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A study of the development and effect of a tape-recorded programmed instruction course in listening

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A STUDY OF THE DEVELOPMENT AND EFFECT OF A TAPE-RECORDED PROGRAMMED INSTRUCTION COURSE IN LISTENING

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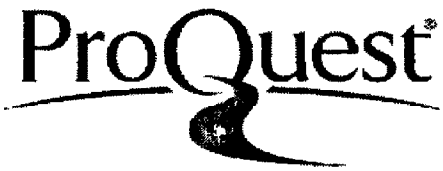

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CHAPTER I

STATEMENT OF THE PROBLEM

Today, more than at any other time, an increasingly widespread interest has been manifested in the areas of language and communication. One need only look about to see the intensity of this interest. It is not confined only to one discipline, but rather has become extended into many, seemingly unassociated areas of inquiry. Why is the scope of this interest so diverse? Perhaps it is because of the intricate involvement of language and communication in human relations.

> It is quite impossible to conceive of either the origin or the development of culture apart from language, for language is that part of culture which, more than any other, enables men not only to make their own experiences and learning continuous, but, as well, to participate vicariously in the experiences and learning of others, past and present, who are or have been members of the group. To the extent that a culture as a whole is made up of common understandings, its linguistic aspect is its most vital and necessary part.[1]

Colin Cherry further develops this point, when he states:

> The development of human language was a tremendous step in evolution; its power for organizing thoughts, and the resulting growth of social organizations of all kinds, has given man, wars or no wars, street accidents or no street accidents, vastly increased potential for survival.[2]

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[1]Harry Hoijer, "The Relation of Language to Culture," cited in The Bases of Speech, G. W. Gray and C. M. Wise (3rd ed.; New York: Harper and Brothers, 1959), 2.

[2]Colin Cherry, On Human Communication (New York: John Wiley and Sons, Inc., 1957), 5.

The assertion that communication has provided the human being with a means of conveying his attitudes, likes and dislikes, his wants and desires appears confirmable; however, in order to fully understand this contention, it is mandatory that we turn to the most basic of the communicative systems, that of oral communication or speech. Speech provides man with a means to adjust to and to learn about other cultures. It provides him with a means to interact within his own social group, or as Gray and Wise have implied, speech and its counterpart listening are means of "social integration and control."[3] Many authors have asserted that it is only because of oral communication that we have a social structure, and that because of speech and listening, man has become a group animal.

Since oral communication is a vital force in our social structure, it is appropriate that efforts be made to improve the members of our society in their use of the skills of speaking and listening. On the assumption that both speaking and listening are not inherited skills but rather learned behaviors, it seems only appropriate that such important skills be a focal point of investigation.

SPEECH EDUCATION

One of the elements of oral communication under investigation and with good cause is speech education. Educators have long accepted the necessity of providing students with training in the use of those skills fundamental to the speech activity. During the course of this training, however, the emphasis tends to be on the development of trans-

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[3]Gray and Wise, 25-26.

mission skills, with those skills necessary for effective reception being neglected. Although a majority of school administrators seem to favor instruction in listening as a counterpart of speaking, only a few schools make any effort toward providing such training.[4]

The field of speech presently finds itself in much the same position as English, the sciences, and many other disciplines. In being recognized as a skill basic to the successful functioning of the student, speech has been made an academic prerequisite for many fields of study, as is evidenced by consulting almost any college catalog. As a result, departments of speech have adopted a "service" function on most campuses and now are faced with a great host of students seeking admission to speech classes. In most instances, these "service" courses are the only formal instruction in speech that students in other areas will receive, however, most of these courses are aimed at the development of transmission skills and exclude any effort toward primary instruction in the development of listening skills. General college and university enrollments are dramatically increasing year by year bringing into the picture greater numbers of individuals who are primarily interested in speech and whose demands for training in all segments of speech must be met.

The problem of instruction in both speaking and listening is further compounded by a sharp rise in information production. A virtual

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[4]"Ten Aims for Next Ten Years," Phi Delta Kappan, 35 (May, 1954), 364, and B. R. Markgraf, "A Survey of Listening Pedagogy in American Teacher-Training Institutions," Journal of Communication, 12 (March, 1962), 33-35.

"information explosion" is taking place. Hourly more information is becoming available, making the adequate coverage of a subject area more demanding and, relative to the time factor, much more difficult than in previous eras. Not only is it very difficult for the speech instructor to cover the essential aspects of transmission but nearly impossible to deal adequately with the essential information for the development of effective listening skills. Along with the constant production of information is the growing employer demand for students more extensively familiar with current information. Industry and society demand that the student be conversant with both the current as well as previously available information. This has become a formidable task for both the student and the instructor in view of current increases in information production.

Finally, the old but equally difficult problem of more appropriately balancing the ratio between practicum and theory exists. Being the only contact a majority of students will have with formalized speech instruction, the beginning speech course must encompass sufficient primary instruction and practice opportunities within the limits of the time allotted to make such training effective. Frequently it is all but impossible to cover adequately the subject matter and still provide the student with a minimum number of speaking experiences. To attempt incorporating additional subject-matter in the already overloaded course is extremely difficult.

It is not being asserted that these deficiencies can be directly correlated with instruction in listening. However, since the teaching of listening is an aspect of speech education, the problems affecting

the teaching of expression tend toward a similar affect on the teaching of reception.

If speech educators are to continue meeting their obligations to students, they must solve the problems produced by increased student enrollment, acceleration of information production, the demands by society and industry for more extensively prepared employees and citizens, and the theory-practicum imbalance.

Basic to education is the concept of individualized instruction.[5] Speech teachers have acknowledged the value of the individual approach,[6] however, as the classes grow in size and the amount of information increases, the opportunity for individual instruction diminishes until it is nearly impossible for the instructor to work meaningfully with each student on anything approaching an individual basis. If today's predictions are accurate and trends continue at their current rate, the idea of the individual approach in speech education will rapidly become nonexistent.

The scope of current changes in speech education encompasses an attempt to establish a new rhetoric based on traditional rhetorical theory and modern scientific findings, and the modernization and improvement of teaching principles, methods and devices. Fundamental to these efforts is the question of what practicable means and techni-

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[5]B. F. Skinner, "The Science of Learning and the Art of Teaching," in Programmed Learning: Theory and Research, W. I. Smith and J. W. Moore ed. (New York: D. Van Nostrand 1962), 26-27.

[6]C. J. Tolch, "Methods of Programming Teaching Machines For Speech," The Speech Teacher, XI (September 1962), 233.

ques are available which might alleviate some of the problems of speech education. A possible solution has been posed by C. J. Tolch:

> We continue to build more classrooms and to train more teachers, but these efforts are not enough to meet the problem of individualizing instruction for large classes. In recent years, many speech teachers have been quick to utilize new, automated teaching aids which enhance and improve teaching-learning methods.[7]

THE TEACHING OF LISTENING

In 1928, Paul T. Rankin[8] reported a study of listening in which he surveyed the personal communication activities of sixty-eight adults in various occupations. He found that the average American spent 70 per cent of his waking time engaged in some type of verbal communication. During this time, 9 per cent was spent in writing, 16 per cent in reading, 30 per cent in speaking, and 45 per cent in listening. In more recent studies Miriam Wilt[9] surveying elementary school children and Francis Cartier[10] surveying high school students, separately confirmed the findings of the Rankin study. Educators have become mildly concerned about the training of students in listening as a result of this research and the growing awareness of the lack of adequately developed listening skills in students. The intensity of the concern among

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[7] Ibid.

[8] Paul T. Rankin, "The Importance of Listening Ability," English Journal (College Edition), XVII (October, 1928), 623-30.

[9] Miriam Wilt, "A Study of Teacher Awareness of Listening As A Factor in Elementary Education," The Journal of Educational Research, XVIII (April, 1950), 626-36.

[10] Francis Cartier, "An Experimental Study of the Effect of Human Interest Factors in Listenability," Speech Monographs, XXII (Mar. 1955), 53-57.

educators is reflected in a number of studies to determine the prevalence of listening programs. In a study of teacher's colleges, Markgraf[11] found that 80 per cent of the institutions surveyed favored training programs in listening but that only 33 per cent of those institutions had such programs available for their students. An earlier study by Max Fuller[12] tends to support these findings.

The lack of courses of instruction in listening becomes doubly significant when the listening ability of the student untrained in listening is considered. Ralph G. Nichols[13] found that the average student comprehends about 68 per cent of the general college level subject-matter presented but some comprehended as little as 20 per cent.

Studies by Brown[14] and Dow and Irvin[15] indicate similar results. Generally the status of listening is described by Sam Duker when he States:

> Listening always has been and continues to be the most widely used human means of receiving information. Until the last decade or two little attention was paid to the importance of developing this skill. It was taken for granted that everyone knew how to listen. That this is not so has been established beyond a reasonable doubt. Listening can be improved by proper teaching, although there are

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[11] Markgraf.

[12] Max E. Fuller, "The Communication Teacher Asks Some Questions," The Journal of Communication, I (May, 1951), 36-40.

[13] Ralph G. Nichols, "Factors in Listening Comprehension," Speech Monographs, XV (1948), 154-63.

[14] James I. Brown, "The Objective Measurement of Listening Ability," The Journal of Communication, I (May, 1951), 44-48.

[15] Clyde Dow and C. E. Irvin, Syllabus Communication Skills (East Lansing, Michigan: Michigan State University Press, 1954), 116.

still those who refuse to accept the evidence on this as valid.[16] It has been asserted that listening effectiveness can be taught and studies by Thomas T. Blewett,[17] Arthur Heilman[18] and others[19] would indicate that such is the case. However, studies performed by Maurice Lewis,[20] David Krueger[21] and most recently Paul Hollingsworth[22] indicate that perhaps listening cannot be taught in all instances or that the current methods being used are not adequately providing the necessary instruction. It is difficult to believe that listening cannot be taught if we only knew what factors in listening to teach.

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[16]Sam Duker, Listening Bibliography (New York: The Scarecrow Press, Inc., 1964), v.

[17]Thomas T. Blewett, "An Experiment in the Measuring of Listening at the College Level," The Journal of Communication, I (May, 1951), 50-57.

[18]Arthur Heilman, "An Investigation in Measuring and Improving the Listening of College Freshmen," Speech Monographs, XVIII (November, 1951), 302-8.

[19]Ralph G. Nichols and Robert J. Keller, "The Measurement of Communication Skill," Junior College Journal, XXVI (November 1953), 160-68; Dow and Irvin, loc. cit.; Kim Giffin and Larry Hannah, "A Study of the Results of an Extremely Short Instructional Unit in Listening," The Journal of Communication, X (September, 1960), 135-39; Kenneth O. Johnson, "The Effect of Classroom Training Upon Listening Comprehension," The Journal of Communication, I (May, 1951), 58.

[20]Maurice Lewis, "The Effect of Training in Listening on Reading," The Journal of Communication, III (November, 1953), 115-19.

[21]David Krueger, "A Study of the Results of Teaching Factors of Listening Comprehension to College Freshmen in the Basic Communication II Course." (unpublished Master's thesis, Dept. of Speech, Whittier College, 1950).

[22]Paul M. Hollingsworth, "The Effect of Two Listening Programs on Reading and Listening," The Journal of Communication, XIV (March 1964), 19-21; _____, "So They Listened: The Effects of a Listening Program," The Journal of Communication, XV (May, 1965), 14-16.

In a general sense, listening can be defined as the perception, comprehension, and retention of auditory stimuli[23] which involves (1) the reception of auditory symbols, (2) the attachment of meaning to those symbols, (3) the understanding of the information conveyed by the symbols, and (4) the retaining of the important information for future use. One of the major problems facing educators interested in listening is the identification of those specific units of subject matter which can be used to operationalize this definition in the teaching of listening. In attempting to achieve a solution, a number of courses in listening have been proposed. In one respect or another, most of these courses include three general classifications of subject matter: (1) simple comprehension skills which include vocabulary skills, recalling in sequence, and listening for main ideas; (2) organizational skills which include learning to summarize, recognizing illustrative details, following the speaker's organization pattern, and note taking; and (3) those skills necessary in distinguishing between fact and opinion which include recognizing emotive language and checking on the reliability of the speaker.[24] With these skills Ralph Nichols and Thomas Lewis include evaluation of supporting materials and the development of concentration and anticipatory skills.[25] The underlying assumptions appear to be that

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[23] M. P. Anderson, W. Lewis, and J. Murray, The Speaker and His Audience (New York: Harper and Row, 1964), 155.

[24] O. S. Niles and M. J. Early, "Adjusting to Individual Differences in English," Journal of Education, 138 (December, 1955), 44-48.

[25] Thomas Lewis and Ralph Nichols, Speaking and Listening (Dubuque, Iowa: William C. Brown Co., 1965), 39 and 62.

these skills must be possessed by the individual if he is to achieve any level of listening performance and that the degree to which he possesses these skills will determine his proficiency as a listener.

For the purpose of this investigation, the programmed course in listening will contain (1) motivational materials which include a definition of listening, a discussion of the benefits derived from efficient listening, and a discussion of the barriers to listening; (2) organizational skills which include a discussion of organizational patterns, learning to summarize, identifying main points and recognizing illustrative details; (3) comprehension skills which include recognizing emotive language, identifying implied meanings, and the testing of evidence and supporting materials; and (4) concentration skills which include learning to overcome mental and physical distractions and learning to direct attention toward the speaker and his message. Additionally the program will afford the student an opportunity to practice developing immediate recall, following directions and listening for sustained periods.

A variety of methods and techniques are being used in an attempt to teach listening skills. These methods include the use of lectures presented by an instructor, pre-recorded lectures presented by tape recorder, outside and in-class listening assignments, the listening laboratory and many others. The scope of these methods seems to be limited only by the imagination of the individuals responsible for the teaching of listening. All of these methods, however, have been categorized by Nichols under one or a combination of three general methods identified as being used to teach listening.

(1) direct instruction: involving lectures on listening, socialized recitations, discussions on necessary skills, classroom exercises

> to develop the skills, concentration in listening situations, periodic progress tests, before and after tests to measure the influence of training; (2) coordination of listening and speech instruction. . . ; (3) the listening laboratory, recommended to supplement the first two given, in which listening conditions and experiences are controlled and results tested individually.[26]

Each method attempts to provide the student with a body of information and an opportunity to practice listening skills under supervision, however, the success realized from each method or combination of methods varies as is reflected by current data. The variation of results obtained in studies of the teaching of listening has been summarized by Charles Petrie, Jr., when he states:

> In approximately half the experimental attempts to improve listening ability, no significant differences between the experimental and control groups were reported. (Experiments in which listening ability was improved do not appear to differ significantly from those in which listening ability was not improved, in respect to the soundness of experimental procedures used or the type, length or intensity of training given.)[27]

This does not imply that the results of the remaining studies are any less valid. As Petrie must admit, listening is being taught successfully by a variety of techniques. The purpose of this study is to consider the possibility of still another approach which might be used to teach listening skills.

According to Karl Wallace, four procedural steps are recommended for inclusion in a program of study in listening. (1) The student must be made aware of the need to develop greater listening effectiveness;

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[26]Ralph G. Nichols, "Listening Instruction in the High School," The Bulletin of the National Association of Secondary School Principals, XXXVI (May, 1952), 158-74.

[27]Charles R. Petrie, Jr., "What We Don't Know About Listening," The Journal of Communication, XIV (December, 1964), 248-51.

(2) he must be motivated toward improvement; (3) he must be provided with appropriate listening experiences which will train him; and (4) his development must be evaluated and suggestions made for additional work.[28] It is assumed that each of these will provide the student with one segment of the total experience necessary for increasing his listening comprehension to become an effective listener, however, only general agreement exists as to the application of these procedures.

In view of the problems confronting speech education, particularly in relation to its "service" function and the student need for instruction in listening, there appears to be opportunity for further investigation of methods to teach listening more effectively. Perhaps a partial solution lies in the use of a programmed instruction course in listening.

Although an impressive amount of data have been accumulated in relation to programmed instruction techniques, there are fields of study, such as speech, which have only recently considered the possibility of their uses. To date, very little investigation has taken place in the use of this method in the teaching of speech, however, there has been some research which appears to be relevant.

Philip Amato[29] performed a study to measure the relative effectiveness of programmed instruction and video-taped lectures as methods of presenting public speaking lecture material. The study compared three

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[28]Karl F. Wallace, Teaching Speech in the Secondary School (New York: Longmans, Green and Co., 1954), 223.

[29]Philip R. Amato, "A Comparative Study of Programmed Instruction and Video-Taped Lectures in Public Speaking," (unpublished Ph. D. thesis, Dept. of Speech, Michigan State University, 1963).

conditions of a forty-five minute video-taped lecture with an oral program and a reading program, all using the same subject-matter. The results of the study indicated that programmed instruction is more efficient and effective in presenting public speaking material than video-taped lectures; that reading programs are as effective as orally presented constructed-response programs; and that combinations of programmed instruction and video-taped lectures do not increase the total amount of learning beyond that acquired when programs are used alone. Although various methods of presentation have been compared with programmed instruction technique in other fields, this is one of the first investigations in speech comparing the effects of an orally programmed course with other forms of presentation.

In another study, Manuel Leonardo[30] investigated the feasibility of improving a student's ability to read a short, simple prose selection in a closely defined and controlled automated instruction situation. Specifically he attempted to determine if students untrained in oral reading would consistently improve as a result of programmed instruction using the content-conscious and the voice-conscious approaches and if auditory feedback from an external loudspeaker would affect a consistent improvement in oral reading ability. The results of the study indicated that all groups significantly improved their oral reading ability as a result of the training, and that no difference appeared between those groups receiving specific auditory feedback and those receiving state-

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[30]Manuel M. Leonardo, "An Experimental Study of a 'Teaching Machine' Application to Speech Improvement," (unpublished Ph. D. thesis, Dept. of Speech, University of Washington, 1963).

ments of general encouragement.

Both of these studies indicate that programmed instruction techniques can be used in teaching speech subject matter and that the level of performance achieved when using material constructed according to these techniques is greater than that achieved when using material constructed in some other form. Additionally both studies relied, at least in part, on the use of listening as a medium of reception further implying that material can be programmed for auditory consumption. The Amato and Leonardo studies are only representative of the possible applications of programmed instruction techniques which might be made in speech education and they demonstrate a possible technique for the teaching of listening. Other applications have been in the form of commercially produced courses of study such as a programmed text entitled, Parliamentary Procedure,[31] by John Grey and Richard Rea and an auditory program entitled Phonetic Transcription,[32] by L. S. Harms. In each case they follow a programmed instruction format, employing some type of appropriate presentation device.

