An In-service Education Evaluation of the Communication Skills Workshop Self-Actualizing Education

Gerald Eldon Manwill
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AN IN-SERVICE EDUCATION EVALUATION OF THE
COMMUNICATION SKILLS WORKSHOP

SELF-ACTUALIZING EDUCATION

by

Gerald Eldon Manwill

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah
1975
DEDICATION

To my mother, Mona,
and my father, Bert
ACKNOWLEDGMENTS

I wish to express my appreciation to the members of my committee, Dr. David Stone, Dr. Elwin Nielsen, Dr. Ronald Peterson, Dr. Marvin Fifield, and especially to my chairman, Dr. Michael Bertoch for his support and guidance throughout all phases of this study. A special thanks is given to Dr. Marvin Fifield for his sincere interest in helping to improve this program evaluation.

I wish to thank Siri Manwill and Scott Orme for their help in rating tapes of classroom interaction. I also wish to thank Lucie Harris for her diligent secretarial work.

I express my sincere appreciation to those school officials, from the district office down to the classroom teachers, who were willing to give their time, efforts, and most of all themselves in order that this study might be possible.

Finally, to my wife, Siri, I express my loving appreciation for both her patience and support over the past two years. And most of all I thank her for the confidence that she instilled in me, without which this study would have been impossible.

Gerald E. Manwill
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ABSTRACT

An In-service Education Evaluation of the Communication Skills Workshop

Self-Actualizing Education

by

Gerald Eldon Manwill, Doctor of Philosophy

Utah State University, 1975

Major Professor: Dr. Michael R. Bertoch
Department: Psychology

This study was concerned with the evaluation of a communication skills workshop for elementary school teachers titled, Self-Actualizing Education sponsored by the Psychology Department at Utah State University and funded under a rural development grant from the Kellogg Foundation.

The purpose of the study was to evaluate objectives related to the interaction of students and teachers with regard to: (1) student attitudes towards teachers; (2) student misbehavior; and (3) student-teacher verbal communication. Testing was done on a control-experimental, pre-post basis. The treatment consisted of a nine week communication skills workshop, held two to three hours once per week. Twelve teachers and 531 students, grades one through six, participated in the study.
Objectives of the Study

The following objectives were formulated as an evaluational guide for the study:

1. To determine whether or not teacher talk incorporates more Flanders Interaction Analysis System category 1, 2, and 3 responses and less category 6 and 7 responses, after teachers have completed the in-service communication skills workshop titled, Self-Actualizing Education;

2. To determine whether or not student talk shifts from responding to initiating, after teacher participation in the communication workshop;

3. To determine whether or not student misbehavior in the classroom decreases after the communication skills workshop;

4. To determine whether or not student attitudes become more favorable towards their teachers after the workshop.

In order to evaluate these objectives three data gathering instruments were employed: (1) the Flanders Interaction Analysis System; (2) a student misbehavior checklist; and (3) two student attitude surveys.

Findings

From analysis of the data, the following conclusions were made regarding this study: (1) teacher talk did not incorporate more Flanders Interaction Analysis System category 1, 2, and 3 responses and less
category 6 and 7 responses as a result of teachers having participated in the communication skills workshop; (2) student talk did not shift from responding to initiating after the workshop; (3) a significant decrease (p < .05) in student misbehavior after treatment did occur; and (4) student attitudes toward their teachers did not change as a result of the workshop.
CHAPTER I
INTRODUCTION

One problem that continually plagues the field of mental health is that of affording proper mental health services to the rural areas of this country. People in these rural areas often have to travel several hundred miles to see a professional person, such as a psychologist, and then they must compete with the local population for his limited services. Nowhere is this problem seen more clearly than in the rural school system where symptoms of infesting mental health problems manifest themselves in academic failure and discipline problems (Hummel and Bonham, 1967).

A partial solution to this problem would be to train teachers to more effectively communicate with their students. This would greatly aid in preventing many school related mental health problems.

