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THE UNIVERSITY OF ALBERTA

THREE SELF-INSTRUCTIONAL VIDEOTAPE

COMMUNICATION SKILL PROGRAMS

by

(C)   SIGRID ANNE HUNDLEBY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies and Research, for
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ABSTRACT

The central focus of this study involved the development of three self-instructional videotape programs. These programs taught the communication skills of (a) paraphrasing, (b) reflecting feelings, and (c) asking open-ended questions.

An initial research project showed that both audiotape and audiovideo tape were effective media to teach a program on paraphrasing. The initial program combined a description of the skill to be taught with modeled illustrations of the skill along with student practice sections. There was no difference in the group who heard the program on audiotape and the group who saw the program on audiovideo tape in their ability to write a paraphrase response or use paraphrasing in a conversation with a coached student. Since this format had been found to be effective in teaching paraphrasing, three self-instructional programs were developed using videotapes. The programs developed were (a) paraphrasing, (b) reflecting feelings, and (c) asking open-ended questions.

The self-instructional programs were made on colour videotape in the university television studio. A professionally trained commentator did the didactic instructions. A female teacher responded to grade six students' statements using the appropriate program skill. Each program consisted of (a) a description of the skill, (b) a three minute interaction between the teacher and a student to illustrate the skill, (c) 10 one statement interactions between the teacher and a student, 10 one statement interactions between the teacher and a student with a 20 second pause for the subject to respond before the

teacher's response was heard, and (d) 10 student statements where the subject responded and no teacher response was heard.

Subjects were randomly assigned to one of three treatment programs or to a control group. The treatment groups (paraphrase, reflection of feelings and open-ended question) each watched the program skill that they were assigned to, filled in a response sheet which consisted of five "student-like" statements and held a five-minute audiotaped conversation with a coached student. The control group filled in the response sheet and held a five-minute audiotaped conversation with a coached student. One week later both the written response form and the five-minute conversation were repeated for both experimental and control subjects.

Judges rated the written responses of all subjects on all three skills. Behavior counts of the number of times each skill was used were made for each subject on the audiotaped conversations with a coached student.

Results showed that the subjects who viewed the self-instructional videotape programs did learn the skills and that they were able to use the skill both in writing a response and when engaging in a conversation. Delayed posttest results showed that all three groups maintained both the ability to write a response and the ability to use their skill in a conversation after a one week lapse in time.

Thus, it appears that individual communication skills can be taught by a self-instructional videotape program and that these skills are learned well enough to be used in making a written response and well enough to transfer to a live conversation with a coached student.

ACKNOWLEDGMENTS

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To my wonderful parents, Malla and Conrad Vennberg, for believing in me and in my work and for standing beside me through some difficult times.

I dedicate this work to my daughter, Britt Inger, with the wish that my growth will open the doors for her to grow.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION ...

... that ... more ... in counselor education programs. Children taught by teachers who were perceived as being facilitative learned more ...

... The teacher qualities which were labeled "warmth" and "indications" ... important components ... The teacher qualities which were called "warmth" and ...

... and teacher acceptance of pupils' ideas ... And the specific skills involved in praise ... have not been studied, ... it ... out that the ability of a person's world, whether he is a counselor or counselor trainee, or a teacher or an administrator in education or industry, or ... is dependent upon the interpersonal and specialty program ... It would, therefore, seem that ... skills are an important part of any situation where there is interpersonal interaction.

... emphasizes that skills are the function of training. To be able to interact more effectively with people, whether they by children or adults, requires both the knowledge of and ability

to use communication skills. A study by Combs and Soper (1963) showed that both "good" and "bad" teachers knew what a helping relationship was. The responses of both groups correlated highly with what therapists described as a good relationship. They suggest that the difference in effectiveness between teachers labelled as "good" or "bad" by students and supervisory personnel lay not in the knowledge of the concept of a helping relationship but rather in the knowledge of and the ability to use specific helping skills.

Amindon and Flanders (1963, p.3) state that:

The key to developing more effective classroom verbal behavior is the opportunity to experiment with and practice desired communication skills. Among the most important of those skills needed by the teacher are the following: (1) ability to accept, clarify, and use ideas, (2) ability to accept and clarify emotional expression, (3) ability to relate emotional expression to ideas, (4) ability to state objectively a point of view, (5) ability to summarize ideas presented in group discussion, (7) ability to communicate encouragement, (8) ability to question others without causing defensive behavior, and (9) ability to use criticism with least possible harm to the status of the recipient.

In the development of communication skills in the classroom, attention appears to be a central part of the interaction between teacher and student (Ivey, 1971). Unless the teacher listens or attends to the student, little in the way of understanding will occur. Ivey (1971) feels that in order to engage in attending to the students' comments the teacher must listen to the content. To understand the feeling component of a statement. one must attend to the feeling that is being communicated.

While no definitive research has pointed out the qualities which make up a good teacher, it appears that good communication skills would be a valuable asset to any teacher-child relationship.

Nature of the Problem

It would seem, then, that there is evidence to suggest that communication skills would be an asset to teachers.

The literature related to ways of teaching communication skills (reviewed in detail in Chapter II) reveals that the skills can either be taught as total concepts or as separate, behaviorally defined units. The literature also reveals that the skills can be taught by a number of methods including (a) lecture, (b) discussion, (c) programmed text, (d) self-instructional audio or video tapes, and (e) the language laboratory. Specific communication skills have been effectively taught as discrete, behaviorally defined units by several different combinations of these methods. However, not all of the above methods appear to facilitate transfer of the cognitive knowledge of the skill to the ability to use the skill in a verbal conversation (Heiserman, 1971: Magnus, 1972). It appears that an effective model of the skill being correctly used plus a didactic explanation of the skill, when combined in a program with student practice and student involvement, prod the likliest combination of techniqu s t both teach the cog-niti pects of the specific skill and to facilitate transfer to a more natural verbal interaction (Ivey, 1971).

As many teachers do not have access to an instructor-led communications program or access to the expensive equipment needed for a micro-counseling workshop (Ivey, 1974), there appears to be a need for a self-instructional program that would allow teachers to become knowledgeable in both the concepts and use of communication skills.

Purpose of the Study

Given the value of effective communication skills in all types of interpersonal interactions and success of the "micro" concept of teaching these skills individually, a study was formulated to develop and evaluate the effectiveness of three self-instructional individual skill videotape programs to teach the skills of (a) paraphrasing, (b) reflecting feelings, and (c) asking open-ended questions. The effectiveness of these programs was assessed both in terms of ability to write a response showing the skills and in terms of being able to use the skill in a live conversation. Both an immediate posttest and a delayed posttest one week later were administered.

Specifically, the purpose of this study was to develop and assess the effectiveness of three videotape self-instructional programs. Before this study could be undertaken it was necessary to run a preliminary study to determine if an audiotape or videotape should be used to present the model of each skill (see Chapter III).

Definition of Terms

In the previous section outlining the purpose of the study, several terms were mentioned. The definitions of these terms should facilitate understanding the nature of the study. These definitions follow.

Paraphrasing. Stating in your own words what a person's remark conveys to you. Emphasis is placed on the content of the person's statement.

Reflecting Feelings. Responding to the feeling being expressed by reflecting back to a person your understanding of how they are

feeling. Emphasis is placed on the affective, rather than the cognitive, part of the person's statement.

Asking Open-Ended Questions. Asking a question which encourages the subject to express her real self or allows her to explore herself with the support of the interviewer. An example would be "How did you feel about that?".

Communication Skill. A verbal or nonverbal behavior which is used in effective conversations and which is operational, repeatable, trainable, and measureable.

Modeled Behavior. A conversation between a teacher and a student where the teacher is using the communication skill specific to the program being used.

Implications of the Study

If the self-instructional communication skill programs do teach the specific skills so that they can be used in verbal conversations, then a basis would be established for testing these programs as helpful aids to actual student-teacher interactions.

Also, if the program skills are retained over time, then it may be useful to develop other communication skill programs using the same basic format.

Limitations of the Study

1. Only university students in training to be teachers were employed in the study. This makes generalizations to actual teacher populations somewhat difficult.

2. The self-instructional programs were presented on video-
tapes. Although the preliminary research (Chapter III) found no
difference in the effectiveness of the paraphrase program whether it
was presented on audio or videotape, it is not possible to say for
certain that audiotapes would be as effective for all three programs.

3. It is not possible to generalize the transfer of the skill
from the coached student-subject interaction to a real life teacher-
student interaction. Other co   ions may make the skills used in
the coached student-subject int   ns not readily useable by a
teacher in a classroom setting.

4. Only specific skills were taught. No attempt was made to
integrate the skills with one another or into an overall conversation.
Therefore, it is not possible to predict whether or not the subjects
will be able to effectively integrate the skill they learned into
their general manner of conversing.

Overview of the Study

The description of the study just outlined progresses as
follows. Chapter II contains a review of literature related to
modeling, communication skills and types of instruction. This is
followed by a discussion of the methodology employed in the study,
including results of a preliminary research project conducted prior
to the central experiment. The thesis concludes with a presentation
of the results of the study along with a discussion of the implications
of the results, and suggestions for further research.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a review of the literature on modeling
studies, communication skill training studies, and educational media
studies.

Modeling Studies

Modeling research has indicated that the observation of a
model's behavior and the consequences to the model can result in the
acquisition and the subsequent performance of novel responses or in the
modification of existing patterns of behavior (Bandura, 1965, 1969;
Bandura & Walters, 1963).

A basic issue studied (Dalton, Sundblad, & nylbert, 1972) was
whether a modeled-learning experience was a more effective method of
acquiring a counselor response than an operant procedure. Undergradu-
ate university students were divided into three groups and shown a
counselor model on video tape using the skill of empathic responses or
given material to read about the skill or given no treatment. Results
indicated that the students exposed to the modeling tape displayed a
significantly higher level of functioning both on a written scale
measuring empathic responses and in a real life situation than did
those students who either read about the skill or who had no treatment.
These differences were maintained when measured one month later. The
use of a model appears to have a valid use in teaching skills and
behaviors.