Other investigative efforts in the use of programmed instruction techniques in the teaching of speech have been focused toward the use of oral presentation devices, specifically using the tape recorder.

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[31] John W. Grey and Richard G. Rea, Parliamentary Procedure (Chicago, Ill.: Scott, Foresman and Co., 1963)

[32] L. S. Harms, Phonetic Transcription (Chicago, Ill.: Scott, Foresman and Co., 1964)

Audrey Holland [33] investigated the use of an automated instruction technique for increasing auditory discrimination skills in children with articulatory disorders. Although the study did not compare the oral program with any other type of auditory discrimination training technique, the results indicated that the automated instruction program did significantly increase this skill in the subjects. A further study was performed by Miss Holland and Jack Matthews[34] using the same mechanical approach but comparing three different programs. Again, the results of the study support the use of orally programmed material as a teaching method in speech. Other programs constructed along similar lines and using similar devices for the presentation of the program have been used by L. S. Harms[35] in teaching phonetic transcription of isolated English syllables and by L. S. Harms and M. E. Scheib[36] to teach speech sound acquisition. Both investigations used a pre-recorded, auditory program presented by tape recorder and each demonstrated a significant improvement of performance by the subjects using the programs.

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[33]Audrey L. Holland, "The Development and Evaluation of Teaching Machine Procedures for Increasing Auditory Discrimination Skill in Children With Articulation Disorders," (unpublished Ph. D. dissertation, Dept. of Speech Pathology, University of Pittsburgh)

[34]Audrey L. Holland and Jack Matthews, "Application of Teaching Machine Concepts to Speech Pathology and Audiology," ASHA, V (January, 1963), 474-82.

[35]L. S. Harms, "On the Development and Testing of a Self-Instructional Program for Learning Phonetic Transcription of Isolated English Syllables," (Communication Research Center, Dept. of Speech and Drama, University of Kansas, 1963) (Mimeographed)

[36]L. S. Harms and M. E. Scheib, "Toward a Generalized Self-Instructional System for Speech Sound Acquisition," (Communication Research Center, Dept. of Speech and Drama, University of Kansas, 1963) (Mimeographed)

Generally, all the studies considered in this investigation indicate that significant improvement can be achieved by using programmed instruction methods in the teaching of subject matter in speech. Further, students using a programmed course significantly improve in the performance of the specific skill being taught over those receiving instruction by other methods. Although only a few studies have been performed using orally programmed subject matter, results tend to indicate that the auditory feature does not reduce the effectiveness of the program but might serve to increase the program's effectiveness.

One investigation using programmed instruction techniques has been performed in which listening has been a primary consideration. Charles Tucker[37] performed a study dealing with listening to estimate the effect on comprehension of programmed and semi-programmed informative speeches about listening by obtaining controlled, overt audience response to the subject matter in the speeches. The study involved two experiments; the first comparing the effects of a lecture following the form of an informative speech, a programmed lecture following the stimulus-response-reinforcement form, and a semi-programmed lecture using the same stimulus form as the programmed lecture but substituting some type of declarative statement in place of the combined response and reinforcement functions. All three information presentation forms used the same subject matter listening comprehension.

The second experiment investigated the effect of revisions in the

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[37]Charles Tucker, "An Application of Programmed Learning to Informative Speech," (unpublished Ph. D. dissertation, Dept. of Speech, Ohio State University, 1962).

programs based on student responses. The criterion measure for each of the conditions was a five foil multiple-choice posttest designed to assess the retention by each subject of the items of information included in the preliminary purpose outlines.

The results of the study indicate that the programmed lectures produced greater listening comprehension, as measured by the criterion test, than their unprogrammed counterparts and that unison overt audience response, which involved the entire audience responding orally as a group, produced results similar to those obtained from random individual overt response.

As in the studies previously cited, the use of programmed instruction techniques produced greater achievement than other forms of presentation. Additionally, the Tucker study indicates that materials which are prepared in an programmed form and presented orally to students may result in an increase in comprehension of the material, no matter what mode of the oral response is being used. The results of these studies reveal the possibility of teaching listening comprehension by the use of orally programmed tapes about listening.

PROGRAMMED INSTRUCTION

The concepts of programmed learning, auto-instructional technique automated instruction and programmed instruction are all used to identify a new approach to the task of instruction. Programmed instruction with which this study will be primarily concerned is defined as:

> Instruction characterized by the controlled presentation of material [which is arranged into a series of sequential steps, usually moving the student from a familiar background into a complex and new set of concepts, principles, and understandings], the elici-

> tation of appropriate response . . ., and control of the way in which learning proceeds.[38]

Generally programmed instruction has been found to be an effective method of teaching. An abundance of data is available to support this contention as well as the contention that the technique is applicable in almost any field of study. One need only consult current publications in programmed instruction to note ample verification of these contentions. Studies by J. H. Hughes,[39] L. J. Briggs,[40] S. L. Pressey[41] and others have compared the effectiveness of programmed instruction with other conventional forms of instruction and the results indicate that such programs are superior to those conventional forms of teaching.

Programmed instruction technique is characterized by a body of principles derived from the laboratory, which are fundamental to the effectiveness of the method. According to Skinner, three sequenced events are proposed as being necessary for efficient learning to take place: (1) a stimulus (S), which is any factor that initiates an activity of

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[38]Desmond L. Cook, "Teaching Machine Terms," in Programmed Learning: Theory and Research, ed. Wendell I. Smith and J. William Moore (New York: D. Van Nostrand Co., Inc., 1962), 232.

[39]J. H. Hughes, "The Effectiveness of Programmed Instruction: Experimental Findings for 7070 Training," cited in Teaching Machines and Programmed Instruction, Edward B. Fry (New York: McGraw-Hill Book Co., Inc., 1963), 102.

[40]L. J. Briggs, "The Development and Appraisal of Special Procedures for Superior Students and an Analysis of the Effects of Knowledge of Results," cited in Fry, 102.

[41]Sidney L. Pressey, "Development and Appraisal of Devices Providing Immediate Automatic Scoring of Objective Tests and Concomitant Self-Instruction," in Teaching Machines and Programmed Learning, (ed.) A. A. Lumsdaine and Robert Glaser (Washington, D. C.: National Education Association, 1960), 69-88.

some kind; (2) a response, (R), which is any form of behavior; and (3) reinforcement (X), which "is a stimulus which increases the probability of the stimulus response connection which it follows."[42] In programmed instruction the S-R-X model indicates the order of a single learning event and occurs in each frame throughout the program. Generally this format occurs in most programs and is a characteristic form in programmed instruction. Additional to this sequence, a number of basic principles have been asserted to form the foundation for much of programmed instruction:

1. Learning takes place most rapidly if the student is actively engaged with the subject matter.
2. Learning is most effective if the student develops the skills and knowledge in a form which will readily generalize to the "real life" situation for which they are intended.
3. Learning takes place most rapidly if immediate "knowledge of results" is given for each response.
4. Learning takes place most rapidly if the subject matter is organized in a hierarchic form.
5. Receiving frequent "knowledge of results" keeps students working at the assigned task.
6. Since learning takes place in individuals, the learning situation should be designed so that each student may proceed at his own pace.[43]

Two program types differentiated by the response form demanded of the student, are available. Skinner's constructed-response program[44] requires that the student formulate his own response to a stimulus rather than engage in selecting one of several pre-formed responses provided by the program. This allows the student an opportunity to develop the

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[42] W. J. Carr, "A Review of the Literature on Certain Aspects of Automated Instruction," in Smith and Moore, 59.

[43] Ibid., 58-60.

[44] B. F. Skinner, "The Science of Learning and the Art of Teaching," in Lumsdaine and Glaser, 99-113.

skill and information in a form more closely aligned with his own particular response characteristics. Contrasted to this is Pressey's multiple-choice program[45] which requires the student to select one of a number of pre-constructed responses to a given stimulus. The constructed-response program asks the student to frame his own response to the stimulus while the multiple-choice response asks for a choice among preconstructed responses. The constructed-response program is largely dependent upon the student's ability to recall data while the multiple-choice program requires recognition of data. Although there does not appear to be sufficient evidence available to support one form over the other, it appears to be generally agreed that both forms allow the student an opportunity to actively respond to the stimulus. The chief determinant in selecting a response form seems to be the particular requirements of the program.

Two major techniques for sequencing programs are currently in use. In the linear or extrinsic system as advocated by Skinner[46] the material is arranged in a single ordered sequence and each student must proceed from the first through the last frame without omitting or repeating any of the frames involved. This approach assumes that each unit of information is of equal value to each person using the program and requires all students to cover the same material no matter how wide the variation in ability, intelligence, etc. The branching or intrinsic system, as pro-

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[45] S. L. Pressey, "A Simple Apparatus Which Gives Tests and Scores--and Teaches," in Ibid., 35-41.

[46] B. F. Skinner, "Teaching Machines," in Ibid., 137-58.

posed by Crowder,[47] employs more than one sequence through the material which the student may be directed to follow. This system allows the student to tailor the program to his individual needs depending on his strengths and weaknesses as reflected by his previous errors. The alternate routes through the program allow the learner to retrace his steps through that portion of the program which his errors indicate he did not learn, adequately. There is a shortage of evidence to support either the linear or branching forms over each other. The choice of system is dependent upon the type of presentation device on which the program is to be used, the specific characteristics of the individuals to use the program, and the personal preference of the programmer. In some instances a combination of the two systems has been adopted which allows the individual to skip over blocks of frames if his error rate is sufficiently low. This approach follows the linear form in that no re-routing of the individual is attempted, however, it also possesses branching characteristics in that not all students are forced to interact with each frame depending on their performance.

Basic to the construction of programs are the considerations of size-of-step and cueing. Size-of-step refers to the amount of increase in subject-matter difficulty with each progression in the program. In a linear program the size-of-step is determined by the slowest or lowest ability test student used in the development of the program. It is assumed that if the size-of-step is decreased to the point which allows the weakest student to complete the program with a minimal error rate,

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[47]Norman A. Crowder, "Automatic Tutoring by Intrinsic Programming," in Ibid., 286-98.

the optimum program for all students will have been achieved.[48] Again, insufficient evidence is available to support the use of either the small or large-step technique over the other. Goldbeck[49] found in teaching spelling words to fifth-graders that the large step program was as effective as the small step program, however, Coulson and Silberman,[50] in a study to explore the effectiveness of machine responsiveness (branching) as compared with a fixed sequence (linear) mode, reported data which indicates that the small-step program was more effective. Fry[51] has suggested that an integration of the two forms might be utilized to achieve the desired level of learning as well as the desired time expenditure. Programs might be constructed with a variation in step size, with small steps occurring at the beginning of the program and larger steps toward the end. This variation would allow the student to "ease into the subject" and after gaining a foundation and adequate confidence, begin moving at a faster pace.

In order to determine the amount of learning which has taken place, some type of evaluation device or method must be applied. Normally, learning and memory content can be measured in three distinct ways: (1) by use of unprompted recall, (2) prompted recall or recognition, and

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[48] Wendell I. Smith and J. William Moore, "Size of Step and Cueing," in Smith and Moore, 203.

[49] R. A. Goldbeck, "The Effect of Response Mode and Learning Material Difficulty on Automated Instruction," cited in Ibid., 206.

[50] John E. Coulson and Harry F. Silberman, "Automated Teaching and Individual Differences," cited in Ibid., 209.

[51] Fry, 145.

(3) relearning time.[52] Each of these methods is an attempt to quantitatively determine the amount of information retained from the total amount to which the student has been exposed, and is usually achieved by administering relevant questions abstracted from the total body of information under consideration.

> Programmed instruction has the unique and valuable characteristic of permitting measurement of student progress throughout the learning process, or the forced overt responses are in a sense a learning record. This measuring function of programs can be enhanced greatly by inserting test items and review items, from time to time, thus maintaining what is in effect a constant surveillance of the body of knowledge that is being acquired by the student.[53]

Programming differs from the classroom technique in that in the latter case it is impossible for the classroom teacher to keep a progressive measurement of each student's responses on each item of information, while the use of the program allows an item by item evaluation of the student's responses. The best the classroom teacher can achieve is a hit-or-miss sampling of the student responses during the course of the learning sequence. As does the teacher, the program is able to make intermittant and terminal assessments of learning. This, in addition to his frame by frame response record, enables the student to establish periodically how much he has learned and how well he has learned it.

Fundamental to programmed instruction is the teaching device. This is some type of device which simply brings the student into contact with the program. The order and progression of the information, the presence of the reinforcement, the cues, prompts, etc., and the oppor-

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[52] Ibid., 75-76.

[53] Ibid., 78.

tunity for response are all part of the program and in an established sequence. The function of the teaching device is to unalterably and automatically present the material to the student in the form prescribed. As is demonstrated in the studies by Holland,[54] Holland and Matthews,[55] Harms[56] and others, the tape recorder can be successfully adapted for the presentation of programmed materials. Although a wide variety of other devices is available for use in presenting programmed materials, the magnetic tape recorder appears to be most effective and practical for use with certain types of programs, particularly those which rely on audition.

STATEMENT OF THE PROBLEM

As it has been indicated, learning can be accomplished through the use of automated instructional technique. Not only can learning take place but studies indicate that learning can often be accomplished more quickly and more efficiently than by employing conventional methods of instruction such as the lecture, discussion, etc. Further, it has been asserted that those skills necessary for effective listening can be taught, however, current data does not fully confirm this assertion. The purpose of this study is to investigate the effect of the automated instruction method in teaching listening skills. Specifically this study is to investigate the development of an orally programmed in-

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[54]Holland, "The Development and Evaluation of Teaching Machine Procedures."

[55]Holland and Mathews, "Application of Teaching Machine Concepts to Speech Pathology and Audiology."

[56]Harms, "On the Development and Testing of a Self-Instructional Program. . ."

struction course in listening and to test its effect on students being taught by this method. The questions being asked are: (1) can an effective oral program about listening be developed, (2) can listening skills be taught by the use of an auditory programmed instruction course in listening, and (3) how do students respond to the use of a programmed course in the area of listening?

CHAPTER II

PROCEDURE

The purpose of this study was to determine the amount of change in listening comprehension resulting from an orally programmed instruction course in listening comprehension. To study the effect of a listening program, it is necessary to (1) construct a programmed instruction course in listening, (2) select a means for the presentation of the programmed course, (3) adopt a criterion test to measure the effect of the instruction program, and (4) construct a student reaction inventory which will provide information about how the subjects respond to the program as a course of study.

THE PROGRAM

An auditory program in listening was prepared (See Appendix I). The core information used in the program was based generally on the materials of Thomas Lewis and Ralph Nichols[1] as cited in Chapter I. Editing was performed on the basis of findings reported by Nichols.[2] The program was based on the materials of Lewis and Nichols primarily because of the utility of their treatment of instruction in listening.

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[1]Thomas R. Lewis and Ralph G. Nichols, Listening and Speaking, (Dubuque, Iowa: William C. Brown, Co., 1954); _____, Speaking and Listening, (Dubuque, Iowa: William C. Brown Co., 1965)

[2]Ralph G. Nichols, "Factors in Listening Comprehension," Speech Monographs, 15 (1948), 154-163.

Some of the assertions made by Lewis and Nichols are open to question, but no effort was made to validate any of their material.

The program was divided into two sets. Set I presented information introducing the program to the student, defining listening and the benefits derived from efficient listening comprehension and discussed some of the listening barriers which decrease listening comprehension. Frames one through eighty-two contained the primary coverage of subject-matter. Frames eighty-three through ninety were used to review briefly the most important items of information in the set. Set I took approximately eighty minutes to complete.

Set II was used to discuss those information items which Lewis and Nichols assert will aid the individual in becoming an efficient listener. Generally, the second set discussed listening for comprehension, listening and concentration, and listening for evaluation and application. In this set, frames one through eighty-two were used to develop the primary information while frames eighty-three through one hundred were used to review the information in the form of nine general rules about listening. Set II took approximately ninety-five minutes to complete.

The format of the program, itself, followed a linear form[3] as described in Chapter I. This form was adopted in preference to the branching method[4] also discussed in the first chapter, because of the mechanical

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[3]B. F. Skinner, "Teaching Machines," in Lumsdaine and Glaser, 137-158.

[4]Norman A. Crowder, "Automatic Tutoring by Intrinsic Programming," in Lumsdaine and Glaser, 286-298.

limitations of the presentation device. The Skinner-Holland method[5] was used to develop the program. This method generally involves defining the field, collecting technical terms, laws, principles and cases, arranging the material, distributing the material within the program to achieve an arbitrary density, composing the individual frames, and "seeding" the terms, laws, etc., throughout the remainder of the program. The Skinner-Holland method was used since it permits the controlled development and distribution of subject-matter throughout the program.

A combination of step sizes was employed in the program. The step sizes were the same as used by Goldbeck[6] in which he defined the small step to be four to nine frames per single item of information, a medium sized step to be three to seven frames per single item, and a large step to be three to six frames per item. Frames one through twenty-two in Set I followed the small step distribution, frames twenty-three through forty-six followed the medium step distribution and frames forty-seven through ninety in Set I and all of Set II followed the large step distribution. The purpose of varying the step size was to allow the subjects opportunity to become accustomed to the presentation form and the subject matter.

The entire program was recorded at a speed of 3.75 inches per second on a Webcor magnetic tape recorder, model EP 2208-1. A graduate student

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[5]B. F. Skinner and J. G. Holland, "The Use of Teaching Machines in College Instruction," in Lumsdaine and Glaser, 159-172.

[6]R. A. Goldbeck, "The Effect of Response Mode and Learning Material Difficulty on Automated Instruction," cited in Programmed Learning: Theory and Research, ed. Wendell I. Smith and J. William Moore (New York: D. Van Nostrand Co., Inc., 1962), 212.

in speech with professional radio and television broadcasting experience was used as the primary voice in the program. Another graduate student read the examples in the program and the text of the criterion test in order to provide some variety in voices for the subjects.

An auditory signal was used in the taped program to designate the appropriate response points. This signal was produced by a 500 cycle per second pure tone generated by a Hewlett-Packard Audio Oscillator, model 200 AB, recorded on a tape and then dubbed into the program at the appropriate places during the vocal recording sessions. The entire program was recorded on a commercial recording tape.

SUBJECTS

The subjects for this study were drawn from four sections of the General Studies program, Division D, "Organization and Communication of Ideas," at Southern Illinois University during the Fall quarter, 1965. A total of sixty-eight subjects was selected, however, three subjects failed to complete the programmed instruction course and their results were eliminated from the study. The final experimental group contained thirty-two subjects and the control group contained thirty-three subjects. All of the subjects were enrolled in a coordinated program, each covering similar subject-matter in speech.

