design and develop listening programs. To begin developing the first module, select a subject area for which a lesson is desired. Follow four steps in designing and developing self-standing listening programs.

1. Determine the instructional purpose(s)

State measurable learning outcomes for the lesson.
Combine objectives and listening skills.

2. Design the program.

Script format.
Script outline.
Script.

3. Produce Listening Lesson.

Transfer the script to audio tape.
Develop support materials.

4. Test and revise program.

Before developing listening programs, the teacher must determine what listening skills can be developed. Knowing what can be done to improve listening will influence the roles that each element in the listening program design will play. See Appendix G, p. 78-82.

To begin designing self-standing listening programs, define the roles of each learning element involved in the self-standing listening program.

--teacher and students, see Appendix G, p. 79.

--lesson and media, see Appendix G, p. 80.

--preassessment and postassessment, see Appendix G, p. 81.

Defining the roles of these elements concerns pairing objectives. The reasons the objectives are paired is to assure compatibility. When comparing the objective roles be sure the purpose of each lesson element is compatible with every other lesson element. This process can point out potential problem areas in instruction as well as suggest some interesting lesson alternatives.

The method used for writing objectives is borrowed from Tom Kimper and Larry Sparks, Writing Objectives. See Appendix G. Their format for writing objectives provides a quick and easy way of stating objectives for all developmental elements of the listening lesson, as well as the subject and listening objectives.

After defining the roles of the learning elements involved in the self-standing listening lesson, teachers will have an idea of how to use the instructional elements necessary for teacher-produced listening programs.

Step 1:⁷ TEACHERS SHOULD WRITE OBJECTIVES FOR THE LESSON ELEMENTS AND COMPARE THEM TO THE OBJECTIVES IN APPENDIX G.

To apply the academic lesson(s) to the program development process, start by stating specific goals for each academic area of learning. See Appendix G.

For the purpose of this study the development of an example listening program module is provided in Appendix G.

The development of this teacher-produced, self-standing module begins by stating the goal of the listening lesson and the language arts lesson. See Appendix G.

By following the developmental process of this module, teachers should have a clear idea of how to produce listening programs that serve student listening development needs, student academic needs, and help to reduce some instructional time constraints teachers must deal with.

Step 2: WRITE OBJECTIVES FOR YOUR ACADEMIC SUBJECT LESSON AND THE LISTENING LESSON: COMPARE YOUR WORK WITH THE EXAMPLE IN APPENDIX G.

⁷These are steps teachers should follow for completing the developmental elements of the program design.

From the goal teachers can determine appropriate terminal⁸ and enabling⁹ objectives. See Appendix G.

Step 3: WRITE TERMINAL PERFORMANCE OBJECTIVES AND ENABLING OBJECTIVES. COMPARE YOUR WORK WITH THE EXAMPLE IN APPENDIX G, P. 89.

After the enabling and terminal objectives have been stated teachers must determine how successful students will need to be when performing tasks. See Appendix G.

Step 4: HOW SUCCESSFUL MUST YOUR STUDENTS PERFORM? WRITE YOUR EXPECTATION AND COMPARE YOUR RESPONSE TO THE EXAMPLE IN APPENDIX G, p. 89.

Once teachers determine the role of the instruction and how the students are expected to perform, they must decide on a strategy and media to convey the instruction. See Appendix G, p. 89.

It is assumed that teachers will use audio tape, cassette or reel-to-reel recordings to present listening units. However, at this point in the development process, teachers may realize that audio tape will not serve the academic interests of the subject they wish to teach. If this is the case, teachers are advised to develop the subject area as a regular learning unit and to find another subject area for the listening skill development.

⁸Terminal objectives are the outcomes students will exhibit as the result of the lesson.

⁹Enabling objectives are behaviors the student must master before he can accomplish the terminal objectives.

Picking media also involves picking the types of supportive materials the students will use as they listen to the audio tape. As teachers select the media they must keep two priorities in mind: keep the module self-standing (i.e., compatible to audio tape feedback) and make the module easy for the students to independently handle.

If teachers develop programs that require supervision they are defeating the self-standing element of the module. Picking a method of presentation must serve teacher need as well as student and instructional needs.

Step 5: WHAT SUPPORT MEDIA WILL YOU USE? MAKE A LIST AND COMPARE THAT LIST TO THE LIST IN APPENDIX G.

After writing objectives for the program and the methods teachers intend to use, a script format can be written. See Appendix G, p. 90. The script format is an outline of the instructional method teachers will use to present materials. At first the script format will seem an oversimplified step, however, as listening programs become complex, and integrate several sources of information at one time, the script format will assure the maintenance of an orderly presentation of materials.

Step 6: WRITE A SCRIPT FORMAT. WHEN YOU ARE FINISHED, COMPARE YOUR FORMAT TO THE SCRIPT FORMAT IN APPENDIX

Whereas the script format is a general order of what will be done, the lesson outline, see Appendix G, p. 91, represents the specific order of events occurring in the listening program.

Step 7: WRITE A LESSON OUTLINE AND COMPARE YOUR OUTLINE TO THE OUTLINE IN APPENDIX G.

At this point, teachers have determined the roles of all the elements necessary for the production of listening programs which serve instructional needs and are self-standing.

Combining the elements of the script format and the lesson outline will indicate the shape of the lesson presentation and will suggest the effect each element (machinery, learning objectives, worksheets) will have on the lesson. Teachers will also be able to see where an element of the lesson may not fit, and will probably have doubts about other elements of the lesson. In any case, teachers should review what they have done. The review must center upon determining how compatible teacher objectives and instructional plans are when combined.

Now teachers are ready for the next to last step in designing a listening module writing the script. The script is the combination of all of the preceding elements in a form that represents the aural presentation of the entire lesson.

Step 8: LOOK AT THE EXAMPLE SCRIPT, APPENDIX G, P. 92. WHEN YOU HAVE READ THE SCRIPT, WRITE YOUR OWN SCRIPT BASED ON THE OBJECTIVES YOU HAVE STATED FOR THE LISTENING AND YOUR SUBJECT AREA. WHEN YOU FINISH, COMPARE YOUR SCRIPT TO THE EXAMPLE SCRIPT.

Once the script is written, check to be sure subject and listening objectives are being met. Writing the script will allow

teachers to check their method of presentation and whether they have included all the support materials necessary for the lesson. Teachers will also have a good indicator of nonessential elements which may have been included in the lesson.

After writing the script, make sure the program is self-standing. Check the program by indicating the material to be presented, student response, and feedback. See Appendix G, p. 92. The program is self-standing if each operation involving student response enables the student to complete the lesson by receiving recorded feedback.

The script is a valuable part of the development process because it allows teachers to see exactly what materials are presented, how students are expected to respond, and whether or not the program contains immediate feedback.

Of course the script is the result of aligning listening materials and academic objectives. If the script does not meet preestablished objectives, teachers must make necessary adjustments.

Once teachers are satisfied with their script, they can develop whatever supportive materials not already developed. In some cases, like a model, the supportive element will influence the way the script is written. In other cases, like a work sheet, the script will determine the design of the work sheet. See Appendix G. p. 95.

The last step in producing the program is to get the program on audio tape, see Appendix G, p. 95. Recording the program

on audio tape is the easiest part of developing listening programs.¹⁰ If teachers begin by designing simple programs for their students and develop more complex programs as the students are ready, skills in program design and production will improve as students' listening skills develop.

The real test for teacher-produced programs will occur as students' use the programs. As the class uses the programs, evaluate the programs by answering these questions:

1. Do the programs enhance academic instruction?
2. Are the program objectives being met?
3. Are student listening skills improving?
4. Are the programs self-standing?
5. Are students interested in using the programs?
6. Are the programs worth the effort of producing?

A "No" answer to any of these questions can necessitate changes which influence the effectiveness of teacher-produced, self-standing listening programs. Changes must be based on serving students' listening and academic needs as well as teacher needs.

¹⁰ If teachers do not have experience operating tape recording equipment, they are advised to read the manual that accompanies the equipment they will use. The biggest obstacle teachers will face will be their own inhibition. Teachers should be assured that their programs will improve with practice.

CHAPTER III

TRYOUT AND ANALYSES OF PROTOTYPE

Tryout of Prototype

Two certified elementary teachers participated in the tryout of the prototype (Chapter II and Appendix G.) Each teacher has more than three years of teaching experience and has taught or is teaching third graders.

Before presenting the teachers with the prototype, each teacher was asked to prepare a five minute learning unit. One teacher prepared a lesson on extinct animals and the other teacher prepared a lesson on antonyms.

The teachers were asked several questions before they were given the prototype. See Appendix B. The purpose of the questions was to find out how much they knew about learning system design. Their responses indicated that they know what behavioral objectives are, but know very little about systematically designing lessons. After answering the questions, the teachers were asked to read Chapter II of this study and to skim Appendix G. After reading, the teachers were told that Chapter II represents the general procedure for designing, developing, producing, and evaluating teacher-produced listening programs. The specific methods referred to in Chapter II are exemplified and further explanation of the development process is contained in Appendix G. At this point the teachers

were asked to prepare a teacher-produced listening program using the subject area they had prepared.

As the teachers went through the process described in Chapter II they were free to ask questions. The questions they asked were concerned with four learning areas: determining how to develop general to specific listening objectives, defining and describing terminal performance objectives, defining and describing enabling objectives, and determining the role of the pretest and post test. The problems teachers had were related to the general principles of learning system design. This is not surprising in light of the pretest given the teachers (Appendix B). The teachers had no difficulty combining instructional objectives with listening objectives.

The only negative comment about the listening program design was related to determining objectives for listening and subject areas. Both teachers had to restate their academic objectives in behavioral terms--a process they were not entirely familiar with.

Positive comments about the program development concerned the easy incorporation of listening skill development with an academic subject area and that they could follow the verbal procedure of the flowchart. Both teachers said they would use reference materials before seriously undertaking listening program development. The references they would consult concern developing behavioral objectives and additional information about listening behaviors.

Analyses of Prototype

Based on the teacher tryout of the prototype, teachers should have a working knowledge of writing learning objectives before they develop objective based listening programs. Teachers can easily familiarize themselves to the objective writing process by reading any of the suggested behavior sources. (See reference section for writing objectives.)

Part of determining the usefulness of the prototype designed specifically for teacher-produced listening programs involved validation the usefulness of the prototype as: a learning system, a model teachers can follow and whether or not the described process for developing teacher-produced listening programs effectively incorporates the use of audio tape. Dr. S. L. Yelon, MSU Department of Instructional Development and Technology, examined the prototype and found no serious faults with the design of the learning system. Dr. William Durr and Dr. Byron VanRoquel, MSU, Department of Special Education, were asked if the prototype represented a process teachers could use. Dr. Durr felt teachers could easily follow the process of the module or flowchart and considered the development of listening programs an important part of third grade instruction. Dr. Van Roquel felt the program is valuable in that it identifies and is developed around specific listening skills. However, he was not sure teachers would be able to follow the process. Van Roquel suggested that teachers need simplified examples and a precise step-by-step process for implementing any programs. Larry Redd, MSU, Department of Television and Radio, felt

the use of audio tape contributed significantly to the self-standing component of the program, ease of production, provided an opportunity for developing an easily accessible listening library and is easy to modify program content.

The greatest concern of the validation committee was whether or not teachers could actually use the prototype and module to design programs for their classrooms. By testing the prototype, teachers demonstrated that they could use the prototype with little difficulty, and that producing listening programs would be a useful endeavor.

CHAPTER IV

SUMMARY, RECOMMENDATIONS AND CONCLUSION

This study is based on the premise that adults are, in general, poor listeners, and listening instruction at an early age can dramatically improve adult comprehension of aural stimulus.

Teachers can effect the listening skills of their students. In particular, third graders are experiencing innate physiological and environmental changes which dramatically effect their listening behavior. Teachers can develop listening skills and provide academic instruction by effectively using media and instructional development principles, which integrate knowledge of changing listening behaviors and regular academic learning units. Teachers can develop their own self-standing programs by following the processes this study describes. Teachers can effectively participate in the development of student listening skills by developing procedures for using media, improving specific listening behaviors, and specifically meeting teacher time constraints and instructional needs. The processes this study recommends are rooted in objectives sensitive to listening needs, academic needs, and teacher needs. An additional advantage of the process is that teachers can modify components of the system in order to meet specific classroom environments.

A way of improving future studies of this kind would be to increase the number of teachers questioned and tested and to student test listening modules developed by teachers.

This study identifies a need for more study of the underlying differences between aural and written communication. Whereas one would assume that one method of communication is equal to another, that is not the case. There are similarities, but there are more differences than we realize. Teachers must be made aware of these differences as they effect the methods of aural and written instruction.

The recommendations which will have an impact upon the types of listening instruction teachers give are:

1. Become familiar with listening skills and the listening behaviors of students.
2. Develop a working knowledge of the methods of behavioral instruction.
3. Develop and test several listening modules before undertaking an entire listening unit.

These recommendations should have an impact on the outcome of teacher-produced programs.

In conclusion, teachers have an important role to play in developing listening skills. By following the procedures recommended in this study, it appears that teachers can increase their teaching effectiveness, children's listening skills, and consequently the listening comprehension of adults.

APPENDICES

APPENDIX A

METHODOLOGY

METHODOLOGY

The questionnaire was designed as an instrument that would give information concerning teacher perceptions of student listening skills and whether or not teachers are interested in producing and implementing their own listening programs. The questionnaire included questions involving teacher opinions as well as teacher practices.

The original intention was to circulate questionnaires to 78 third grade teachers in the Lansing School District area. The 78 teachers were to be drawn from the eight school districts in the Lansing area.

The questionnaire was three pages long and contained 41 questions. There was a cover letter explaining my purposes, a direction page and a self-addressed stamped envelop for the return of the questionnaire.

Of the eight school systems, only two school districts were able to fully cooperate. This meant that out of 78 intended participants, only eight teachers would be queried. Despite the small remaining sample, I feel this sample is still representative of third grade teachers.

Five teachers responded to the questionnaires. The responses were scored and the findings indicate strong teacher interest in developing listening programs for their students.

Dear Teacher:

I would like to seek your cooperation in filling out and returning the enclosed questionnaire. I have included a self addressed stamped envelope for your reply.

I am in the process of designing a procedure for developing listening programs for third graders. Since the purpose of the program will be to develop a program for teacher use, it is necessary to find out what teachers think of self-produced listening programs for classroom use. Your experiences and opinions are essential before I can formulate an effective program for teacher use.