The principles of modeling have been used in a variety of ways within an educational and counseling framework. The models used have been on film, video tape, audio tape and live.

Myrick (1969) exposed grade eight students to either a video tape or audio tape model of a client in a counseling setting in order to orient them to the counseling process. He found that xposure to either model increased the number of self reference statements made during counseling as compared with a no model control group.

Whalen (1969) found that exposure to a model (on film) of inter-personal openness, when preceded by de riptive instruction, facilitated the expression of interpersonal openness and inhibited impersonal dis-cussion in the observers. In this study using male college students, Whalen found that neither model nor instruction alone were sufficient to increase self-disclosure.

In a study looking at the effect of a high empath model, a low empathy model, and no model on the acquisition of the skill of makin an empathic response, Perry (1975) found that the subjects ex   the high empathy model were significantly more empathic when responding to a taped client.

Goldberg (1970) examined the effectiv   ss of an audiotaped model plus instructions in learning the counseling skill of reflection of feelings. Her study consisted of four groups (a) model plus instruc-tion, (b) model only, (c) instructions only, and (d) placebo. Goldberg found that instructions plus modeling proved most effective, followed by modeling only.

The above studies show that modeling techniques have been used successfully to develop verbal skills. The comparative effects of

different types of models (audio, videotape, live, and sound films) have not been widely investigated.

Di Mattia and Arndt (1974) compared microcounseling which used videotape models with a reflective listening program which used live role-playing models. The two programs were basically the same except for the method of model presentation and skill practise evaluation. While the microcounseling group were videotaped and evaluated by reviewing the tape with a supervisor the reflective listening group discussed what they had done immediately after their practise session and compared the most facilitative and least facilitative responses. No difference was found between the two approaches in teaching reflective listening skills.

Myrick (1969) found that an audio tape model was more effective than a video tape model in orienting students to the verbal behavior of a counseling session. He concluded that perhaps students were more able to attend to the verbal factor when listening to an audio tape than when listening to and viewing a video tape. The video tape might introduce too great a number of stimuli on which to attend.

The use of audio or video tapes to record the interviews of students in counselor training programs has been examined. Poling (1968) found video tapes to be more effective in critiquing the counseling skills of practicum students. Yenowine and Arbuckle (1971) found video tape plus supervision helped the students move faster in their professional growth than did audio tape recording plus supervision. Harbach (1973) found no difference in audio or video tapes in modifying the counselor's perception of the interview. However, the video group believed their program to be of greater value than did the audio group.

From the above studies it appears that the use of modeling is an effective way to teach a verbal communication skill. Whether the equipment necessary to use an audio-video model produces a tape that is significantly more effective than a straight audio tape is not as clear.

Ivey (1971) suggested that an audio tape model may be more effective than an audio-video model in teaching verbal skills as there are fewer distracting stimuli. He felt that an audio-video model was most effective in presenting skills that involved the physical behavior of the student.

Communication Skill Training Studies

Material can be presented as global skills or as discrete segments of a total skill. It appears that short, well-defined units of behavior are more easily learned than are total concepts which do not have the composite skills well defined (Allen & Ryan, 1969; Gropper, 1975; Gagné, 1965). On this basis several counselor trainers have developed programs to teach effective communication skills (Ivey & Gluckstern, 1974; Carkhuff, 1969; Danish & Hauer, 1973). One of these approaches, that of Ivey, will be considered in more detail.

Microtraining procedures, as conceived by Ivey (1971), focus on specific skills and behaviors which can be defined, seen in operation, practiced and evaluated. Rather than confusing the trainee with an overwhelming amount of data, the component-skill approach breaks communication skills into workable and observable dimensions. Each skill is systematically taught as a separate unit. The breaking down of complex behaviors into a number of discrete, identifiable behaviors allows the

trainees to become aware of what makes up effective communication and their own areas of skill and weakness.

Ivey has developed a microcounseling model for teaching these skills. This model consists of the following progressive steps (1) a five-minute videotaped interview between the trainee and a client, (2) the trainee reads a manual describing the specific skill to be learned in the session, (3) the trainee watches video models of an expert demonstrating a specific skill, (4) the trainee is shown his initial interview and discusses with his supervisor where he engaged in or failed to apply the specific skill in question, (5) the supervisor and trainee review the skill together and plan for the next counseling session, (6) the trainee reinterviews the same client for five minutes, (7) feedback and evaluation on the final session are made available to the trainee.

This model of skill presentation involves cue discrimination and specific suggestions for improvement, video models (Bandura & Walters, 1963), written materials and supervisor's comments. Operant techniques (Skinner, 1953) are stressed, in that appropriate interviewer behavior is rewarded and relatively little attention is paid to interviewer errors.

Several studies have shown that this method does teach the component skills of effective communication (Haase & Di Mattia, 1970; Ivey, Normington, Miller, Morrill & Haase, 1968; Kelly, 1971; Higgens, Ivey & Uhlemann, 1970). They also show that trainees readily learn these skills when presented as well defined units. This method of skill training involves both expensive equipment and supervisory personnel.

Using microtraining and other methods specific communication skills have been taught. The skill of reflection of feelings has been focused on in several studies.

Perkins and Atkinson (1972) taught university resident assistants how to make reflection of feeling responses as part of a program in human relations skills which also included attending behavior and summarization of feelings. They found that this skill could be taught by a lecture-discussion method where the subjects listened to an audio taped lecture and then discussed the qualities of a reflection of feeling response before seeing a client and by a lecture-model method where the subjects listened to an audiotape lecture and then saw the skill being used by a counselor on a videotape before seeing a client. While the skill was successfully taught in a 27-minute program, Perkins & Atkinson felt that one exposure to the program would not ensure continued use of the skill and recommended periodic supervised practice of the target behavior.

Haase and Di Mattia (1970) used the micro-counseling paradigm in three 4-hour segments to train support personnel in the skills of attending behavior, expression of feelings and reflection of feelings. Sixteen female subjects, with only one subject having more than a high school education took part in the study. Inspection of pre-test post-test differences showed that there was a significant increase in ability to engage in the communication skills taught in this study. Both this research and a study done by Ivey, Normington, Miller, Morrell and Haase (1968) emphasize the importance of describing each skill in behavioral terms that are meaningful to the beginning counselor, teacher or lay person.

Another communication skill which has been taught as a specific skill is the ability to ask open-ended questions. Canada and Lynch (1975) developed a program based on the developmental steps of (1) learning what an open-ended question was through definition and examples, (2) classifying questions as open or closed, (3) practicing using open-ended questions with a partner, and (4) making a trial run interview where skill acquisition was evaluated. They found that this program successfully taught subjects how to ask open-ended questions.

Higgins, Ivey and Uhlemann (1970) taught couples to share and respond to feelings that they experienced while together in a study of 33 pairs of university students who were married, roommates, engaged or friends. They divided the pairs into three groups and taught the skill in three ways: (1) full micro-training model, (2) programmed text and video models only, and (3) reading material only. The full treatment group showed the most improvement in amount of direct, mutual communication followed by the programmed group.

The above studies show that communication skills can be successfully taught as specific, identifiable tasks. Factor analytic studies of counselor communications (Hackney & Zimmer, 1970; Zimmer & Anderson, 1968; Zimmer & Park, 1967) have identified other specific skills which occur with great frequency in counseling interviews. These skills included (1) minimal verbal stimulus, such as "Mm-hmm", (2) behavior description, (3) restatement or paraphrase, (4) unstructured invitation to talk, (5) reflection of feelings, and (6) summarization of content and feelings. It is suggested by Hackney and Zimmer (1970) that these response classes can be operationalized and taught as specific skills so that they become integrated into the counselor's verbal repertoire.

Self-Instructional Media Studies

Several instructional methods, including lecture, discussion group, programmed text books, language laboratory, self-instructional audio and video tapes, and role-playing groups, have been used to teach specific communication skills. In this section of the review of literature studies which have compared the effectiveness of various methods of teaching skills are looked at.

Perkins and Atkinson (1973) compared the effectiveness of (a) a lecture-model treatment which combined listening to a 17-minute tape-recorded lecture and viewing a 10-minute videotape demonstration of the skill, (b) a lecture-discussion treatment which combined the 17-minute tape-recorded lecture and a 10-minute group discussion, (c) a lecture role playing treatment which combined the 17-minute tape-recorded lecture with two 5-minute sessions of role playing the skill, and (d) a control group which received no treatment in teaching the skills of attending behavior, reflection of feelings, and summation of feelings. The subjects were 40 resident assistants (20 females and 20 males). Subjects in all three experimental groups maintained eye contact for a significantly longer period of time than did control subjects. Reflection of feeling responses were recorded a significantly greater portion of time for the lecture-discussion and lecture-modeling treatments than for the control group.

The lecture method was compared with an experiential-videotape training program by Heiserman (1971). She taught juvenile court caseworkers to discriminate client feelings and thoughts and to communicate that understanding to the client in two ways (1) a straight lecture method combined with audiotape and videotape models of caseworkers using

the skill, (2) an experiential videotape method where the caseworker was videotaped using these skills with a client. The caseworker had an immediate replay and discussion of their use of the skills. Heiserman found no difference in the effectiveness of these two methods of teaching.

Hum (1973) compared the effectiveness of four methods of teaching the skill of reflection of feelings: He used the language laboratory for an audio-videotape group and an audiotape group. As well, he had an audio tape-recorder group, a lecture-discussion group and a control one. All treatment groups taught the skill of reflection of feeling. The language laboratory audio group did not display higher scores on measures of empathy than the other treatment groups as hypothesized.

Several studies (Magnus, 1972; Di Mattia & Zimmer, 1972; Higgens, Ivey & Zimmer, 1972; and Saltmarsh, 1973) have looked at the use of programmed textbooks alone and combined with other teaching methods to teach communication skills.