EXPERIMENTAL PROCEDURE

The subjects were divided randomly into an experimental group and a control group before the experiment began. Although not all members of the experimental group were exposed to the program at the same time, the program was administered to all members of the experimental group during the same week. At the beginning of the instruction period, each

each subject in the experimental group was given a copy of a prepared response booklet (See Appendix I). The tape recorder was started and the program began by presenting directions about the operation of the program to the subjects (See Appendix II). Immediately following the directions, the actual program (See Appendix II) began. Each frame followed the same format. A "bit" of information was presented, followed by some type of example of the information unit. Following the example, an incomplete statement was presented from which letters, a word or phrase had been omitted. At each omission point, the auditory signal was sounded. At the finish of each incomplete statement the operator of the tape recorder stopped the machine to allow the subjects time to record their responses in the booklet. The length of the pauses was dependent upon how long it took the subjects to respond, however, none of the response pauses exceeded ten seconds in length. The maximum limits of the response pause was based on findings noted during a preliminary study. Immediately following the response pause in each frame, the recorder was started again and a reinforcement statement was given. After each statement of reinforcement, a new frame was begun in which this same sequence of events was repeated. The total program, including response time, was presented in four 40 minute periods. The exact administration time varied slightly between sections because of the variation in response time demanded by the subjects. The control group took the criterion test only.

THE RESPONSE BOOKLET

The response booklet (See Appendix I) was prepared to correspond with the program. This booklet contained a student information and di-

rection sheet, the response sheets which coincided with the program, and a student questionnaire for the subjects to record their reactions to this particular program and to programmed instruction methods in general. They responded to five questions of the equal-appearing-interval type. The questionnaire was similar to that used by Hughes and McNamara[7] with which they attempted to acquire information about their subjects after being exposed to an industrial programmed learning course on the IBM 7070 Data Processing System.

THE CRITERION TEST

Since one of the purposes of this study was to determine the amount of increase in listening comprehension resulting from an aural automated instruction course in listening, some criterion measure was needed to assess the amount of increase. Primarily, the programmed instruction course in listening was focused toward teaching receptive listening skills, such as getting lecture details and following oral directions, and reflective listening skills such as getting the central idea, drawing inferences, and identify transitional elements,[8] and it was necessary to select a criterion measure which assessed these skills in preference to other types of listening skills, such as listening for enjoyment. Additionally, it was necessary that the measuring device be methodologically adaptable to the requirements of this study. In

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[7] J. L. Hughes and W. J. McNamara, "A Comparative Study of Programmed and Conventional Instruction in Industry," Journal of Applied Psychology, 45 (August, 1961), 225-231.

[8] J. I. Brown and G. R. Carlsen, Brown-Carlsen Listening Comprehension Test, (New York: Harcourt, Brace and World, Inc., 1955), 2.

view of these requirements, it appeared particularly desirable to use a standardized test as the criterion measure since the test items and administration directions would have been refined and tested and some estimate of validity and reliability would be available.

A number of tests of listening ability have been constructed and are available, however, only two of these have been standardized, those being the STEP: Listening Test[9] and the Brown-Carlsen Listening Comprehension Test.[10] Although both tests are cited frequently in the literature on listening, the Brown-Carlsen Test appears to have been used most often. No specific statements have been advanced for preferring the Brown-Carlsen Test as a research tool, however, for the purposes of this study, the STEP: Listening Test would not be satisfactory because of the use of "aesthetic materials"[11] such as poetry in the test and because it does not attempt to assess the individual's listening comprehension within the framework of sustained passages, as in the lecture situation. The Brown-Carlsen test, however, attempts to assess five aspects of listening performance. They are:

> (1) Immediate Recall which measures the ability to keep a sequence of details in mind until a question is asked which requires thinking back over the sequence; (2) Following Directions, which measures the ability to follow oral directions; (3) Recognizing Transitions, which measures awareness of the function of transitional words and phrases within sentence contexts; (4) Recognizing Word Meanings, which measures the ability to recognize meanings of words from context; and (5) Lecture Comprehension, which measures the ability to

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[9] "Manual For Interpreting Scores," STEP: Listening, (Princeton, New Jersey: Cooperative Test Division of the Educational Testing Service, 1957)

[10] Brown and Carlsen.

[11] "Manual For Interpreting Scores," STEP:Listening, 9.

> listen for details, get the central idea, draw inferences, understand the organization, and note the degree of relevancy in a brief lecture presentation read by the examiner.[12]

Through the use of these listening factors, it appears to be assessing those listening skills needed in the normal classroom situation as well as those skills being taught in the programmed course in listening. Both the independent skills, such as recognizing transitional words and phrases, recognizing word meanings from their contexts and identifying main ideas, and the use of these independent skills in a total performance, such as might be encountered in the lecture situation, are being measured by this test. It does not, however, attempt to measure listening aesthetic materials.

Like other listening tests, the Brown-Carlsen does not appear to be assessing elements unique to listening only but it does demonstrate some concurrent validity. In a number of studies, correlations are reported between listening and reading, intelligence, grade point average, and the like. These correlations would indicate that the Brown-Carlsen Test is detecting factors affecting listening but that listening comprehension is quite probably not independent of intelligence and certain personality variables. Allen Erickson[13] performed a study using 309 college communication students as subjects. He reported that those groups receiving a 12 week course of systematic listening instruction demonstrated a significantly greater increase in listening ability as measured by the Brown-Carlsen Test than did those students taking the

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[12]Brown and Carlsen, 3.

[13]Allen G. Erickson, "Can Listening Efficiency Be Improved?" Journal of Communication, 4 (Winter, 1954), 128-32.

regular communication sequence. He also reported correlations between listening and reading at .67; between listening and intelligence at .77; between listening and vocabulary at .67. Another study by John Haberland[14] reports using 110 college freshmen to take a battery of tests consisting of the A.C.E., Reading Comprehension portion of the Cooperative English Test, Michigan State College Listening Test, Stephens College Listening Test, Brown-Carlsen Test, the Iowa Silent Reading Test, and the Thurstone Temperament Scale. The results of this study indicate that listening tests yield widely different results when correlated with reading, that the Stephens College Test correlated most closely with grade point average and the Brown-Carlsen Test correlated most highly with the linguistic portions of the other tests. Haberland concluded his study by asserting that the various listening tests are not necessarily measuring the same things and that listening is probably a combination of abilities working in association with each other. Additional studies by Finkbeiner and others[15] tend to support both Erickson's and Haberland's findings.

An important consideration in choosing a criterion test is the fac-

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[14]John A. Haberland, "Listening Ability in College Freshmen," School and Society, 84 (December, 1956), 217-18.

[15]Edith Joy Finkbeiner, "A Study of the Relationship Between the Listening Ability and the Listening Performance of Ninth Grade Pupils," (unpublished Master's thesis, Department of Speech, University of Washington, 1962); James I. Brown, "How Teachable Is Listening?" Educational Research Bulletin, 33 (April, 1954), 85-93; Edward J. J. Kramer, "The Relationships of the Wechsler-Bellevue and A.C.E. Intelligence Tests With Performance Scores in Speaking and the Brown-Carlsen Listening Comprehension Test," Dissertation Abstracts, 15 (1955), 2599; and Robert D. Peterson, "Relationship Between Listening Comprehension and Scholarship; A Comparison of Eighth Grade Boys and Girls in Amos Hiatt Junior High School," (Unpublished Master's thesis, Department of Speech, Drake University, 1961).

tor of stability. The reliability for the Brown-Carlsen Test is reported as a mean estimate of .78,[16] while the mean validity indices were 28.4 for Form Am and 34.0 for Form Bm.[17] Although the reported estimates of validity and reliability are not exceedingly high, they do indicate reasonable stability and appear adequate for this study.

The only research currently available to this writer which directly challenges the use of standardized tests in listening is a study by Charles Kelly.[18] The purpose of his study was to determine whether the Brown-Carlsen and STEP: Listening tests are indeed valid and reliable measures of a unique factor. In his report of the study, Kelly included some criticism of the validity of these tests. He does note, however, that of the four forms of the two tests, the Brown-Carlsen, Form Bm appears to be the most valid. Kelly's research raises important issues that should not be ignored. As he states:

> Specifically, the evidence is insufficient to conclude that the Brown-Carlsen Bm Test should be adopted as a research tool.[19]

By the same token as Kelly would certainly admit, the evidence is insufficient to reject the Brown-Carlsen Test as a research tool. As indicated in studies by James Brown and others,[20] this test has been em-

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[16] Manual of Directions For the Brown-Carlsen Listening Comprehension Test, (New York: Harcourt, Brace and World, Inc., 1955), 13.

[17] Ibid., 14.

[18] Charles Kelly, "The Construct Validity of Two Listening Tests," Speech Monographs, 32 (June, 1965), 139-43.

[19] Ibid., 143.

[20] James I. Brown, "Can Listening Be Taught?" College English, 15 (February, 1954), 290-91; Russell J. Canute, "An Exploratory Evaluation of Certain Aspects of the Listening Program As Part of the Study Skills Course At the University of Wyoming," (Unpublished Doctoral dissertation,

ployed successfully to measure listening comprehension ability.

TREATMENT OF DATA

The data obtained from the Brown-Carlsen Listening Test was treated by use of the student's "t" Test.[21] The student's "t" was used as a statistical technique to reveal the significance of difference between the means of the experimental and control groups on the Brown-Carlsen Test.

The data obtained from the student reaction questionnaire were treated by use of the Chi-square statistic.[22] The Chi-square was used to compare the observed reactions expressed on the student questionnaire with the expected reactions of the subjects.

STATEMENT OF HYPOTHESES

On the basis of the discussion presented in the first chapter, it is assumed that listening skills can be taught by using an orally prepared programmed instruction course in listening, and that this instruction course in listening will result in a higher performance on the criterion test among those subjects using the program than those subjects not using the programmed course in listening. Therefore, the null hypothesis for this study is: that the mean of the experimental group on

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Department of Education, University of Wyoming, 1961); Thomas G. Devine, "The Development and Evaluation of a Series of Recordings For Teaching Certain Critical Listening Abilities," Dissertation Abstracts, 22 (1962), 3546-47; and Ruth Gallant, "The Improvement of Listening Comprehension Skills At the College Level," (Unpublished Master's thesis, Department of Speech, Miami University, 1959).

[21] J. P. Guilford, Fundamental Statistics in Psychology and Education (3rd ed.), (New York: McGraw-Hill Book Co., Inc., 1956), 220.

[22] Ibid., 232.

the Brown-Carlsen Listening Comprehension Test, Form Bm, does not differ significantly from the mean of the control group on this test.

An additional purpose of this study is to learn more about the reactions of the subjects to the programmed instruction method in general and to this program in particular. To gain this information, the second null hypothesis of this study is: that the reactions expressed by the experimental group on the student questionnaire toward the programmed instruction method do not differ significantly from those reactions expressed by the control group on the same questionnaire.

CHAPTER III

RESULTS OF THE STUDY

The research done in this study is the result of existing controversy as to whether or not listening skills can be taught. Although some results exist which indicate that listening skills cannot be taught, perhaps the lack of significant results in these studies is the product of the method employed to teach those skills operating in listening behavior.

The null hypotheses for this study are: (1) that the mean of the control group on the Brown-Carlsen Listening Comprehension Test, Form Bm does not differ significantly from the mean of the experimental group on the same test; and (2) that the reactions expressed by the control group on the student reaction questionnaire toward programmed instruction methods does not differ significantly from those expressed by the experimental group on the same questionnaire. Evaluation of the scores for both groups obtained from the Brown-Carlsen Test and evaluation of the student's reactions toward the programmed instruction course in listening was accomplished in the following ways:

1. Significance of the mean score difference between the two groups was assessed by use of a "t" Test for independent samples.[1]

2. Significance of the difference between subject responses on the student reaction questionnaire and expected subject responses

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[1]Guilford, 220.

on this questionnaire were assessed by use of the Chi-square test.[2]

The results of the "t" Test, summarized in Table I, necessitate the rejection of the first null hypothesis. The mean for the experimental group is 111.22 and the mean for the control group is 106.64, a difference of 4.58. The obtained "t" for these two groups is 2.01 while the table value "t", using sixty-three degrees of freedom at the five per cent level of significance, is 2.00, thus necessitating the rejection of the null hypothesis and the consideration of the alternate hypotheses. The alternative hypotheses for this aspect of the study are (1) that the mean score of the control group is greater than the experimental group; and (2) that the mean score of the experimental group is greater than the mean score of the control group. After reviewing the mean score of the two groups it was found that the mean score of the experimental group was greater than the mean score of the control group, resulting in the adoption of the second alternate hypothesis.

The results of the Chi-square test, for the entire student reaction questionnaire, summarized in Table 2, necessitates the retention of the second null hypothesis. The observed Chi-square for these groups was 6.38. The expected Chi-square based on 16 degrees of freedom at the 5 per cent level of significance was 26.3. The probability of the observed Chi-square result was .98, thus establishing a non-significant difference between the observed responses and the expected responses, and necessitating retention of the second null hypothesis.

Since the members of the control group were not exposed to the pro-

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[2] Ibid., 232.

TABLE I

MEANS OF EXPERIMENTAL AND CONTROL GROUPS ON THE BROWN-CARLSEN LISTENING COMPREHENSION TEST, FORM Bm, AND SUMMARY OF ANALYSIS OF THE DIFFERENCE BETWEEN GROUPS

GROUPS	MEANS	DIFFERENCE	OBTAINED "t" VALUE	P
EXPERIMENTAL	111.22	4.58	2.01*	.05
CONTROL	106.64			

* A value of "t" = 2.00 is required for significance at the five per cent level.

TABLE 2

CALCULATION OF CHI-SQUARE STATISTIC
FOR REACTION DIFFERENCE
BETWEEN EXPERIMENTAL AND CONTROL GROUPS
TOWARD PROGRAMMED INSTRUCTION METHOD.

	CATEGORIES				
	Least 1	2	Neutral 3	4	Most 5
EXPERIMENTAL GROUP (X_1)					
TOTAL OBSERVED RESPONSES	23	34	46	40	22
TOTAL EXPECTED RESPONSES	19.5	28	49	45.5	23
DIFFERENCE	3.5	6.0	3.0	5.5	1.0
CONTROL GROUP (X_2)					
TOTAL OBSERVED RESPONSES	16	22	52	51	24
TOTAL EXPECTED RESPONSES	19.5	28	49	45.5	23
DIFFERENCE	3.5	6.0	3.0	5.5	1.0

OBSERVED X^2 = 6.38

EXPECTED X^2 = 26.33

$\therefore$ RETAIN THE NULL HYPOTHESIS

I. Degree of Freedom = (5-1)(5-1) = 16

II. Significance Level at .05.

III. Probability = .99

grammed course in listening, their responses to questions three and four on the student questionnaire might have biased the results obtained from the Chi-square test for the entire questionnaire. As a result a Chi-square test was computed for questions one, two and five only. The results of the Chi-square tests for questions one, two and five of the student questionnaire, as summarized in Table 3, further necessitates the retention of the second null hypothesis. The observed Chi-square for the experimental and control groups on these questions was 5.58. The expected Chi-square based on 8 degrees of freedom at the 5 per cent level of significance was 15.51. The probability of the observed Chi-square result was .70, establishing a non-significant difference between the observed and expected responses on questions one, two and five of the questionnaire.

The results of the student reaction questionnaire, although the comparisons are not statistically significant, do reveal some interesting reactions on the part of those subjects in the group using the programmed course in listening. When the responses made by the subjects are considered as percentages, as summarized in Table 4, they indicate a neutral attitude toward the programmed instruction method as a general method of learning and a preference for not using programmed courses as compared to other instructional forms, but they do indicate that the programmed instruction method is a preferred means of teaching listening comprehension.

In summary the results of this study are:

1. That the mean score achieved by the experimental group on the Brown-Carlsen Listening Comprehension Test, Form Bm, is significantly greater than the mean score of the control group on the same test.

TABLE 3

CALCULATION OF CHI-SQUARE STATISTIC
FOR REACTION DIFFERENCE
BETWEEN EXPERIMENTAL AND CONTROL GROUPS
ON QUESTIONS 1, 2, AND 5 OF THE
STUDENT REACTION QUESTIONNAIRE

	CATEGORIES				
	Least 1	2	Neutral 3	4	Most 5
EXPERIMENTAL GROUP (X_1)					
TOTAL OBSERVED RESPONSES	21	22	27	19	10
TOTAL EXPECTED RESPONSES	16.5	19.0	29.0	23.5	11.0
DIFFERENCE	4.5	3.0	2.0	4.5	1.0
CONTROL GROUP (X_2)					
TOTAL OBSERVED RESPONSES	12	16	31	28	12
TOTAL EXPECTED RESPONSES	16.5	19.0	29.0	23.5	11.0
DIFFERENCE	4.5	3.0	2.0	4.5	1.0

OBSERVED X^2 = 5.58

EXPECTED X^2 = 15.51

∴ RETAIN THE NULL HYPOTHESIS

I. Degree of Freedom = (5-1) (5-1) = 8

II. Significance Level at .05

III. Probability = .70

TABLE 4

PERCENTAGES OF SUBJECT RESPONSES MADE IN EACH CATEGORY OF EACH QUESTION ON THE STUDENT ATTITUDE QUESTIONNAIRE

QUESTION	CATEGORIES				
1. What is your reaction to the programmed instruction method?	1	2	3	4	5
	Very unfavorable		Neutral		Very favorable
EXPERIMENTAL	9.1	24.2	27.3	27.3	12.1
CONTROL	3.0	12.1	27.3	48.5	9.1
2. In your opinion, how difficult is it to learn using the programmed instruction method?	1	2	3	4	5
	Very difficult		Neutral		Very easy
EXPERIMENTAL	18.2	24.2	24.2	21.2	12.1
CONTROL	3.0	15.2	48.5	21.2	12.1
3. How adequately has the programmed instruction method taught you the subject-matter on listening?	1	2	3	4	5
	Very inadequate		Neutral		Very adequate
EXPERIMENTAL	0	21.2	33.3	30.3	15.2
CONTROL	6.1	9.1	33.3	39.4	12.1
4. In your opinion, how successful is the information presented in this course in developing listening comprehension?	1	2	3	4	5
	Very unsuccessful		Neutral		Very successful
EXPERIMENTAL	6.1	15.2	24.2	33.3	21.2
CONTROL	6.1	9.1	30.3	30.3	24.2
5. In the future, would you like to use the programmed instruction method in place of regular classroom methods?	1	2	3	4	5
	Never		Neutral		Always
EXPERIMENTAL	36.4	18.2	30.3	9.1	6.1
CONTROL	30.3	21.2	18.2	15.1	15.1

2. That the reactions expressed by the experimental group on the student questionnaire do not differ significantly from the reactions expressed by the control group on the same questionnaire.