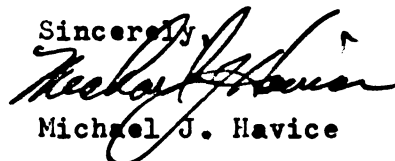
For the purpose of this questionnaire please consider "listening programs" to be instructional sequences which prompt students to give and receive (interpret) oral instruction effectively.

At the end of the questionnaire, space is provided for additional feedback. Please feel free to provide any information which you think would be helpful for teachers who wish to develop their own listening programs.

Of course, all information you provide will be handled in a confidential fashion. Please respond by May 20.

My area of study at M.S.U. is the effective use of telecommunications in educational systems. Please feel free to contact me if further clarification is needed (349-1894).

Thank you for your cooperation.

Sincerely,

Michael J. Havice

TEACHERS AND LISTENING PROGRAMSINSTRUCTIONS:

When answering the questions please place an appropriate mark in the space which best exemplifies your response. If no response is appropriate please feel free to write your own response.

There are five questions which may require written responses. If you don't have enough writing room please feel free to use the back of the questionnaire or additional paper.

When you have completed the questionnaire please see that it is mailed. I have selected a small sample and require as near a 100% response as possible.

Thank you.

Richard

How many third grade students are you presently teaching? _____

Are you using a specific method for improving the listening skills of your students? ☐ Yes ☐ No

If yes, what is the nature of that method?

- ☐ Self produced
☐ Purchased as part of another program package.
☐ Purchased as part of a "Listening Program" package.
☐ Other (please explain)

Are you aware of the "normal" physiological listening development of third graders?
☐ Yes ☐ No

Developing listening skills of students is the area of the Audiologist.
☐ Agree ☐ Disagree

Can you feel some students give and follow oral directions more effectively than other students?

If you use a "packaged" listening program, is it satisfying your students' listening needs?
☐ Yes ☐ No ☐ Don't know

What elements do you feel are necessary for a listening program to be effective?
☐ Don't know

There is a direct relationship between poor listening skills and academic success.
☐ Agree ☐ Disagree ☐ Don't know

Do students respond poorly to oral directions.
☐ Agree ☐ Disagree

Students need a structured program in order to develop better skills in oral comprehension and expression.
☐ Agree ☐ Disagree

Do you have two cassette tape recorders that you could easily use?
☐ Yes ☐ No ☐ Don't know

Two microphones ☐ Yes ☐ No ☐ Don't know
 Headsets ☐ Yes ☐ No ☐ Don't know

Listening is an ☐ active ☐ passive process.

Do the right and left ears of third graders respond to the same stimulus in the same way?
☐ Yes ☐ No ☐ Don't know

Students who listen well and orally communicate effectively are usually
☐ poor ☐ good ☐ excellent
 readers.

Do students ask direct oral questions? ☐ Yes ☐ No

5. When given oral instructions do your students ☐ always respond correctly to the instruction? ☐ usually ☐ seldom
6. Do your students generally ask oral questions which are perceptive?
☐ Yes ☐ No
7. Do you use questioning strategies when asking oral questions?
☐ Yes ☐ No
8. If yes, will you explain the strategies you use?
9. There is no need for a listening program. Students either have good listening skills or they don't.
☐ Agree ☐ Disagree
10. Have you assessed the listening needs of your students?
☐ Yes ☐ No
11. If yes, what does your assessment indicate?
12. Would you use an instructional sequencing tool for developing a listening program for your students?
☐ Yes ☐ No ☐ Don't know what you are talking about.
13. Have you used instructional sequencing in the past? (in other instructional situations)
☐ Yes ☐ No
14. If yes, has the instructional sequencing been successfully used by you and your students?
☐ Yes ☐ No
15. Is there a difference between affective and effective listening?
☐ Yes ☐ No ☐ Don't know
16. Listening skill development should be taught ☐ individually, ☐ in groups.
17. The listening programs the school has purchased effectively teach listening skills.
☐ Agree ☐ Disagree ☐ We don't purchase listening programs.
18. Listening programs should be supported with ☐ visual materials (slides & pictures) ☐ paper work (workbooks) ☐ instantaneous student response
19. Listening programs need to be strictly supervised by the teacher.
☐ Agree ☐ Disagree
20. Listening programs need to be individualized.
☐ Agree ☐ Disagree
21. Listening programs should concentrate on ☐ semantics ☐ syntax ☐ don't know.

3

1. Is there a specific listening behavior you can expect from third graders?

Yes ☐ No ☐ Don't know ☐

2. If yes, please explain.

3. Listening is primarily ☐ cognitive,
☐ affective,
☐ psychomotor,
☐ combination of the above (specify) _____
☐ don't know.

4. On the average, how much time do you spend developing or improving listening skills of your class each week?

☐ no time. ☐ 61-90 min.
☐ 0 - 30 min. ☐ 91-120 min.
☐ 31-60 min. ☐ more than 2 hours.

5. In evaluating speaker competence it is necessary to take into account the competence of the listener.

☐ Agree ☐ Disagree ☐ Don't know

6. Would you be willing to make your own listening program if you were given an instructional development model to follow?

☐ Yes ☐ No ☐ Don't know

7. What do the following instructional development terms mean?

UNC

NO

Don't know

8. Do students need a program which will help them improve their listening skills.

☐ Agree ☐ Disagree

9. What listening programs do you use? (Please specify by name.)

10. FINAL REMARKS

Please feel free to make appropriate comments.

SCORED QUESTIONNAIRE

Number of responses 5question:

1. Yes 5 No _____ No Response _____
2. Self produced 4
Purchased as part of another program package. 1
Purchased as part of a listening program package. _____
Other _____
3. Yes 3 No 2 No Response _____
4. Agree _____ Disagree 5 No Response _____
5. Various types of learning patterns
Different development level of skills
Able to organize their leads
Development of home patterns
Mental ability to decode the spoken word into
organized ideas at their own level of understanding.
No Response 1
6. Yes _____ No 1 Don't Know _____ No Response 4
7. Hierarchy of skills
Diversity of areas within the listening program
Sequencing of skills
Materials readily available
Must have a checking device
Children must see carry over.
High interest materials
Regular and short practice sessions
Reinforced application
8. Agree 4 Disagree _____ Don't know 1 No Response _____
9. Agree _____ Disagree 3 No Response 2
10. Agree 3 Disagree 2 No Response _____

11. Yes 3 No 2 Don't Know No Response
- 11a) Yes 3 No 2 Don't Know No Response
- b) Yes 5 No Don't Know No Response
12. Active 5 Passive No Response
13. Yes 1 No 1 Don't Know 2 No Response 1
14. Poor
 Good 2
 Excellent 2
 Not sure of correlation 1
 No response
15. Yes 4 No No Response 1
16. always
 usually 5
 seldom
17. Yes 4 No No Response 1
18. Yes 4 No 1 No Response
19. Use thought concept - accept any answer - some
 sequence - some direct answer.
 Avoid yes and no answers.
 Include a lot of how and why do you think ...
 Do not ask yes or no questions.
 No Response 2
20. Agree Disagree 5 No Response
21. Yes 4 No 1 No Response
22. Differential skills
 Students have to have a specific reason for
 listening.
 Information must be of a high interest level
 Overall good listener concentration.
 Students need to be actively involved.
23. Yes 5 No Don't Know No Response
24. Yes 4 No 1 No Response
25. Yes 5 No No Response
26. Yes 4 No Don't Know 1 No Response

27. individually 1
in groups ____
Both 4
28. Agree ____ Disagree ____ Don't purchase Listening
Programs 5
29. Visual stimulus 1
Paper work
Instant student response 2
All of the above 1
No Response 1
30. Agree 1 Disagree 2 No Response 2
31. Agree 1 Disagree 2 No Response 2
32. Semantic ____
Syntactic ____
Don't Know 3
No Response ____
Comprehension 1
Should not be limited 1
33. Yes 2 No 1 Don't Know 2 No Response ____
34. Follow series of six or seven directions successfully ____
Relationship of phonetic sound to reading
Draw inferences and conclusions from spoken word
No Response 3
35. Cognitive ____ Affective ____ Psychomotor ____
Combination 3 Don't Know 2 No Response ____
36. No time 61-90 ____
0- 30 5 91-120 ____
31-60 ____ 2hr + ____ No Response ____
37. Agree 5 Disagree ____ Don't Know ____ No Response ____
38. Yes 5 No ____ Don't Know ____ No Response ____
39. TPO ____ EO ____ Don't Know 5 No Response ____
40. Agree 5 Disagree ____ No Response ____
41. Scholastic news trails, Weekly Reeder
Teacher
None 1 No Response 3

FEEDBACK

Programs need to be usable within our present Language
Arts program.

APPENDIX B

PROTOTYPE PRETEST AND TEACHER RESPONSES

1. Are you familiar with instructional development?

Yes _____ No 2

2. Are you familiar with learning system design?

Yes _____ No 2

3. Are you familiar with behavioral objectives?

Yes 2 No _____

4. Are you familiar with either terminal performance objectives or enabling objectives?

yes _____ No 2

5. Do you know what listening skills third graders can actually develop?

Yes _____ No _____ Kind of 2

APPENDIX C

READING-LISTENING COMPARISON

TABLE 1.--Listening Equivalents to Reading Grade Versus Reading Grade (Vocabulary).

Listening			Reading		
	Score	Equivalent to Reading Grade	Score	Grade	Listening above Reading (yr-mo)
Primary Forms:					
Grade 1	75	3.1	37	1.5	1.6
Grade 2	82	3.6	58	2.5	1.1
Intermediate Forms:					
Grade 3	46	4.6	35	3.5	1.1
Grade 4	54	5.4	45	4.5	.9
Grade 5	61	6.2	55	5.5	.7
Grade 6	69	7.1	64	6.5	.6
Advanced Forms:					
Grade 7	130	7.9	122	7.5	.4
Grade 8	137	8.5	137	8.5	.0

APPENDIX D

FIGURES

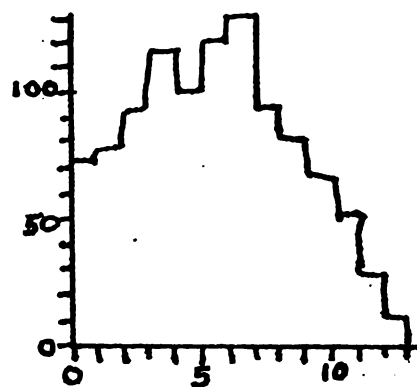


FIGURE 1.--Distribution of scores of the Oral Directions test.

SOURCE: Charles C. Brigham, *A Study of American Intelligence* (London: Princeton University Press, 1923), p. 2.

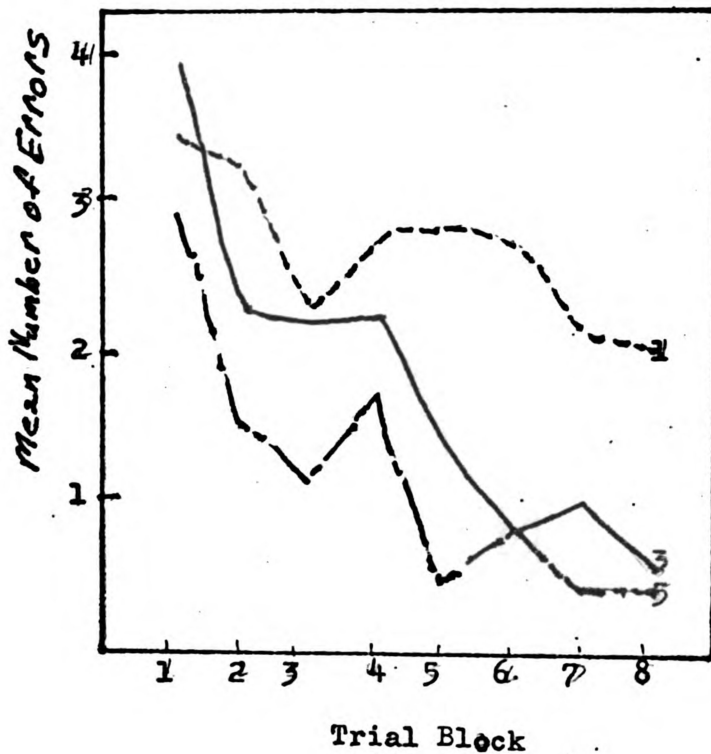


FIGURE 2.--Mean Errors over Trials for Matched-Age Pairs in the Four Grades.

SOURCE: Robert M. Krauss and Sam Glucksberg, "Some Characteristics of Children's Messages," Reading and Child Development and Relationships, Edited by Russell C. Smart and Mollie Smart (New York: MacMillan Co., 1972), p: 374.

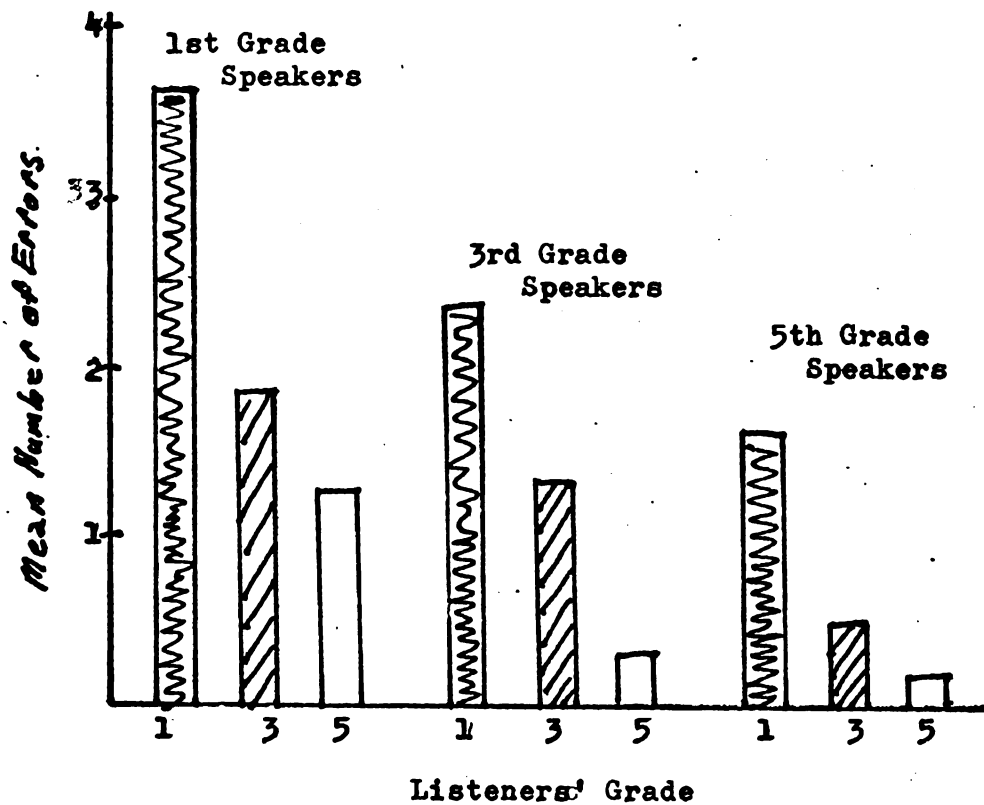


FIGURE 3.--Errors as a Function of Speaker and Listener Age.