Magnus (1972) developed a programmed text to improve the ability of school administrators and counselor trainees to understand and communicate empathically. The text was divided in two parts. Part I used a linear program format to focus the learner's attention on the cognitive aspects of empathic understanding and communication. Part II used a branching program format structured around five stimulus expressions to give the learner an opportunity to utilize what he had learned in interaction with the stimuli of the programmed text. Magnus found that this programmed text effectively taught the subjects to discriminate empathic responses from non-empathic statements for both groups of subjects. The counselor trainees were also able to write empathic responses at a level significantly higher than the control group. While this programmed text had the advantage of being

auto-instructional, no attempt was made in the study to determine if

the subjects could use the skill in a real life situation. Only one

of the two treatment groups significantly increased their ability to

write an empathic response.

A study by Di Mattia and Zimmer (1972) found that a programmed

text was more effective than a video modelling tape with no commentary

or student involvement in teaching discrimination of depressive clues

in people. They felt that a critical difference in the two manners of

teaching was the fact that the programmed text forced student involve-

ment while the video presentation left the student passive.

Student involvement in the program appears to be a critical

component in teaching any skill. Higgens, Ivey and Uhlemann (1970)

compared the effectiveness of (1) a media group involving didactic

instructions, modelling tapes, subject practice with clients and

feedback discussion with, (2) a programmed text plus videotape models

the skill to see which method more effectively taught sharing and

onding to feelings between couples. While both methods signifi-

cantly increased both treatment groups abil   the target skill,

the full media reatment subjects showed   ovement.

Saltmarsh (1973) combined a self-inst   onal pr   med

manual with a tape which directed interaction between group members.

He designed this approach to teaching the components of the skill of

empathic understanding to master degree students. While he found that

subjects who had been in the program scored significantly higher on

the Michigan State Affective Sensitivity Scale than the control group

no attempt was made to see if the treatment subjects could display,

through written response or verbal interaction, an empathic response.

A study which compared programmed-machine training, leader-led group training, and video-lecture training was done by Emener (1971). He taught the skills involved in empathic responses to 56 university students. Both written and verbal measures of the student's ability to make an empathic response were made. Emener found that both the leader-led group training group and the programmed machine training group significantly improved on both written and verbal measures. The video-lecture training group were able to communicate verbal empathic responses as effectively as the programmed-machine training group but not as effectively as the leader-led group.

Several studies have been done to test out self-instructional programs (Eisenberg & Delaney, 1969; Dickerson & Roberts, 1974; Hum, 1973; and Esenrath, Cocker, & Martinson, 1972).

Dickerson and Roberts (1974) developed a program of thirty learning units consisting of tape recordings and supplementary reading material to be used as inservice training for employed rehabilitation counselors. The unit skills were based on information useful for these counselors to know. The subjects consisted of 136 treatme   jects who were given the program and left to progress at their own speed and 69 control subjects who were given no treatment. The lack of signifi-cant gains in the treatment group's knowledge of the program skills was attributed largely to lack of motivation on the part of the subjects. They did not work through the program units. Dickerson and Ryan con-cluded that while the idea of an individualized packaged program was promising the individual units had to be carefully planned so that the student felt involved.

Hum (1973) successfully taught university students to make written reflection of feeling responses using an audiotape program

combined with a written manual. Elsenrath and Cocker (1972) combined a self-instructional audio-tape with a lecture to teach the interview skill of pausing to allow the interviewee time to think and respond.

The above studies indicate that verbal skills can be successfully taught by a self-instructional program.

A summary of the major findings of the preceding review of literature would include:

1. The concept of modeling is useful in teaching communication skills.

2. While videotape models, audiotape models and live models have been used successfully, there is no clear cut evidence as to which method is more effective in presenting a model of a communication skill.

3. Communication skills can be broken down into discrete, identifiable behaviors and taught as separate units.

4. Many methods, including lecture, discussion group, programmed text books, language laboratory, self-instructional audio and videotapes and role-playing groups, have been used to teach specific communication skills. No clear cut findings point out which method was most effe   e when time required to learn the skill, the ability to transfer ... skill to real life situations, and cost in terms of equipment or teachir staff are considered.

5. Communication skills can be taught by self-instructional programs. One of the keys to the effectiveness of the program appears to be student involvement in the program as they are experiencing the instruction.

A worthwhile topic of study based on the literature examined seemed to involve an examination of the relative effectiveness of an

audio tape model as compared to a videotape. Using the most effective
model, self-instructional programs which taught some useful, specific
communication skills could be assessed in terms of the effectiveness
in teaching skills at both the cognitive level of understanding and at
the practical level of using the skill in a live situation.

Communication Skills to be Modeled

The review of literature revealed several discrete communication
skills that had been taught as separate units. These skills included:
(a) reflection of feelings (Perkins & Atkinson, 1972; Haase & Di Mattia,
1970; Ivey, Normington, Miller, Morrell & Haase, 1968), (b) open-ended
questions (Canada & Lynch. 1975), and (c) sharing and responding to
feelings (Higgins, Ivey & Uhleman, 1970). As well, the factor analytic
studies of counselor communications (Hackney & Zimmer, 1970; Zimmer &
Anderson, 1968; and Zimmer & Park, 1967) revealed other skills which
could be operationalized and taught as specific skills. These skills
included (1) minimal verbal stimulus, such as, "Mm-hmm", (2) behavior
description, (3) restatement or paraphrase, (4) unstructured invita-
tion to talk, (5) reflection of feelings, and (6) summarization of
feelings.

Ivey (1971) has put many of these separately defined skills
into an order which makes up the component skills of microcounselling.
The first three verbal skills in his order of presenting the skills
are (1) open invitation to talk or open-ended questions, (2) reflection
of feelings, and (3) paraphrasing. As these three skills have been
shown to be: (1) used by counselors, (Ivey, 1974; Zimmer & Park, 1967)
and (2) separate, operationally defined verbal skills, (Zimmer & Park,
1967) they appeared to be suitable and useful skills to use as the

basis for the beginning units in a program of teaching communication skills.

Choice of Modeling Media

Studies have shown that some methods of presenting the skill to be modeled have been videotapes, audiotapes, written dialogues and role-playing.

While written program texts have effectively taught the concepts of specific communication skills, these texts do not appear to facilitate the transfer of the cognitive understanding of the skill to use in live conversations (Dalton, Sunblad, & Hylbert, 1972 and Magnus, 1972). The combination of written material or a lecture and a videotape modeling the skill has been found to facilitate both cognitive understanding and transfer of the skill to live communications (Perkins & Atkinson, 1972 and Higgens, Ivey & Uhlemann, 1970). As one of the purposes of this study was to develop a self-instructional program, it seemed suitable to combine introductory didactic explanations of the skill and a model showing the skill being used in several ways all on one tape. A videotape model was chosen on the basis of preliminary research which showed that there was no difference in the effectiveness of a videotape or audiotape model in teaching the skill of paraphrasing. (See Chapter III).

In summarizing the research, there is increasing evidence to indicate that modeling is an effective way for learning new behaviors. It has been shown that a number of educators are experimenting with several instructional methods that incorporate the use of models. These methods include microcounselling procedures, programmed textbooks and self-instructional audio tapes and video tapes. In conjunction

with the use of specific media for teaching skills through the use of
models, it has been found that specific communication skills can be
taught as separate, identifiable units. However, evidence as to the
effectiveness of certain types of model media, such as audio tapes and
video tapes, when used in self-instructional communication skill
programs requires further investigation.

CHAPTER III

METHODOLOGY

This chapter presents a summary of the preliminary research project, the methodology of the thesis research, a description of the self-instructional programs, and a summary of the research questions.

Preliminary Research Project

The first step toward conducting the study was the development of a preliminary project. The purposes of this preliminary study were two fold: (1) to determine whether the audiotape self-instructional program and the audio-videotape self-instructional program are effective in teaching a paraphrase response, and (2) to determine whether an audiotape self-instructional program was as effective as an audio-videotape self-instructional program in teaching a paraphrase response.

Subjects. Thirty-four students (13 males and 21 females) enrolled in an undergraduate Educational Psychology course were used in this study.

Instruments. The subject's ability to paraphrase was measured in two ways.

A five-statement questionnaire where the subjects wrote "responses that showed that they were interested in what the student was saying" was used. This questionnaire was rated independently by two trained raters who judged whether or not the responses were paraphrases. Inter-rater reliability on this measure was .93.

23

A thr e-minute videotape clip of the subject talking to a
coached client was rated for the number of paraphrases used. Inter-
rater reliability was .95.

Procedure. A Posttest-Only Control Group Design was used. The
subjects were randomly assigned to one of three groups: (1) audio-video
tape program, (2) audio tape program, and (3) control group.

1. Audio-video tape treatment. These subjects watched the
audio-video program individually. Upon completion they filled in the
paraphrase response questionnaire and then held a 5-minute interview
with a coached client.

2. Audio tape treatment. These subjects listened to only the
audio portion of the audio-video tape program. Upon completion they
filled in the paraphrase response questionnaire and then held a 5-minute
interview with a coached client.

3. Control group. These subjects filled in the paraphrase
response questionnaire and then held a 5-minute interview with a
coached client.

All the subjects were randomly assigned to the coached clients.
Neither the person randomly assigning the subjects nor the coached
clients knew which group the subject was from.

Nature of the Self-Instructional Program. The program was 30
minutes in length and consisted of (1) a verbal explanation of the skill
of paraphrasing, (2) two 3-minute demonstrations of a teacher talking
with a student and using paraphrasing, (3) another verbal explanation
of the skill, (4) 10 single verbal interactions between a teacher and
a child to demonstrate the skill as an isolated concept, (5) 10 practise

stat ... nts where a student made a statement, there was a 20-second

pause for the subject to make a paraphrase response, and then a teacher

made a paraphrase response, and (6) 10 practise statements where a

student made a statement and there was a 20-second pause for the

subject to make a paraphrase response.