The profession of teaching has for a long time recognized the need for re-evaluating and improving traditional methods of preparing teachers for careers in the public schools. The majority of programs designed to prepare elementary school teachers for such careers usually devote some portion of the training program to professional laboratory experiences. These experiences often encompass activities such as observing actual classroom situations, simulation activities,
demonstration lessons, and student teaching. Due to the great emphasis placed on these laboratory experiences many volumes have been devoted to this particular aspect of teacher education (Association for Student Teaching, 1965a; 1965b; 1963; 1959; 1957; and Flowers, 1948). The intent of these in-service experiences is basically that of changing teacher behaviors. As a result of in-service experiences it is hoped that teachers will be doing things they did not do before in ways that represent some adaptation of behavior. This behavior may range from learning better methods of teaching reading, writing, and arithmetic to learning better methods of communicating with students.

One area of in-service education that has received an increasing amount of attention recently is that of teacher-student relationships. One of the paramount deterrents to the child's social, emotional, and personal growth has largely been the inability of teachers to communicate effectively with children in the classroom. Flanders (1970) believes that although teachers behaviorally influence children and the learning situation, in reality they possess little knowledge as to those methods of influence. Gordon states that teachers and other adults lack the basic attitudes and skills to be effective training agents. They have not been adequately trained to be effective therapeutic agents in an interpersonal relationship with a child or adolescent. (Gordon, 1970, p. 298)

Since teachers interact with youth more than anyone else except parents, they could become the logical media through which preventive mental health services could be provided to rural areas. With proper
training, teachers could learn more effective communication skills and hence lessen the exacerbation of problems children may be bringing from home.

For the past several years an increasing number of classes and workshops have been designed with the goal of helping teachers develop better methods of motivating, disciplining and relating to students. As a result of these programs, improved teacher-learner communication patterns have developed and have proven useful in solving problems that lead to emotional disturbance in family members (Alexander and Parson, 1973; Peterson, 1971; Garcia, 1971; Stearn, 1971; Shapiro, 1954; and Hereford, 1963).

Through a Kellogg Foundation Grant to the Psychology Department at Utah State University, a program has been developed to facilitate teachers acquiring basic skills which will enable them to communicate more effectively with their students. The developed program titled **Self-Actualizing Education** is an attempt to synthesize into active form the most recent and most effective materials available in regards to teacher-student relationships. The authors of the above mentioned program have conducted numerous workshops and classes designed to help teachers formulate improved methods of disciplining, motivating, and relating to students. As a result of their search for textual and illustrative material the authors have been unable to find a single source that deals with all of the aspects of the relationship skills that they find teachers needing. As a result of this, the
Self-Actualizing Education program was developed to cover several approaches to teacher-student relations rather than adhering to any single approach. The program was made functional by means of an in-service teacher training workshop of approximately twenty hours of instruction over a nine week period (see Appendix A).

Need for Evaluation

The purpose of the present study is primarily that of evaluation. It has been noted by Borg (1973) that one of the major weaknesses of most teacher education programs is a lack of any evaluation procedures. Although promising innovations come about as a result of conventional programs, they seldom make a permanent impact in the area of teacher education. This is largely due to the fact that they almost entirely rely upon subjective impressions in order to determine their effectiveness. Stake (1967) points out that the most common approach employed in evaluational studies is an informal one. Without the support of objective evidence, innovations in the field of teacher education often become nothing more than a passing fad that is replaced by the newest fad to come along. Also, it would seem that school systems would be much more receptive to innovative proposals for in-service programs if the programs have been objectively evaluated and if the data from the evaluation is available for their inspection. In the past, teacher education programs have had a very poor record in regards to providing objective evidence as to their effectiveness (Borg, 1973).
In summary, a rigorous objective evaluation tells one something that has almost never been obtained in regards to conventional teacher education programs. One can thus become aware of those aspects of the program that have succeeded and those aspects that have failed. If the above strategy were employed in in-service education each workshop and minicourse developed would be completely evaluated and evidence would be obtained as to its effectiveness in meeting its specific objectives.

In conclusion, the purpose of the present study is that of critically and objectively evaluating the in-service teacher education program Self-Actualizing Education.