SOURCE: Robert M. Krauss and Sam Glucksberg, "Some Characteristics of Children's Messages," Reading and Child Development and Relationships, Edited by Russell C. Smart and Mollie Smart (New York: MacMillan Co., 1972), p. 375.

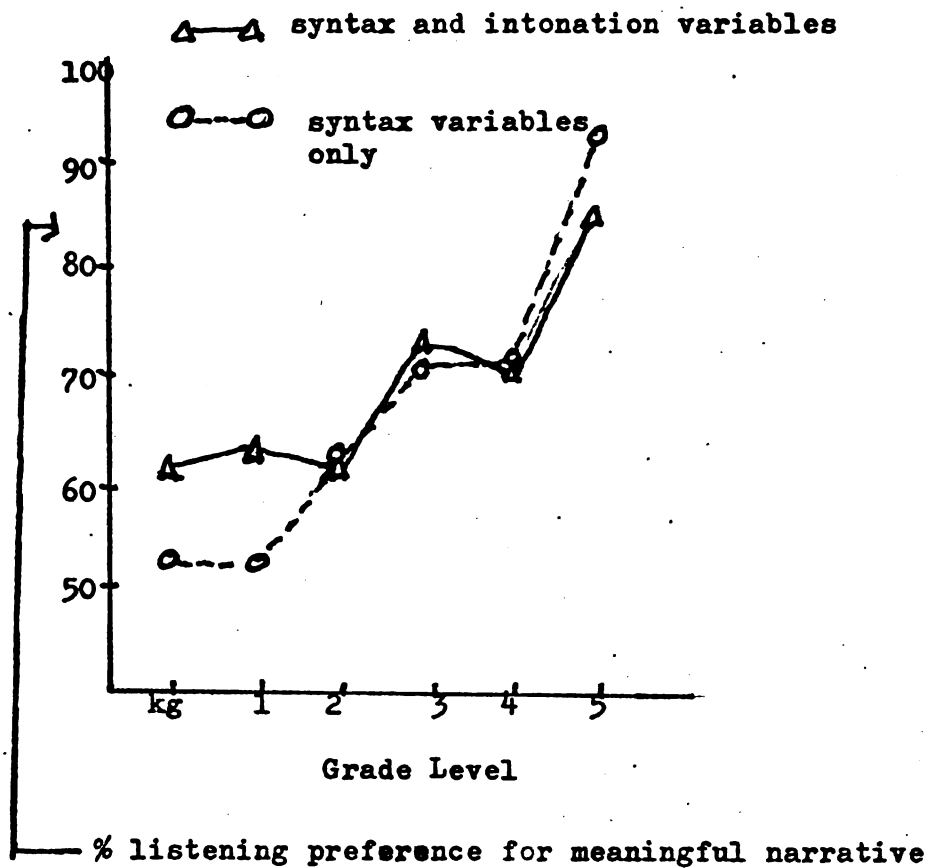


FIGURE 4.--Mean Selective Listening Preference for Meaningful Narratives with Normal Intonation.

SOURCE: John N. Bohannon and Bernard Z. Fieldlander, "Effect of Intonation on Syntax Recognition in Elementary School Children, Child Development 44 (June, 1973).

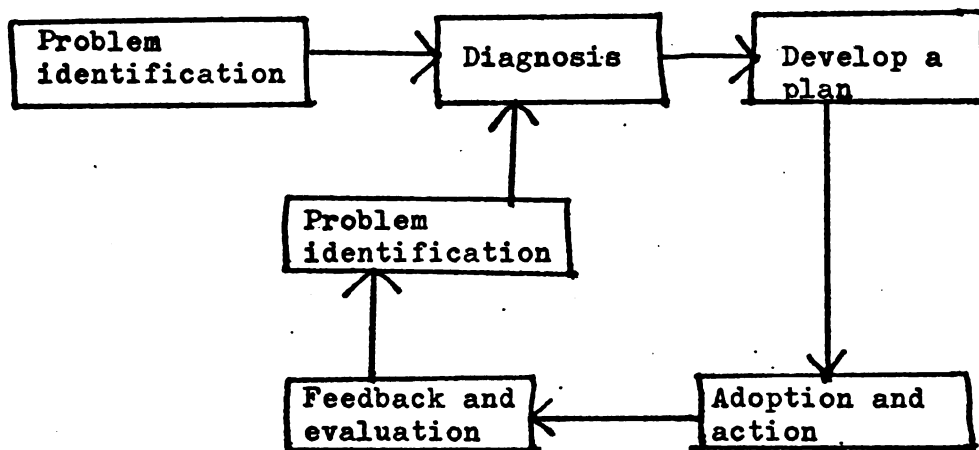
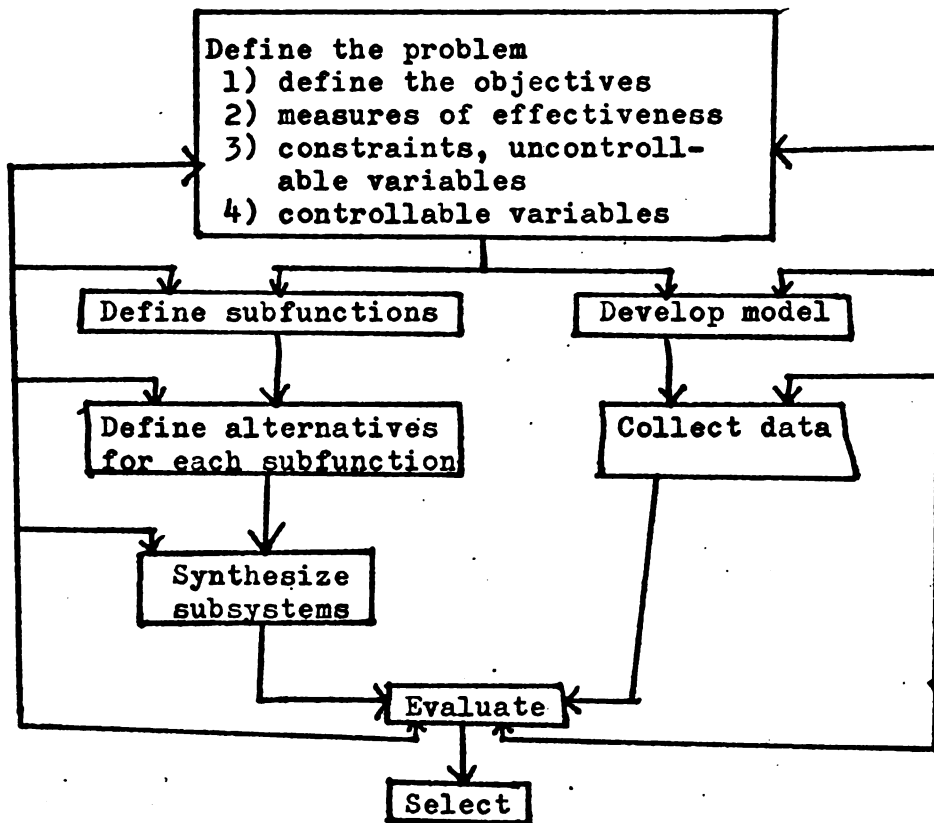


FIGURE 5.--Cyclical Nature of the Problem-Solving Sequence.

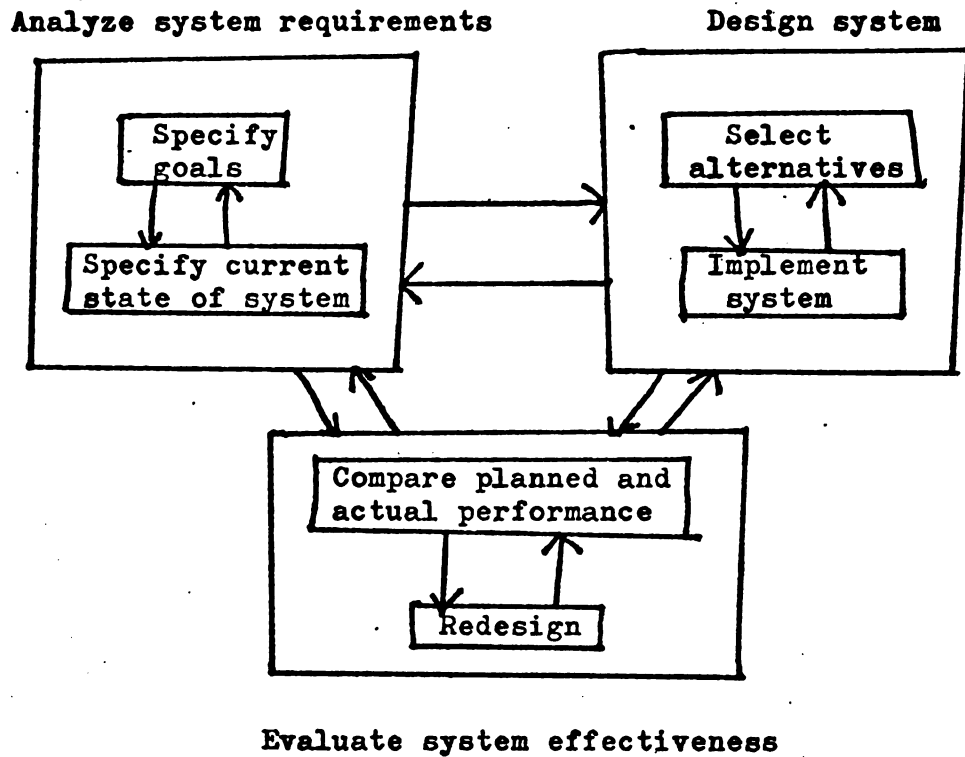
SOURCE: Richard Schmuck, Mark Chesler, and Ronald Lippit, Problem Solving to Improve Classroom Learning (Chicago: Science Research Associates, Inc., 1966), p. 27.

APPENDIX E

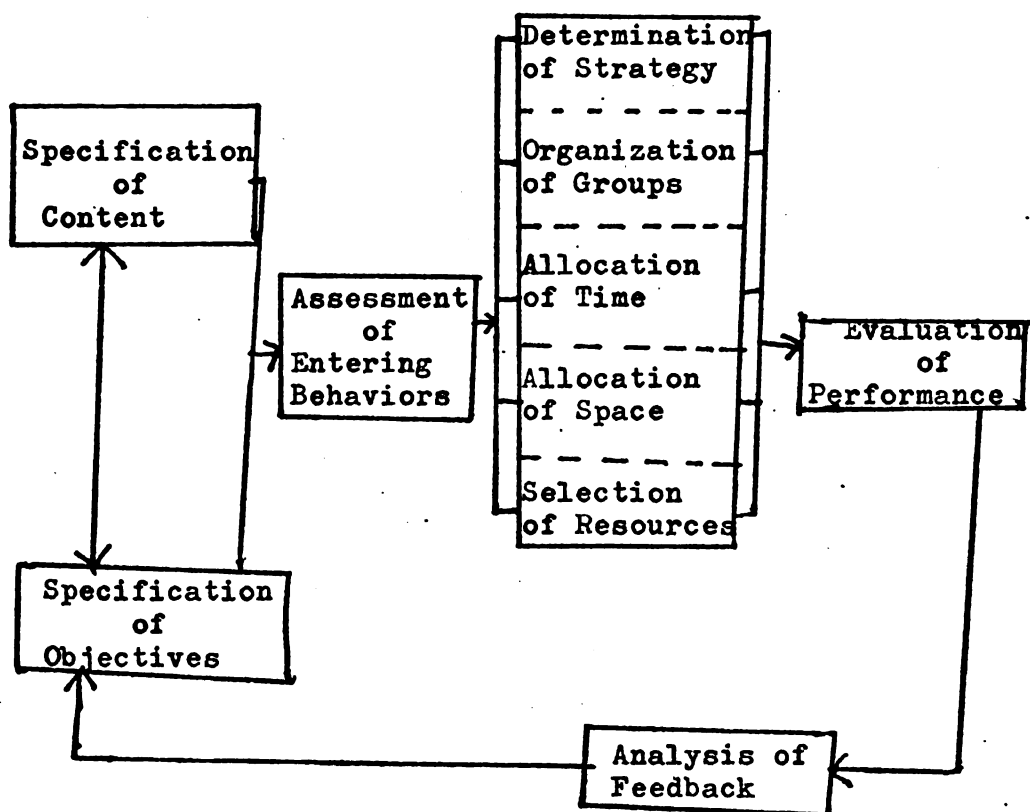
LEARNING SYSTEM DESIGN MODELS



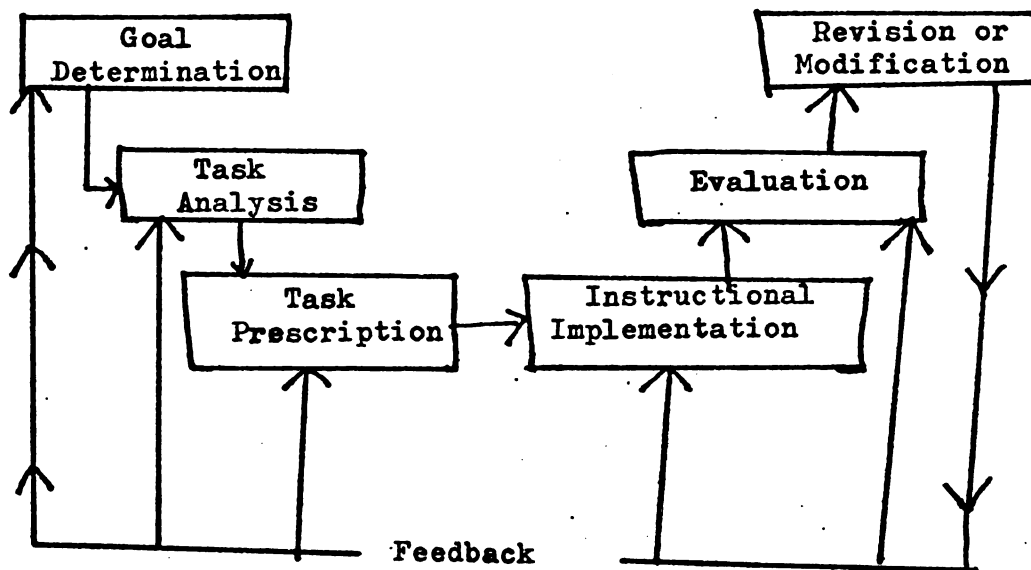
SOURCE: John Pfeiffer, New Look at Education (New York: Odesy Press, 1968), p. 32.