The program was reproduced on three video tapes and three audio

tapes to allow six treatment subjects to work independently at one time.

Results. It was hypothesized that both the audio-video tape

program (A-V) and the audio tape program (A) would effectively teach

the skill of paraphrasing and that there would be no difference in the

effectiveness of the two programs.

On the subjects ability to write a paraphrase response, the

following results were obtained.

Table I

Means and Standard Deviations on

Written Paraphrase Questionnaire

Group	Audio	Video	Control
Mean	3.79	3.73	.45
S.D.	.98	.98	1.19

Table II

t-Tests for Differences on Written

Paraphrase Questionnaire

Groups	df	Obtained t
A-V and C	20	6.4*
A and C	21	6.2*
-V and A	21	.02

< .01

Using a t-test comparing the means of the A-V group and the control group, the obtained t value was 6.4 and the critical t value was 2.529. This t value was found to be significant beyond the $\mathcal{C}$ = .01 level, (df=21).

A t-test comparing the means of the A group and the control group obtained a t value of 6.2 and a critical t value of 2.518. This was found to be significant beyond the $\mathcal{C}$ = .01 level, (df=20).

A t-test comparing the means of the A-V group and the A group obtained a t value of .02 and a critical t value of 2.528 (df=21). No significant t difference was found to exist.

On the subjects' ability to use paraphrases in a conversation, the following results were obtained.

Table III

Means and Standard Deviations

on Verbal Interactions

Group	Audio	Video	Control
Mean	3.37	3.74	.50
S.D.	2.8	3.3	.9

Table IV

t-Tests for Differences on Frequency of Using

Paraphrases in Verbal Interactions

Groups	df	Obtained t
A-V and C	20	3*
nd C	21	3*
A-V and A	21	.02

*p < .01

Using a t-test comparing the means of the A-V group and the control group, the obtained t value was 3 and the critical t value was 2.528. This was found to be significant beyond the α = .01 level, (df= 21).

A t-test comparing the means of the A group and the control group obtained a t value of 3 and a critical t value of 2.518. This was found to be significant beyond the α = .01 level, (df=20).

A t-test comparing the means of the A-V group and the A group obtained a t value of .02 and a critical t value of 2.528 (df=21). No significance was found.

Discussion. The treatment subjects learned the concept of paraphrasing effectively from both the audio-video tape program and the audio tape program. This learning was apparent in both the written questionnaire and the verbal interaction. Since no difference was found between the two modes of presenting the model, audio tape or combined audio and video tape, it appears that a verbal communication skill such as paraphrasing can be effectively taught using a verbal model.

Audio tape equipment is accessible to many more people and, therefore, a communication skills program developed on audio tapes would be readily useable by many more people than a program developed on video tapes. The self-instructional nature of the program also makes it easily used by individuals on their own time.

The lack of difference between groups in non-verbal attending skills could be due to the fact that the skill being learned was verbal in nature so, therefore, even when a visual model was presented the subjects attention was focused on the auditory stimuli. Also, as no mention of these skills was made, the subjects may have resorted to

typical personal behavior in the brief verbal interaction which was video taped.

While all but two treatment subjects used at least one paraphrase in their oral interview, there was a great difference in number of paraphrases used. It appeared that some subjects were more able to use the newly acquired skill than others. In a future study it would be valuable to find out why some subjects chose to use the skill in the oral interview and some did not. It could have been partly due to the instructions given to the subjects prior to the oral interview. More direct instructions to use paraphrases may be needed to see if they have internalized the skill to the place where they could use it in conversation.

The results of this study indicate that it would be worthwhile to develop self-instructional programs on either audio tapes or audio-video tapes to teach paraphrasing as well as other communication skills.

Implications of the Preliminary Research

The results of the preliminary research influenced the nature of the thesis research in the following ways: (a) It was shown that there was no difference in an audiotape model and a videotape model in teaching the communication skill of paraphrasing. As a result, it was decided to develop the three thesis program skill models on videotapes. Videotapes were chosen for two reasons. Firstly, once the programs were made on video tapes it was an easy matter to make the audio tapes by taking the sound tracks from the video tapes. In this way, both audio and audio-video programs would be available depending on the equipment available to the person using the programs. Secondly, the video tape form of the programs appeared to be more exciting to parti-

cipate in, even though they were not shown to be more effective than audio tapes in teaching the skill of paraphrasing. (b) Some subjects used the skill in the verbal discussion with the coached student and some did not. It was decided to make an inquiry with some subjects immediately after the verbal post test and with all subjects immediately after the delayed post test to see if reasons for this difference could be found. (c) The format of the self-instructional program successfully taught the skill of paraphrasing. It was decided to use the same program format when developing the thesis program tapes.

Methodology of Thesis Research

Sample. The subjects for the study were 63 undergraduate education students (13 males and 50 females) attending Spring Session at the University of Alberta.

Research Design. A post test-only control group design was used. This design was selected in an attempt to control for the possibility of task learning and reactivity effects through pre-testing (Campbell & Stanley, 1966). Further, this design lends itself to obtaining a measure of how frequently the program skills are actually used after a subject had worked through the program. Subjects were also given a delayed posttest one week after they had gone through the program. This gave a measure of retention   e skill over a short period of time.

Upon completion of the verbal posttest, two subjects from each group were questioned about their use of the program skill in the live interaction situations. This was done to get subjective data on why the subject used or did not use the program skill. Further information was sought as to the impressions the subjects have of the programs.

Upon completion of the verbal delayed posttest all treatment subjects filled in the inquiry form.

Instruments. The subjects' ability to use the program skills was measured in two ways in order to test the recall and transfer dimensions of the programs (Gopper, 1975).

A five-statement questionnaire which was made up of five "student-like" statements was used (see Appendix D). The subjects wrote a response to each "student-like" statement. This questionnaire was filled in during both the posttest and the delayed posttest. The questionnaire was rated independently by two trained raters. Each subject's responses were rated for all three skills. Inter-rater reliability is reported in Chapter IV.

Each subject held a 5-minute live conversation with a coached student. These conversations were audiotaped. Each conversation was rated in the following manner. Forty-five seconds at the beginning of each conversation was dismissed as a warm-up phase. The number of times the program skill was used in the next three minutes were counted. Both trained raters independently counted the number of times each program skill was used during the three minutes. Each subject's responses were rated for all three skills. Inter-rater reliabilities on rater behavior counts are reported in Chapter IV.

A third form of inquiry was also used. This consisted of a questionnaire which was designed to find out why the subject did or did not use the skill and to get some feedback on the programs (see Appendix F). Two subjects from each experimental group were interviewed immediately after the posttest conversation with a coached student. All

other subjects in experimental groups filled in this inquiry form after

their delayed posttest conversation with a coached student.

"Subjects who were interviewed individually after the posttest

conversation with a coached student were not included in the delayed

posttest measures.

Data Analysis. This study yielded two types of data. These

were: (1) the judges' ratings of subjects' interviews with coached

students, and (2) the judges' ratings of written responses. Each type

of data was analyzed using a one-tailed t-test. A Welch t-test

adjusted for unequal variance was used to take into account any dif-

ferences variance found in between group comparisons (Ferguson,

1966).

The difference between groups was considered significant if

this difference had a probability of less than five chances in one

hundred of being due to chance alone ($p < .05$).

Nature of the Trained Raters and Coached Students. The two

raters, a student in counseling and the researcher, were trained to

identify the program skills until an inter-rater agreement of .9 was

achieved. This training consisted of both rating written responses

and rating audiotape statements. The vai__y of the ratings was

checked by including responses rated as either paraphrase, reflection

of feeling or open-ended question by an expert rater. The two trained

raters consistently rated these responses in accordance with the

expert rater.

The three coached undergraduate students underwent an hour

training period where they practiced the statements they were to present

to each subject that they saw. The coached students used the same
problem with each subject that they saw. They made many short state-
ments and paused frequently to give the subjects an opportunity to
respond.

Procedure. Subjects were randomly assigned to one of four
groups. There were three treatment groups and one control group. The
groups were (1) paraphrase program group, (2) reflection of feelings
program group, (3) open-ended question program group, and (4) control
group.

Each of the treatment groups listened to the videotape self-
instructional program that they had been assigned to. Upon completion
of the program they made written responses to the five statement
questionnaire of typical student statements. They then held a five-
minute interview with a coached student.

The control group filled in the five statement questionnaire
and held a five-minute interview with a coached student.

All subjects were randomly assigned to the coached students.
Neither the person randomly assigning the subjects nor the coached
students knew which group the subject was from.

Two subjects from each treatment group were interviewed immedi-
ately after their interview with a coached student (see Appendix F).

One week later subjects were again measured for their ability
to use their program skill in both a written form and in an interview
with a coached student. Subjects who were given the inquiry after the
first verbal measure were not included in the delayed posttest group.
(See Figure 1 for Procedure Outline.)

Figure 1

Research Procedure for Treatment and Control Groups

Group	Procedure
Paraphrase Videotape Program	1. Saw the 25 minute self-instructional program on paraphrasing. Filled in the check mark sheet during the practice phase of the program. 2. Made written responses to 5 typical student statements. 3. Held a 5-minute live interaction with a coached student. 4. One week later repeated the written response sheet and the 5-minute live raction with a coached student. F_ d in the inquiry questionnaire.
Reflection of Feelings Videotape Program	. id the 25 minute self-instructional program on reflection of feelings. Filled in the check mark sheet during the practice phase of the program. 2. Made written responses to 5 typical student statements. 3. Held a 5-minute live interaction with a coached student. 4. One week later repeated the written response sheet and the 5-minute live interaction with a coached student. Filled in the inquiry questionnaire.
Open-Ended Question Videotape Program	1. Did the 25 minute self-instructional program on asking open-ended questions. Filled in the check mark sheet during the practice phase of the program. 2. Made written responses to 5 typical student statements. 3. Held a 5-minute live interaction with a coached student.