3. The subjects in the experimental group indicate a neutral reaction toward programmed instruction methods in general, but appear to feel that it is a desirable method in learning listening skills.

CHAPTER IV

DISCUSSION

Educators in general and speech teachers in particular have acknowledged the importance of listening skills as a significant aspect of the individual's development in oral communication, however, acknowledgment of these skills and their importance is not sufficient. Some method of teaching skills in listening is necessary in order that those individuals whose listening skills are inadequately developed, may become more efficient in their listening comprehension. Although a number of methods have been proposed to produce a change in listening comprehension, a diversity of results have been obtained. These findings have led to serious doubt as to the teachability of listening skills by use of direct methods as opposed to such indirect methods as listening to speeches, radio programs, and the like. The primary purpose of this study was to investigate the use of programmed instruction methods as a direct approach to the teaching of listening comprehension as well as to investigate further the question of whether or not listening, in fact, can be taught by use of direct methods of instruction. An attempt was made in this study to change directly the listening comprehension level of the experimental group by use of a tape recorded programmed instruction course in listening. No effort was made to modify seriously current principles or theories in listening behavior, other than in those cases in

which the modifications were necessitated by the use of programmed instruction technique.

The Brown-Carlsen Listening Comprehension Test, Form Bm, was selected to determine the level of listening comprehension possessed by the members of both the experimental and control groups. No effort was made to modify this test in any respect since the information provided by the test appeared to be adequate for this study.

Although the results indicate that the mean of the experimental group is larger than the mean of the control group by a 4.58 margin, the score distribution demands some consideration. The distribution of scores within the control group range from 71 to 133, or a total range of 63, while the distribution of scores within the experimental group range from 97 to 127, or a total range of 31. The experimental group appears to contain distribution range of approximately one half that of the control group and might indicate that the programmed course has a "localizing" effect on the population which used it. Additionally, the scores obtained by the experimental group appear to cluster most heavily in a range between 110 and 119 while the scores obtained by the control group appear to be distributed somewhat equally over the entire range of scores. This clustering of scores obtained by the experimental group might indicate that the programmed course aids those individuals possessing less efficient listening comprehension skills in changing their level of listening comprehension ability to a certain point but it does not seem to contribute to a change in listening comprehension ability over the entire range of scores. This possibility tends to indicate that the programmed course in listening is not adequately developing

those skills necessary for the most efficient levels of listening comprehension as measured by the Brown-Carlsen Test. A possible reason for this failure may be that the size-of-step used in the latter portion of Set I and all of Set II is excessively large to accommodate efficient learning of the more advanced skills in listening. Goldbeck, however, reported in 1960 that "a low error rate on a program does not necessarily mean optimum achievement on a criterion measure."[1] This suggests that providing larger steps does not necessarily reduce efficiency in learning, although it may increase the error rate.

When the individual frames in each set were inspected for errors, a distinct majority of the errors were found in three blocks of frames. In Set I, a high frequency of errors occurred in frames forty-three through fifty-nine and in frames seventy-one through eighty-eight. In the case of the first block (frames 43-59), this marked the end of the first session in working through the program. Fatigue could have been responsible for the increase in errors. Also the error frequency on a number of these frames may have been increased because they were the first frames encountered by the student in the following session with the program, and as such, reflect the student's effort to adjust to this second learning session. In the second block of frames in Set I having a high frequency of errors (frames 71-88), the increase in errors may be the result of the length and complexity of the frames. Beginning with frame seventy and ending with frame ninety, each one progressively in-

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[1]W. I. Smith and J. W. Moore, "Size of Step and Cueing," in Programmed Learning, W. I. Smith and J. W. Moore, ed. (Princeton, N. J.: D. Van Nostrand Co., Inc., 1962), 203.

creased in length and complexity. The length and complexity of each frame, when considered in relation to the oral presentation characteristic of the program, may have contributed to this increase in errors. Likewise, the influence of fatigue could have contributed to this increase, although this is not too probable since the block of frames in which the increase of errors occurred encompass a major portion of this part of the set.

An increase in error frequency occurs in frames forty through sixty-one of Set II. As in Set I, this marks the end of a learning session and the beginning of another. Again, as in Set I, this increase in errors could be attributed to fatigue and the student's efforts to adjust to the learning task once more. The factors of length and complexity do not appear to apply here since frames of varying of lengths and complexities are distributed throughout this block.

The error frequency of these frames could be reduced by increasing the number of sets in the program and by limiting each set to approximately forty frames. In each set an initial five to eight frames could be employed to introduce the set and briefly review significant points from the preceding set before introducing new information. Further the length and complexity of the frames might be more slowly increased on a progressive schedule. In this manner, the student would be encountering a progressively more lengthy and complex learning task in each subsequent frame. In either set, the increase in errors most likely was not caused by the difficulty level of the subject matter since each of these blocks of frames contained review materials as well as new information. Another possibility may be that those factors

which Lewis and Nichols assert as being necessary to listening do indeed contribute to a certain amount of change in listening comprehension but perhaps they do not contribute to an overall change at all levels of efficiency. If this inadequacy should exist in the programmed course, it might be rectified by use of additional frames to review more completely the most important concepts in listening. A further possibility is that the Brown-Carlsen Test, itself, may not be measuring accurately those skills necessary for more efficient listening, however, no evidence of this possibility is mentioned in other investigations using the Brown-Carlsen Test as a criterion measure.

A student reaction questionnaire was used to detect student reactions toward programmed instruction, in general, and the programmed course in listening, in particular. Although the results of the student questionnaire indicate that no significant difference exists between the reported reactions of those students in the experimental group and the control group, this lack of difference demands some consideration. The lack of a significant difference between the reported reactions of these two groups would indicate that the use of the programmed course in listening does not appear to alter student reactions toward the programmed instruction method. Even when considering only those questions on the questionnaire which apply to the programmed method in general, non-significant results are obtained. As indicated in Table 3, when questions 1, 2, and 5 are computed, exclusive of question 3 and 4, the proportions between the expressed reactions of the experimental group and the control group remain the same. This would tend to negate the possibility that questions 3 and 4, which specifically apply to the program-

med course in listening, adversely bias the results of the total questionnaire.

A variety of reasons could explain these non-significant results. Since 1957, programmed learning and instruction have been investigated and discussed in various quarters of education, industry, and the military services. The possibility exists that the reactions expressed by the two groups are similar because of the influence of popular discussion about programmed instruction and learning. Most of this group falls in an 18 to 20 year age bracket and quite probably have had either direct or indirect experience with programmed instruction methods during the course of their high school training.

A second possibility may be that the questionnaire, itself, is not valid. Although questionnaires of a similar type have been used in other research to detect subject reactions to programmed instruction methods, the specific questions used here may be too generally stated to discriminate between programmed instruction and other more conventional methods of instruction. Congruent with this, is the possibility that the format of the programmed course in listening was not sufficiently unique to allow the participants an opportunity to formulate reactions toward it other than those obtained through normal "second-and-third-hand" contact, such as through lectures or readings dealing with programmed instruction. This possibility does not appear likely, however, since questions 3 and 4 of the questionnaire relate specifically to the programmed course in listening and the reaction difference between the two groups on each of these questions was still non-significant.

A third possibility might be the result of the manner in which the experimental condition was carried out. During the course of the experiment, the control group continued to engage in their normal class activities. This involved the preparation and presentation of speeches. The experimental group was separated from the control group and engaged in working through the programmed course in listening only. Any preferences that the subjects in the experimental group might have had for engaging in speaking activities or any concern which the members of this group might have had for participating in the normal course activities for a grade could have influenced their reactions toward the programmed instruction method and resulted in negative reactions toward it. Likewise, the members of the control group may have preferred to be in the experimental group and may have registered higher responses on the questionnaire as a result of this desire, however, the members of the experimental group were informed that all normal class requirements would be suspended during the experiment and the control group were told that they would have an opportunity to examine the experimental materials following the completion of the experiment. As a result, any unnecessary concern should have been dispelled to some degree.

A final possibility is that in having the members of the experimental group complete the reaction questionnaire immediately upon completion of the programmed course, they tended to register the majority of their reactions in the third and fourth intervals of the scales because of fatigue and frustration resulting from working the program. Some of the subjects reported being fatigued at the completion of each session and some reported feeling frustrated, particularly when the er-

ror rate increased, however, no record was kept of these reports. If these factors did bias the reported reactions, perhaps a time period should be provided between the completion of the programmed course and the completion of the questionnaire, to allow the students an opportunity to overcome the fatigue and frustration before attempting to answer the questionnaire.

Although the reactions expressed by the experimental and control groups do not differ significantly, some tendencies are suggested by the data. As summarized in Table 3, the control group demonstrated greater frequency of positive reactions (those occurring in categories 4 and 5) toward the programmed instruction method than did the experimental group. This is of particular interest since none of the control group had contact with the programmed course used in this study at any time. In contrast to this, the experimental group indicated a greater frequency of negative reactions (those occurring in categories 1 and 2) toward programmed instruction than did the control group. A possible explanation might be that the effort demanded of the subject in becoming oriented to this instruction form served to generate some negative reactions. Likewise the physical conditions under which the course was administered may have been sufficient to generate negative reactions, however, since they were in a typical classroom situation during their listening training, this possibility seems doubtful. Finally, working in an experimental condition, as opposed to a regular class situation may have been partially responsible for the responses. Although the control group did demonstrate a greater frequency of positive reactions and the experimental group a greater frequency of negative reaction to-

ward the programmed course, both groups registered the majority of their responses in the neutral and neutral + categories (alternatives 3 and 4). It is interesting to note that the subjects in the control group expressed severe negative reactions to the questions concerning the use of the programmed course in listening comprehension and concerning the exclusive use of programmed instruction methods even though they were not exposed to the listening course at any time. The responses on these questions tend to indicate pre-conceived reactions on the part of the control group toward programmed instruction methods and training in listening, however, no conclusions can be reached on this point, since the members of the control group could not possibly react to the programmed course used in this study. Undoubtedly the control group should not have been asked questions 3 or 4 since they did not know what the questions were about.

In view of the results of this investigation, a number of aspects of the teaching of listening and the use of programmed instruction methods appear which demand additional research. Now that further evidence exists which would indicate that listening can be taught, more scrutiny should be given to the useful precepts of listening. Although this study was concerned primarily with the teaching of listening, the results tend to reveal that the rules and principles of efficient listening, as advocated by Lewis and Nichols, do apply to a change in listening efficiency. Unfortunately those precepts which effect listening behavior most significantly have not been thoroughly delineated and it is mandatory that further research be done in classifying and delimiting those significant factors operating in listening.

Further research must be done in the use of programmed instruction methods to teach listening. The programmed course used in this study could be enlarged, edited and refined to investigate if students can be taught to achieve greater efficiency in listening than those reported here. Additionally the possibilities of using the "branching" format of programmed instruction in the teaching of listening should be investigated. Along with this research should be undertaken to determine the effects of using a program, such as used here, with groups and with individuals.

Although some data currently exists, additional research is needed in determining student attitudes toward programmed instruction, listening, and the use of programmed instruction methods to teach listening. Research is needed to determine the types of questions to be asked, the types of responses which might be expected, and the value of these responses in relation to improving such courses.

Finally additional research is needed in developing more valid and reliable measures of listening ability than are currently available.

CHAPTER V

SUMMARY AND CONCLUSIONS

Research in listening and the teaching of listening skills has become increasingly widespread in recent years. One needs only to consult some of the more recent professional publications to become acutely aware of the dimensions of this concern. This study was concerned with the use of the stimulus-response-reinforcement (S-R-X) programming technique, being presented in an oral form, as an approach to the teaching of listening comprehension. An oral programmed instruction course in listening was constructed for use in this study. The specific purpose was to determine the effect of an oral programmed instruction course in listening comprehension as shown by a comparison on the Brown-Carlsen Listening Comprehension Test, Form Bm between an experimental group which received the instruction in listening and a control group which did not receive the instruction. Additionally an attempt was made to obtain information about the subjects used in this study in relation to their reactions to the programmed course in listening as shown by a comparison of the expected results based on the hypothesis and the actual results obtained from the student reaction questionnaire. The null hypotheses for this study were: (1) that the mean score of the experimental group on the Brown-Carlsen Test, Form Bm, does not differ significantly from the mean score of the control group on the same test;

and (2) that the reactions expressed by the experimental group on the student reaction questionnaire toward programmed instruction methods do not differ significantly from those reactions reported by the control group on the same questionnaire.

The results of the study indicate that a significant difference of means does exist between the group being exposed to the course in listening and the control group as measured by the Brown-Carlsen Test. The results also indicate that the use of the programmed instruction course does not cause a significant difference to exist between the reactions reported by the control group and those reported by the experimental group, but that both groups slightly favor the programmed instruction method.

The results of this investigation based on the operational particulars of the study suggest the following conclusions:

1. Some evidence exists which indicates that listening skills can be taught by use of the programmed instruction method.

2. Some evidence exists which indicates that students slightly favor using the programmed instruction method in learning listening skills.

3. Some evidence exists which might indicate that further research is needed in the application of programmed learning techniques to the teaching of listening.

4. Evidence exists which indicates that the principles and rules in listening, as espoused by Lewis and Nichols do effect listening performance positively, and that additional research is needed in further clarifying these precepts.

5. Additional investigation is needed in developing other programmed learning techniques to the teaching of listening.

6. Research is needed in the development of a diagnostic listening comprehension test.

7. Further investigation is needed to refine the body of knowledge currently being considered in listening.

8. Additional research is needed in developing effective interview techniques.

APPENDIX I

RESPONSE BOOKLET

FOR THE

PROGRAMMED INSTRUCTION COURSE

AND

STUDENT REACTION QUESTIONNAIRE

NAME: _____

DATE: _____ AGE: _____ CLASS: _____

SEX: _____ MAJOR: _____

ADDRESS: _____ TELEPHONE _____

DIRECTIONS

This is a short programmed instruction course in listening. The information about listening is contained on an accompanying tape. Each of these units of information is followed by an incomplete statement which you are asked to complete. The tape contains an auditory cue which indicates the place that a word, phrase or some letters in a word have been omitted. At the end of each incomplete statement a short pause exists which will allow you an opportunity to write your answer or response to the incomplete statement. Immediately following the response pause, the tape contains a reinforcement statement which indicates what word, phrase or letters might be used to complete the statement.

You are asked to write your answers in this booklet. Look at each response blank carefully before you write your answer, since some written cues such as dashes, the first or last or first and last letters of the word to be used, short lines, long lines and series of lines indicate the particular characteristics of the response you are asked to emit. In the longer responses you are not expected to have a word-for-word match with the reinforcement statement on the tape. The idea is the most important item. In every response, the exact word is not necessary. If you have used a synonym, the response is considered correct. If you miss the answer, however, be sure to mark it with an "X".

Now the tape will be started. The first part of this tape contains additional directions to aid you in successfully completing this course.

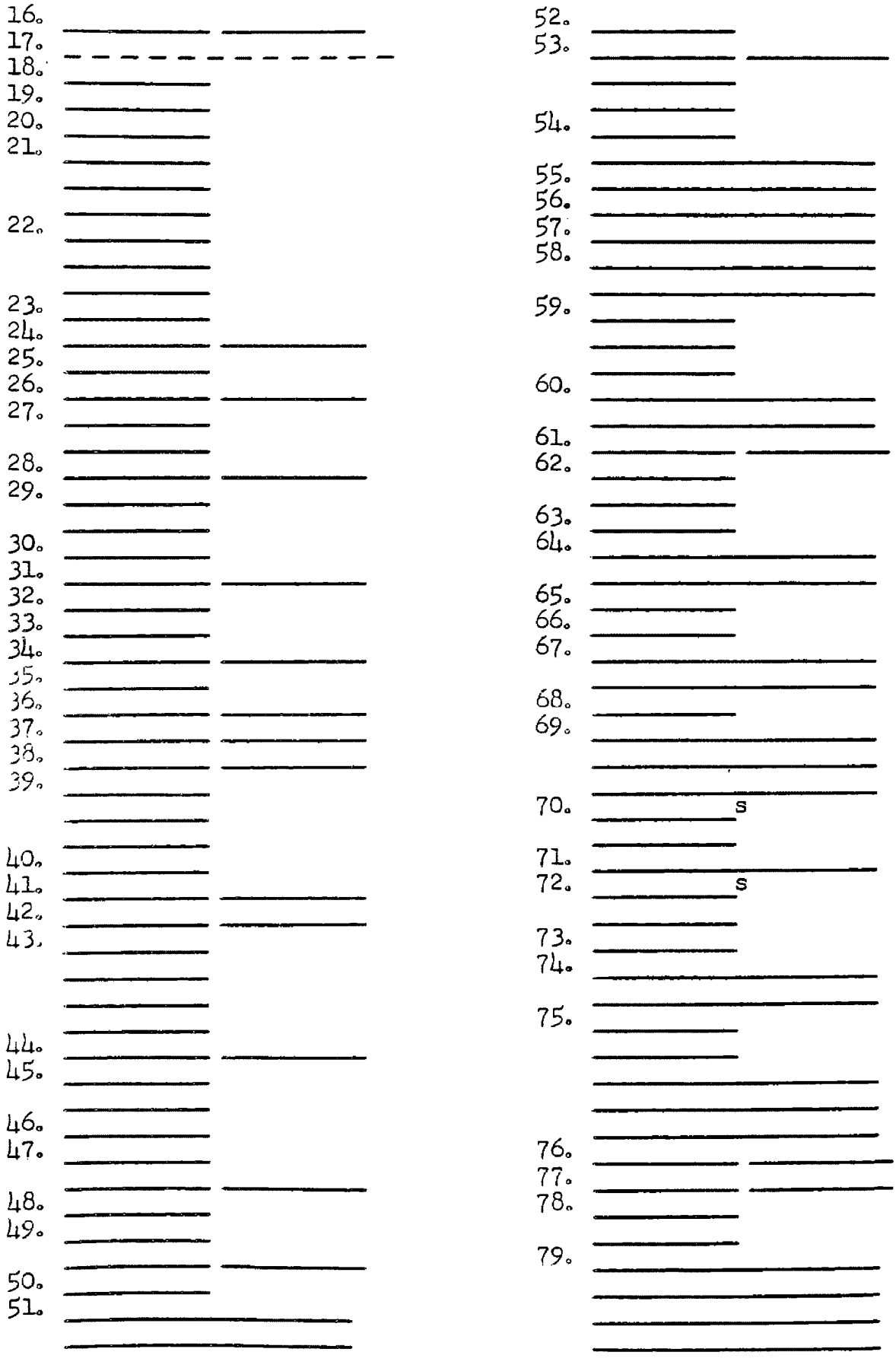
Example 1. _____

Example 2. _____ _____

SET I

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____



80. _____

81. _____

82. 1. _____
2. _____
3. _____
4. _____
5. _____

83. _____

84. _____

85. _____

86. _____

87. s_____g
a_____e
e_____c
r_____e
p_____y

88. p_____e
b_____f
c_____s

89. _____

90. _____

SET 2

1. s_____
2. _____
3. r_____y
4. _____
5. c_____y
6. is - is not

7. _____
8. n_____y
9. is - is not

10. 1. r_____
2. c_____
3. n_____

11. c_____l_____s
12. c_____l_____
13. is - is not
14. _____
15. _____

16. e_____y
17. _____
18. e_____s
19. _____
20. _____
21. _____

22. _____
23. _____

24. _____
25. 1. _____
2. _____
3. _____

26. _____
27. 1. _____
2. _____
28. _____
29. 1. _____
2. _____
30. 1. _____
2. _____
31. 1. _____
2. _____
3. _____
32. 1. _____
2. _____
3. _____
33. _____

34. _____

35. _____

36. _____

37. _____
38. _____
39. _____

40. 1. _____
2. _____
3. _____

4.
41.
42.
43. c n c e
44.
45.
46.
47.
48.
49. i
50.
51. t
52.
53. b
54.
55.
56.
57.
58.
59. 1.
2.
60.
61.
62. is - is not
63.
64.
65.
66.
67.
68. 1.
2.