SOURCE: R. H. Davis; L. T. Alexander; and S. L. Yelon, Learning System Design (New York: McGraw-Hill, Book Co., 1974), p. 314.



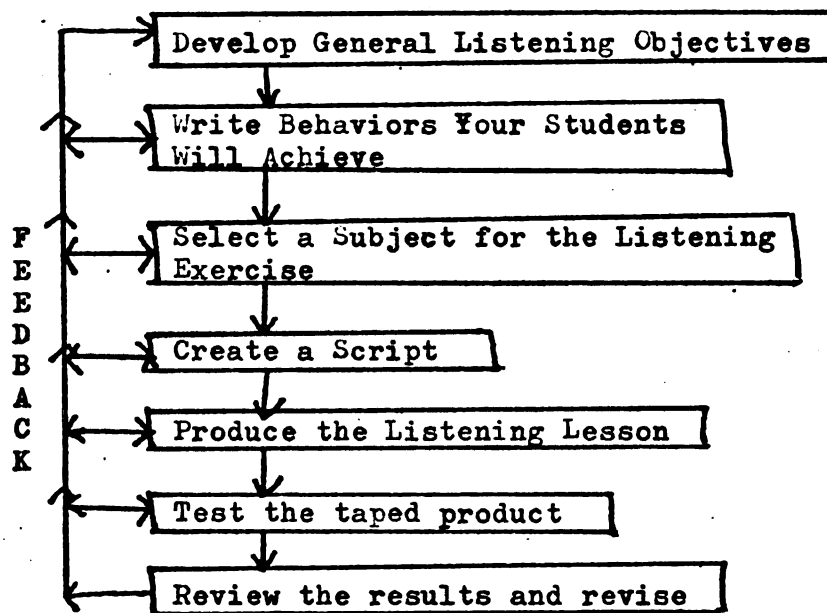
SOURCE: Vernon S. Garlach and Donald P. Ely, Teaching and Media (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1971), p. 49.



SOURCE: Castelle Gentry, 1975 (Unpublished).

APPENDIX F

PROTOTYPE OVERVIEW



Prototype Overview

APPENDIX G

MODEL DESIGN AND PROTOTYPE

Many teachers inadvertently avoid listening programs because they have not known how to deal with the individual natures of listening problems in the classroom. As Alice Yardley states, "listening instruction is a problem of time."

The main problem for the teacher is the number of children she wants to listen to. They need listening to one at a time. To overcome time constraints, teachers can use advances in modern technology to help develop programs for their students while giving themselves more time to devote to other areas of learning. The specific medium is audio tape, when combined with the technique of instructional development, efficient, effective listening tapes can be produced.

Audio tape provides the teacher with the freedom of knowing that students are receiving the type of instruction she wants, and instructional development assures that students are directed properly.

Instructional development works best when there is a plan, school or district wide, that allows for the growth of expectations as the child advances. This learning schedule, as it may be called, prevents the duplication of materials and allows for reemphasis where and when necessary. The prototype included as part of this paper is an example of applying instructional development to the development of a listening program teachers can produce for themselves.

The statements on the next page concern the implementation of self-produced listening programs for third grade teachers. These statements clarify the why and how of educational objectives as they apply to the development and use of self-produced listening programs.

This plan clarifies the roles of the teacher and students. The roles of the lesson and the equipment are defined separately.

The elements in the Lesson and Media Roles tabulation on the following page designate the roles of all of the elements involved in the production of listening programs, but they do not take into account preassessment or postassessment. The purpose of preassessment is to construct a plan for an unambiguous plan for evaluation. Postassessment grows out of a need to evaluate course objectives. Postassessment provides a check on how precisely and clearly objectives have been written, carried out, and met.

Teacher and Student Roles

TEACHER	STUDENT
AUDIENCE: Third grade teachers who wish to develop listening programs for their students.	Third grade students designated as needing instruction in order to further develop their listening skills.
BEHAVIOR: Teachers will design and produce in-class programs which will increase the listening competencies of their third grade students.	By the end of the units third grade students will demonstrate by writing or acting out an increased ability to interpret aural stimuli.
CONDITION: After assessing student listening needs, developing objectives and using available audio equipment.	Using audio equipment provided, following the established objective of the lesson, given a set number of sentences in which the lesson must be completed, interpret aural stimulus as the lesson may require.
DEGREE: Increase student listening competencies 50% or to whatever degree the teacher feels is realistic.	Student scores must reflect 95% accuracy in interpreting aural stimulus before they go to the next step in the program.

Lesson and Media Roles

LESSON	MEDIA
AUDIENCE: Third grade text or experience.	Audio related equipment and support materials within the classroom or school building.
BEHAVIOR: Materials will be used to create a change in the listening skills of the third grade students who participate in the program.	To be used to produce audio presentations which will improve student listening skills.
CONDITION: After assessing student performance, teacher ability, and resources at the teachers disposal.	To be used individually or as group programs; by individuals or groups.
DEGREE: The materials used will depend on their appropriateness in meeting listening and subject objectives.	The equipment will be used whenever listening programs are produced or played back.

Preassessment and Postassessment Roles

PREASSESSMENT	POSTASSESSMENT
AUDIENCE: Members of the third grade class.	Class members who have participated in teacher produced listening programs.
BEHAVIOR: Teachers will determine present listening skills of her students.	Teachers will determine whether or not listening skills (behavioral objectives) have developed to a higher level than entering behaviors.
CONDITION: By asking the students questions and asking the students to perform tasks that require the student to listen carefully.	By assessing student performance scores and asking students questions involving listening tasks.
DEGREE: To determine what instructional alternatives are available, and that in fact audio tape can be used as an instructional alternative. To determine the current level of third grader listening performance.	Postassessment must determine effective use of the equipment used and student performance.

This is interactive subject area and the model presented here is useful for listening programs within any one or combination of subject areas.

The design of the prototype is based on an examination of several Learning System Design Models (Appendix E). These models have elements in common which can be considered minimal requirements for the design and implementation of self-produced listening programs.

Because of the nature of listening skill development, a few modifications have been made which serve the needs of self-produced listening program development. The obvious modification effect the production of a script and the tape itself. The modification provides for the integration of other subjects into the listening program format. These features give the program added

flexibility and enable the teacher to design strategies for two subjects at one time. The obvious advantage is that teacher effectiveness is maximized.

The prototype that is part of this paper is not intended to represent a fixed process. Circumstances may require adjustments which will enable you to more accurately serve your classroom needs. The criteria to keep in mind as you design, develop, and implement the prototype are:

Assessing classroom needs.

Stating behavioral goals.

Designing a system that effectively utilizes alternatives at your disposal.

Assessing student performance on the basis of your objectives and feedback.

This prototype is designed to help you improve your students' listening skills and to make appropriate changes which will assure the best results from your students, you, and the lesson.

In the past the notion has prevailed that a general application of listening skill development is enough, but now there is a structure of basic language comprehension development which must be developed as part of student behavior.

Learning concepts involve the discrimination of one set of elements from another. Given an identical stimulus, children may react quite differently. The difference may be the result of conceptual differences in the interpretation of the message (stimulus). When assessing a student's level of language performance, a teacher may begin going through a variety of procedures. Tina Bangs has identified some types of subjective impressions a diagnostician may make while assessing a child.

Recognition of objects

Recognition of pictures

Naming (pictures, objects, self)

Action agent--use of gesture language; giving functional answers rather than naming the thing that represents the function.

Defining--repetition of question may mean the question has no meaning to the child.

Categorizing

Numbers

Spatial concepts

Serial directions

Sentence building

Jargon

Echolilia--no understanding of particular words or sets of instructions.

Gesture (Tina Bangs, 1968, p. 10).

The assessment items mentioned are all good indicators of a communication process, and may point to types of communication problems, however, not all of the considerations are aimed at listening oriented problems. To get started in determining listening skills, teachers should consider variables in hearing.

1. Auditory Acuity

The ability of an individual to hear and respond to pitch and loudness.

Human pitch is between 125 and 8,000 cycles per second (CPS)

Some students may only hear some pitches, consequently they may not hear whole words.

2. Masking

Auditory noise i.e., extraneous sound superimposed on a desired message.

3. Auditory Fatigue

Results from sustained exposure to the same frequencies results:

- (a) Tuning out continuous unwanted noise like a clock or fan noise

- (b) Tune out (involuntarily) a monotonous voice.

James J. Thompson, Instructional Communication (New York: American Book Co., 1969), p. 68.

These variables influence the listening perceptions of everyone, and the teacher who is concerned with listening development must be aware of those perceptual areas which may effect student listening performance. Some of these perceptual areas can be corrected or helped by the teacher, whereas areas concerned with hearing impairment should be left to the trained audiologist.

Not only are there variables in hearing perception, there are basic thought processes taking place as a listener hears aural sources. These processes are outlined by Ralph G. Nichols and Leonard A. Stevens.

1. Thinking ahead of the talker, to anticipate what the oral discourse is leading to and what conclusions will be drawn from the words spoken at the moment.
2. Listener weights the evidence used by the talker to support the points that he makes.
3. Listener periodically reviews and mentally summarizes the points the talk made so far.
4. Listens between the lines. What are the meanings which are not expressed. Xerox Corp., "Effective Listening" (New York, 1964) (Audio Tape).

Thought processes and hearing variables play an important role in the development of listening skills, the teacher designing listening programs will undoubtedly be dealing with student perceptions and thought processes. Perceptions and thought processes underlie all listening skills.

As you read the following lists of listening skills notice the relationship between listening skills, listening variables, and listening thought processes.

LISTENING SKILLS

Show that you can follow oral directions.

Follow directions for drawing pictures.

Follow directions in arranging pictures and objects in a predetermined order.

Follow directions for playing games.

Show that you can differentiate between sounds.

Identify loud and soft sounds.

Identify human and nonhuman sounds.

Show that you can remember specific information from an oral presentation.

After listening to a short story, identify the proper sequence of a series of four or five pictures related to the story.

Recognize the main idea in an oral passage that you have just heard.

After listening to a passage, answer questions about the passage (John C. Flanagan, Robert F. Mager, and William Shanner, 1971), p. 2.

Dorothy Braken has listed listening skills which she feels improves reading.

LISTENING SKILLS

1. Discrimination, basic listening.

2. Focusing or attending

Zeroing in on speaker ideas and "tuning out" extraneous sounds.

3. Tracking

Receiving messages when there are competing messages.

4. Remembering

Dependent on auditory memory and sequencing. Different from reading memory because there are no visual props.

Dorothy K. Braken, 1971, p. 59.

Braken's investigation has led to the identification of an area of specific listening skills which influence interpretive reading performance, fosters the development of the listening thought

processes, and is not greatly influenced by hearing variables.¹
 These skills are given in terms of general listening goals.

I. Teach Semantic/Syntactic Listening Skills

These skills are:

Semantic

1. Accurately interpret one simple semantic sentence.
2. Accurately interpret one complex semantic sentence.
3. Accurately interpret several related simple semantic sentences.
4. Accurately interpret several related complex semantic sentences.
5. Accurately interpret a simple and complex semantic sentence arrangement.
6. Accurately interpret several sets of simple and complex sentence arrangements.
7. Accurately interpret several randomly arranged semantic simple and complex sentence arrangements.

Syntactic

1. Accurately interpret one simple syntactic sentence.
2. Accurately interpret one complex syntactic sentence.
3. Accurately interpret several related simple syntactic sentences.
4. Accurately interpret several related complex syntactic sentences.
5. Accurately interpret a simple and complex syntactic sentence arrangement.
6. Accurately interpret several sets of simple and complex syntactic sentence arrangements.
7. Accurately interpret several randomly arranged syntactic simple and complex sentence arrangements.

Semantic/Syntactic

1. Accurately interpret one paragraph which is made up of only semantic sentences.
2. Accurately interpret one paragraph which is made up of only syntactic sentences.
3. Accurately interpret one paragraph which is made up of semantic and syntactic sentences.
4. Accurately interpret a story which has semantic and syntactic meanings.

¹In the area of Dichotic listening, early detection of perceptual difficulties can lead to referring a student to a diagnostic specialist who can determine the extent of the student's particular listening problem.

II. Teach Dichotic Listening Skills

These skills are:

1. Accurately interpreting two simultaneous sound sources.
 - a. noise
 - b. simple sentence message
2. Accurately interpreting two simultaneous sound sources.
 - a. simple sentence
 - b. simple sentence--Sources contain two different messages and start at different times.
3. Accurately interpreting two simultaneous sound sources.
 - a. noise
 - b. complex sentence message
4. Accurately interpreting two simultaneous sound sources.
 - a. complex sentence message
 - b. complex sentence message
5. Accurately interpreting two simultaneous sound sources.
 - a. multiple complex sentence messages
 - b. multiple complex sentence messages
6. Accurately interpreting two simultaneous sound sources.
 - a. conversation A
 - b. conversation B--Mixed degrees of similarity and extreme differences. subject, voices, tones and emotional contents.
7. Accurately interpreting two simultaneous sound sources when volume shifts are involved.
 - a. involve all of the above skills plus designating a conversation to follow while the volume is shifting.
8. Increasing the accuracy of interpretation by increasing the number of conversations and the number of conversations the student is expected to accurately interpret. The suggested limit for simultaneous interpretation is five conversations.

III. Teach Combined Dichotic and Semantic/Syntactic Listening Skills

These skills are:

1. Accurately interpret two simultaneous sound sources, one source is a simple semantic/syntactic sentence pair.
 - a. noise
 - b. one simple semantic and one simple syntactic sentence.
2. Accurately interpret two simultaneous sound sources. One source is a complex semantic/syntactic sentence pair.
 - a. noise
 - b. one complex semantic sentence and one complex semantic sentence.