Group	Procedure

| | 4. One week later repeated the written response sheet and the 5-minute live interaction with a coached student. Filled in the inquiry questionnaire. |

Control Group

1. Made written responses to 5 typical student statements.

2. Held a 5-minute live interaction with a coached student.

3. One week later repeated the written response sheet and the 5-minute live interaction with a coached student.

Figure 2

Subject Distribution

Group	Posttest n	Delayed Posttest n
Paraphrase treatment group	16	13
Reflection of feelings treatment group	17	9
Open-ended question treatment group	18	10
Control group	11	11

The drop in the number of subjects taking the delayed posttest measure as compared to the posttest measure was due mainly to subjects being unable to fit the delayed posttest interview into their busy timetables. In all but two cases subjects who did not take part in the delayed posttest measures stated that they would be unable to be present for the second testing. The following table of mean scores on the posttest measure for those people who did not take the delayed posttest measure and for those people who did take the delayed posttest measure shows that there was no significant difference in the two groups. (See Figure 3.) Therefore, it is unlikely, that the delayed posttest results were significantly influenced by the dropout of subjects after the posttest measures.

Figure 3

Mean Scores on Posttest Measures For Subjects Who Did
And Did Not Do The Delayed Posttest Measures

Measure	$\bar{X}$ Score (Delayed Posttest)	$\bar{X}$ Score (No Delayed Posttest)
Paraphrase (written)	4.2	4.0
Paraphrase (verbal)	2.0	2.7
Reflection of feelings (written)	3.4	3.1
Reflection of feelings (verbal)	1.7	1.5
Open-ended questions (written)	3.9	3.9
Open-ended questions (verbal)	2.8	2.5

<u>Nature of the Self-Instructional Programs</u>. The self-
instruction l programs were presented on video tapes. Video tapes
were selected after the preliminary research found no difference in
the effectiveness of an audio-video model as compared to an audio only
model. Video tapes were chosen for two reasons. Firstly, once the
programs were made on video tapes it would be an easy matter to make
the audio tapes by taking the sound tracks from the video tapes. In
this way, both audio and audio-video programs would be available to
the person using the programs. Secondly, the video tape form of the
program appeared to be more exciting to participate in. The program
when presented on both audio tape and audio-video tape taught the skill
of paraphrasing. Therefore, the same program format was used in the
three communication skills programs being tested in this study.

The programs were made in the Audio Visual Department at the
University of Alberta by professional television personnel. Grade six
students from Brander Gardens Elementary School and an elementary
teacher provided the verbal interchanges for the programs. Both the
students and the teacher were trained in the type of statements and
responses to make which would best illustrate the program skill being
demonstrated. A professionally trained commentator did the didactic
instructions.

While a broad, integrative concept of programming is frequently
encouraged (Lindvall & Bolvin, 1967), Lange (1967) points out that
there is value in effective educational modules that can be used for
specific purposes and conditions. By developing specific skill programs
it becomes possible to evaluate each segment of what later may be
integrated into a complete series of skill programs. Also, by develop-

ing each skill as a separate unit, the user is able to easily repeat
the program or segment of it to meet his own needs and time schedule.

The programs were based on a dual taxonomy for characterizing
behaviors to be learned and exhibited which was compiled by Gropper
(1975). This taxonomy sets out two conditions of performance (a) recall,
and (b) transfer. The component skills are (1) discrimination, (2) gen-
eralizations, (3) associations, and (4) chains.

Specifically, the program was set out to be efficient as well
as effective. The following necessary program requirements, as set out
by Gropper, were incorporated: (a) enough exposure to target behavior
before practice so that the target behavior was clearly delineated,
(b) exposure to a wide variety and a sufficie number of samples to
allow for easy generalization, (c) practice during instruction to
facilitate recall, (d) feedback about correctness or incorrectness of
responses, and (5) practice of the total criterion behavior.

The individual program video tapes were approximately 25 minutes
in length and consisted of (1) a verbal explanation of the skill, (2) a
3-minute demonstration of a teacher talking with a student and using
the skill, (3) another verbal explanation of the skill, (4) 8-10 verbal
interactions between a teacher and a child to demonstrate the skill as
an isolated concept, (5) 8-10 practice statements where a student made
a statement, there is a 20-second pause for the subject to make a
response, then a teacher made a response using the program skill. The
subject compared his response to the teacher's to determine if they
used the program skill. (6) A re-statement of the program skill,
(7) 10 practice statements where a student made a statement and the
subject made a response using the program skill. For parts 5 and 7 of

the program, the subjects gave themselves a check mark each time they felt they had made a successful response. This helped insure subject involvement in the program. This method was shown to be successful in a study by Verplanck (1956) (see Appendix D).

Research Questions

To evaluate the effectiveness of the three self-instructional communication skill programs and to see if the skill acquisition held up over time, six specific hypotheses were constructed. These hypotheses were tested with both posttest and the delayed post measures.

Question I

Paraphrase program group subjects will use significantly more paraphrase responses on the written questionnaire than will control group subjects.

Question II

Reflection of feelings program group subjects will use significantly more reflection of feelings responses on the written questionnaire than will control group subjects.

Question III

Open-ended question program group subjects will use significantly more open-ended questions on the written questionnaire than will control group subjects.

Question IV

Paraphrase program group subjects will use significantly more paraphrase responses in the live interview than will control group subjects.

Question V

Reflection of feelings program group subjects will use
significantly more reflection of feelings responses in the live inter-
view than will control group subjects.

Question VI

Open-ended question program group subjects will use signifi-
cantly more open-ended questions in the live interview than will
control group subjects.

CHAPTER IV

RESULTS AND ISCUSSION

This chapter deals with the reliability of the judges on both
the written and verbal measures, the findings as related to each of
the hypotheses, and a summarization of the subjective data gathered by
the inquiry questionnaire.

Reliability of Raters

Basic to the consideration of the data collected in terms of
differential treatment effects was an investigation into the reliability
with which written responses and verbal statements emitted by subjects
during a discussion could be counted. As indicated by Tables 5 and 6,
it was found that the judges could reliably rate both written and
verbal responses. This was expected in view o he high interjudge
reliabilities found in the preliminary research project described in
Chapter III.

Treatment Effects on the Posttests

The following null hypotheses were generau to test the treat-
ment effect as displayed on the written posttest.

1. There will be no significant difference between the mean
number of paraphrases used by subjects in the experimental and control
groups on the written response posttest.

2. There will be no significant difference between the mean
number of reflection of feeling responses used by the subjects in the

Table V

Correlation Coefficients of Rater

Scores on Posttests

Measure	Skill	Correlation*
Written Response Sheet	Paraphrase	.97
Written Response Sheet	Open-Ended Question	.99
Written Response Sheet	Reflection of Feelings	.97
Verbal Interaction Behavior Count	Paraphrase	.91
Verbal Interaction Behavior Count	Open-Ended Question	.95
Verbal Interaction Behavior Count	Reflection of Feelings	.98

*Pearson r

Table VI

Correlation Coefficients of Rater Scores

on Delayed Posttests

Measure	Skill	Correlation[*]
Written Response Sheet	Paraphrase	.95
Written Response Sheet	Open-Ended Question	.97
Written Response Sheet	Reflection of Feelings	.97
Verbal Interaction Behavior Count	Paraphrase	.97
Verbal Interaction Behavior Count	Open-Ended Question	.98
Verbal Interaction Behavior Count	Reflection of Feelings	.98

*Pearson r

experimental and control groups on the written response posttest.

3. There will be no significant difference between the mean number of open-ended question responses used by the subjects in the experimental and control groups on the written response posttest.

T-test analyses using the Welch t-test (Ferguson, 1966) adjusted for unequal variance was carried out (see Table 7). On the measure between the open-ended question group and control group a significant difference was found ($t = 21.8$; $p < .01$). No t-scores could be computed in the comparison of the paraphrase group and the control group and in the comparison of the reflection of feeling group and the control group as the control group made no scoreable responses in either case. However, with mean scores of 3.8 for the paraphrase group and 3.4 for the reflection of feeling group, it seems reasonable to assume that the treatments were effective. The maximum possible mean score on the written response measure was 5.0. Therefore, for all three hypotheses the null hypothesis was rejected.

The following null hypotheses were generated to test the treatment effect displayed on the verbal behavior count posttest.

1. There will be no significant difference between the mean number of paraphrases used by subjects in the experimental and control groups on the verbal behavior count posttest.

2. There will be no significant difference between the mean number of reflection of feeling responses used by the subjects in the experimental and control groups on the verbal behavior count posttest.

3. There will be no significant difference between the mean number of open-ended questions used by subjects in the experimental and control groups on the verbal behavior count posttest.

Table VII

Means, Standard Deviations and

t-Tests on Posttest Measures

Skill	Experimental			Control			df[1]	t
	Written			Written				
	n	$\bar{x}^2$	S.D.	n	$\bar{x}^2$	S.D.		
Paraphrase	16	3.8	1.4	11	0.0	–	–	–
Reflection of Feelings	17	3.4	1.6	11	0.0	–	–	–
Open-Ended Question	18	4.2	1.5	11	.09	0.5	21.8	9.8*
	Verbal			Verbal				
	n	$\bar{x}^2$	S.D.	n	$\bar{x}^2$	S.D.		
Paraphrase	16	2.1	1.7	11	0.4	0.7	23.1	3.5*
Reflection of Feelings	17	1.6	2.1	11	0.9	0.3	17.0	2.8**
Open-Ended Question	18	2.7	1.8	11	0.9	0.2	16.7	5.9*

[1]Degrees of freedom adjusted by Welch test for $\neq$ variance.

[2]Maximum possible mean wa 5.0.

* $p < .01$

** $p = .01$

T-test analysis using the Welch t-test adjusted for unequal variance was carried out (see Table 7). On the measure between the experimental paraphrase group and the control group a t score of 3.5 (p<.01) was calculated. On the measure between the experimental reflection of feeling group and the control group a t score of 2.8 (p = .01) was calculated. On the measure between the experimental open-ended question group and the control group a t score of 5.9 (p<.01) was calculated. This indicates that all three treatment programs were successful in teaching the skill and that the skill could be transferred into a live conversation.