**Interaction Analysis**

In a great majority of the research dealing with teaching effectiveness no assessment is made of classroom interaction and as a result the investigator has a most difficult time explaining his results (Flanders, 1970; Stake, 1967; Suchman, 1967; and Borg, 1973). Interaction analysis is a systematized method for exploring the chain of events in the classroom in such a way that every event is taken into consideration. Thus, interaction analysis provides a great deal of information in regards to the verbal communication that occurred in the classroom. In this respect interaction analysis is an invaluable tool to the researcher conducting research in the classroom.
In order to objectively and critically evaluate the **Self-Actualizing Education** program of in-service education the author found it necessary to observe the classroom performance of the teachers included in this study. To accomplish this goal interaction analysis was employed in the form of the Flanders Interaction Analysis System.

**Flanders Interaction Analysis System**

After an extensive search of observational systems in *Mirrors for Behavior* 1970, the author concluded that the Flanders Interaction Analysis System, hereafter referred to as FIAS, would best serve this particular study. The FIAS is primarily concerned with the analysis of the verbal interaction patterns of students and teachers. The FIAS provides a means of coding spontaneous verbal communication in the actual classroom. The resulting array of coded data is arranged into a useful display and can readily be analyzed in order to study the various patterns of teacher-student communication. The whole system is primarily a process of encoding and decoding wherein certain categories are established for classifying statements, a certain code symbol is given to each category, and finally, trained observers record the data by writing down code symbols. The decoding process is simply the reverse of the encoding process.

Table 1 lists the ten categories of the FIAS. Flanders (1960) developed the ten category system between 1955 and 1960 at the University of Minnesota. Of the ten categories seven are used while
### Table 1

Categories for Flanders Interaction Analysis System

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<tr>
<th>TEACHER TALK</th>
<th>INDIRECT INFLUENCE</th>
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<tr>
<td>1. <strong>Accepts Feeling:</strong> accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included.</td>
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<tr>
<td>2. <strong>Praises or Encourages:</strong> praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying, &quot;um hm?&quot; or &quot;go on&quot; are included.</td>
<td></td>
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<tr>
<td>3. <strong>Accepts or Uses Ideas of Students:</strong> clarifying, building, or developing ideas suggested by a student. As a teacher brings more of his own ideas into play, shift to category five.</td>
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<tr>
<td>4. <strong>Asks Questions:</strong> asking a question about content or procedure with the intent that a student answer.</td>
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<th>DIRECT INFLUENCE</th>
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<td>5. <strong>Lectures:</strong> giving facts or opinions about content or procedure; expressing his own ideas, asking rhetorical questions.</td>
</tr>
<tr>
<td>6. <strong>Giving Directions:</strong> directions, commands, or orders to which a student is expected to comply.</td>
</tr>
<tr>
<td>7. <strong>Criticizing or Justifying Authority:</strong> statements intended to change student behavior from nonacceptable to acceptable patterns; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.</td>
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<th>STUDENT TALK</th>
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<tr>
<td>8. <strong>Student Talk-Response:</strong> a student makes a predictable response to teacher. Teacher initiates the contact or solicits student statement and sets limits to what the student says.</td>
</tr>
<tr>
<td>9. <strong>Student Talk-Initiation:</strong> talk by students which they initiate. Unpredictable statements in response to teacher. Shift from 8 to 9 as student introduces own ideas.</td>
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| 10. **Silence or Confusion:** pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer. |
the teacher is doing the talking, two are used while any student is doing
the talking, and the use of the last category indicates confusion or
silence. According to Flanders (1970), the major feature of his inter-
action system is embodied in the analysis of initiative and response
that is characteristic of the interaction that takes place between two or
more individuals. Initiation refers to making the first move, to lead,
to introduce, or to express oneself. Likewise, responding refers to
action taken after an initiation, such as reacting to ideas already
expressed, countering, or amplifying ideas.

Objectives

With the background provided in the foregoing review of the FIAS
and interaction analysis in general, the following objectives were
formulated as an evaluational guide for the present study:

1. To determine whether or not teacher talk incorporates more
FIAS category 1, 2, and 3 responses and less category 6 and 7
responses after teachers have completed the in-service communication
skills workshop titled Self-Actualizing Education;

2. To determine whether or not student talk shifts from
responding to initiating after the communication skills workshop;

3. To determine whether or not student misbehavior in the
classroom decreases as a result of teacher participation in the
communication skills workshop;

4. To determine whether or not student attitudes become more
favorable towards their teachers as a result of teacher participation in the communication skills workshop.