Start Staggering

3. Accurately interpret two simultaneous sound sources.
 - a. simple semantic/syntactic sentence pair
 - b. simple semantic/syntactic sentence pair.
4. Accurately interpret two simultaneous sound sources.
 - a. simple semantic/syntactic sentence pair.
 - b. simple semantic/syntactic sentence pair.
5. Accurately interpret two simultaneous sound sources.
 - a. complex semantic/syntactic sentence pair.
 - b. complex semantic/syntactic sentence pair
6. Accurately interpret two simultaneous sound sources.
 - a. complex semantic/syntactic sentence pair.
 - b. complex syntactic/semantic sentence pair.
7. Accurately interpret two simultaneous sound sources.
 - a. complex semantic/syntactic sentence pair.
 - b. simple syntactic/semantic sentence pair.
8. Accurately interpret two simultaneous sound sources.
 - a. a randomly mixed paragraph of semantic and syntactic sentences.
 - b. a randomly mixed paragraph of semantic and syntactic sentences.
9. Accurately interpreting more than two simultaneous sound sources.

Randomly mix the number and complexity of sound sources. Be sure to start at an easy level for your students and proceed to up to five mixed messages. With practice the student should be able to follow up to five sound sources with at least 80% comprehension of each source.

The identified skills are particularly relevant since they promote listening skill development in those areas where the third grader is ready to develop listening skills.

Example Module

Reasons for Developing

Example Module

The example listening program module that is part of this project was developed so teachers would be able to trace the development of an ordinary self-produced listening program. This module also shows how listening objectives can be combined with the Language Arts program of an existing school.

For the purposes of the model, a Language Arts text was obtained from a Lansing area school and is currently being used in a third grade classroom. The general objective of the unit used

from the Language Arts Text is to have students recognize sentences that show strong feelings. The general objective of the listening program is to teach semantic and syntactic sentence listening skills.

By following the module and referring to the prototype and references, teachers should have enough information to put together effective listening programs of their own. As teachers use the prototype and module they will find that the suggested procedures are easy to implement in the classroom setting. Part of the ease of use can be attributed to the easy incorporation of a second subject area in the listening program design.

The format of the programs are easy to tailor to individual or group needs. Another advantage of self-producing programs is that teachers can change or replace lessons as required.

Compared to using other program types, the self-produced programs are specifically designed by the teacher to serve students' particular listening needs. The nature of the end product has great potential for making learning fun. Learning becomes fun because the programs can be directly related to known student experiences, real and vicarious.

Example Module Procedure

When teachers begin working on a particular self-produced lesson they need to start with four words: goal, objectives, criterion and strategy. Equipped with these words, teachers should create several worksheets following this pattern.

These worksheets provide the basic learning components for self-produced lesson. The teacher will know what to do and how to go about doing it. Now, the teacher needs to develop a strategy for presenting objectives and must introduce some motivational elements.

If the teacher doesn't already have a format to follow for self-produced listening program, the teacher will want to develop one. The purpose of a format is to develop a general procedure for presenting objectives.

The script format for the example module is given after the following tabulation.

LISTENING

LANGUAGE ARTS

Goal

General Objective	To teach semantic/snytactic sentence listening skills.	To teach recognition of sentences that show strong feeling.
--------------------------	--	---

Objectives

Enabling Objectives	Given an aural sentence which is declarative, the student will accurately interpret its meaning.	Given a simple declarative sentence, the student will be able to interpret its meaning in a written and spoken form.
Terminal Objective	Given an aural message, the student will distinguish between declarative and exclamatory sentences.	Given a randomized sequence of sentences, the student will be able to place the correct punctuation mark at the end of exclamatory sentences.

Criterion

Pretest	Oral interpretation of criterion items on pretest will be 85%.	Students will be able to interpret written declarative sentences with 95% accuracy.
Posttest	When given aural declarative and exclamatory sentences, students will be able to identify correctly from an aural list the sentences that are declarative or exclamatory as specified by the teacher. With 95% accuracy.	Given random lists of declarative and exclamatory sentences, the student will put the correct punctuation on 95% of the sentences.

Strategy

Audio tape	Language Arts Text
Worksheets	Language Arts Work Book
Aural student response (recorded)	Audio tape lesson # ____
Student will use audio tape # ____ for the lesson and record aural responses on a blank tape. When written responses are required, the student will respond on the appropriate worksheet # ____.	Worksheet # ____.

Script Format**Introduce:**

subject
behavior expected at outcome.

Be sure student has all of appropriate materials before starting.

writing instrument
worksheet(s)
record unit
extra paraphernalia (bells, horns, whatever)

Administer pretest

Have student check work for accuracy in order to proceed to

FEEDBACK

Go through the lesson.

Concentrate on expressed objectives.

FEEDBACK

Posttest

If student meets criterion, send to the next module.
If student does not meet criterion, send to another tape
that emphasizes the same lesson objectives.

After writing a general format, teachers will have a basis
for writing a lesson outline. The teacher outline should contain
all of the elements which will be necessary for the student to suc-
cessfully master the stated behavioral objectives. The lesson out-
line will indicate what supportive materials the self-produced
listening program will require.

Remember that the format is not a restricting element in
the program design. The format gives a pattern of presentation but
does not fix the nature of the presentation itself. The creativity
of the teacher should complement the format at all times.

Lesson Outline**Review**

Declarative sentence
Give pretest for exclamatory sentences.

Explain

Exclamatory sentence criteria
Exclamatory sentence punctuation
Role feelings play in exclamatory sentences.

Give examples**Single sentences**

- 1.
- 2.
- 3.
- 4.

Ask for student examples**Feedback**

Create a situation calling for an exclamatory statement.

Student response
Feedback

Compare and contrast declarative and exclamatory sentences.

List four sentences.

Have students identify exclamatory sentences.
Feedback

At this point the process of the script is not complete. What is required now is the writing of the script and the inclusion of the supportive materials. When you finish your script, and as you write it, review the effectiveness of the format and outline. Changes will occur which will undoubtedly improve the effectiveness of the finished product. What will not change will be the objectives of the lesson.

Example Lesson Script: Exclamatory Sentences

NARRATOR: To be sure you are including all of the elements necessary to effective instruction, you may want to indicate where material is given a response is expected and feedback is given.

Material Before starting this lesson, you should have successfully completed the lesson on declarative sentences. To successfully complete this lesson, you must have the following items.

- a cassette recorder playing this lesson.
- a cassette recorder loaded with a blank tape.
- a microphone connected to the recorder with the blank tape.
- a set of headsets if you are listening to this lesson by yourself.
- an Example Lesson worksheet
- something to write with.

Response Do you have all the items? If you do, continue this lesson. If you do not have all of the items mentioned, stop this recorder and get the materials you need. Start the recorder when you are ready.

(Pause)

When you hear this sound "stop cue" stop this recorder and do what is asked of you. When you are finished, restart this recorder.

Material Ready? Let's see how much you remember from the last lesson. Look at exercise number one on your worksheet. Correctly punctuate the sentence or sentences that are declarative.
Response (stop cue)

Feedback If you put periods at the end of sentence two and sentence three, continue this lesson. If you put a period at the end of sentence one or four, you should ask me for a review lesson.

(Pause)

Now, you are ready to learn how to correctly identify exclamatory sentences.

(Pause)

Material

Sometimes you want to say something that expresses how strongly you feel. You may be glad, excited, surprised, angry or even frightened.

Response

Listen to each of the following sentences. What feeling is conveyed by each of the following sentences? Circle your response on exercise two of your worksheet.

1. Hooray, our team is ahead!

2. All at once, I saw a ghost!

(stop cue)

Feedback

Did you indicate that sentence one conveyed an excited feeling and sentence two conveyed a frightened feeling? If you did, you are right.

MaterialResponse

Now, you try it. Make up two exclamatory sentences. One sentence should show fright and the other sentence should show excitement. When you have finished writing the sentences, practice saying them. When you are ready, record your excited and frightened sentences on the other recorder.

(stop cue)

Feedback

Do your sentences sound like these sentences?

1. My, it's dark!

2. Someone's coming!

These sentences show fright.

1. Slide Tom!

2. I got an A!

These sentences show excitement.

Check your sentences.

(stop cue)

Material

As you can imagine, there is a special punctuation mark for sentences that convey strong feelings. We call this punctuation mark an exclamation mark. The exclamation mark looks like a baseball bat with a baseball at the bottom of the bat. Look at the example on your worksheet. This punctuation mark indicates strong feeling on the part of the speaker or writer.

Response

Look at the sentences from exercise two. Both of those sentences are punctuated with an exclamation mark.

(Pause)

Can you write three exclamatory sentences?

Give it a try! Write three exclamatory sentences for exercise three.

(stop cue)

Feedback

Did you put the correct punctuation mark at the end of each sentence? Check your work.

(stop cue)

Material
Response

How do these sentences sound? Do they convey strong feelings? Stop this recorder and read your sentences into the other recorder. Play back the sentences when you finish. Do your sentences convey strong feelings? If you are not sure about your sentences, start this lesson over.
(stop cue)

MaterialResponse

If you were outside and someone said, "Here comes the bus!" what would be happening and where would you be going? Think about it a minute and record your response on the other tape recorder. Use two exclamatory phrases in your description of what happens.
(stop cue)

Feedback/
Material
Response

Did you have a good trip? Write the exclamatory sentences you used in the space provided for exercise four.
(stop cue)

Feedback

Do your sentences convey strong feeling?
(pause)

Material

Remember, a declarative sentence is a statement of fact or opinion. An exclamatory statement must show strong feelings.
(pause)

Response

Listen to the following sentences. For exercise five write down the sentences which are exclamatory. Be sure to use the correct punctuation mark.

Wrinkles should merely indicate where smiles have been.

We finished!

John, look out! Pause and repeat after each
When in doubt, tell the truth. sentence.

(pause)

Feedback

If you wrote, We finished! and John, look out! you have correctly identified the exclamatory sentences in exercise five. Did you use the correct punctuation mark?
(pause)

Material/
Response

For exercise six, put the correct punctuation mark after each of the sentences.
(stop cue)

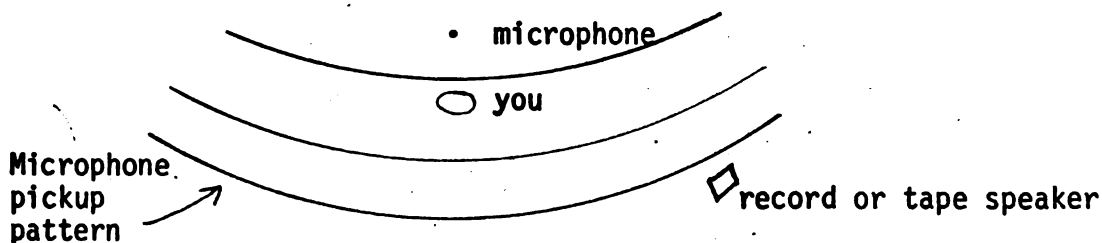
Feedback

Sentences one and three are exclamatory sentences. Sentences two and four are declarative sentences.

You have finished this lesson. Bring me your completed worksheet and your tape. I'll tell you which lesson to do next.

The process of getting the script on audio tape is the easiest part of the entire self-produced listening program process. For most practical experiences, you will be using a cassette tape recorder and the microphone that usually accompanies the cassette recorder. In order to simply record your voice, follow the instructions that come with the recorder. If you wish to create the impression of depth in your recording, vary the distance of sound sources from the microphone. This process will be helpful when you are dealing with dichotic listening skills.

Use distance from the microphone to give the impression of depth.



The volume on the record/tape speaker can be controlled to adjust the presence of the sound coming from that source.

"Example Lesson" Worksheet

Exercise one.

1. Are you going to the store
2. My dog has brown eyes
3. Mr. Jones is my friend
4. Tom, are you coming

Exercise Two.

Hooray, our team is ahead!
glad, excited, surprised, angry, frightened

All at once I saw a ghost!
glad, excited, surprised, angry, frightened

EXCLAMATION MARK ! ! ! ! !

Two exclamatory sentences:

1. (fright)
2. (excitement)

Exercise three.

- 1.
- 2.
- 3.

Exercise four.

- 1.
- 2.

Exercise five.

- 1.
- 2.
- 3.
- 4.

Exercise six.

1. I can see the top of the mountain.
2. Nothing helps scenery like ham and eggs
3. Hooray
4. Water taken in moderation cannot hurt anybody

Evaluating Self-Produced Listening Programs

Teachers have enough information to realize that there is a way to develop listening skills in third graders, however, teachers also realize that dealing with the problem of listening skill development is not confined to just the physical ability of hearing. Dealing with listening means dealing with the interactive world of auditory perception and conceptual meanings of stimuli that are received by the listener.

Since listening is greatly dependent on perception and these perceptions lead to communication effectiveness, measuring listener performance is logically based on competence, and this measuring of competence raises the question of whose competence; the speaker or the listener who is responding to a speaker?

Communication is not a solitary process, but occurs between two parties involved in the communication task. Therefore, competencies must be measured on two fronts: the message being sent, and the message being received. If teachers are careful to assure competencies in instruction, the teacher can be assured of measuring the competencies of students. Teachers need to develop competencies in the development of programs they design, and be aware that poor student responses may be due to poor teacher performance.

To discover the competencies of students and the rate of student development, the teacher must preassess student listening skills and develop objectives for self-produced listening programs. By doing this, the teacher will be able to measure any progress that may be made by students, and measure the development of the listening program objectives. In evaluating program and student performance, which are based on their respectively stated objectives, the teacher will receive feedback relative to instructional and program production competencies.

Because of the pretest, a teacher may develop programs that will work for students. If the teacher uses a program and it fails, (as indicated by her posttest) the failure can usually be attributed to one of these three reasons.

1. The production of the program.
Is the pace too fast?
Were all the major sound cues clear and understandable?
2. Behavioral Objectives.
Were objectives suitable to the student(s)?
Are the Behavioral expectations in a developmental order?
Were the expectations of the program made clear to the student?
3. Teacher attitude.
Have the students been affected by the teacher's attitude toward the program?

These problems can be easily remedied by looking at the results of the program after it has been used. Be sure to base conclusions on the program and learning objectives.

Another problem is that the program may point out a hearing impaired child. In this case, seek professional help, and remember that the program has served a vital purpose in identifying a potentially hearing impaired child.

The following flowchart represents a visualization of the development process for constructing a listening program. References at the end of this study are useful for those who wish to develop skills in specific developmental areas.

Setting General Goals

Minimum requirements:

Analysis and identification of what needs to be done.

Defining Goals.