The large standard deviations when compared to the means calculated for the paraphrase group ($\overline{X}$ = 2.1; S.D. = 1.7) and the reflection of feeling group ($\overline{X}$ = 1.6; S.D. = 2.1) indicates that in the treatment groups a few subjects were making a relatively large number of countable skill responses while many subjects were making a relatively small number or no countable skill responses. This finding shows that while a few subjects transferred the program skill very effectively to the live conversation setting, many did not. Possible reasons for this finding will be discussed further under the section on subjective reports.

Summary of the Results of the Posttest. The self-instructional videotape programs appeared to be effective in teaching the skill and allow the subjects to use them successfully both in making responses and when engaging in a live conversation. Thus, one of the major goals of this study, to develop an effective, self-instructional programs to teach the communication skills of paraphrase, reflection of feelings and asking open-ended questions was satisfied.

The number of scoreable verbal responses made during the three minute behavior count was found to be significantly higher for the treatment groups than for the control groups. While the actual number of mean responses made was relatively small (paraphrase, $\bar{X} = 2.1$, reflection of feelings $\bar{X} = 1.6$, open-ended questions, $\bar{X} = 2.7$) it appe ed that the subjects did master the skills to the extent that they could use them in a live conversation. Whether the number of skill responses would increase or decrease in a less structured, more relaxed atmosphere is not answered by this study.

Treatment Effects on the Delayed Posttest

The following null hypotheses are generated to test the treatment effects as displayed on the written delayed posttest.

1. There will be no significant difference between the mean number of paraphrases used by the subjects in the experimental and control groups on the written response delayed posttest.

2. There will be no significant difference between the mean number of reflection of feelings responses used by the subjects in the experimental and control groups on the written response delayed post-test.

3. There will be no significant difference between the mean number of ope ed questions used by the subjects in the experimental and control groups on the written response delayed posttest.

T-test analyses using the Welch t-test adjusted for unequal variance was carried out (see Table 8). On the measure between the paraphrase group and control group a significant difference was found ($t = 6.1$; $p < .01$). A significant difference was also found on the measure between the open-ended question group and the control group

Table VIII

Means, Standard Deviations and t-Tests

on Delayed Posttest Measures

Skill	Experimental			Control			df^1	t
	Written			Written				
	n	$\bar{x}^2$	S.D.	n	$\bar{x}^2$	S.D.		
Paraphrase	13	2.8	1.3	11	0.3	0.6	18.8	6.1*
Reflection of Feelings	9	3.6	1.3	11	0.0	–	–	–
Open-Ended Question	10	4.2	1.6	11	.09		9.7	7.9*
	Verbal			Verbal				
	n	$\bar{x}^2$	S.D.	n	$\bar{x}^2$	S.D.		
Paraphrase	13	2.5	2.2	11	0.1	.4	13.0	3.6*
Reflection of Feelings	9	1.7	2.2	11	0.0	–	–	–
Open-Ended Question	10	2.9	2.4	11	0.5	0.8	11.2	3.0**

[1]Degrees of freedom adjusted by Welch test for $\neq$ variance.

[2]Maximum possible mean was 5.0.

*$p < .01$

**$p = .01$

(t = 7.9; p<.01). No t-score could be computed in the comparison of

the reflection of feelings group and control group as the control

group made no scoreable responses. However, with the mean score of

3.6 for the reflection of feelings group, it seems reasonable to assume

that the treatment was effective. The maximum possible mean score on

the written response measure was 5.0.

The following null hypotheses were generated to test the treat-

ment effect displayed on the verbal behavior count delayed posttest.

1. There will be no significant difference between the mean

number of paraphrases used by subjects in the experimental and control

groups on the verbal behavior count delayed posttest.

2. There will be no significant difference between the mean

number of reflection of feelings responses used by the subjects in the

experimental and control groups on the verbal behavior count delayed

posttest.

3. There will be no significant difference between the mean

number of open-ended questions used by subjects in the experimental and

control groups on the verbal behavior count delayed posttest.

T-test analysis using the Welch t-test adjusted for unequal

variance was carried out (see Table 8). On the measure between the

experimental paraphrase group and the control group a t score of 3.6

(p<.01) was calculated. The t score calculated between the open-

ended question measure and the control group was found to be 7.9 (p<

.01). No t score could be computed in the comparison of the reflection

of feelings group and the control group as the control group made no

scoreable responses. However, with the mean score of 1.7 for the

reflection of feelings group, it seems reasonable to assume that the

treatment was effective. This indicates that the treatment programs were successful in teaching the skill of paraphrasing and asking an open-ended question and that these skills could be transferred to a live conversation.

The large standard deviations when compared to the means calculated (paraphrase $\bar{X}$ = 2.5, S.D. = 2.2; reflection of feelings $\bar{X}$ = 1.7, S.D. = 2.2; open-ended questions $\bar{X}$ = 2. S.D. = 2.4) indicates that in the treatment groups a few subjects were making a relatively large number of countable skill responses while many subjects were making a relatively small number or no countable skill responses. This finding shows that while a few subjects transferred the program skill very effectively to the live conversation setting, many did not. Possible reasons for this finding will be discussed further under the section on subjective reports.

Summary of Results of the Delayed Posttest. The self-instructional videotape programs appeared to be effective in teaching the skills so that the subjects could use them correctly, both on the written response sheet and in a verbal conversation, one week after seeing the skill program. Thus, it appears that the effects of the program held up over time.

There was no significant difference in the mean scores of the groups on the posttest measures and on the delayed posttest measures.

The number of scoreable verbal responses made during the three minute behavior count was found to be significantly higher for the treatment groups than for the control groups. While the actual number of mean responses made was relatively small (paraphrase, $\bar{X}$ = 2.5; reflection of feelings, $\bar{X}$ = 1.7; open-ended question, $\bar{X}$ = 2.9) it

appeared that the subjects did master the skills to the extent that they could use them in a live conversation one week after having been exposed to them. Whether the number of skill responses would increase or decrease in a less structured, more relaxed atmosphere is not answered by this study.

Posttest-Delayed Posttest Comparisons

The means for each of the three experimental groups and the control group changed very little from the posttest to the delayed posttest measures (see Table 7 and Table 8). Due to the very slight change in the means no statistical analysis was carried out. It appeared that the subjects who saw a self-instructional videotape skill program were able to use the skill as well after a week intermission as they were directly after viewing the program.

Summary of Ratings on All Three Program Skills

The responses of each group, both on the written measure and in the behavior count of skill useage, were scored on all subjects' responses for all three skills (paraphrase, reflection of feelings, and open-ended questions). A summary of these results are set out in Table 9 and Table 10.

Several observations are possible. Subjects who were in the open-ended question group tended not to use skills other than open-ended questions while filling in the written response forms. The only skill other than open-ended questions that they used in the live conversations were paraphrases. They used more paraphrases on both the posttest and the delayed posttest than did the control group.

Subjects who were in the paraphrase group used mainly paraphrase responses both on the written response forms and in the verbal conver-

Table IX

Number of Skill Responses of Each Group

Rated on All Three Skills (Posttest)

Group	n	Measure	Paraphrase		Reflection of Feelings		Open-Ended Question	
			n	X̄	n	X̄	n	X̄
Paraphrase	16	Written Response Sheet	61.5	3.8	0	0	0	0
Reflection of Feelings	17		12.5	.7	59.0	3.4	1.5	.09
Open-Ended Questions	18		0	0	0	0	75.5	4.2
rol	11		0	0	0	0	1.0	.09
Paraphrase	16	Verbal Behavior Counts	34.5	2.1	4.0	.25	1.5	.09
Reflection of Feelings	11		26.5	2.5	28.0	2.6	3.5	.3
Open-Ended Questions	18		13.0	.7	0.5	.03	47.0	2.7
Control	11		4.5	.4	1.0	.1	1.0	.1

Table X

Number of Skill Responses of Each Group Rated

On All Three Skills (Delayed Posttest)

Group	n	Measure	Paraphrase		Reflection of Feelings		Open-Ended Question	
			n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Paraphrase	13	Written Response Sheet	35.5	2.8	6.5	.5	0	0
Reflection of Feelings	9		3.0	.33	33.5	3.6	5.5	.6
Open-Ended Questions	10		0	0	0	0	42.0	4.2
Control	11			.3	0	0	1.0	.09
Paraphrase	13	Verbal Behavior Counts	33.0	2.5	4.5	.34	.5	.04
Reflection of Feelings	9		17.0	1.9	16.0	1.7	2.0	.22
Open-Ended Questions	10		7.0	.7	0	0	29.5	2.9
Control	11		2.0	.18	0	0	5.5	.5

sations. Some subjects, however, did use reflection of feeling responses.

The major finding shown by scoring each group on all three skills was seen in the reflection of feelings group. This group used almost as many or more paraphrase responses as reflection of feelings responses in the verbal conversation. Also, on the written response form this group used a noteworthy number of paraphrases. The reflection of feeling group also used some open-ended questions. This use of multiple skills has at least two possible explanations. Firstly, the nature of the scoring criteria used was such that many responses which did not have a direct reference to feelings and, therefore, could not be scored as a reflection of feeling response, had enough content in them to be scored as a paraphrase. Secondly, some of the modeled responses on the reflection of feeling videotape were very close to being paraphrases. Thus, if these responses were used as the model by the subject, it is likely that a paraphrase response would result. Other unexplained factors could also be responsible for the wider use of other skills by the reflection of feelings group than by the other two experimental groups.

The Inquiry Questionnaire

In the preliminary research it was found that many more subjects used the program skill on the written response form than in the live conversation. It was not possible to determine if factors other than the lack of transfer of the skill from the understanding stage to useable stage were involved. Also, it seemed desirable to obtain feedback from the subjects on the program that they saw. With these two objectives in mind a number of inquiry questions were set out (see

Appendix F). These questions were asked individually to two subjects from each of the treatment groups immediately after the posttest interview. All delayed posttest subjects filled in the questionnaire upon completion of the delayed posttest conversation with a coached student. No differences were found between the type of responses made in the individual interviews and those written by the subjects themselves. Therefore, all of the information gathered will be considered together.