In regards to objective 1, one goal of the evaluational effort was to determine whether or not teachers incorporated significantly more indirect influence in class after participation in the workshop than they did before the workshop. This objective is directly related to the goals of the Self-Actualizing Education program. According to Flanders (1970), indirect teacher influence in teacher-student communication involves: (1) accepting and clarifying the feeling tone of the student in a nonthreatening manner; (2) listening to students in a manner that encourages and reinforces their actions and behavior; and (3) developing ideas that have been suggested by students. These three modes of indirect teacher influence are an integral part of effective student-teacher communication (Flanders, 1970 and Barcus, Bertoch, and Nielsen, 1974).

According to Flanders (1970), direct teacher influence in teacher-student communication involves: (1) giving orders or commands to which a student is expected to comply and (2) criticizing or justifying authority through such means as preaching, lecturing, blaming, etc. Barcus, Bertoch, and Nielsen (1974) in their Self-Actualizing Education program refer to the aforementioned modes of interaction as communication killers. In regards to objective 1, the aim of the evaluational effort was also to determine whether or not teachers incorporated less direct influence, use of FIAS categories 6 and 7, which involves less
use of the communication killers noted by Barcus, Bertoch, and Nielsen (1974).

In regards to objective 2, the goal was to determine whether or not student talk would statistically become more initiation oriented and less response oriented as a result of teacher participation in the Self-Actualizing Education workshop experience. Barcus, Bertoch, and Nielsen (1974), in teaching teachers to become good listeners, aim at facilitating student initiated talk and student self-expression by training teachers to communicate acceptance to their students. The FIAS categories 8 and 9 objectively measure the amount of student talk made in response to the teacher as well as the amount of student talk initiated by the student himself in expressing his own ideas in a setting of acceptance.

In regards to objective 3, the goal was to determine whether or not student misbehavior in the classroom would decrease as a result of teachers having completed the Self-Actualizing Education workshop. Barcus, Bertoch, and Nielsen (1974), throughout their workshop program, focus on the goal of decreasing student misbehavior in the classroom.

In regards to objective 4, the goal was to determine whether or not student attitudes would become more favorable toward their teachers after their teachers had experienced the communication skills workshop. As a teacher learns to relate to students on an accepting and open level, student attitudes towards that teacher improve and become more
favored (Flanders, 1970). The workshop *Self-Actualizing Education* focuses on and attempts to train teachers to be accepting, to show consideration for pupil ideas, to be effective communicators with students, and to be nonjudgmental listeners. All of these training objectives are measured in part via an analysis of student attitudes towards their teachers incorporated in the present evaluation.

**Biphasic Approach to Evaluation**

The present evaluation effort is only one phase of a two phase evaluational program. The phase that the present research embodies is basically a normative approach to educational evaluation. The phase that is being carried out by another author is basically a criterion-referenced approach to program evaluation. It is felt that as a result of employing two diverse evaluational strategies a stronger overall program evaluation is possible. It is important to note that the two evaluators are working separately and independently of each other in order that research findings do not become contaminated or otherwise biased in the evaluational process.

**Definition of Terms**

To aid the reader in analyzing the elements and composition of the study the following definition of terms is provided to clarify the intent of the author throughout the study:

1. **Objectivity**—the employment of a systematic procedure for
classifying and describing qualitatively different acts whereby the conscious intent of a teacher's verbal act is abstracted from the verbal act itself. In this study objectivity refers mainly to the interpretation and use of the Flanders Interaction Analysis Category System.

2. Flanders Interaction Analysis System (FIAS)---refers to the systematized procedure for quantifying teachers' and pupils' classroom verbal communications in order to assess teacher verbal influence patterns.

3. In-service education---a goal directed activity concerned with changes in individuals and organizational systems and achieved through changes in people, rather than in rules, structures, functions, or physical environment; and accomplished through training, rather than replacement or reassignment.

4. Self-Actualizing Education---the title of the in-service education minicourse developed at Utah State University and evaluated in the present study.

5. Student misbehavior---as used in this study refers to the following behaviors emitted by students in the classroom: 0 = no problem behavior being emitted; S = out of seat; H = hitting other students; Y = yelling or making disruptive noise; and T = throwing objects.