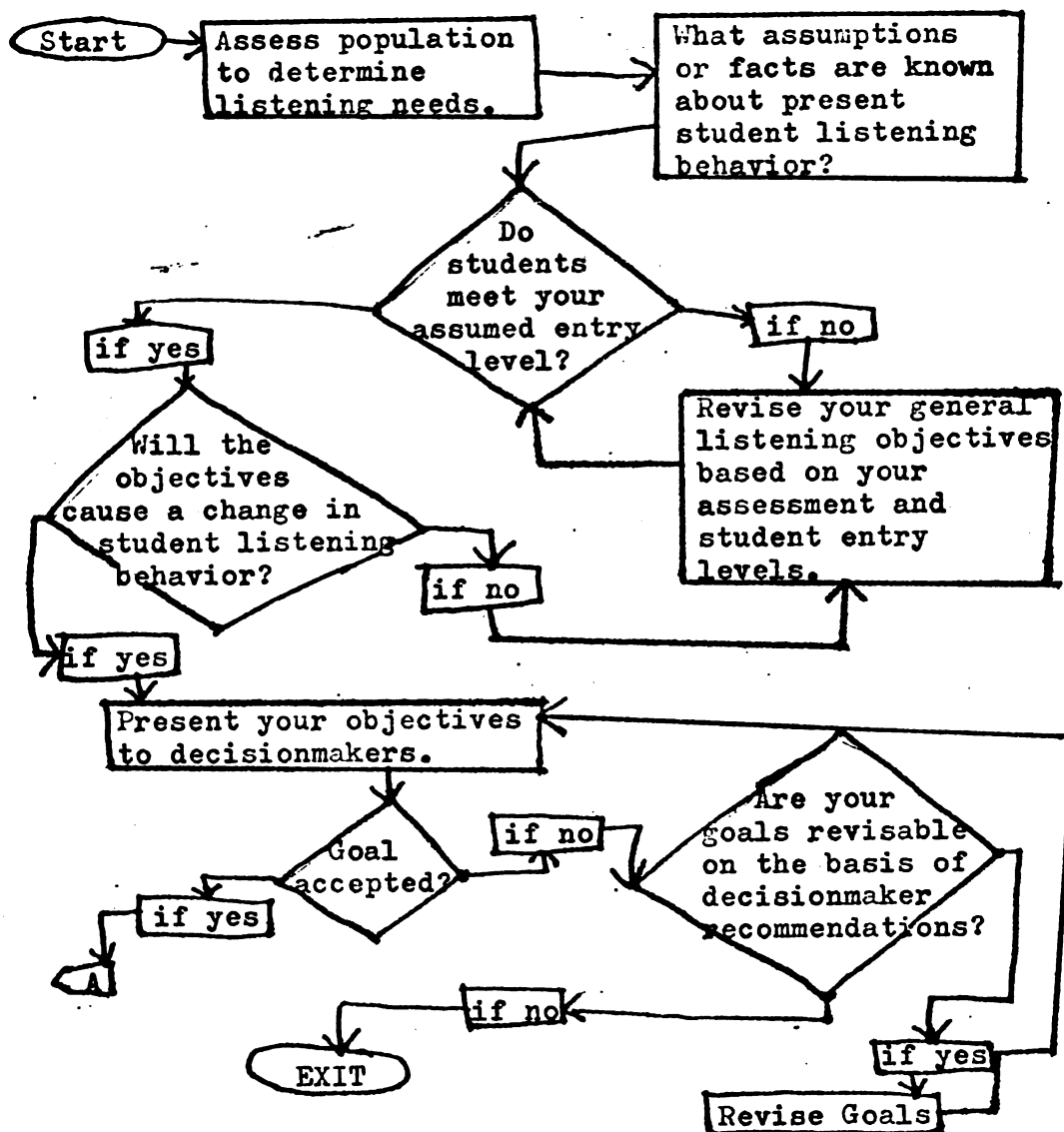
PROTOTYPE

Figure 6: Developing General Listening Objectives.

Designing a system

Minimum skill requirements:

Knowledge of third grade listening skill development pattern.

Basic listening skills

A Semantic/Syntactic listening skills

Dichotic listening skills

Combined listening skills

B Ability to combine listening skill objectives with another subject area or experience oriented set of objectives.

C Create a Script
Combine listening and subject area experiences

D Produce a listening lesson
Transfer a script to audio tape
Effectively integrate other supportive materials

PROTOTYPE

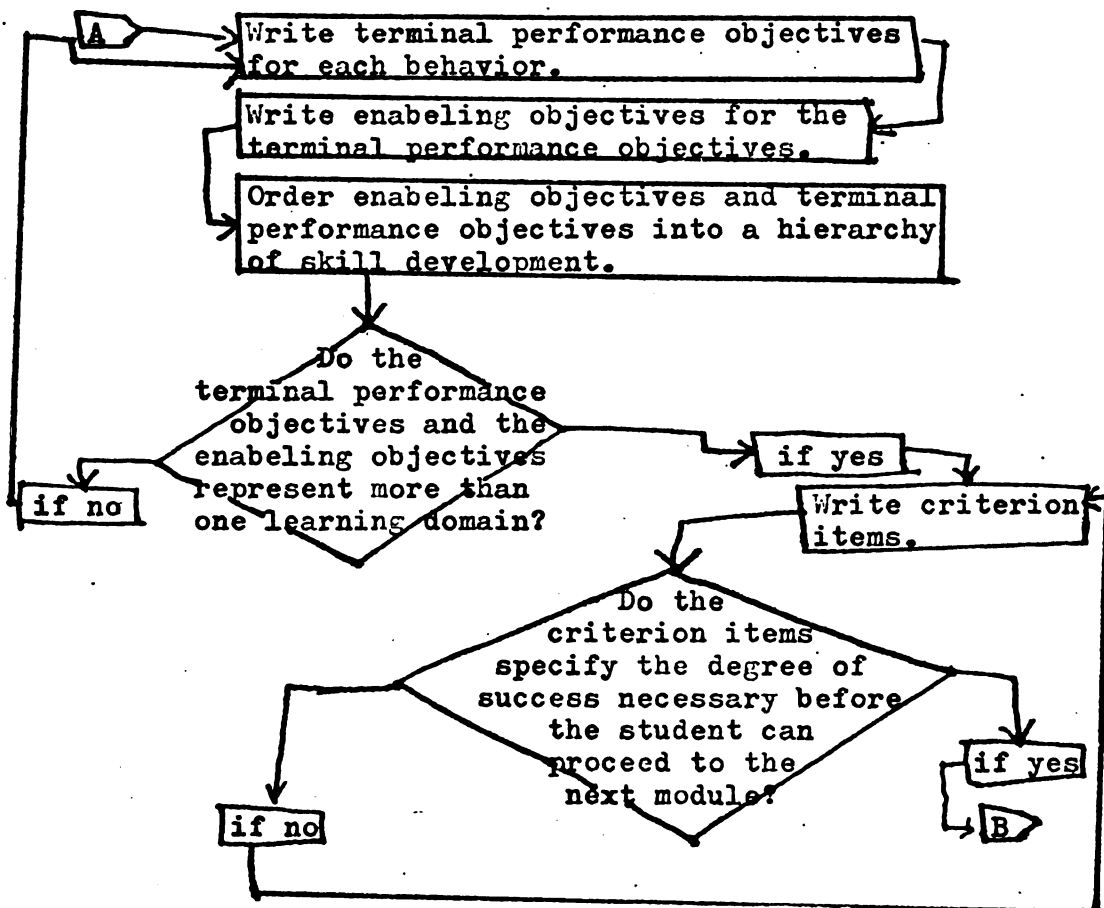


Figure 7: Developing Specific Learning Outcomes.

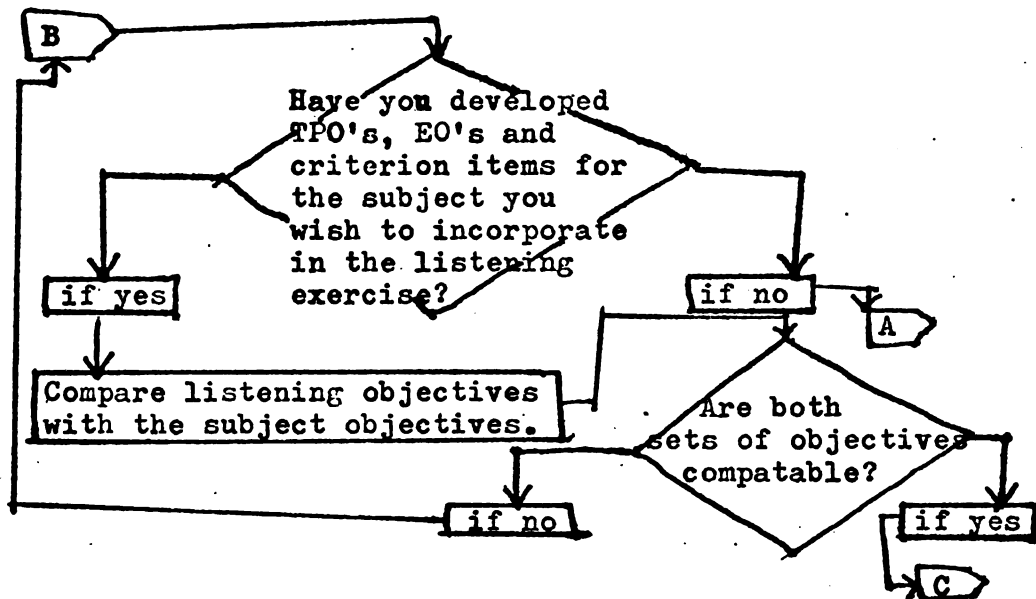


Figure 8: Selecting a Subject for the Listening Exercise.

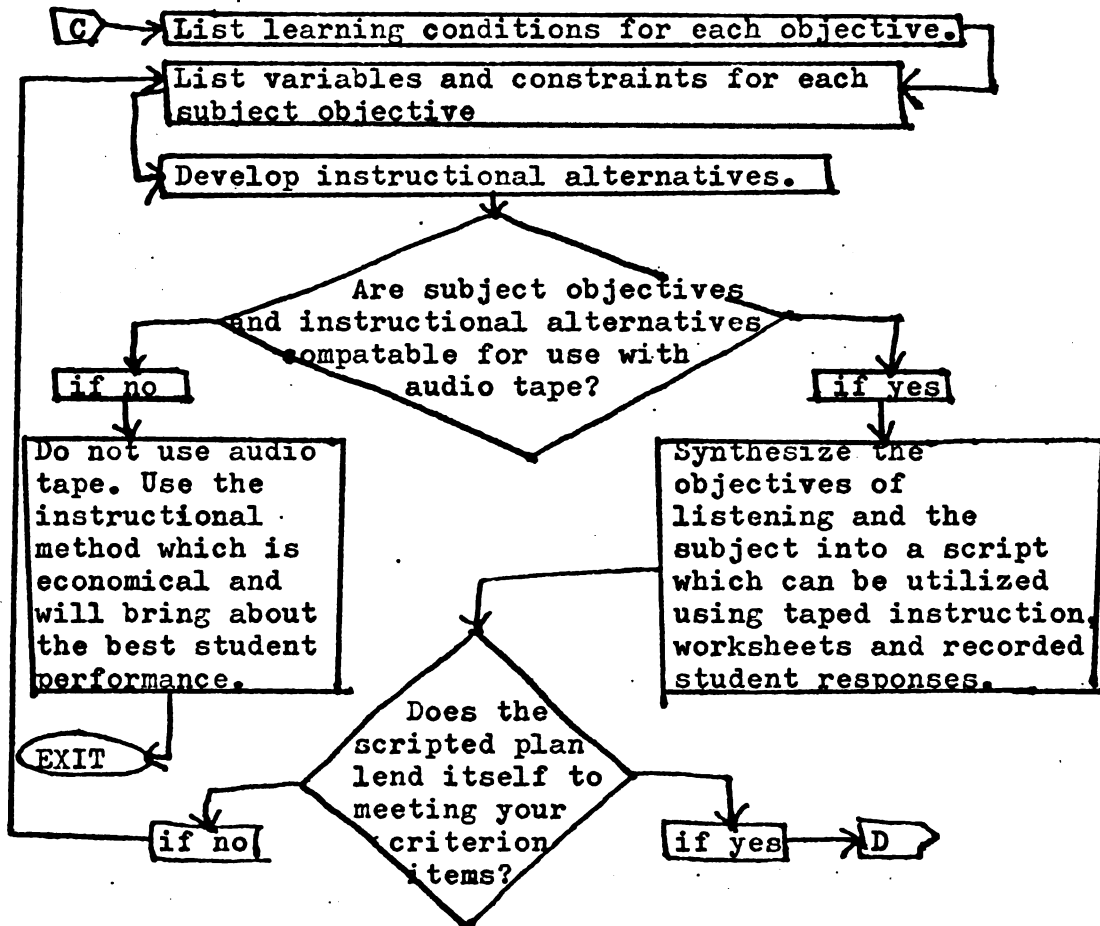


Figure 9: Developing a Script for the Listening Program.

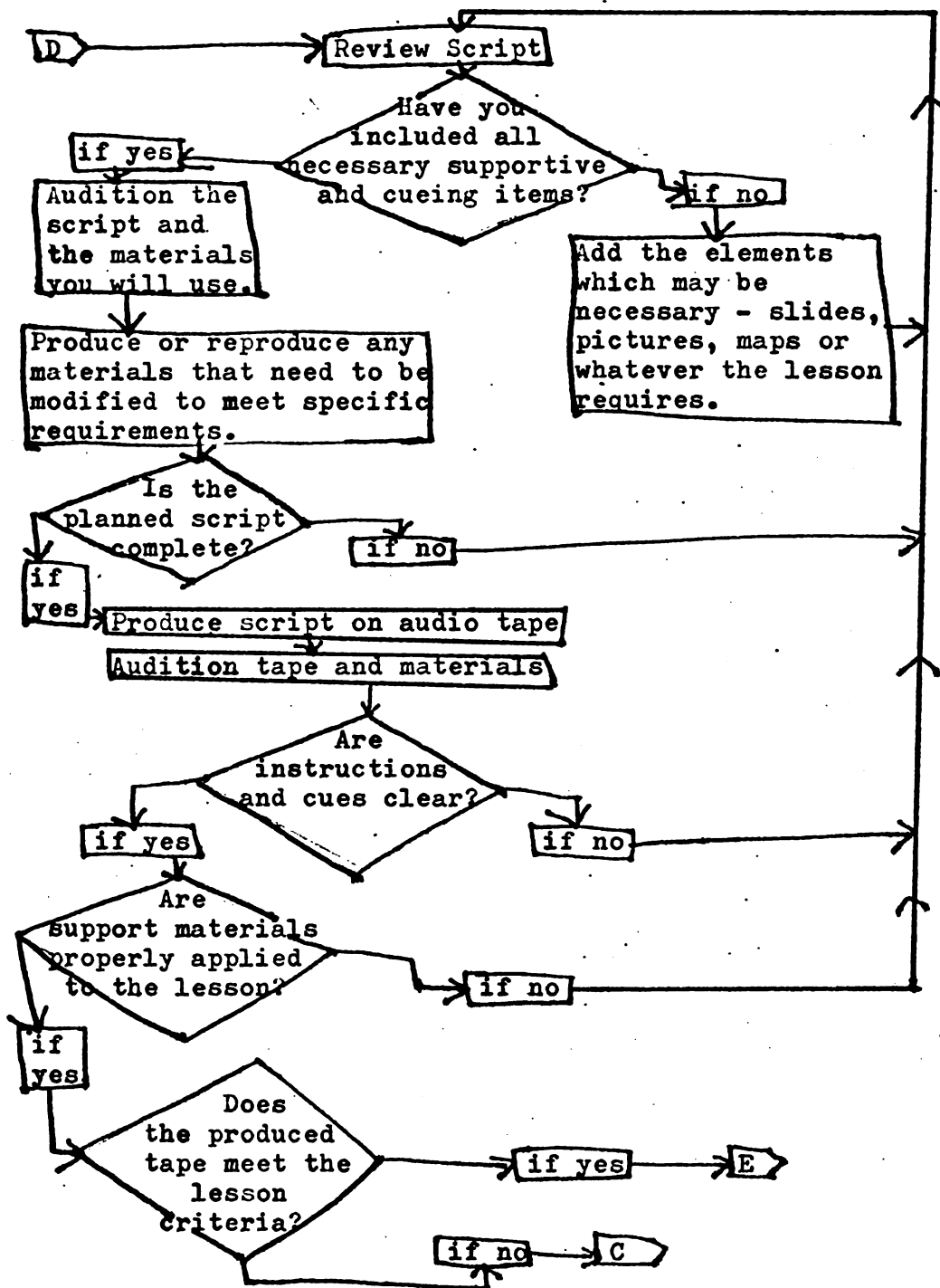


Figure 10: Producing a Listening Lesson.