A total of forty-one inquiry forms were filled in. Thirty-one subjects said that they used the program skill in their conversation with the coached student, while seven said they did not and three were uncertain whether they had or not.

Typical student comments to the question "How did you feel about using it?" were as follows: "uncomfortable", "awkward", "artificial", "self-conscious", "relaxed". This suggests that one of the reasons subjects were not using the skills as well in the live conversations as they did in making written responses was due in part to the strain they felt when being placed in the position of having to engage in a forced conversation. Perhaps in a more relaxed situation they would have felt freer to use the program skill.

Another question asked was, "How did you feel about the program you saw?". Representative subject statements for each communication skill program follow.

Paraphrase

"It was clear and informative."

"Well produced as a learning tool."

"I felt that it was useful. Paraphrasing takes time to develop."

Reflection of Feelings

"The program did raise my communication awareness."

"At first it seemed very rehearsed, quite unreal and overdone. However, I now see how one can make this skill effective when used in one's own fashion."

"It's a good idea."

Open-Ended Questions

"It was a bit long and sʲ   ⁻tic."

"I felt I learned someth   classroom teacher."

"Good – too long – point wᵃ ⁻ ꞏ across well."

From the above comments it appears that the programs themselves were well received and perceived by many of the subjects as being useful.

Information was gained through the subjects' responses to the last question ("Any other comments") which would be useful to consider in either revising the present self-instructional video-tapes or when developing further skill tapes using the same basic program model. Some of these comments will now be listed.

"I would have appreciated clearer directions at the beginning as to how to use the ch   rk sheet."

"See it as usef   ꞏ people having trouble communicating, particularly beginning teachers."

It appeared that a major reason for subjects not using the skill more in the conversation with the coached student   due to the "artificial" and "forced" nature of the conversation.

CHAPTER V

SUMMARY AND CONCLUSIONS

It is the purpose of this final chapter to present a brief overview of the study conducted as well as to postulate implications of the results and to propose areas of future related research.

Overview and Summary of Results

The original purposes of the study involved the following activities: (a) to determine if an audiotape or videotape self-instructional program using skill description and modeling procedures could teach the skill of paraphrasing, (b) to see if there was a difference in the effectiveness with which the audiotape program and videotape program taught the skill of paraphrasing, (c) to develop three other self-instructional videotape programs to teach the communication skills of paraphrasing, reflection of feelings, and asking open-ended questions, (d) to determine if the three videotape programs taught their respective skills at both the recall and transfer level of usage, and (e) to determine if the acquired skill was maintained over a period of time.

Considering the first concern just outlined, it was found in the preliminary research that both the self-instructional audiotape program and the self-instructional videotape program successfully taught the skill of paraphrasing. Second, no significant difference was found between the audiotape group and the videotape group on either the written response measure or the live conversation measure. As a con-

sequence of this preliminary research, the thesis research developed

three self-instructional communication skills programs using videotape

as the presenting media and using the same basic program format as was

used in the initial research.

Two measures were used to determine if the three self-instruc-

tional videotape programs taught their respective skills at the recall

level and at the transfer level of usage. It was found that the skills

of paraphrase, reflection of feelings and open-ended questions were

used significantly more often by the experimental group who worked

through the skill program than by the control group. This was true for

all three skill groups in the live conversation where the number of times

the skill was used was counted. A significant difference was also found

between the open-ended question group and the control group on the

number of written responses made on a five-item list of student-like

statements. No statistical analyses could be made between the written

response measurement of the paraphrase group and the control group and

between the written response measurement of the reflection of feelings

group and the control group as the control group made no scoreable

response in either case. However, with mean scores of 3.8 for the

paraphrase group and 3.4 for the reflection of feeling group it seems

likely that subjects who viewed the programs learned how to write a

response illustrating the skill. The maximum mean score on the written

measure was 5.0.

The above results indicate that the skill programs did teach

the skills to the extent that subjects viewing the program tapes could

use the skill in a written response and could transfer the skill to the

structured situation of a conversation with a coached student.

The final purpose of the study was to determine if these skills would be maintained over time. A week after the immediate posttest a delayed posttest was carried out. This consisted of both a written measure and a verbal measure of the skill being used in a conversation. The experimental paraphrase group and open-ended question group used their respective skills significantly more often than the control group on the written response form. No statistical analysis could be done to compare the reflection of feeling group and the control group as the control group made no scoreable responses. However, as the reflection of feeling group had a mean score of 3.6 on a five-item questionnaire, it appears likely that they, too, had retained the ability to use the skill in a written response.

On the measure to see if the experimental subjects had retained the ability to use their respective skills in a conversation with a coached student, it was found that both the paraphrase group and open-ended question group used their skills significantly more often than the control group. Again, the reflection of feeling group could not be looked at statistically as the control group made no scoreable responses.

The above findings suggest that the skills were maintained over time. No statistical comparisons were made between the posttest scores and the delayed posttest scores as the mean scores for each set of measures differed very little. This suggests that the skill usage retained one week after the programs were completed was at the same level as it was immediately after the programs were completed.

In both the preliminary study and the thesis research, some experimental subjects used the skill they had been exposed to frequently,

during their conversation with the coached student while other

experimental subjects used their skill infrequently or not at all.

A subjective inquiry after the conversation with the coached student

revealed that many experimental students felt uncomfortable and tense

while in the conversation setting. It is possible that the strain

experienced during this taped conversation inhibited some of the

experimental subjects and, thus, made them reluctant to try out the

new skill they had just learned.

Subjective ments on the programs themselves were found to be

generally favorable, with many subjects finding the skill they learned

to be useful.

Implications of the Study

A model developed by Ivey (1971) showed that specific communi-

cation skills could be effectively taught by a method termed Micro-

counseling. This method required approximately four hours of student

and instructor time for each skill taught plus expensive videotape

camera and playback equipment. Students who learned specific communi-

cation skills were found to be able to transfer them to an interview

with a coached student (Higgins, Ivey & Uhlemann, 1970). This thesis

research has shown that three component skills of communication

(paraphrasing, reflection of feelings and open-ended questions) can be

taught in a period of 25 minutes by a self-instructional videotape

program. Students viewing these programs can also transfer the skill

to an interview with a coached student. This indicates that it is

possible to acquire the above skills in situations where a person does

not have access to a communication skills workshop. This factor seems

important considering the large numbers of teachers ho live and work

in areas or situations that do not permit them the time to fit into an
organized workshop. With a self-instructional program, the teacher can
fit use of the program to their own time schedule.

As this study was done using videotapes as the medi   program
presentation the finding in the preliminary research that there was no
difference in the effe   /eness of a videotape presentation or an audio-
tape presentation in teaching the skill of paraphrasing. Since the
three thesis programs were developed using the same basic format as the
one used in the preliminary research, it seems likely that the thesis
programs could have been as effectively taught using audiotapes as
using videotapes. If this proved to be true, then the only equipment
needed to use the programs would be an audio tape recorder. This would
greatly increase the useability of the self-instructional communications
skill programs.

Suggestions for Further Research

The thesis research looked at the transfer of the progra   ills
to a conversation with a coached student. It did not look at whether
or not the skill would transfer into the subject's everyday conver-
sations. Future research on the transfer of the program skills,
specifically the transfer of the skills into   acher-student interactions
seems to be indicated.

The program skills were taught as separate units with no attempt
made to see if the program skills when taught as separate units would
integrate with each other and become useable parts of an overall method
of communication. Future research could let subjects see all three
program tapes and then evaluate the subject's overall effectiveness in
communication. Further to integration, these specific programs may have

a more useful effect if they became part of an overall program which
included other means of instruction including an introductory lecture
and role-play practice.

The retention of the skills was checked out after only one week's
intermission from the time the subjects saw the programs. It may be
desirable in future research to check skill retention after a longer
intermission and to include a follow-up to the main program that would
reinforce the knowledge and useage of the skill.

As these self-instructional videotapes were successful in
teaching specific communication skills it may be useful to develop
further skills using the same model. Also, testing out the programs'
effectiveness when presented on audiotape would give support to the
findings of the preliminary research.

Another factor influencing how successful a program is in
teaching a specific skill involves the attitudinal set of the person
viewing the program. It is likely that the results of this thesis
research would have been even more successful if the subjects involved
in the study were there because of a desire to learn the skill rather
than because they were interested in being involved in a research
project. Future research could compare the difference in skill attain-
ment by people who sought to learn the skills and by people who were
learning the skill as a secondary motivation.

Though this research has provided a partial answer to the
question of how to teach three of the component skills in communication,
no attempt was made to examine the effects the --- of these skills
would have on classroom behavior. Research is needed to uncover the
possible effects of the use of these skills in the classroom.

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APPENDICES

APPENDIX A

COMMENTARY ON THE PARAPHRASE VIDEO TAPE

EFFECTIVE COMMUNICATION SKILLS

SKILL ONE: PARAPHRASING

1. Single person facing camera (commentator)

Paraphrasing is a skill to help you understand what someone has said.
It lets you check to make sure that you understand another person's
ideas, information, or suggestions as he intended them.

Paraphrasing, then, is stating in your own way what a person's
remark conveys to you. It is more than merely trying to say the
same ing in different words. A paraphrase reflects what a
persc statement means to you. Thus, if you have misunderstood
the person becomes aware of the discrepancy between his intended
meaning and your understanding.

Effective paraphrasing is one way of showing your interest in
another person. When you take care to understand what a person is
saying it lets th person know that you are interested in him. His
ideas, information, or suggestions are worthwhile understanding
correctly.

You will now hear a teacher talking with a student and using para-
phrasing to show interest in what the student is saying and to
clarify what has been said so that the teacher knows if she has
understood the student and the student knows if the teacher has
understood him.