3.
69.
70.
71.
72.
73.
74.
75.
76.
77.
78.
79. 1.
2.
3.
80.
81.
82. 1.
2.
3.
83.
84.
85.
86.
87.
88.
89.
90.
91.
92.
93.
94.
95.
96.

97. _____ 99. _____
98. _____ 100. _____

STUDENT ATTITUDE QUESTIONNAIRE

As a last phase of this program in listening, you are asked to complete the following questions before handing this booklet to the operator. Please answer the questions, being as honest in your evaluations as possible.

1. What is your reaction to the programmed instruction method?

Very unfavorable — Neutral — Very favorable

2. In your opinion, how difficult is it to learn using the programmed instruction method?

Very difficult — Neutral — Very easy

3. How adequately has the programmed instruction method taught you the subject-matter on listening?

Very inadequate — Neutral — Very adequate

4. In your opinion, how successful is the information presented in this course in developing listening comprehension?

Very unsuccessful — Neutral — Very successful

5. In the future, would you like to use the programmed instruction method in place of regular classroom methods?

Never — Neutral — Always

APPENDIX II

RECORDED INSTRUCTIONS

PROGRAMMED INSTRUCTION COURSE

Can everyone hear this recording clearly? (PAUSE)

This is a short programmed course in listening designed to help you efficiently improve your listening comprehension. The course of study about listening is contained on this tape. The course is divided into two units called sets. Each set will be used to develop one phase of the instruction on listening. Set I is a general introduction to listening while set II is concerned with advice on how to improve your listening comprehension. The sets are divided into units of information called frames. The function of the frame is to present each individual unit of information about listening.

The booklet you have before you is for the answer or response phase of this course. A stimulus, in the form of information about listening is presented in each frame. Each frame ends with an incomplete statement which you are asked to complete on the basis of the information you have received. The word, phrase, or letters which you use to complete each incomplete statement will be your response and is to be entered into this response booklet. The voice recorded on the tape will identify the number of the frame to be worked and you are asked to find the corresponding number in the response booklet. Then the voice will present a unit of information about listening. The last part of this unit of information will be in the form of an incomplete statement.

A sound signal (AC)____ is used to mark the places that words, phrases or letters have been omitted. At the end of each incomplete statement a pause will be made to allow you an opportunity to complete the statement by filling in the missing word, phrase, or letters. Do not fill in the missing words when you hear the sound signal since additional information may still follow. Wait until the entire statement has been made.

Now let's try a couple of frames and see if you understand how this program works.

Example 1. (S) The primary function of listening is to learn. Each time we listen, no matter what the situation, we are learning from someone or something else. The student, listening to the lecture, is learning and so is the adult listening to the child. In both instances the listener is (AC)____ something about the subject of the discourse and the person delivering the message. (R)

The sound signal (AC) ____ marked the place where the word was missing but the remaining part of the statement gave you some important clues about what word was missing. This is the reason for waiting until the end of the statement before you attempt to respond.

Immediately following a short response pause, the speaker will give the answer for the frame, the answer being the word, phrase or letters omitted. In example 1, the word that was missing from the incomplete statement was the word (X) - learning. The final statement should be "In both instances the listener is - LEARNING - something about the subject of the discourse and the person delivering the message."

Example 2. (S) Each time a listener hears a statement, he is learning information or gaining knowledge. When the student hears the statement "On December 7 1942 the Japanese government declared war

on the United States by bombing Pearl Harbor." he has gained information about a specific event. When a listener hears a statement, he is (AC) _____. (R) (X-learning information, gaining knowledge.)

A number of clues are contained in each frame to help you complete the missing word, phrase, or letters. In some cases the number of words to be used in your response is indicated by the number of lines in the booklet. In other cases a series of short lines indicates the number of letters contained in the word necessary for the response. Along with these short dashes, the first and last letter of the word may be provided to further cue your answer. Finally, the length of the response line will indicate the length of your answer. For the short one or two or three word response, a short line will be used. However, for the longer responses longer lines will be provided. Be very careful to watch for these cues.

The program begins with relatively easy one, two or three word answers. Don't despair. Later on the incomplete statements require longer answers and grow more challenging. In the case of the longer answers, you aren't expected to have a word-for-word match with the answer given on the tape. However the general idea should be similar. The most important words in the answer will be indicated by the vocal emphasis of the speaker. These words or similar words should be used in your answer.

Your success in the use of this program is totally dependent upon how much you wish to improve your own listening comprehension. I ask you to avoid cheating since it will hinder your development and defeat the purpose of this program. You can benefit greatly by seriously and actively attempting to learn by using this program. Your learning and progress will be greatly aided if you listen carefully to what is said on this tape, if you listen carefully for the clues that are contained in each frame and watch for written cues in your response booklet, and if you follow the program as closely as possible. Do not request help from the operator. Are there any questions? (PAUSE) Let's begin.

SET I

1. (S) There are four communication skills which man uses to make contact with his fellow human beings. These skills are reading, writing, speaking and listening. Ideas, concepts, directions and facts are all communicated between human beings by use of four skills, which are reading, writing, (AC) s_____, and (AC) l_____. (R) (X-speaking and listening)
2. (S) Two of these communication skills rely on some type of printed symbols to carry or convey the information. The communication skills which rely on the medium of printed symbols to carry information are (AC) _____ and (AC) _____. (R) (X-writing and reading)
3. (S) The other two communication skills rely on the use of auditory or sound symbols to convey information. These communication skills are called (AC) _____ and (AC) _____. (R) (X-speaking and listening)
4. (S) Spoken words used to convey information to a receiver rely on the use of (AC) _____ symbols. (R) (X-auditory or sound)
5. (S) After the auditory symbols have been spoken by the person sending the information, they are received by a person called the (AC) _____. (R) (X-listener)
6. (S) The auditory message is sent by the (AC) _____ and received by the (AC) _____. (R) (X-speaker and received by the listener)
7. (S) The two communication skills which rely on the use of auditory symbols to convey a message are (AC) _____ and (AC) _____. (R) (X-speaking and listening)
8. (S) Writing is to reading as speaking is to (AC) _____. (R) (X-listening)
9. (S) Before we can begin discussing listening, a word must be defined. This is the word, perceive, spelled P-E-R-C-E-I-V-E. Now write this word in your booklet as I spell it. (P-E-R-C-E-I-V-E)
10. (S) The word perceive is defined as the activity of obtaining information through the senses, such as the ears, eyes, etc. When an individual becomes aware of a sound, he has (AC) _____ that sound. (R) (X-perceived)
11. (S) A noun form of the word perceive is the word perception. Perception is the direct acquaintance with anything through the use of the senses. The statement, "His perception of the poison saved our lives." means that he became directly acquainted with the poison or detected it through the use of his (AC) _____. (R) (X-senses or taste or tongue)
12. (S) Likewise the statement, "He perceived the movement in the trees." means that he has obtained knowledge or information about something moving in the trees through the use of his (AC) _____. (R) (X-senses)
13. (S) Listening is one of the most important skills that a person can acquire, however, it has been defined in a variety of ways. For the purposes of this discussion, we will define listening as the attachment of meaning to the auditory symbols perceived. A person who perceives auditory symbols and then attaches meaning to those symbols is engaging in (AC) _____. (R) (X-listening)

14. (S) Like reading, listening demands the perception of symbols and the attachment of meaning to those symbols, but unlike reading, the activity of listening is dependent upon (AC) _____ symbols. (R) (X-auditory or sound symbols)

15. (S) In a sense, listening is a combination of what we hear and what we understand. Obviously the auditory symbols which we perceive would be of little value to us unless we attach (AC) _____ to those symbols. (R) (X-meaning)

16. (S) To be able to listen demands not only that we be capable of receiving auditory symbols but that we be able to (AC) _____ _____ to those symbols. (R) (X-attach meaning to those symbols)

17. (S) At this point another word must be defined for the purpose of our discussion of listening comprehension. This is the word comprehension, spelled C-O-M-P-R-E-H-E-N-S-I-O-N. Now write this word in your booklet as I spell it to you. (X- C-O-M-P-R-E-H-E-N-S-I-O-N)

18. (S) The word comprehension means the act of grasping the meaning of something or in a broad sense, understanding it. The individual who reads or hears a sentence and has grasped its meaning or understood it, can be said to (AC) _____ the meaning of the sentence. (R) (X-comprehend)

19. (S) In a general sense, the person who receives symbols of some type, attaches meaning to those symbols and is able to grasp the meaning of those symbols, can be said to (AC) _____ or (AC) _____ the symbols. (R) (X-comprehend or understand the symbols)

20. (S) In relation to listening, the idea of comprenension involves more than the grasping of meaning from auditory symbols. It also involves being able to remember or retain the important information derived from our listening. Listening comprehension involves not only the perception and understanding of auditory symbols but also the (AC) _____ of the important information derived from those symbols. (R) (X-retention or retaining or remembering)

21. (S) In summary then, the task of improving a person's listening comprehension involves taking steps toward improving the specific elements in his listening behavior. These steps are (1) (AC) _____, (2) (AC) _____ and (3) (AC) _____. (R) (X- 1. perception, 2. understanding, 3. retention or remembering. These words can be in any order)

22. (S) This course of study is concerned with listening, primarily with helping you improve your listening comprehension ability. Specifically this course in listening is to help you improve your ability to (AC) _____, (AC) _____ and (AC) _____ auditory symbols. (R) (X- perceive, understand, and retain or remember auditory symbols.)

23. (S) It would not be to your advantage to attempt improving your listening comprehension ability unless you could benefit by doing so. Improvement of your listening comprehension in fact does benefit you in many ways. First training in increasing listening comprehension will enable you to become a more efficient listener. Generally the average person does not listen very efficiently. A number of research investigations have indicated that the average individual can remember only about 50 per cent of the information heard in a lecture, immediately following the lecture. This means that about half of all the information you heard in one of today's or yesterday's lectures has been forgotten. A possible approach to rectifying this problem might be

to have the instructor present twice as much information during his lecture, however, a better approach is to improve your own listening comprehension. Immediately following a lecture, only about (AC) _____ per cent of the information heard in the lecture remains with the student. (R) (X- 50 per cent)

24. (S) These same studies go on to indicate that after a lapse of two months only 25 per cent of the original information remains with the listener, or one-quarter of the total information presented is retained. Again, this statistic emphasizes the need for training in (AC) _____ _____. (R) (X-listening comprehension)

25. (S) A two month lapse between the presentation of the lecture and the testing of that information usually results in a loss of half of the information retained immediately following the lecture or (AC) _____ per cent of the total information contained in the lecture. (R) (X- 25 per cent)

26. (S) To quickly review our definition of listening comprehension includes three specific components. They are perception, understanding and retention. The improvement of a person's listening comprehension should result in an increase in the amount of (AC) _____ _____. (R) (X-information retained or remembered)

27. (S) To further review, the average person retains only (AC) _____ per cent of the information received immediately following the presentation and only (AC) _____ per cent after a lapse of two months. (R) (X- 50 percent and 25 per cent)

28. (S) These statistics emphasize the pressing need for training to improve one's own (AC) _____ _____. (R) (X-listening comprehension)

29. (S) Now let's turn to another benefit realized from improvement of your listening comprehension. This is an increase in knowledge. Listening is one of the easiest means of obtaining knowledge from others. In a study in 1928, Paul Rankin found that the average individual engages in listening about 47.5 per cent of his waking hours as opposed to his engaging in reading for only 16 per cent of this time. Quite obviously we have less opportunity to learn by (AC) _____ than by (AC) _____. (R) (X-reading than by listening)

30. (S) As a student, a great deal of your learning is derived from listening to lectures. A lecture represents many weeks of reading, studying, assembling and screening of information by an instructor. This information is digested and presented to you in one short period. We must acknowledge that in relation to the research and organization done by the instructor, that listening is a very easy method of obtaining knowledge. The lecture presents the information obtained from weeks of research in a (AC) _____ form. (R) (X-condensed or digested)

31. (S) When the student realizes that nearly half of his waking hours are spent in listening, that weeks of research are made available to him in a very short time period, and that he remembers only 50 per cent of this information immediately after he hears it and only 25 per cent of the information remains after a two month lapse, he must acknowledge the need for training to improve his (AC) _____ _____. (R) (X-listening comprehension)

32. (S) The listener benefits culturally from increasing his listening comprehension. We gain a great deal of our information about manners, customs, fashions, etc., through listening to others. Our lis-

tening comprehension ability determines to a large extent our (AC) _____ development. (R) (X-cultural)

33. (S) Knowledge about customs fashions all aid us in our (AC) _____ development. (R) (X-cultural)

34. (S) Cultural development is greatly dependent upon how well we have developed our (AC) _____ _____. (R) (X-listening comprehension)

35. (S) Along with fashion, customs, etc., a great many of our tastes are based on what we hear. Our taste in art, music, books etc. are not inherited but are rather learned by listening to what others tell us. Our listening comprehension ability, to a large extent, determines these (AC) _____. (R) (X-tastes)

36. (S) In review, our tastes and our knowledge of custom, fashion, etc., all determine the level of our (AC) _____ _____. (R) (X-cultural development)

37. (S) Similar to cultural development is social maturity. Much of the knowledge and information we have about mature social action is derived by listening. The knowledge and information which has allowed us to mature our actions and our thoughts, attitudes, desires, etc., has been acquired mostly by listening. If we have not fully matured socially, it may be because we have not adequately developed our (AC) _____ _____. (R) (X-listening comprehension)

38. (S) The level to which we have developed our listening comprehension may, in part, be responsible for the level of (AC) _____ _____ which we have attained. (R) (X-social maturity)

39. (S) Training in the development of listening comprehension usually aids us in increasing our (AC) _____ to grow (AC) _____ and to mature (AC) _____. (R) (X-increasing our knowledge, grow culturally, and mature socially)

40. (S) Even the individual's communication skills are effected by his listening comprehension ability. The listener, as the counterpart of the speaker, spends a great deal of his time receiving messages from speakers in face-to-face situations. Not only does the listener receive the verbal message but he also receives information about communication technique and organization in general. The listener's evaluation of the message and speaker technique can aid him in improving his own (AC) _____ ability (R) (X-speaking or communication)

41. (S) Because of the frequency with which we engage in listening in the face-to-face situation we as listeners, have the opportunity to follow a variety of oral communication techniques from beginning to end and to make a first-hand observation of those techniques and their effect on the receivers. The assumption is that we, as oral communicators will avoid those techniques which we, as listeners, have found to be ineffective. Our communication ability is often determined by our (AC) _____ _____ ability. (R) (X-listening comprehension)

42. (S) Most often the best communicator in the class is also one of the best listeners. His organization, word choice, idea development etc., all reflect how well he has listened and remembers. Improvement of listening comprehension can help the individual improve his (AC) _____ _____. (R) (X-communication ability)

43. (S) In summary, the increasing of listening comprehension can beneficially effect the student's (AC) _____, (AC) _____ development, (AC) _____ maturity, and (AC) _____ effectiveness. (R) (X-learning

or acquisition of knowledge, cultural development, social maturity and communication effectiveness)

44. (S) The development of adequate listening comprehension is often impaired by a number of listening barriers. These barriers are elements which inhibit the free exercise of the individual's listening comprehension skills. Frequently the listening comprehension of the untrained listener is inhibited by elements called (AC) _____ _____. (R) (X-listening barriers)

45. (S) Perhaps the foremost barrier to listening is lack of training. The untrained listener frequently falls victim to a number of elements in the listening situation which reduce his listening comprehension. Most of these barriers result from not knowing how to counteract or avoid these elements or more specifically, these barriers result from (AC) _____ of (AC) _____. (R) (X-lack of training)

46. (S) A few of the factors which negatively effect listening comprehension can be isolated and have been identified as listening barriers. Proper knowledge of these factors is a positive aid to increasing listening comprehension. By being aware of the negative factors in the listening situation, the student should be able to identify, counteract or avoid their effect. A positive aid to increasing listening comprehension is by receiving (AC) _____ in avoiding and counteracting the effect of listening barriers. (R) (X-training or knowledge)

47. (S) These barriers have been grouped into five general categories. The first category is composed of the concentration barriers. Many of us are too lazy to be active listeners, it is easier to be semi-alert than fully alert. Our passive listening habits act as a (AC) _____ to our concentration thus reducing our (AC) _____ _____. (R) (X-barrier to our concentration thus reducing our listening comprehension)

48. (S) Lack of mental discipline is a major cause of under-developed listening comprehension. The undisciplined mind can find a variety of reasons for not concentrating. It is true that many factors sometimes make listening difficult, but the well-disciplined mind learns to overcome and counteract these factors and concentrate on the message. Under-developed listening comprehension is most frequently caused by (AC) _____. (R) (X-lack of mental discipline)