Assessing student and Tape performance.

Minimum requirements:

Ability to determine:

Whether or not listening and subject objectives are being met.

Effectiveness of:

script

audio production

exercises

supportive materials

Positive and negative factors in student-program interaction.

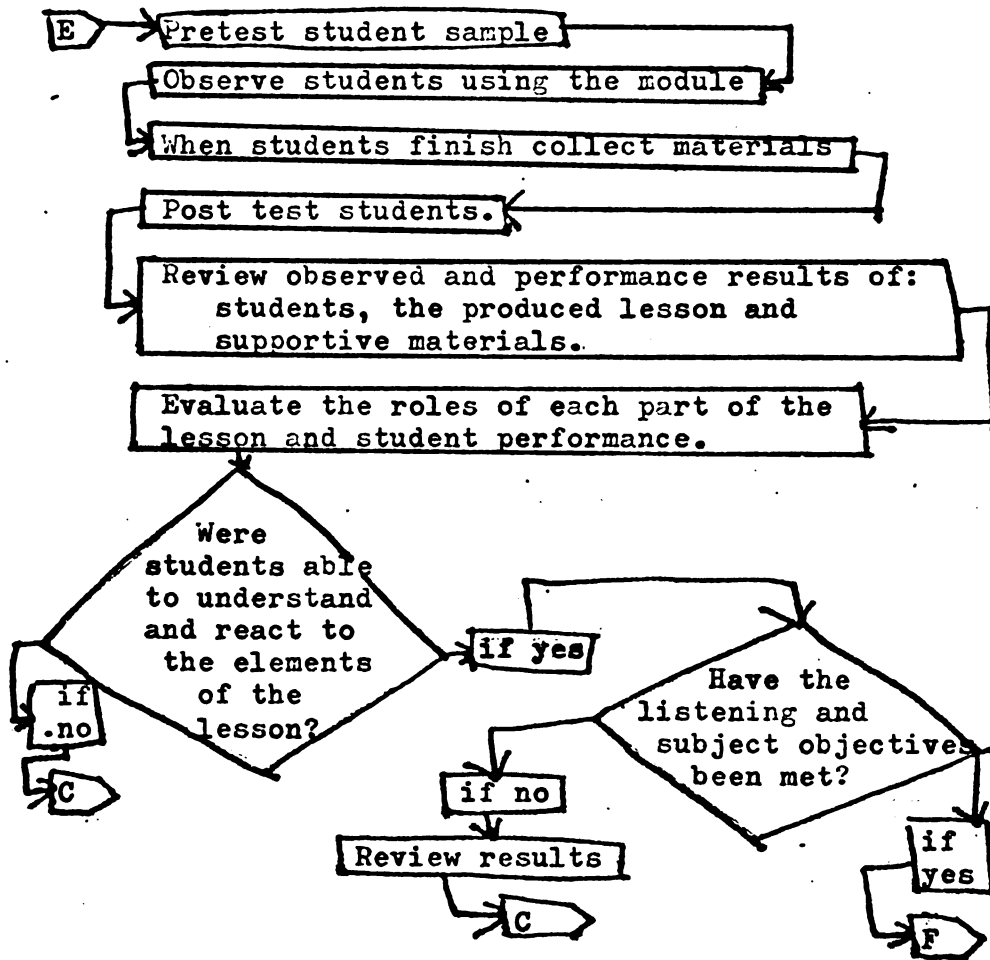


Figure 11: Testing the Listening Program Prototype

Feedback

Minimum requirements:

Observe how your students use the modules you have made.

Are they easily used?

Does the student level of performance indicate the establishment of obtainable but challenging behavioral objectives?

Do the students look forward to using the programs you have produced?

Periodic referral to objectives.

To assure yourself of the relevance of your objectives.

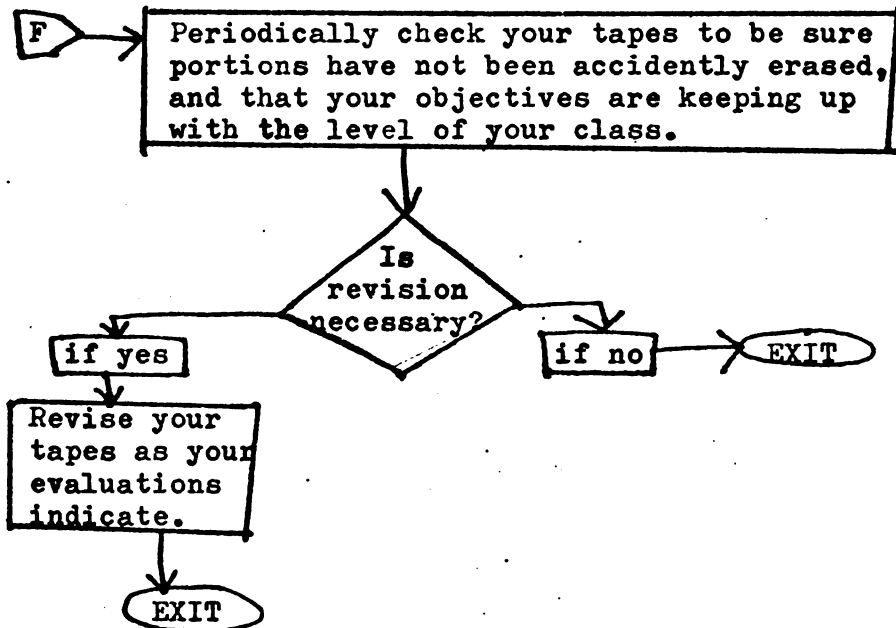
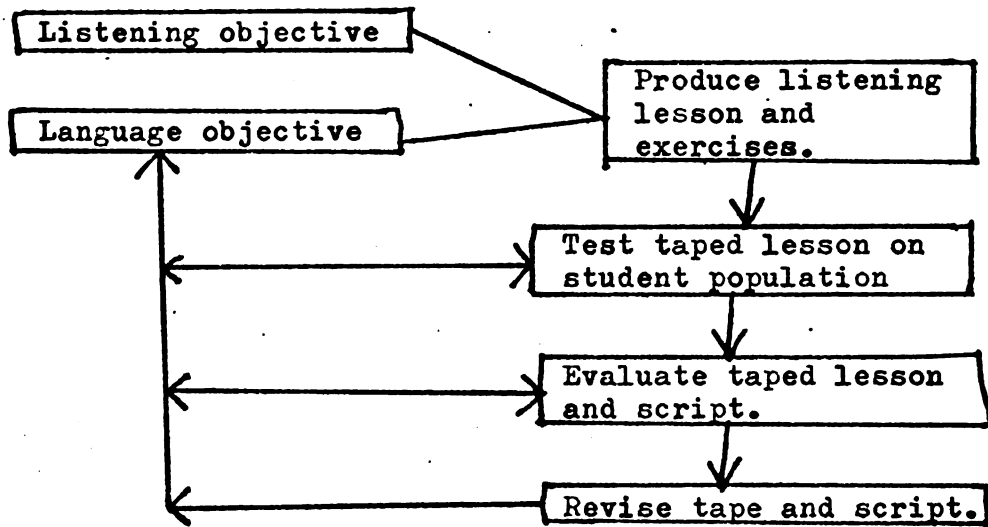


Figure 12: Monitoring and Revision the Listening Program.

APPENDIX H

EXAMPLE MODULE OVERVIEW



Example Module Overview.

REFERENCES

REFERENCES

Developing General Listening Objectives

- Bangs, Tina E. Language and Learning Disorders of the Pre-Academic Child. New York: Appleton-Century-Crofts, Educational Division, Meredith Corporation, 1968.
- Berry, Mildred F. Language Disorders of Children: The Bases and Diagnoses. New York: Appleton-Century-Crofts, Educational Division, Meredith Corporation, 1969.
- Bloom, Robert M., and Lamb, Pose, eds. "A Program for Oral English." Guiding Children's Language Learning. Dubuque, Iowa: Wm. C. Brown Co., 1967, p. 97.
- Burns, P. C., and Schell, L. M., eds. Elementary School Language Arts: Selected Readings. Chicago: Rand McNally and Company, 1969.
- Chomsky, Carol. The Acquisition of Syntax in Children from Five to Ten. Cambridge, Mass.: The M.I.T. Press, 1969.
- Duker, S. Listening Bibliography. Metuchen, N. J.: Scarecrow Press, 1968.
- _____. Teaching Listening in the Elementary School: Readings. Metuchen, N. J.: Scarecrow Press, 1971.
- Durrell, D. D. Improving Reading Instruction. New York: Harcourt, Brace and World, Inc., 1956.
- Guthrie, E. R. The Psychology of Learning. New York: Harper and Brothers, Pub., 1952.
- Kavanagh, J. F., and Mattingly, I. G., eds. Language by Ear and Eye. Cambridge, Mass.: The M.I.T. Press, 1972.
- Keefe, W. F. Listening Management: Creative Listening for Better Managing. New York: McGraw-Hill, 1971.
- King, H. V. Guide and Workbook in the Structure of English. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967.
- Lamb, Pose, ed. Guiding Children's Language Learning. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1967.

Lundsteen, Sera W. Listening: Its Impact on Reading and the Other Language Arts. Boston, Mass.: Allyn and Bacon, Inc., 1970.

Plainer, P., Krames, L., and Alloway, T., eds. Communication and Affect: Language and Thought. New York: Academic Press, 1970.

Strickland, R. G. The Language Arts in the Elementary School. New York: D. C. Heath and Company, 1951.

Taylor, Stanford E. Listening. Washington, D.C., National Education Association, 1964.

Yardley, A. Exploration and Language. London: Evans Brothers Limited, 1970.

Dissertations

Agres, S. J. "Audiological and Information Processing Considerations in Dichotic Listening." Ph.D. dissertation, Michigan State University, 1970.

Broski, D. C. "Comprehension of Rate-Altered Discourse by Primary School Children with Identified Auditory or Visual Strengths." Ph.D. dissertation, Michigan State University, 1974.

Edward, R. F. "Effects of Different Competing Stimuli on Listening Behaviors." Ph.D. dissertation, Michigan State University, 1966.

Papers

Berlin, C. I., Hughes, L. F., Low-Bell, S. S., and Berlin, H. L. "Dichotic Right Ear Advantage in Children Five to Thirteen." Louisiana State University Medical Center, 1974.

Hutchinson, J. M. "Processing of Acoustic Cues." Michigan State University, 1973.

University of California Department of Education, "Language Ability in the Middle Grades of the Elementary School." Final report, March 1, 1961.

Developing Specific Learning Outcomes

Ammon, R. "Listening as a Means of Developing Language." Elementary English (April, 1974): 515-18.

- Baird, Hugh, Belt, W. Dwayne, Holder, Lyal, and Webb, Clark. A Behavioral Approach to Teaching. Dubuque, Iowa: Wm. C. Brown, 1972, p. 6.
- Baker, Larry L. Listening Behavior. Englewood Cliffs, N. J.: Prentice-Hall, 1971.
- Briggs, Lesslie J. Sequencing of Instruction in Relation to Hierarchies of Competence. Pittsburgh, Pa: American Institutes for Research, 1968.
- Clark, Milton L. Hierarchical Structure of Comprehension Skills. Hawthorn, Australia: Australian Council for Educational Research, 1972.
- Davies, I. K. "Task Analyses: Some Process and Content Concerns." AV Communication Review (Spring, 1973): 73-86.
- Davis, Robert H., Alexander, Lawrence, and Yelon, Stephen L. Learning System Design: An Approach to the Improvement of Instruction. New York: McGraw-Hill Book Company.
- Erway, Ella A. Listening: A Programmed Approach. New York: McGraw-Hill, 1969.
- Flanagan, John C., Mager, Robert E., and Shanner, William M. Language Arts Behavioral Objectives: A Guide to Individualizing Learning. Palo Alto, Calif.: Westinghouse Learning Press, 1971.
- Gagné, Jacques R. Personalizing the Educational Experience and the Hall-Denis Report. Ann Arbor, Mich.: University of Michigan, 1972.
- Gagné, R. M. An Institute for Research in Behavior Science. Washington, D.C.: U. S. Dept. of HEW, 1965.
- Gagné, R. M., ed. Learning and Individual Differences; A Symposium of the Learning Research and Development Center. Columbus, Ohio: University of Pittsburgh, 1967.
- Gagné, Robert M, and Briggs, Leslie J. Principles of Instructional Design. New York: Holt, Rinehart and Winston, Inc., 1974.
- Gratz, F. W. "Goal; 'Maxi-Listening.'" English Journal (Fall, 1973), pp. 268-71.
- Hayes, John R., ed. Cognition and the Development of Language. New York: John Wiley and Sons, Inc., 1970.