2. 3 minute interaction between a teacher and student   SPLIT SCREEN

3. single person facing camera (commentator)

You have just heard how paraphrasing can be used in an everyday
conversation between a student and a teacher.

Students will now make short statements. A teacher will paraphrase
what the student has said. As you listen to the student think of
how you would paraphrase what has been said.

Notice how the teacher listens carefully to what the student is
saying and checks out with the student whether or not the meaning
they understood is what the student has intended to convey.

4. 10 single interactions between a teacher and child SPLIT SCREEN
   5 SECONDS BLUE AFTER EACH SEGMENT

5. Single person facing camera (commentator)

   You now know what a paraphrase is and how it is used. You will
   now have a chance to practise paraphrasing.

   A student will make a statement. You are to paraphrase what the
   student has said. That is, put in your own words the meaning you
   derived from the student's statement. After you have made your
   statement a teacher will paraphrase what the student said.

   Think about your response. If it was a paraphrase give yourself a
   check mark. See how many check marks you have by the end of this
   section.

6. 12 student/teacher interactions
   student makes statement
   wait 20 seconds with camera on student
   teacher responds
   5 SECONDS BLUE BETWEEN EACH SEGMENT

7. Single person facing camera (commentator)

   How many check marks did you get? Great. You will now have a
   chance to practise paraphrasing on your own. You will hear a
   student make a statement. Paraphrase that statement.

   If you feel your paraphrase was successful give yourself a check
   mark. No teacher response will be heard so you will judge your own
   response.

8. 10 single student statements
   student holds on screen for 20 seconds after segment
   5 SECONDS BLUE BETWEEN EACH SEGMENT

9. Single person facing camera (commentator)

   How many paraphrases did you make? Great. You now have an effective
   method to make sure that you understood the meaning another person
   wished to convey.

APPENDIX B

COMMENTARY ON THE REFLECTION OF FEELINGS VIDEOTAPE

EFFECTIVE COMMUNICATION SKILLS

SKILL TWO: REFLECTION OF FEELINGS

1. Single person facing camera (commentator)

Many statement that people make to us have a feeling component. These feelings in be directly stated or implied. By listening carefully to what a person is saying, we can acknowledge these feelings by reflecting back to the person how we perceive they are feeling. That is we attend to the feelings being expressed rather than attending solely to the content.

This skill of showing another person that you understand their feelings and internal emotions is called reflection of feelings.

Reflection of feelings is a skill which is appropriate to use at any time regardless of whether the feeling expressed is positive, negative or ambivalent. It helps you, the listener, keep in tune with the person who is speaking. Your goal in reflecting feelings is to tune in on emotions.

Reflection of feelings is one way of showing a person that you are interested in him. When you take care to understand how a person is feeling, it lets that person know you are really listening to him.

You will now hear a teacher talking with a student and reflecting feelings. The emphasis is on the emotional portion of the statement rather than on the content.

2. 3 minute interaction between a teacher and student   SPLIT SCREEN

3. Single person facing camera (commentator)

You have just heard how reflection of feelings can be used in an everyday conversation between a student and a teacher.

Students will now make short statements. A teacher will reflect the feeling expressed by the student. As you listen to the student think of how you would respond to the feeling part of what has been said.

Notice how the teacher listens carefully to what the student is saying. She lets the student know that she understands the feelings underlying what they are saying.   —

4. 10 single interactions between a teacher and child   SPLIT SCREEN
   5 SECONDS BLUE AFTER EACH SEGMENT

5. Single person facing camera (commentator)

   Now you know what a reflection of feelings is and how it is used.
   You will now have a chance to practise reflecting the feelings
   underlying what a student is saying.

   A student will make a statement. You are to reflect the feeling
   1oment of what the student has said. That is, put into your own
   u   the feelings you associate with the student's statement.

   Aft   you have made your response a teacher will reflect the feelings
    the student's statement. Think about your response. If it did
   reflect the student's feelings, give yourself a check mark. See how
   many check mark you have by the end of this section.

6. 12 student/teacher interactions
   student makes statement
   wait 20 seconds with camera on student
   teacher responds
   5 SECONDS BLUE BETWEEN EACH SEGMENT

7. Single person facing camera (commentator)

   How many check marks did you get? Great. You will now have a
   chance to practise reflecting feelings on your own.

   A student will make a statement. Reflect the feelings that you
   hear. If you feel that your reflection was successful, give your-
   self a heck mark. No teacher response will be heard so you will
   judge your own responses.

8. 10 single student statements
   student holds on screen for 20 seconds after statement
   5 SECONDS BLUE BETWEEN EACH SEGMENT

9. Single person facing c   ommentator)

   How many check marks   ? Good. You now know how to show
   a person that you are   he feelings underlying what they
   are saying. This lets   on know that you have truly understood
   their feelings. Reflecting feelings is a helpful skill to use in
   all types of conversations.

APPENE

COMMENTARY ON THE OPEN-ENDED QUESTION VIDEOTAPE

EFFECTIVE COMMUNICATION SKILLS

SKILL THREE: OPEN-ENDED QUESTIONS

1. Single person facing camera (commentator)

One effective way to help people express what they are thinking and
feeling is to give them an open invitation to talk. That is, through
the use of open-ended questions you can encourage a person to keep
talking without guiding the direction of the discussion.

An open-ended question, then, is a question which shows the person
that you are interested in what they are saying. It does not zero
in on one particular part of their statement but rather acts as a
general encourager for the person to keep talking.

> Could you tell me more about that?

> How do you feel about that?

are two examples of open-ended questions.

These questions are designe   lp a person clarify his or her
own ideas. They are not int   to provide information for the
listener. Open-ended questions are useful in a number of different
situations.

> They help to begin a conversation.

> They help to get a person to elaborate on a point.

> They help to elicit examples of specific behavior so that you
> are better able to understand what the person is describing.

> They help focus the person's attention on his or her feelings.

You will now hear a teacher talking with a student and using open-
ended questions to encourage the student to keep talking.

2. 3 minute interaction between a teacher and student   SPLIT SCREEN

3. Single person facing camera (commentator)

You have just heard how open-ended questions can be used in an
everyday conversation between a stu   nd a teacher.

Students will now make short statemenus. A teacher will encourage
the student to continue talking by using an open-ended question.

As you listen to the student, think of how you would phrase an open-ended question in response to the student's statement.

Notice how the teacher listens carefully to what the student is saying. She shows her interest in the conversation by asking an open-ended question.

4. 10 single interactions between a teacher and child SPLIT SCREEN
   5 SECONDS BLUE AFTER EACH SEGMENT

5. Single person facing camera (commentator)

   Now you know what an open-ended question is and how it is used. You will now have a chance to pract   sing open-ended questions.

   A student will make a statement. You are to ask an open-ended question in response to this statement. That is, ask a question which will encourage the student to keep talking. This question should not ask for specific details, but, rather, should be an open invitation to continue talking in any direction that they choose.

   After you have made your response, a teacher will ask an open-ended question in response to the student's statement. Think about your response. If it was an open-ended question give yourself a check mark. See how many check marks you have by the end of this section.

6. 12 student/teacher interactions
   student makes statement
   wait 20 seconds with camera on student
   teacher responds
   5 SECONDS BLUE BETWEEN EACH SEGMENT

7. Single person facing camera (commentator)

   How many check marks did you get? Great. You will now have a chance to practise asking open-ended questions on your own.

   A student will make a statement. Ask an open-ended question in response to that statement. If you feel that your question was open, give yourself a check mark. No teacher response will be heard so you will judge your own response.

8. 10 single student statements
   student holds on screen for 20 seconds after each statement
   5 SECONDS BLUE BETWEEN EACH SEGMENT

9. Single person facing camera (commentator)

   How many check marks did you get? Good. You now know an effective way of encouraging a person to express what they are thinking and feeling.

APPENDIX D

CHECK MARK SHEET TO ACCOMPANY EACH VIDEOTAPE PROGRAM

Name _____   Number _____

Check Mark Sheet

PART ONE   (Comparison with teacher response).

> Give yourself a check mark each time you feel that your
> response shows the program skill.

PART TWO   (Self-evaluation of response)

> Give yourself a check mark each time you feel that your
> response shows the program skill.

APPENDIX E

WRITTEN RESPONSE QUESTIONNAIRE

Name _____   Number _____

Write a response to the following students' statements.

1. I'm terribly concerned about my trouble in math. I'm not sure what
   to do. The teacher confuses me and I feel lost.

   _____

   _____

   _____

2. My parents are on me all the time. I saved up the money to buy a
   car, but they won't even let me get a license.

   _____

   _____

   _____

3. I made a new friend this winter. We both like to skate and play
   basketball. I sure hope he doesn't move away.

   _____

   _____

   _____

4. I hate winter. I always have to shovel the snow off the driveway.
   Boy, do I get cold.

   _____

   _____

   _____

5. I think that this is a very poor textbook. I can't understand it.

   _____

   _____

   _____

APPENDIX F

FOLLOW-UP INQUIRY SHEET

Name _____   Number _____

1. Did you see a skill program? _____

2. If so, which program? _____

3. Did you use this skill during your conversation with the research
   student?

   _____

4. How did you feel about using it?

   _____

   _____

   _____

5. If you did not use the skill, why not?

   _____

   _____

   _____

6. If you had been told to use the skill when talking with the research
   student would you have used the skill more than you did?

   _____

7. How did you feel about the program that you saw?

   _____

   _____

   _____

8. Any other comments

   _____

   _____

   _____

APPENDIX G

COACHED STUDENT IMPRESSION SHEET

STUDENT IMPRESSION SHEET

Subject Number _____

1. Did you enjoy talking with this person?   _____

2. Did you feel that you would have liked more
   time to continue the conversation?   _____

3. Did you feel that the subject was interested
   in what you were saying?   _____

4. Did their conversation seem artificial or
   unnatural?   _____