6. Student Attitude Surveys---attitude surveys designed by the author to measure teacher attractiveness on the basis of students answering yes or no to various declarative statements about their
respective teachers.

7. Interrater reliability--the extent to which two or more observers agree in their assignment of a particular category code number to a particular sequence of classroom interaction as measured by the FIAS.

8. Interaction matrix--a ten row by ten column table which facilitates the recording of a sequence of events in the classroom and thus provides the observer with a convenient device for analyzing the summarized teacher-pupil interaction data.

9. Interaction pattern--a teacher behavior followed by a student behavior and then by a teacher behavior.

10. Revised, indirect/direct teacher influence ratio--the mean ratios of both pre-treatment and post-treatment values obtained by dividing the sum of categories 1, 2, and 3 by the sum of categories 6 and 7 of the FIAS categories.

11. Indirect/direct teacher influence--the mean ratios of both pre-treatment and post-treatment values obtained by dividing the sum of categories 1, 2, 3, and 4 by the sum of categories 5, 6, and 7 of the FIAS categories.

12. Double blind technique--a method of data analysis wherein neither the observers nor the person distributing the data to the observers knows which tapes or transcripts were made at the beginning and which at the end of the study.

13. Evaluational research--research directed toward determining
the value or amount of success in achieving a predetermined objective. It includes the formulation of objectives, identification of the proper criteria to be used in measuring success, the determination and explanation of the degree of success, and recommendations for further program activity.

14. Formative evaluation—is evaluational research designed to improve a program while it is still fluid and in the developmental stage.

Summary

It is hoped that as a result of the present study (1) focus on student outcomes will be enlarged and enhanced in future project efforts, (2) more evaluational studies will be carried out on innovative educational programs, (3) more evaluation of future in-service programs will be done at the point of origin of the program in the classroom itself, and (4) that the teacher education workshop Self-Actualizing Education will be systematically revised and improved for subsequent implementation in accordance with the research findings of the present evaluation.
CHAPTER II

REVIEW OF THE LITERATURE

For the past decade the field of education has been undergoing innovations on a larger scale than ever before (Suchman, 1967). Much of the evaluation carried out on these innovations has consisted of subjective judgments by publishers, school principals or superintendents, authors, parents, teachers, school boards and lay committees (Scriven, 1967). Currently far too little information is available for sound objective decisions regarding innovative educational programs and products (Payne, 1974). As a result, there is presently an augmented awareness on the part of educators and the public as well in regards to the vital need for evaluation in education.

This review of literature will focus primarily on evaluational research as it pertains to educational innovations.

Historical Perspectives in Educational Evaluative Research

As early as 1897, J. M. Rice, an educator, carried out an actual evaluative research study. Rice (1897) utilized a standardized spelling test to compare spelling achievement to time spent on drill. With his research data, Rice argued that emphasis on drill did not improve achievement.
Chapin and Associates (1947) at the University of Minnesota conducted evaluative research on the effect of treatment programs on juvenile delinquents.

In spite of Rice's initial emphasis on student evaluation testing that began early in the nineteenth century, educators were somewhat tardy in showing a concern for program evaluation. Ralph Tyler (1935) suggested that progressive schools be viewed as experiments in education and that they be formally evaluated as such.

One important and somewhat early social psychological contribution to educational evaluation was made by Theodore Newcomb. Studying college students Newcomb (1943) attempted to deliniate the effects of participation in an experimental college program as it affected the attitudes and personalities of students.

Anderson and his colleagues (Anderson, 1939; Anderson, Brewer, and Reed, 1946; Anderson and Brewer, 1946; 1945) were mainly concerned with evaluating dominative and integrative contacts in the classroom.

Lippitt and White (1943) carried out evaluative research dealing with the effects of democratic and autocratic leadership styles on children's performance. Lippitt and his associates (Lippitt, 1963; Lippitt and Gold, 1959) have devised other evaluative studies of classroom social structure as a result of the initial Lippitt and White study (1943). Gage (1963) developed a handbook that deals with research on teaching.