49. (S) Lack of mental discipline permits the student to mentally wander from distraction to distraction thus counteracting his efforts to concentrate on the speaker's message. The undisciplined mind offers the listener's attempts to concentrate. The listener's efforts to (AC) _____ on the speaker's message are frequently counteracted by the listener's lack of (AC) _____ _____ (R) (X-concentrate-mental discipline)

50. (S) The mind can give attention to any stimulus for only a few minutes. Full attention for any extended period of time is impossible. The listener constantly keeps shifting the focus of his attention from one object to another, sometimes focusing on what the speaker says, sometimes focusing on something on the stage and sometimes on the things around him. Each time the focus of (AC) _____ is for only a few seconds. R) (X-attention)

51. (S) We might describe attention as the mind moving in spurts, focusing on one thing and then another. In order for the listener to increase his concentration, he must seek to sustain his attention. The attention can be sustained by linking each of the short spurts of attention into a long progression, thus producing a span of attention. The listener can sustain his attention by (AC) _____. (R) (X-linking the shorter spurts of attention into a sustained span of attention)

52. (S) The primary element in the speaking situation upon which the listener must focus his attention is the speaker's message. The listener must prolong his attention toward what the speaker is saying. Concentration on any other aspect of the speech situation will result in the listener's loss of important information. The listener must learn to concentrate on the speaker's (AC) _____. (R) (X-message)

53. (S) Normally speaker's talk at only 125 to 150 words per minute; yet the listener's mind is capable of working at a much faster pace, a rate equivalent to 400 or 500 words per minute. The problem is obvious, the (AC) _____ _____ can normally work much faster than the (AC) _____ can (AC) _____. (R) (X-listener's mind speaker can talk or speak)

54. (S) The difference of rate between the function of the speaker and the listener means that the mind has considerable opportunity to become diverted. We have all experienced the periods of mental wandering while the speaker finishes making a point and before he begins the next. These opportunities to be mentally diverted can be caused by the difference between the (AC) _____ and the (AC) _____. (R) (X-speaker's rate of presentation and the listener's rate of thought)

55. (S) The diversion of attention by the listener usually functions as a straying of attention to another subject and then returning, attempting to pick up what the speaker is saying. After each time that the mind wanders, it becomes increasingly difficult to return to the speaker's message until it becomes useless to attempt to resume your attention. The mental wanderings become more and more frequent and lengthy after each excursion, ultimately resulting in (AC) _____. (R) (X- a useless attempt by the listener to resume attention)

56. (S) Finally the student's multi-directional orientation makes concentration difficult. Concern over grades, problems of money, our social life, an unfinished term paper, all compete for our attention and are causes of this multi-directional orientation. We are multi-directionally oriented in that a variety of concerns and responsibilities are all simultaneously competing for our concentrated efforts. The multi-directional orientation, then, is caused by (AC) _____. (R) (X-the concerns and responsibilities competing for our attention)

57. (S) Our multi-directional orientation is not bad in itself, since it allows us to successfully manipulate and control our complex lives. We meet our commitments, perform our duties and protect ourselves from danger, all by virtue of this many-directional orientation. Unless we can keep this consideration of our personal concerns and responsibilities in check, our ability to concentrate on the demands of the immediate situation will be sharply curbed. Our multi-directional orientation benefits us by allowing us to (AC) _____. (R) (X-manipulate and control our complex lives)

58. (S) Preoccupation with personal concerns defeats concentration. There are times when the listener must learn to control his preoccupation and concentrate fully upon the speaker's message. This involves forgetting, for the moment, about all those troubles and problems large and small. The foremost concern must be the speech. The listener's concentration can be maintained only by (AC) _____. (R) (X-forgetting all the problems and troubles competing for our attention at that particular time.)

59. (S) By way of summary, then, concentration in the speech situation is difficult because of three problems. These are: (1) (AC) _____, (2) (AC) _____, and (3) (AC) _____. (R) (X- (1) short attention span, (2) difference between speaker's rate of talking and listener's rate of thinking, and (3) multi-directional orientation)

60. (S) A primary barrier to listening comprehension is (AC) _____. (R) (X-the listener's inability to concentrate)

61. (S) A second group of barriers to listening comprehension are the personality barriers. These are barriers which result from the particular personality traits possessed by the listener. These traits actively force us to resist the immediate situation. The particular personality traits of the listener can act as a (AC) _____ _____. (R) (X-listening barrier)

62. (S) Not all personality traits are detrimental to listening comprehension. It has been observed that the personality traits indicated by the words vigorous and reflective are highly contributory to listening comprehension. The listener who is active, vital and energetic but still pensive and reflective seems to gain the greatest amount of information from his listening efforts. Listening comprehension is increased by the (AC) _____ and (AC) _____ personality traits. (R) (X-vigorous and reflective)

63. (S) Two personality traits are especially detrimental to listening comprehension. The first is self-effacement. Perhaps the best way to describe the self-effacing listener is that he is a compulsive nodder. He agrees compulsively with everything the speaker says. He is always physically attentive, sympathetic and complaint but very seldom knows what has been said. The compulsive agreer is the (AC) _____ - _____ listener. (R) (X-self-effacing)

64. (S) The self-effacing listener seldom engages in reflection or listens from any position of conviction since his principle concern is to convey the impression of being attentive and agreeable. His attentiveness and agreeability is only superficial since he is in reality not even tuned to the speech. The primary concern of the self-effacing listener is to (AC) _____. (R) (X-give the impression of being attentive and agreeable.)

65. (S) Self-effacement defeats listening comprehension. Listening comprehension demands that the listener search out his own convictions and bring them to bear on the speaking situation. It also demands that the listener critically evaluate what he hears, always checking the accuracy of the speaker's statements. Listening comprehension is defeated by (AC) _____ - _____. (R) (X-self-effacement)

66. (S) Opposite to self-effacement and no less a personality barrier to listening is argumentativeness. The argumentative personality listens in a defensive and aggressive manner. He cannot be enthusiastic

about what anyone says, let alone agree with them because of the compulsive characteristic of this personality trait. Everything he hears is viewed with a negative suspicion and if he is asked to accept or reject what has been heard, he will consistently choose rejection. The defensive and aggressive listener who compulsively opposes all aspects of what he hears can be described as having an (AC) _____ personality. (R) (X-argumentative)

67. (S) The argumentative listener's listening comprehension is impaired because he spends most of his time preparing silent replies to the speaker rather than concentrating on what is being said. In a conversation, discussion or debate he spends most of his time thinking of what he is going to say as soon as he gets a chance. He seldom reflects upon the ideas of others but merely gets cues from the speaker which trigger his own lines of argument. The major concern of the argumentative listener is to (AC) _____. (R) (X-prepare silent replies to the speaker's message)

68. (S) Listening to a speech is difficult for the argumentative listener because he feels that he never gets an opportunity to speak himself. This does not prevent him from debating the speaker. He silently questions everything the speaker says and goes off on mental excursions of his own, thus missing important pieces of information in the speech. Silent debating of the speaker and frequent mental excursions characterize the (AC) _____ listener. (R) (X-argumentative)

69. (S) The argumentative listener must listen with an open mind and after the speaker is finished, evaluate what he has heard. At all costs he must avoid his impulse to debate the speaker. The argumentative listener can increase his listening comprehension by (AC) _____ and (AC) _____. (R) (X-listening with an open mind and by evaluating what he has heard at the completion of the speech)

70. (S) Another category of listening barriers are the emotional barriers. People listen not only with their ears, but also with their emotions, their prejudices, their beliefs, and their entire background of information. Our prejudices, beliefs and emotions sometimes act as (AC) _____s to (AC) _____. (R) (X-barriers to listening)

71. (S) Many of our emotions, prejudices and beliefs are shaped by what others tell us. A child is not concerned with racial differences until adults make him aware of them, but from that time forward he judges people by color or nationality. The judgment of people by color or nationality is an example of prejudice which has been shaped by (AC) _____. (R) (X-what others tell us)

72. (S) Some of our beliefs become so rigid that when we have a new encounter with one of them, we react without reflective thought. Hardened belief is called prejudice. Usually we attach labels to these hardened beliefs, such as Communist, ultra-conservative, or Jew and the mere mention of these labels triggers a series of emotional reactions within us. We all carry long lists of labels -- emotion-laden words and phrases, which, when we hear them, seriously reduce our listening comprehension. Listening comprehension can be seriously impaired by the mere mention of hardened (AC) _____s called (AC) _____. (R) (X-hardened beliefs called prejudice)

73. (S) Additionally, the prestige levels of a speaker and a listener can be an emotional barrier. The status or position of the speaker

often will determine our regard for him. If we respect him thoroughly, we may listen without adequate critical reflection, but if we feel superior to him, we may disregard everything he says as being unimportant. Our regard for the speaker based on his position or status can often operate as an (AC) _____ barrier. (R) (X-emotional)

74. (S) Executives often fail to listen to workers and teachers often fail to listen to students because the executive and the teacher may regard the student and worker as being of lower (AC) _____. (R) (X-status or position or prestige level)

75. (S) The listener must learn to break through the effects of status consciousness and consider both the speaker and his message on their respective merit. The plumber, although lacking knowledge of bank administration is equally qualified with the banker to speak on democracy. Neither should be accepted by virtue of his status alone. The listener can reduce the effect of (AC) _____ consciousness as an (AC) _____ barrier by (AC) _____. (R) (X-the listener can reduce the effect of status consciousness as an emotional barrier by disregarding the speaker's status and judging both the speaker and his speech on their own merit.)

76. (S) In summary, prejudice, prestige levels of speakers and the effect of some personality traits all are types of (AC) _____ _____. (R) (X-emotional filters)

77. (S) Environmental barriers also can reduce listening comprehension. The speaker and listener are often dissimilar in background and environment origin. One may be a Montana farmer while the other may be a New York artist. The effect of their respective backgrounds and environments on their thinking may well reduce their listening comprehension. Listening comprehension can be effected by the differences in (AC) _____ and (AC) _____ between the speaker and listener. (R) (X-background and environment between the speaker and listener.)

78. (S) Too often the effect of these environmental barriers force the listener to pay attention to what is said but to totally misinterpret or bluntly refuse to accept the speaker's ideas. Many of us can remember how we, as naive western students, have misinterpreted the statements of the sophisticated eastern professor. Environmental barriers force the listener to (AC) _____ or (AC) _____ what the speaker has said. (R) (X-misinterpret or bluntly reject)

79. (S) The negative effect of environmental barriers on listening comprehension can be reduced by both the speaker and listener striving to overcome their environmental differences. They should approach each other with an open mind. The speaker talks within the realm of the listener's experience and the listener should judge both speaker and message on their individual merit. The listener can reduce the effect of environmental barriers by (AC) _____ and (AC) _____. (R) (X-being open minded and judging the speaker and his ideas on their individual merit.)

80. (S) Finally, physical barriers can reduce listening comprehension. The effects of poor ventilation, distracting audience noise, hard chairs, tight clothes, etc., can all be barriers to listening comprehension if the listener lets them. Often these conditions make the speaker's job impossible since he has no control over them. These external physical distractions act as (AC) _____ to listening (AC) _____.

(R) (X-barriers to listening comprehension)
81. (S) The listener must learn to either dispose of the physical barriers or tolerate them. His primary purpose is to listen to the speech, all else must be laid aside. The listener must exert himself doubly to concentrate on the speaker. The effect of physical barriers on listening comprehension can be reduced if the listener will either (AC) _____ or (AC) _____. (R) (X-either dispose of the physical barriers or learn to tolerate them)
82. (S) In summary, then, we have talked about a number of general factors which seem to act as barriers to listening comprehension. These barriers are: (1) (AC) _____ barriers, (2) (AC) _____ barriers, (3) (AC) _____ barriers, (4) (AC) _____ barriers, and (5) (AC) _____ barriers. (R) (X-(1) concentration barriers, (2) personality barriers, (3) emotional barriers, (4) environmental barriers, and (5) physical barriers.)
83. (S) Now let's very quickly review the most important points that have been discussed in this set. The first point that we discussed were the four skills upon which communication is based. These are the skills of reading, writing, speaking and listening. The two skills used to transmit information are reading and listening. Reading, then, is to writing as (AC)_____ is to (AC)_____. (R) (X-listening is to speaking)
84. (S) Since this program is primarily concerned with listening, particularly with the development of listening comprehension, we have defined listening comprehension according to its components. Listening comprehension has been defined as the perception, understanding and retention of auditory symbols. Essentially the individual becomes aware of the auditory symbols directed toward him, he attaches meaning to these symbols and he attempts to retain the most important pieces of information derived from those original auditory symbols which were perceived. The basic components of listening comprehension, then, are (AC) _____, (AC) _____, and (AC) _____ of auditory symbols. (R) (X-perception, understanding, and retention of auditory symbols)
85. (S) Obviously, unless an individual can derive direct benefit from improving his listening comprehension, it would be of little value to pursue such training. In the forepart of this set we discussed a number of benefits which can be derived from improvement of listening comprehension. The student can become a more efficient listener through adequate training. As a result of the increased listening comprehension, the student can gain more knowledge, in general. He can gain cultural development as well as social maturity. In general the benefits to be gained by the individual from increased listening comprehension are increased listening (AC) _____, and (AC) _____ _____. (R) (X-increased listening efficiency, an increase in knowledge, and an increase in cultural development and social maturity)
86. (S) Although a number of benefits can be gained from increased listening comprehension, a number of factors act as barriers to the listener's comprehension. These factors interfere with the listener's adequate reception, understanding and retention of the speaker's message in some way. One of the primary barriers to listening comprehension are the concentration barriers. Generally, concentration barriers are the product of the listener's lack of mental discipline. This lack of mental discipline allows the listener's attention an op-

portunity to indiscriminately wander from distraction to distraction. The listener's wandering attention impairs his efforts to (AC) _____ on the speaker's message and are the result of the listener's lack of (AC) _____ _____. (R) (X-concentrate on the speaker's message and are the result of the listener's lack of mental discipline.)

87. (S) The second category of listening barriers are those referred to as personality barriers. It has been observed that those individuals who are active, vital and energetic but still pensive and reflective seem to gain the greatest amount of information from their listening efforts. On the other hand, however, it has been observed that the listener who has a self-effacing or argumentative personality does not receive full benefit from his listening efforts. Generally, the listeners who have (AC) s_____g or (AC) a_____e personalities are not as effective in their listening as the individuals who are (AC) p_____y barriers on their listening comprehension. (R) (X-generally, the listeners who have self-effacing or argumentative personalities are not as effective in their listening as the individuals who are energetic and reflective because of the negative effect of personality barriers on their listening comprehension)

88. (S) A third group of listening barriers which we have discussed in this set are the emotional barriers. We suspect that a number of emotional factors effect how well we perceive, understand and retain information derived from the listening situation. Some of these emotional factors benefit our function in listening. A number of factors called prejudice, belief, and emotions can sometimes negatively effect how well we listen. Our reactions to the speaker, his message, the situation in which we do our listening, all seem to be effected by these emotional barriers. Our attitude toward negroes, orientals whites, Jews, catholics, Republicans, Democrats, little children, old ladies, etc., all determine to some degree how we approach our task of gaining the maximum amount of information from our listening. Much of our emotional reaction is based on what others have told us about the object of our reactions, and much of our emotional reaction is based on what we think others have told us. Generally, the negative effect of factors such as (AC) p_____e, (AC) b_____f, and (AC) e_____s which are many times acquired from what others tell us or at least what we think others tell us, act as (AC) _____ barriers to our listening comprehension. (R) (X-generally, the negative effect of factors such as prejudice, belief and emotions which are many times acquired from what others tell us or at least what we think others tell us, act as emotional barriers to our listening comprehension)

89. (S) Another category of barriers which we discussed earlier and which seem to impair the listener's comprehension are called environmental barriers. The differences in background and environment between the speaker and listener can negatively effect how well the listener attends to the speaker and his message. Many of us attempt to discredit the speaker and what he has to say on the basis of the differences of their backgrounds and environmental origins. We have the tendency to distrust and therefore only partially accept anything which comes from a source that we feel is too different from ourselves. We tend to associate only with that which we determine to be acceptable. The differences in background and environment between the speaker and

the listener can often be sufficient grounds for us to ignore the speaker's message or at any rate to misinterpret that message. The differences in (AC) _____ and (AC) _____ between the speaker and listener can negatively effect the listener's comprehension and act as a (AC) _____ barrier. (R) (X-the differences in background and environment between the speaker and listener can negatively effect the listener's comprehension and act as an environmental barrier.)

90. (S) The final listening barrier which we have discussed in this set are called physical barriers. The fit of our clothing, the temperature of the room, the hardness and location of our seat in the room and many more physical factors serve to impair our listening comprehension. The serious listener will either disregard these factors or attempt to lessen their effect. On the other hand, the less serious listener will allow these factors to distract his attention from the speaker and in many cases, use them as an excuse to disregard his responsibility to listen. The effect of the hard seats, our clothing, the room temperature and many other elements, all can act as (AC) _____ barriers and serve to impair the listener's (AC) _____. (R) (X-the effect of the hard seats, our clothing, the room temperature and many other elements, all can act as physical barriers and serve to impair the listener's comprehension)

This completes the first set of this program. You have been introduced to listening and some of the benefits and barriers which are part of listening. You now are ready to advance to set 2 which will be concerned with some specific suggestions on how to improve your listening comprehension.

This is set 2. In set 1, we discussed listening in a general sense, concentrating primarily on describing listening and considering the benefits and barriers which might be encountered in studying such subject-matter. In this set we shall continue to discuss listening, however, our consideration here shall be concentrated toward those specific steps which will aid you in improving your own listening comprehension. The same operations that you encountered in set 1 will continue to be used here. Is everyone ready to start? (PAUSE) Let's begin.