- Karthwohl, David R., Bloom, Benjamin S., and Masia, Bertram B. Taxonomy of Educational Objectives, Handbook 11: Affective Domain. New York: David McKay Company, Inc., 1964.
- Kemper, Tom, and Sparks, Larry. Writing Objectives: What you Always Wanted to Know About Performance Objectives but were Afraid to Ask. National Special Media Institute, 1972.
- Lindvall, C. M., ed. Defending Educational Objectives. Penn.: University of Pittsburg Press, 1964.
- Lippke, R. L. "Teachers' Potpourri: Improving Student Listening Skills." Speech Teacher (January 1974): 51-53.
- Michael, Donald N., and Maccoby, Nathan. "Factors Influencing Verbal Learning from Films Under Varying Conditions of Audience Participation." Journal of Experimental Psychology (December 1953): 411-418.
- Skinner, B. F. "The Science of Learning and the Art of Teaching." Harvard Education Review (Spring 1954): 86-97.
- Smart, Russell C., and Smart, Mollie S., eds. Readings in Child Development and Relationships (New York: The Macmillan Company, 1972).
- Some Aspects of Oracy. New York: National Association for the Teaching of English, 1965.
- Williams, S. S. "Building Listener Accountability." Speech Teacher (January 1974): 53-56.

Selecting a Subject for the Listening Exercise

- Brown, James I., and Carlson, G. Robert. Listening Comprehension Test. 2nd ed. New York: Harcourt, Brace and World, 1955.
- Gagne, R. M., and Gephart, William J., eds. Learning Research and School Subjects. Ithaca, Ill.: F. E. Peacock, 1968.
- Schwen, T. M. "Learner Analyses: Some Process and Content Concerns." AV Communication Review (Spring 1973): 44-72.
- Stodola, Quinton, Schwartz, Donald F., and Kolstoe, Ralph H. Administering a Listening Comprehension Test Through Use of Teacher-Readers--Sound Film and Tape Recordings. Fargo, North Dakota: North Dakota State University, 1962.

Developing a Script for the Listening Program

- Danielson, E. R. "Casette Tape: An Aid to Individualized High School English." English Journal (March 1973): 441-45.
- Henderson, G. L. "Individualized Instruction: Sweet in Theory, Sour in Practice." Education Digest (March 1972): 34-36.
- Keislar, E. R., and Phinney, J. "Young Children's Use of an Information Source in Self Instruction." AV Communication Review (Summer 1973): 177-190.
- Kromboltz, John D., and Weisman, Ronald G. "The Effects of Overt Versus Covert Responding to Programed Instruction on Immediate and Delayed Retention." Journal of Educational Psychology (April 1962): 89-92.
- Leven, Gerald R., and Baker, Bruce L. "Item Scrambling in a Self-Instructional Program." Journal of Educational Psychology (June 1963): 138-143.
- Rankow, E. "Listening Games." Instructor (April 1974): 79.
- "Resources." English in Australia (June, 1973): 25-40.
- Wittrock, C. W. "Response Mode in the Programming of Kinetic Molecular Theory Concepts." Educational Psychology (April 1963): 89-93.

Impelementing the Script for the Listening Program

- Ball, John. "Training Programmers and Writing Programs." Education (March 1963): 400-405.
- Kemp, Jerold E. Planning and Producing Audiovisual Materials. San Francisco, Calif.: Chandler Publishing Co., 1968.
- Lundgren, R. E., and Shavelson, R. J. "Effects of Listening Training on Teacher Listening and Discussion Skills." California Journal of Educational Research (Spring 1974): 205-218.
- Marlow, D. L. "Tape it Yourself." School Shop (January 1974): 38-39.
- Scott, Gini. "Designing Games: Techniques to Use." Simulation/Gaming/News (September 1973): 14-15.

Testing the Listening Program Prototype

Blanton, William E., Farr, Roger, and Tuinman, J. Jaap, eds. Measuring Reading Performance (Newark, Del.: International Reading Association, 1974).

Smith, Nila Banton, ed. Reading Methods and Teaching Improvement Newark, Del.: International Reading Association, 1971.

Monitoring and Revising the Listening Program

Doyle, W., and Redwine, J. M. "Effect of Intent-Action Discrepancy and Student Performance Feedback on Teacher Behavior Change." Journal of Education (October, 1974): 750-755.

Duberstein, H. "An Essay on Program Development." Elementary English (February 1974): 207-208

"Evaluating Learning Resources: Symposium." AV Instructor (Spring 1974): 4-10.

Hug, William E. "The Value of Media Information." Education Technology (November 1974): 61.

Jones, Kenneth. "Alas, in Wonderland." English Journal (April 1973): 577-578.

Wilkinson, G. L. "Cost Evaluation of Instructional Strategies." AV Communication Review (Spring 1973): 11-30.

System Design

Briggs, L. J., Campeau, P. L., Gagné, R. M., and May, M. A. Instructional Media: A Procedure for the Design of Multi-Media Instruction, A Critical Review of Research, and Suggestions for Further Research. A final report prepared by The Instructional Methods Program of the Center for Research and Evaluation in Applications of Technology in Education (CREATE). Pittsburgh, Pa.: American Institutes for Research, 1967, pp. 28-52.

Davis, R. H., Alexander, L. T. and Yelon, S. L. Learning System Design: An Approach to the Improvement of Instruction. New York: McGraw-Hill Book Company, 1974, pp. 1-26; 51-78; 79-128; 129-158; 181-196, and 247-278.

Gagné, R. M., and Briggs, Lislle. Principles of Instructional Design. New York: Holt, Rinehart and Winston, 1974, pp. 73-98; 99-120; 159-182; 209-230, and 231-255.

Gagné, R. M. Psychological Principles in System Development. New York: Holt, Rinehart and Winston, 1962.

Gerlach, Vernon S., and Ely, Donald P. Teaching and Media: A Systematic Approach. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971, pp. 12; 49; and 80-85.

McCleary, Lloyd E. Design and Implementation of Individualized Instructional Programs. Ed. Technology 14 (November 1974), p. 11.

"An educational program is composed of planned sets of experiences or encounters, and the main substance of these experiences is derived from fields of knowledge as known and interpreted by the professional staff." Aspects of individualized instruction must be linked to unifying themes of legitimate interdisciplinary and interrelated concepts and skills.

Operational Steps

1. Identify program purposes and instructional objectives.
2. Curriculum Building.
3. Determining instructional modes & program structure.
4. Providing for assessment of learner performance.
5. Creating a basis for continuous program development.

"At all times the instructional emphasis must:

1. focus upon conceptual rather than factual content;
2. use each learning experience to build the competencies of self-directed inquiry;
3. spend a significant amount of time on concomitant learnings--the relationships involved, roles being learned, feelings about the worth of what is studied, connections to other experiences, planning skills, etc.;
4. maintain standards of excellence demanding integrity and quality in each task."

Michael, G. J. Systems Analyses and Systems Simulation Applications and Evaluation in Education. AEDS Monitor 1 (July/August 1973): 5-6.

Pfeiffer, John. "Decision Making in Action." Systems Analysis in our Schools and Colleges. New York: Odesy Press, 1968), pp. 16-32.

Tyler, Ralph Winfred. Perspectives of Curriculum Evaluation. Chicago: Rand McNally, 1967).

General References

- Baird, Hugh; Belt, W. Dwayne; Holder, Lyl; and Webb, Clark. A Behavioral Approach to Teaching. DuBuque, Iowa: Wm. C. Brown Co., 1967), p. 6.
- Berlin, Charles I.; Hughs, Larry F.; Lowe-Bell, Sena S.; and Berlin, Harriet L. "Dichotic Right Ear Advantage in Children Five to Thirteen." Presented to the Kresge Hearing Research Laboratory of the South Louisiana State University Medical Center, 1973.
- Bohannon, John N., and Friedlander, Bernard Z. "The Effect of Intonation on Syntax Recognition in Elementary School Children." Child Development 44 (June 1973): 675.
- Brim, Orville G., Jr.; Crutchfield, Richard S.; and Holtzman, Wayne. "Creative Thinking in Children.: Intelligence: Perspectives, 1965. New York: Harcourt, Brace and World, 1966, p. 38.
- Buglione, B. R. "Transforming Education into an Individualized Process." Clearing House 47 (March 1973): 409-412.
- Chrittenden, Edward A. "What is Learned and What is Taught." Reading In Child Development and Relationships. Edited by Russel C. Smart and Mollie S. Smart. New York: MacMillan, 1972, p. 171.
- Cooper, Franklin S. "How Language is Conveyed by Speech." Language by Ear and Eye. Edited by James F. Kavanagh and Ignatius G. Mattingly. Cambridge, Mass.: M.I.T. Press, 1972): 25-46.
- Culver, Carmen M. The Power to Change: Issues for the Innovative Educator. New York: McGraw-Hill, 1973.
- Dawson, Mildred A.; Zollinger, Marian; Elwell, M. Ardell; and Johnson, Eric W. Language for Daily Use. New York: Harcourt, Brace and World, Inc., 1964.
- Department of Education. Language Ability in the Middle Grades of the Elementary School. University of California, 1961, p. 116.
- Dodge, M.; Bagden, R.; and Lewis R. How Teachers Perceive Media. 14 Ed. Technology (January 1974): 21.
- Durrell, Donald D. "Listening Comprehension versus Reading Comprehension." Journal of Reading 12 (March 1969): 458.
- Fitzgerald, J. "Educational Technology: Aid for the Classroom Teacher of Reading." 9 Educational Technology (September, 1973): 44-48.
- Friedrich, D. "Developmental Analyses of Memory Capacity and Information Encodign Strategy." 10 Developmental Psychology (July 1964): 559-563.

- Gagné, Robert Mills. The Condition of Learning. 2nd ed. New York: Holt, Rinehart and Winston, 1970.
- _____. Psychology and Human Performance; An Introduction to Psychology. New York: Holt, Rinehart and Winston, 1959.
- Geddes, V. "Individualized Self-Paced English." 61 English Journal (March 1972): 413-416.
- Goldbeck, Robert Arthur. Integrating Programmed Instruction with Conventional Classroom Teaching. San Metro, Calif.: American Institute for Research, 1962.
- Glucksberg, Sam, and Krauss, Robert. "Some Characteristics of Children's Messages." Reading in Child Development and Relationships. Edited by Russel C. Smart, and Mollie S. Smart. New York: Macmillan, 1972.
- Green, Edward J. The Learning Process and Programmed Instruction. New York: Holt, Rinehart and Winston, Inc., 1962.
- Greenspoon, Joel, and Foreman, Sally. "Effects of Delay of Knowledge of Results on Learning a Motor Task." Journal of Experimental Psychology 51 (March 1956): 226-228.
- Heilman, Arthur W., and Holmes, Elizabeth Ann. Smuggling Language into the Teaching of Reading. Columbus, Ohio: Charles E. Merrill Publishing Co., 1972, pp. 15-47.
- Hillyard, S. A. "Electrical Sign of Selective Attention in the Human Brain." Science (December 1973): 177-180.
- Hutchinson, John M. "Processing of Acoustic Cues." Research Project, Michigan State University Department of Audiology and Speech Sciences, 1974.
- Jones, Daisy Marvel. Teaching Children to Read. New York: Harper and Row, 1971.
- Jones, Howard L., and Sawyer, Michael O. "A New Evaluation Instrument." The Journal of Educational Research 42 (January 1949): 381-385.
- Keller, Charles and Baker, Richard. The Star-Spangled Banana and other Revolutionary Riddles. London: Prentice-Hall International, Inc., 1974.
- Labon, Walter. "The Green Pastures of English." Elementary English 50 (May 1973): 683-690.

- Linneberg, Eric H. "The Regularity of Onset of Speech and Language." Reading in Child Development and Relationships. Edited by Russel C. Smart and Mollie S. Smart. New York: MacMillan, 1972, p. 67.
- Luetje, C. "Custom-Tailored Teaching for All." 48 Parents Magazine (September 1973): 30-1.
- Lumsdzine, A. A. Teaching Machines and Programmed Learning: A Source Book. Washington: The National Education Association, Division of Audio-Visual Instruction, 1960.
- Lundsteen, Sera W. "Critical Listening: An Experiment." Research in Elementary School Curriculum. Edited by A. Montgomery Johnston and Paul C. Burns. Boston, Mass.: Allyn and Bacon, Inc., 1970.
- Lysaught, Jerome P. and Williams, Clarence M. A Guide to Programmed Instruction. New York: John Wiley and Sons, Inc., 1963.
- Marascuilo, Leonard A., and Penfield, Douglas A. "Learning to Listen: A Study in Auditory Perception." California Journal of Educational Research 23 (January 1972): 5.
- O'Donnell, Bernack, and Hoetker, James. "ERIC/RCS Reports to the Profession." Elementary English 50 (May 1973): 771-774.
- Raph, J. B.; Goldberg, M. L.; and Passow, H. Bright Underachievers: Studies of Scholastic underachievement among Intellectually Superior High School Students. Teachers College Press, Teachers College, Columbia University, New York, 1966.
- Sarnd, Edward Francis, Jr. "Programed Instruction and Broadcast Education." 1963.
- Schmuck, Richard; Chesler, Mark; and Lippitt, Ronald. Problem Solving to Improve Classroom Learning. Chicago: Science Research Associates, Inc., 1966, p. 27.
- Sheldon, W. D. "A Summary of Research Studies Relating to Language Arts in Elementary Education: 1971." Elementary English 50 (May 1973): 791-839.
- Shultz, Thomas R., and Pilon, Robert. "Development of the Ability to Detect Linguistic Ambiguity." Child Development 44 (1973).
- Smith, Nila Banton. Reading Methods and Teaching Improvement. Newark, Del.: International Reading Association, 1971, p. 40-49.

- Smith, Wendell I., and Moore, J. William, eds. Programmed Learning: An Enduring Problem in Psychology. Princeton, N. J.: D. Van Nostrand Co., Inc., 1962.
- Stevens, S. S. "Neutral Quantum in Sensory Discrimination." Science 181 (August 3, 1973): 467-469.
- Strickland, Ruth G. The Language Arts in the Elementary School. New York: D. C. Heath and Company, 1951, p. 101.
- Strong, H. R. "Pictorial and Verbal Media in Self-Instruction of Procedural Skills." AV Communication Review 21 (Summer, 1973): 225-232.
- Swalm, J. E. "Is Listening Really More Effective for Learning in the Early Grades." Elementary English 51 (November 1974): 1110-13.
- Yetten, C. C., and Tillman, R. "Do Schools Need IPI?" Education Digest 38 (September 1972): 40-3.
- Wetstone, Harriet S., and Friedlander, Bernard Z. "The Effect of Word Order on Young Children's Response to Simple Questions and Compounds." Child Development 44 (December 1973): 734.

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