One recent undertaking in educational evaluation is Project
TALENT. Flanagan (1964) in working with Project TALENT tried to obtain an accurate inventory of the potentialities and abilities of American youth.

Nontechnical evaluations of the nation's schools have been made by (Conant, 1959; Gardner, 1961; and Trump, 1960). Cronbach and Gleser (1964) and James (1963) have carried out numerous evaluations of the educational decision-making process.

Evaluative innovations in measurement methodology have been undertaken in the areas of psychological scaling (Torgerson, 1958), Osgood's Semantic Differential (Osgood, 1957), and Flanders Interaction Analysis (Flanders, 1961).

Britton (1964) noted that a great deal of the literature dealing with curriculum evaluation presently exists only in impermanent form such as conference handouts and office papers.

One research undertaking dealing with the evaluation of educational outcomes is the Stanford-Brentwood Project. According to Suppes (1968), this project is currently the most advanced investigation of computer-assisted instruction.

Provus (1969) developed the Pittsburgh Evaluation Model. This model's evaluational purpose is that of making decisions in regards to maintaining, improving, or terminating educational programs.

Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman, and Provus (1971) developed an approach to educational evaluation entitled the CIPP Model of Evaluation. According to Worthen and Sanders (1973),
the concepts involved in the model are "the definition of evaluation; decision settings and decision types; and evaluation types (p. 128)."

According to Borg (1971), one far reaching research program in education that is now taking place is the National Assessment of Educational Progress. This program will be used to supply census-like data in the area of national education achievement.

Overall, educational evaluative research has progressed and developed to its present state wherein it is receiving the attention that it has long deserved.

An Overview of the Evaluation of Teaching Effectiveness

Teaching effectiveness has been a problem to educators for as long as teachers have existed. The questions that seem to be asked most often in regards to teacher effectiveness are: (1) how does one identify it; (2) how does one measure it; and (3) how does one evaluate it?

Objective evaluation studies of the effectiveness of teachers began in about 1891. Momentum in this area of research was largely augmented during the period from 1913-1917 and for approximately twenty years this momentum continued. Ellen (1961) notes that some 250 separate studies dealing with teacher effectiveness were published in the period from 1928-1932.

Little was done in the area of teacher evaluation from 1937 to 1950. A comprehensive bibliography of studies dealing with teacher competence
was compiled by Domas and Tiedeman (1950). Then in 1952, according to Ellen (1961), a quantitative research summary was published.

Beecher (1949) recommended the use of a scale to be used in judging teaching effectiveness in regards to pupil reactions to teacher behavior. Cornell and Lindvall (1953) successfully developed an instrument that trained observers used to record objectively the basic elements of effective classroom teaching. Their research revolved around the observation of teachers' personalities in the classroom. According to California Teachers Education (1953), a five year study was carried out on teacher competence by the California Teachers Association. One of the major roles of the teacher as a result of the study was that the teacher be a counselor and guidance worker in the classroom.

Hughes (1959), Ryans (1960), and Rose (1960) all focused their expertise on the pupil-reaction method of studying teacher effectiveness. According to Medley and Mitzell (1963), the study of teacher effectiveness needs to focus pre-service and in-service training efforts on the classroom and especially on the teacher rather than on some other orientations that are often employed. They also noted that there is currently in existence a great amount of support and interest in teacher effectiveness research.

According to Bryan (1968), most teachers can modify their behavior in the classroom and as a result their students will be positively affected. Bryan sees these modifications coming about as a
result of in-service training.

According to some authors teaching effectiveness can be effectively measured and assessed through soliciting student attitudes towards their respective teachers. It follows logically that if a student does not develop a good attitude toward his teacher, that teacher's effectiveness will be significantly hindered as far as that particular student is concerned. Therefore, it appears that a healthy attitude toward the teacher is one of the most important assets a student can bring to the classroom.

Scott (1952) in searching for ways to evaluate teaching effectiveness found that student attitudes were one productive avenue to follow in looking for effective evaluation methods.

Remmers (1955) noted that student attitudes are a crucial factor in regards to the total learning situation.

According to Murray and Anthony (1955), attitudes that students have in regards to their teachers do indeed affect student learning. It was also noted that students reveal the attitudes they have towards their teachers in their ratings of their teachers.