1. (S) The skills and habits necessary for increased listening comprehension can be acquired and improved if a number of important elements in the message are considered. The first element that must be considered in the development of listening skills is the use of evidence. Evidence which is used can be evaluated. Whenever a speaker makes an assertion he either does or does not support it with evidence. If no evidence is offered and no explanation is given for its absence, the assertion should be suspected. If evidence is submitted it must be attributed to a specific source. Therefore, the initial test of evidence is based on the source of the evidence. The speaker who states that recently a Senator stated that the U.S. will be in a major war by August, has not provided the necessary source of his evidence and thereby reduces the impact of the evidence by not identifying from where it came. An initial test for the acceptance or rejection of a piece of evidence offered in support of a statement might be whether or not the (AC) _____ of the evidence has been identified by the speaker. (R) (X-source)

2. (S) A statement supported by evidence without an identified source should not be rejected but it should be (AC) _____. (R) (X-suspected or held in question or tentatively accepted)

3. (S) If the source of a piece of evidence has been identified, the listener should set about testing the value of the evidence. One test of the value of evidence is the date of its origin or its recency. A quoted statement by Harry Truman, dated 1937, would, in most instances, carry less weight than a statement by him, dated 1947. A statement made in 1929 and used to support a point about the current Communist threat would not carry as much influence as would evidence dated 1965, because the 1929 quote lacks (AC) _____. (R) (X-recency)

4. (S) Recency, as a test of evidence, means that the more recent the date of a piece of evidence, the more likely it is to be accepted as support of a point. Recency is a test of evidence to determine the (AC) _____. (R) (X-date of its origin)

5. (S) A second test of evidence is the competency of its source. Testimony by a baseball star about razor blades or cigarettes may be

convincing but the same player's testimony about the excellence of an engineering technique employed in an automobile is much less convincing. An automotive engineer testifying as to the engineering qualities of an automobile is acceptable as evidence since the source possesses (AC)_____. (R) (X-competency)

6. (S) Evidence consisting of testimony by a house-wife about the economic success of foreign exchange programs (AC) (is/is not) likely to be convincing since the source lacks (AC) _____. (R) (X- is not, competency)

7. (S) A possible guide relative to this test is that evidence simply cannot be more convincing than the source from which it comes. Testimony by a farmer about industrialization is not likely to be anymore convincing to a listener than testimony by an advertising executive about breeding pigs. Evidence is only as competent and convincing as its (AC) _____. (R) (X-source)

8. (S) A third test of evidence has to do with the neutrality or lack of prejudice existing in the source of the evidence. Basically the question which must be asked is, "Does the person or organization supplying this evidence stand to gain something through its acceptance?" If we heard evidence from a representative of the American Tobacco Company which stated that smoking definitely does not cause lung cancer and is not harmful to one's health, we should be suspicious of this evidence. Likewise when we hear evidence supplied by the president, registrar and dean of women about the advantages of attending Bascom Institute of Technology, we should suspect this evidence since the sources appear to lack (AC) _____ and have something to gain. (R) (X-neutrality)

9. (S) Statements by farmers about the poor conditions of farm supports (AC) (are/are not) likely to be accepted as evidence since they lack the necessary neutrality and probably are (AC) _____. (R) (X-are not prejudiced or biased)

10. (S) In summary, the three tests of evidence have to do with the date of the evidence, whether or not the qualifications of the source are appropriate to what he is testifying and finally, whether or not the source of the evidence is prejudicial. The three tests of evidence after the source has been identified are (1) (AC) r_____, (2) (AC)c_____ and (3) (AC) n_____. (R) (X- (1) recency, (2) consistency and (3) neutrality)

11. (S) In line with our present discussion of evidence, let's turn for a moment and consider the relationship between evidence and listening. It is the task of the listener to differentiate between those messages which are sincere, forthright, and beneficial and those which are formulated to mislead, dupe, and present false information. One of the available methods of deciding between these two types of messages is the employment of critical listening skills. Normally, the listener, unless trained in critical listening, is as likely to accept one position in a speech as another, as long as the position seems to satisfy his immediate needs. During the 1930's, Germany willingly followed Hitler, not because the people necessarily believed in him but probably because they were not (AC) c_____ l_____s or at least non-critical thinkers. (R) (X-critical listeners)

12. (S) Critical listening can be defined as a process built upon the immediate and continual weighing and testing of evidence or lack of it,

as it is used to support each argument presented. The critical listener continually and immediately makes a decision about each piece of evidence that is used in support of each argument. He further evaluates each argument used to support a main idea on the basis of its evidence. The listener who immediately and continually evaluates each argument and the evidence used to support that argument is engaged in (AC) c_____ l_____. (R) (X-critical listening)

13. (S) The listener who accepts an argument without evidence or evidence which has not been tested (AC) (is/is not) engaged in critical listening. (R) (X-is not)

14. (S) Additional to testing the evidence used by a speaker, the listener should also be able to identify the method of point support used. Identification of the method of point support is important to the listener since it reveals who adequately the point has been constructed, it can disclose a good deal about the skill and motives of the speaker, and it can provide the listener with a basis for ultimately making a sensible evaluation of the speech and for deciding what our response to that point should be. The determination of how completely the speaker's point has been constructed, what the speaker's motives are and how skillful he is in the development of his points, all can be accomplished if the listener is able to (AC) _____ whenever the listener hears them. (R) (X-identify the types of point support)

15. (S) The points of a speech are normally developed according to one of three possible methods. These methods of point support are the expository, spelled E-X-P-O-S-I-T-O-R-Y, the emotional, and the illustrative, spelled I-L-L-U-S-T-R-A-T-I-V-E. Now let's write these two words in the booklet while I spell them for you. Expository, spelled E-X-P-O-S-I-T-O-R-Y. On the next line, illustrative, spelled I-L-L-U-S-T-R-A-T-I-V-E.

16. (S) The expository form of point support relies heavily on definition and explanation. In fact exposition is another word for explanation. The speech which explains how to do something or perform an operation of some type, usually employes the (AC) _____ form in developing the topic. (R) (X-expository)

17. (S) The material used to explain the operation of a turbo-electric engine would usually rely on an abundance of (AC)_____ material. (R) (X-expository)

18. (S) The emotional form of point development relies most heavily on the use of appeals for us to do things for emotional reasons. The emotional form is slanted toward considering ideas with high emotional involvement such as our good names, our future prospects, our homes, etc. In using this form the speaker is focusing his appeal toward our (AC) e_____s (R) (X-emotions)

19. (S) When the method of point support is aidmed toward what we feel rather than toward what we think, the speaker is employing the (AC) _____ form of point support. (R) (X-emotional)

20. (S) A third form by which speakers build their points is through the use of illustrative material. It appears useful to know some of the forms used in developing illustrative material. The conventional steps usually employed by the speaker in establishing a point using illustrative material are (1) he states the point, (2) he illustrates that point, and (3) he generalizes from the illustration. By doing

this the speaker methodically develops each point to a generalized point from which it is assumed can be correlated with the central or main idea. Normally, the first step in developing a point using illustrative supporting materials is to (AC) _____. (R) (X-state the point)

21. (S) By beginning with a statement of the point to be developed the speaker clearly defines for the listener the information area under consideration. Stating the point under consideration helps the listener (AC) _____. (R) (X-identify the information area under consideration.)

22. (S) A second step is to illustrate the point under consideration. By doing this the speaker moves the idea to a level of practical is appropriate to the point in question. For example, the speaker may cite the point that not all policemen are honest. In developing this point, such as, "In Harzberg, Colorado, 1962, twelve policemen were apprehended, tried and convicted of thefts totalling $500,000 in merchandise from local stores. In Campton, Illinois, 1957, three police officers were apprehended, tried and convicted of directing, protecting and sharing the profits from the business activities of five prostitutes. The first step in the development of his point is to (AC) _____ and the second step is to (AC) _____. (R) (X- 1. state the point, 2. illustrate that point)

23. (S) A third step in developing the point using illustrative material is to generalize from the illustration. In our hypothetical speech, the point in question is that not all policemen are honest. The illustrations were about policemen who were found guilty of theft and trafficing in prostitution. A third step is to generalize from these illustrations, showing that in specific cases, some policemen have been found to be dishonest and that there definitely may be additional instances which further support this point. The third step in developing a point using illustrative material is to (AC) _____. (R) (X-generalize from the illustrations)

24. (S) By generalizing from the illustrations, the speaker attempts to show the listener the quality and scope of his specific statement and to demonstrate the probable scope beyond what he has shown. The third step in developing a point using illustrative material is to (AC) _____. (R) (X-generalize from the illustrations)

25. (S) Now in review, the three steps in the conventional form of point development using illustrative material are to (1) (AC) _____ the point, (2) (AC) _____ that point, and (3) (AC) _____ from the (AC) _____. (R) (X-1. state the point, 2. illustrate that point and 3. generalize from the illustrations)

26. (S) In some cases the speaker using illustrative material to develop a point will employ a strict deductive form. The deductive form proceeds from the general to a specific statement. The conventional three steps are reduced to two: (1) a generalized statement of the point and (2) the presentation of specific supporting illustrative material. The effect here is that the listener is asked to generalize the illustration, to extend the scope of the illustrations. Not all policemen are honest. In Atlanta, Georgia, a policeman was recently found guilty of murder. In New York City, eight policemen were found guilty of operating a narcotics ring. In London, three

inspectors from Scotland Yard were found guilty of taking bribes from artists. This form of point development eliminates the third step found in the conventional form, which is to (AC) _____. (R) (X-generalize from the illustrations)

27. (S) The deductive variation of developing a point using illustrative material uses only two of the conventional three steps. These two steps are (1) (AC) _____ and (2) (AC) _____. (R) (X-generalized statement of the point, and use of illustrations in support of the point)

28. (S) Another variation in developing a point using illustrative material is the strict inductive form. The inductive form proceeds from the specific to the general. Again the three conventional steps are reduced to two steps those being (1) the presentation of specific illustrative materials and (2) the formulation of the point, drawn from the illustrations. For example, a speech may follow this form: Three men in Boulder, Colorado, survived kidney transplants. A report from the University of Minnesota Medical Center stated that fifty-two people have survived kidney transplants. And a report from Paris states that one-hundred-twenty patients have successfully recovered from kidney transplants. These reports and many more indicate that the success in doing kidney transplants on human subjects is increasing. In this particular form, step one of the conventional form has been eliminated, which is the (AC) _____. (R) (X-statement of the point)

29. (S) Now let's quickly review and summarize the information we have discussed about point development using illustrative material. The two steps used in the development of the inductive form are: (1) (AC) _____ and (2) (AC) _____. (R) (X-1. presentation of illustrations and 2. generalizing from these illustrations)

30. (S) The steps followed in the deductive form of point development using illustrative material are (1) (AC) _____ and (2) (AC) _____. (R) (X-(1) statement of the point and (2) illustrating that point)

31. (S) The three steps followed in the conventional form of point development using illustrative materials are (1) (AC) _____, (2) (AC) _____, and (3) (AC) _____. (R) (X- (1) statement of the point, (2) illustrate the point, (3) generalize from the illustrations)

32. (S) Finally, the three types of point development using illustrative material are the (1) (AC) _____, (2) (AC) _____, and (3) (AC) _____. (R) (X- (1) conventional (2) inductive and (3) deductive)

33. (S) What is efficient listener behavior when we encounter points presented in either an expository, or emotional or illustrative form? First the listener must identify what is happening as soon as possible. This identification aids him in determining the structure being used to convey the information and prepares us, as listeners, to employ the appropriate evaluation skills to that information. The listener cannot appropriately or accurately deal with the immediate message unless he can identify what is happening. One of the first steps the listener must take when encountering a message in which the points are being developed according to an expository, emotional or illustrative form, is to (AC) _____. (R) (X-identify what is happening as soon as possible)

34. (S) The second activity for listening to material developed according to one of these forms is to listen with the intention of accurately reporting what we hear to someone else. By listening with

this purpose in mind, the listener makes a concerted effort to comprehend the message and to retain only that information which will aid him in reporting the message to someone outside of the immediate listening situation. Listening with the intention of reporting what we hear aids the listener to (AC) _____ and (AC) _____ what he has heard. (R) (X-comprehend and retain)

35. (S) Two steps which can be taken by the listener when listening to expository, emotional or illustrative material is to (AC) _____ and then to listen with the specific purpose of (AC) _____. (R) (X-identify what is happening as soon as possible and then to listen with the specific purpose of reporting what we hear to someone else)

36. (S) We've been discussing the use of illustrative materials, now let's examine the illustration by itself. What is an illustration? Usually it can be thought of as simply a story of a single case of the point being made. For example, if the point is that high school teachers are underpaid, the illustration which might be used to support this point is the case of Tom Brown who teaches in Lee's Nob, Missouri, and earns a yearly salary of $3200. Al illustration is simply a (AC) _____. (R) (X-story of a single case of the point being made)

37. (S) If a speaker's point is that student housing on university campuses is costing more, he might cite the case of the University of Montana where family housing is increasing to $150 per month. This story used to support a point is called an (AC) _____. (R) (X-illustration)

38. (S) Illustrations can and do appear in many forms. Any form of the example, short anecdote, fable, parable or analogy can be used as an illustration. In each case the form used provides a factual or hypothetical story which possesses characteristics in common with the point in the speech. Each of these, as illustrations, serve to point out the idea in question in some type of practical setting which allows the listener to view the results. The example, anecdote, fable, parable and analogy can be used as an (AC) _____. (R) (X-illustration)

39. (S) The final generalization used to summarize and conclude points using illustrative materials in a conventional form can be of two kinds, either in a statistical or testimonial form. If a speaker is attempting to summarize the point that some types of tranquilizers are habit-forming, he may summarize and conclude his point by saying, "From our illustrations we can see that approximately 47 per cent of those tranquilizers sold without perscription are habit-forming," or he may use quoted testimony, such as "Dr. Molner states that slightly less than half of the tranquilizers sold without perscription are habit-forming." In either case the illustrations preceding the final statement have been summarized and concluded by the statement. The final generalization in the development of a point by a speaker may be in either a (AC) _____ or a (AC) _____ form. (R) (X-statistical or a testimonial form)

40. (S) We have discussed some of the ways of presenting illustrative material in order that you might be able to recognize and deal with them when you encounter such material in the speech situation. Your listening comprehension can be increased if, during the time that the speaker is developing his illustrative points you will try to identify what method is being used to develop each point and how well the speaker pre-

sents each illustrative idea and how well he generalizes from his illustrations and states his conclusion. By watching these specific operations, the listener keeps in constant contact with the speaker as well as enabling the listener to methodically reduce the point and its illustrative material should (1) note the method being used to (AC) _____, (2) note the skill of the speaker in (AC) _____, (3) note how well the speaker (AC) _____ from his illustrations and (4) states the (AC) _____. (P) (X- (1) note the method being used to develop the point, (2) note the skill of the speaker in presenting each illustration, (3) note how well the speaker generalizes from his illustrations, and (4) states the conclusion)

41. (S) Periodically in listening to a speech, the listener should attempt to mentally reconstruct the main points covered up to that point in the speech. The reconstruction helps the listener reinforce the main points bringing them into sharper focus and aids him in listening to the speech. The periodic (AC) _____ of the main points in the speech will aid the listener by bringing those points into sharper focus. (R) (X-reconstruction)

42. (S) In a general sense, oral communication is a cyclic process. It involves a speaker and listener and cannot be complete until both have interacted in the process. The speech organization and pattern of arrangement is set up twice by the speaker. Once when he originally constructs the speech and again when he makes his presentation to an audience. It is during this latter occasion that the listener completes the communication cycle is he successfully follows the ideas according to the speaker's design. Essentially, the communication cycle is not complete until the listener (AC) _____. (R) (X-successfully follows the ideas according to the speaker's design)

43. (S) Unless the listener is able to successfully follow the ideas according to the speaker's design, the (AC) _____ will not be completed. (R) (X-communication cycle)

44. (S) To insure that the listener is able to adequately follow the speaker and his message, two tasks should be performed by the listener. First the listener should learn to identify the normal divisions of the speech. These are the introduction, thesis, body and conclusion. These divisions help the listener to determine where the speaker is in his speech at all times. One of the tasks of the listener in listening to a speech is to identify the (AC) _____ _____ division in the speaker's presentation. (R) (X-four part)

45. (S) A second task of the listener is to recognize and follow the arrangement pattern being used by the speaker so that the proper responses can be made. This enables the listener to anticipate the type of arrangement and materials he is likely to encounter in the speech and to prepare for such an encounter. A second task of the listener is to (AC) _____. (R) (X-recognize and follow the arrangement patterns being used by the speaker)

46. (S) As we listen, we should constantly analyze and evaluate the development of each of the parts of the speech. The listener must be as involved in the speech development as the speaker. To be less involved can result in partial-listening and can produce partial-comprehension and retention. Analysis and evaluation aids the listener in actively participating in the speech as well as judging the adequacy of

each phase of the development. The listener must constantly (AC) _____ and (AC) _____ each part of the speech. (R) (X-evaluate and analyze)
47. (S) In avoiding partial-listening, the listener should constantly (AC) _____. (R) (X-analyze and evaluate each part of the speech)
48. (S) Upon encountering the introduction of the speech, the listener should adjust to the speaker and his specific characteristics and prepare himself for listening to the remainder of the speech. The listener can use the introduction of the speech to (AC) _____ to the speaker and his specific characteristics and to (AC) _____ himself to listen to the remainder of the speech. (R) (X-adjust to the speaker and his specific characteristics and to prepare himself to listen to the remainder of the speech)
49. (S) At the termination of the introduction of the speech, the listener should prepare to concentrate on the speaker and his message. He should prepare to hear the statement of the thesis of the speech and to follow the development of the topic to its conclusion. The final point of preparation for listening to the remainder of the speech is at the end of the (AC) _____. (R) (X-introduction)
50. (S) The appropriate listener behavior during the statement of the thesis of the speech is to listen closely to each auditory and visual cue presented by the speaker and to note mentally every item of significance. This can be the most important part of the speech for the listener since it is the basis for everything which follows. During the statement of the thesis of the speech, the listener should (AC) _____ and (AC) _____. (R) (X-listen to each auditory and visual cue and note mentally every item of significance)
51. (S) The statement of the thesis of the speech is, in many cases, the only formal statement of the speech topic. As such, the thesis provides the listener with a formalized statement from which he should be able to predict the development and information to follow. Sometimes the only formalized statement of the topic occurs in the part of the speech called the (AC) _____. (R) (X-thesis)
52. (S) It is desirable for the listener to identify the real aim or goal of the speaker as quickly and as specifically as possible. This aids the listener in anticipating the development of the topic as well as establishing the precise subject area to be developed. A desirable activity for the listener during the statement of the thesis of the speech is to (AC) _____. (R) (X-identify the real goal of the speaker as soon as possible)
53. (S) Usually the most extensive part of the speech is the body, which normally includes the arrangement and development of the main points, arguments and evidence. It frequently assumes the form of a series of individual points being developed by arguments and supported by evidence being presented as an integrated total presentation. As such the listener's task involves listening closely to the development of each point but also relating each point to the development of the total speech. The portion of the speech usually committed to the arrangement and development of the main points, arguments and evidence is called the (AC) _____ of the speech. (R) (X-body)
54. (S) The task of the listener during the presentation of the body of the speech is to (AC) _____ and to (AC) _____. (R) (X-listen to the development of each point, argument and evidence and to relate each of

these to the entire presentation)

55. (S) Comprehension of the discourse may not be accomplished unless the listener is able to visualize and understand the reason for the speech's internal structure, assuming there is a reason. Knowledge and understanding of the structure in a speech aids the listener in anticipating the organization and information to follow. Anything less than knowing and understanding the internal structure of the speech may impair the listener's comprehension. The listener's comprehension of the discourse is sometimes dependent upon his ability to (AC) _____ the structure of the speech and (AC) _____ the reasons for the speech's internal structure, assuming there is a reason. (R) (X-know or visualize understand)

56. (S) Experienced speakers sometimes end their speech with a conclusion. This conclusion normally contains two elements: a summary and a final appeal to the listeners. The purpose of the summary is to quickly review each of the main points, arguments and evidence used in the body of the speech and to provide some type of summated foundation for the final appeal is to provide the listener with a final clear and concise statement of what behavior the speaker desires from the listener in relation to the speech topic. The two elements sometimes found in the conclusion of a speech are a (AC) _____ and a (AC) _____ _____. (R) (X-a summary and a final appeal)

57. (S) Since the ultimate concern of the listener in relation to a speech is comprehension, he must make every effort to achieve this end. What listening activity might follow the conclusion to increase the listener's comprehension? The listener should appraise the skill with which the speaker matches his final appeal with the content of the body of the speech. This appraisal should allow the listener to evaluate the connection between the evidence and the arguments, and the main points of the speech. Additionally, then, the listener may be able to assess the speaker's development of his topic. A listener activity while listening to the conclusion of a speech might be to appraise the skill with which the speaker (AC) _____. (R) (X-matches his appeal with the content in the body of the speech)

58. (S) Another listener activity while listening to the conclusion of the speech is to schedule a period of reflection for appraising and evaluating what the listener has just heard. The listener should appraise what he has heard and attempt to determine whether or not the final appeal is appropriate to what the material in the body of the speech indicates. A second listener activity while listening to the conclusion of a speech might be to (AC) _____. (R) (X-schedule a period of reflection to appraise and evaluate the proposal just heard)

59. (S) Two possible listener activities while listening to the conclusion of a speech might be (1) (AC) _____ and (2) (AC) _____. (R) (X-(1) appraisal of the speaker's skill in matching his final appeal with the content of the speech and (2) schedule a period of reflection)

60. (S) The activity of reflection over the material in a speech can aid the individual in his comprehension of the message. It allows him an opportunity to review what he has heard and to reach an unhurried conclusion. By reflecting over what the speaker has presented in his speech, the listener's (AC) _____ of the speaker's message can be aided and the listener is allowed an opportunity to (AC) _____ what he has

heard and reach toward an unhurried (AC) _____. (R) (X-comprehension of the speaker's message can be aided and the listener is allowed an opportunity to review what he has heard and reach toward an unhurried conclusion)

61. (S) Concentration is perhaps one of the most important skills the listener can possess. The listener increases his level of concentration by making a concerted effort to attend to the speaker and his message and to actively interact with the speaker. The listener should (AC) _____ if he is to benefit from the speaker's total presentation. (R) (X-concentrate)

62. (S) As has been stated, one of the basic functions of listening is to achieve comprehension. Comprehension, in this case, means understanding. To fully comprehend what a speaker is saying, the listener must do much more than absorb the literal content of the speech. The literal content is the bare message of primary information which the speaker wishes to convey. Additional to the literal content of the speech is a great deal more information being transmitted that is not directly involved in the words or auditory stimuli. The listener should attempt to supplement and reinforce the literal content of the message. Comprehension (AC) (is/is not) entirely dependent upon the literal content of the message being received. (R) (X-is not)

63. (S) Comprehension of the literal content in a message can be supplemented by employing four skills in concentration. One of the first of these skills is to anticipate or predict what the speaker is going to say before he says it. Most experienced speakers build a number of points in each speech. These points serve as "sign-posts" of the major ideas under consideration. The efficient listener attempts to anticipate what the speaker's next point of development will be. One of the skills of concentration, then, is the (AC) _____ of what the speaker will say next. (R) (X-anticipation)

64. (S) By anticipating what the speaker will say next, the listener can improve his (AC) _____ on the evidence and the development of the speech. (R) (X-concentration)

65. (S) Each time the listener anticipates the speaker's next point correctly, his understanding and retention of that point is reinforced. It is assumed that the student who successfully anticipates the next point of a speech must have a reasonable understanding of the basic theme of the speech to make such a prediction. We have used the term anticipate rather than guess since anticipation implies understanding while guessing can be a matter of chance. The correct anticipation of a speaker's next point by the listener helps reinforce the listener's (AC) _____ and (AC) _____ of that point. (R) (X-understanding and retention of that point)

66. (S) Even if the listener does not correctly anticipate the speaker's next point, his understanding and retention can be facilitated. If we predict the wrong point, we normally would review our reasons for making the wrong prediction. Additionally, the normal listener would compare his predicted point with the one which the speaker has made to determine the differentiating characteristics. The erroneous prediction of a speaker's next point by the listener can still aid the listener in his (AC) _____ and (AC) _____ of the speaker's point. (R) (X-understanding and retention of the speaker's point)

67. (S) The understanding and retention of the speaker's points can be reinforced even if the listener incorrectly (AC) _____ these points. (R) (X-anticipates or predicts)

68. (S) To this point in our discussion of listening, we have been almost exclusively concerned with the message and its content. In order to complete our consideration of the entire listening situation, we should turn our attention to the listener. It is doubtful that many of us have given much, if any thought to the adjustments that need to be made by the listener. There are, however, at least three aspects of the speech situation which call for conscious listener control if he wishes to be efficient in his listening. These are making adjustments to the speaker, making adjustments to the ideas he expresses and making adjustments to the words he uses. Each of these reaction points necessitates that the listener adjust to the speaker in some way and can, in most cases, aid the listener in increasing his listening comprehension. The three points of reaction which demands the adjustment of the listener to the speaker are to the 1. (AC) _____, 2. (AC) _____ and 3. (AC) _____. (R) (X-1. speaker himself 2. speaker's ideas 3. words used by the speaker)

69. (S) The first point of reaction is the adjustment of the listener to the speaker. Every speaker possesses certain peculiarities. It is perhaps natural for the listener to note them, to become sometimes preoccupied by them and in time, use them as a rationalization for choosing to follow some mental tangent rather than the discourse itself. The preoccupation and resulting tangents may cause the level of the listener's comprehension to diminish. The more he becomes involved in this activity the more probable will be the reduction of his listening comprehension. The listener's efficiency may be determined by the level of his comprehension and retention. When the listener becomes preoccupied with something other than the thread of the discourse, his comprehension and retention are impaired and thus reducing his listening efficiency. The listener's efficiency may be diminished if he becomes preoccupied with the speaker's (AC) _____ and resulting (AC) _____ _____. (R) (X-peculiarities, mental tangents)

70. (S) Some speakers have more peculiarities than others and it is more difficult to give them sustained attention. Some have poor eye contact, odd pronunciations, distracting bodily activity. When these peculiarities attract more of our attention than does the speaker's message, our comprehension and retention are seriously reduced, resulting in an interruption of the flow of the message. The listener who is more attentive to the speaker's eye contact and his vocal inflection pattern than he is to what the speaker is saying may be seriously interrupting his comprehension and retention of the primary information of the speech. The listener's attention to the speaker's peculiarities can result in a reduction of the listener's (AC) _____ and (AC) _____ of the message. (R) (X-comprehension and retention)

71. (S) To improve our own listening comprehension, we should continually battle the notion that we are the helpless victims of speakers with intolerable shortcomings. The listener should quickly adjust to the speaker's peculiarities and focus his attention on the speaker's message. The listener, although aware of the speaker and his

unique characteristics can channel his primary concentration toward what is being said rather than being concerned with the speaker's unique characteristics. In order to derive the maximum comprehension and retention from a speaker's message, the listener should (AC) _____. (R) (X-ignore the speaker's peculiarities and concentrate on the message)

72. (S) The speaker should make every effort to accurately and concisely transmit his message to the listener but the listener also should make every effort to receive the message. Although the speaker's responsibility is to present the message, he sometimes falls short of that goal. In such cases, the listener should take steps to derive as much information as possible from the speech. The communication cycle is not complete until both the speaker and the listener fulfill their respective responsibilities. In order to increase the probability of completing the communication cycle even when the speaker is inadequate to the task, the listener should (AC) _____ of the message. (R) (X-take steps to insure the adequate comprehension and retention)

73. (S) The listener should establish and maintain eye contact with the speaker. He should indicate that the occasion and the speaker's efforts are a matter of real concern by his posture and facial expressions. Additionally, the listener should give applause at any point that it is deserved. By doing these things, the listener may help the speaker to improve himself and in turn benefit the listener by achieving increased comprehension resulting from the speaker's improvement. The listener's reactions to the speaker can aid the speaker to (AC) _____ thus aiding the listener as a result of the improved communication. (R) (X-improve the communication between the speaker and the listener)

74. (S) The listener should try to stimulate the speaker. Anything said by the speaker and interpreted by the listener can influence the listener in some visible form which in turn may effect the speaker. The reaction of the listener can help guide the speaker toward more effective communication if the speaker is able to interpret the listener's reactions. If we seem interested and responsive, the speaker is likely to become encouraged, to lose many of his objectionable mannerisms and become more communicative. Our visible reactions demonstrating interest can help (AC) _____ the speaker to a better performance. (R) (X-stimulate)

75. (S) Listening is a full-time job. The efficient listener uses a variety of self-made devices to stay with the speaker, however, two activities may be particularly helpful. First the listener should actively interact with the speaker. This means that he should stay constantly with the speaker, point-for-point, using every opportunity to evaluate and review what he has heard to that point in the speech and prepare to associate the product of his review and evaluation with the information to follow. The first activity which seems to aid the listener in concentrating on the speech and mediating the differences between speaker and listener rates is (AC) _____. (R) (X-active evaluation and review of the information heard or active interaction with the speech)

76. (S) A possible second activity in which the listener can engage to maintain active contact with the speaker is to maintain eye contact with the speaker. The visual cues received by the listener about the speak-

ing situation can aid the listener in interpreting and comprehending what he has heard and anticipating the information to come. The maintenance of eye contact between the speaker and listener as well as the reviewing and reconsidering of the information by the listener should help the listener to better comprehend the speech and avoid those stimuli leading to mental wandering. The second activity to aid the listener in staying with the speaker can be by (AC) _____. (R) (X=maintaining eye contact with the speaker)

77. (S) Enough about the speaker, now let's talk about the speaker's use of language. A problem confronting the listener is the effect of emotion-laden words. Most human beings are afflicted by certain so called psychological deaf spots which significantly impair their ability to perceive and understand. These so-called deaf spots are areas of tremendous sensitivity, and are the dwelling place of our most cherished notions, convictions, mores, and complexes. The invasion of one of these areas with a word, phrase, or argument which seems to violate our beliefs, figuratively paralyzes us with respect to listening to the remainder of his speech. This mental paralysis results from the effect of (AC) _____ words which the speaker has used. (R) (X=emotion-laden)

78. (S) An important aspect of listening is that of adjusting to emotion-laden words. The listener cannot afford the possibility of losing vital information because of the presence of mental paralysis caused by emotion-laden words. He must make every effort to overcome the effect of these words. In short, the listener must learn to (AC) _____ to emotion-laden words. (R) (X=adjust)

79. (S) In an effort to overcome the effects of emotion-laden words, the listener may profit by doing three things. First, the listener should identify and list those words or phrases which most upset us emotionally. Second, the listener should analyze why each word influences us as it does, locating the original basis for our reaction to see if it still has a logical application to our current issues. Finally, the listener should rationalize the impact of each word by discussing it with others. By following these steps the listener will be able to recognize and deal with those words which cause us to become mentally paralyzed. The three steps for dealing with emotion-laden words are: 1. (AC) _____ 2. (AC) _____ and 3. (AC) _____. (R) (X=1. identify the words which upset us mentally 2. analyze each word 3. rationalize the impact of each word)

80. (S) Similarly emotion-laden points produce the same effect as emotion-laden words. So-called psychological deaf spots may be caused by quick and violent disagreement with the main points or arguments of the speaker rather than by reaction to just the words or phrases. These deaf spots can be more serious in this case largely because of their greater duration. Emotion-laden points produce psychological deaf spots which may be caused by (AC) _____. (R) (X=quick and violent disagreement by the listener with the main points or arguments of the speaker)

81. (S) The effects of emotion-laden words and points are caused by over-stimulation. The listener should wait until he fully understands a point before attempting to judge it. Inefficient listeners tend to be emotionally less restrained. They consistantly prepare an answer to a point or question before the point has been fully comprehended. The

listener should attempt to (AC) _____. (R) (X-wait until he fully understands a point before judging it)

82. (S) Again, as in the case of dealing with emotion-laden words, the listener can follow three steps in handling emotion-laden points. First he should withhold evaluation of a point until he completely comprehends the point. Second, he should diligently search for evidence proving him to be wrong. Finally, he should make a realistic self-analysis of his prejudices and avoid them at all costs. Adherence to these steps should aid the listener in avoiding the pitfalls of reacting to emotion-laden points. Again, the possible three steps the listener should follow in handling emotion-laden points are: 1. (AC) _____ 2. (AC) _____ and 3. (AC) _____. (R) (X-1. withhold evaluation of a point until it is complete 2. search for negative evidence to counteract his own position 3. analyze his prejudices)

83. (S) In quick review, efficient listening can be generally characterized by nine basic components. These components are: (1) that the individual should be experienced in listening to difficult materials, (2) that he should either have or generate an interest in the subject-matter at hand, particularly in relation to the topic, (3) that he should learn to adjust to the speaker, (4) that he should learn to adjust physically to the demands of the listening situation, (5) that he should learn to adjust to the abnormal listening situation, (6) that he should adjust to emotion-laden words (7) that he should adjust to emotion-laden points, (8) that he should learn to recognize central ideas, and (9) that he should learn to reconcile the thought and speech speed difference. If the individual can do each of these, he should be well on his way to achieving increased (AC) _____ _____. (R) (X-listening comprehension)

84. (S) In an effort to increase listening comprehension, the student should consider the following suggestions and try to practice them diligently. First, look directly at the speaker. Your attention is less likely to waiver so long as you are physically focused on the speaker. The listener should be ready to receive any visual cues which the speaker might present and the speaker may be more likely to speak more effectively if he knows you are looking at him. The speaker and the listener both should benefit if the listener (AC) _____. (R) (X-looks directly at the speaker)

85. (S) Second, the listener should resist all distractions. Don't allow your attention to wander from the speaker to other elements in the speaking situation. If you find this happening, double your efforts to concentrate. Remind yourself that the speaker's message has some possible value. Focus your attention on the speaker and resist all (AC) _____. (R) (X-distractions)

86. (S) The second suggestion to improve listening comprehension is that the listener should (AC) _____ in the speaking situation. (R) (X-resist all distractions)

87. (S) Third, the listener should keep an open mind. Resist the temptation to ignore the speaker if the beginninf of the speech seems dull or uninteresting. Watch for signs of your prejudices effecting your attitude toward the speaker. Don't allow your own pre-conclusions to rob you of possible important information. A possible method of avoiding such pitfalls is by (AC) _____ throughout the speech. (R) (X-

keeping an open mind)
88. (S) The third suggestion is that listening comprehension may be enhanced if the listener (AC) _____. (R) (X-keeps an open mind)
89. (S) Fourth, the listener should look for the speaker's purpose. Be aware that the purpose he states may not be the true purpose. Watch for the real purpose the speaker has in mind. Since underlying purposes are often the most important ones, try to (AC) _____. (R) (X-look for the speaker's purpose)
90. (S) A fourth suggestion to improve listening comprehension is for the listener to (AC) _____. (R) (X-look for the speaker's purpose)
91. (S) The listener should look for the speaker's central idea. Identification of the central idea or theme of the speech can aid you, as the listener, in understanding the speech and you may be less likely to be fooled by a clever persuader. A practical approach to a better understanding of the speech may be for the listener to (AC) _____. (R) (X-look for the speaker's central idea)
92. (S) A fifth suggestion is that listening comprehension may be improved if the listener will (AC) _____. (R) (X-look for the speaker's central idea)
93. (S) A sixth suggestion is that the listener should concentrate on main points. You should identify the speaker's main points clearly in your mind. If he has not clearly organized his speech, do it for him. The most important part of the speech is not the myriad of facts the speaker produces but rather the ideas to which he tries to attach those facts. To get the important ideas in mind, the listener should (AC) _____. (R) (X-concentrate on main points)
94. (S) A sixth suggestion to improve listening comprehension may be for the listener to (AC) _____. (R) (X-concentrate on main points)
95. (S) A seventh suggestion to improve listening comprehension is for the listener to periodically review the progress of the speech. After each main point is completely developed it may be helpful for the listener to think back through that part of the speech which he feels is important. This activity can reinforce the ideas each time you review and can keep you in contact with the speaker. At the completion of each main point it may be a good idea for the listener to (AC) _____. (R) (X-review the progress of the speech)
96. (S) In order to keep in contact with the entire speech and the speaker, it may help the listener if he will, (AC) _____. (R) (X-periodically review the progress of the speech)
97. (S) An eighth suggestion to improve listening comprehension is that the listener should check the speaker's support of his idea. Is he really supporting his ideas with evidence or does it only appear to be that way? The acceptance of faulty ideas may be avoided by (AC) _____. (R) (X-checking the speaker's support of his ideas)
98. (S) An eighth suggestion for the improvement of listening comprehension may be that the listener should (AC) _____. (R) (X-check the speaker's support of his ideas)
99. (S) A final suggestion for the improvement of listening ability is that the listener should look for hidden meanings in the speech. Try to listen between the lines and determine if the speaker means everything he is saying literally. Don't accept his speech on the basis of its sur-

face meaning alone. The listener should (AC) _____. (R) (X-look for hidden meanings)

100. (S) Do not assume that what the speaker literally says, is the meaning that he intends. The listener should avoid being tricked by the literal meanings. He should (AC) _____. (R) (X-look for hidden meanings)

You have now completed the program in listening. The next phase of this course will be for you to take a test to determine how well you can listen. This test will be administered by tape recorder just as the program was. It is important that you seriously attempt this test since your achievement will give some basis for evaluating the success of the program you have worked.

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