Hood (1957) in speaking of student attitude scales stated

The scale reveals information that cannot be obtained from any other source since pupils are the only persons who are in daily contact with teachers at their best and at their worst.

(Hood, 1957, p. 118)

Snedeker and Remmers in writing on student attitudes noted that

Both ordinary classroom observations and controlled experimental results attest to the fact that the student's interest in and attitude toward
the courses taught in colleges are largely conditioned by his personal reactions to the instructor. Thus, the student's attitude toward the instructor is a vital factor in the total learning situation. (Snedeker and Remmers, 1960, p. 1)

In summary, it is important to note that far too little research has been completed in regards to student attitude change as it is affected by teacher participation in in-service educational programs.

Problems in Evaluating Teaching Effectiveness

In reviewing the literature on teacher competence Barr (1948) found most of the research studies to be exploratory and rather inconsequential. He also questioned the reliability of most of the teacher competence studies.

According to Remmers (1955), the rating of teaching skills is largely done subjectively and the validity of such ratings can't be established.

As a result of extensive research program analysis for teacher evaluation, Rose (1960) noted that a large majority were superficial and almost totally subjective.

Ryans (1960) noted that effective teacher evaluation has been hindered by teachers reluctance in accepting the idea of evaluation.

Sorenson and Gross (1967) found that a definition of teaching success which is formulated in terms of some single fixed teacher-ideal is both intolerable and inappropriate. They believed that much could be learned from studying student appraisals of teachers.
Another major difficulty in the area of teacher evaluation is the problem of devising a sound program for the prediction and measurement of teacher effectiveness. According to Flanders (1970), much of the teaching effectiveness research involves no classroom interaction assessment. As a result many researchers have a most difficult time explaining their findings.

In regards to recommendations for evaluating teaching effectiveness Barr (1961) and Ryans (1960) urged that there be a diminished use of the point-value rating scales and self-reporting devices and an increased use of observable behaviors and measureable personal characteristics.

Gage (1963) in trying to derive some major prediction and measurement categories of teacher effectiveness listed the following as pertinent: leadership, competencies, behavior control, and personal qualities.

Observational Systems in Educational Evaluation

Observation appears to be one aspect of teacher evaluation that has gained increasing popularity over the past decade. Objective observations of teacher behavior appear to show substantial promise in the evaluative area of teacher effectiveness.

According to Ober (1968), the systematic observation movement affords the educational researcher techniques for observing, identifying, classifying, and quantifying particular behaviors in regards to the
teaching-learning situation in the classroom.

Attempts at systematically observing classroom behavior were carried out as early as 1914. Horn (1914) in developing a system of classroom observation used a seating chart. The goal of his system was that of determining which students did and did not participate in class.

Puckett (1928) using Horn's original seating chart program of systematic observation devised a set of 14 symbols representing observable student behavior. Some of the behaviors were:

1. Pupil raised hand;
2. Pupil raised hand and was called on by teacher;
3. Pupil was called on when he did not have his hand raised;
4. Pupil was called on when he did not have hand raised; made a single word response;

Wrightstone (1935) also used the seating chart technique of observational measurement. His method consisted of coding various teacher responses in regards to classroom interaction. Some of his responses used in the coding process were as follows:

1. Allows pupil to make a voluntary contribution;
2. Encourages pupil to make a contribution;
3. Proposes a question for pupil or class;
4. Discourages or prohibits a pupil contribution;
5. Question and answer on assigned textbook subject matter. (Wrightstone, 1935, p. 45)

Wrightstone (1934) also devised a category system for recording pupil responses. This instrument was scored in three categories. They were: (1) initiative; (2) other items (responsibility, curiosity, and
criticism); and (3) memory.

According to Murray (1970), the movement of systematic observation has developed and progressed into various areas of classroom behavior. Murray lists some of these areas as:

1. verbal interaction;
2. non-verbal interaction;
3. specific subject matter content areas;
4. the general content dimension;
5. teacher practices. (Murray, 1970, p. 5)

Bales (1950) utilized the verbal interaction method of systematic observation. He devised a category system for recording patterns of verbal interaction in small group situations. It is important to note that Bales was the first individual to use a timing factor in the systematic observation of classroom behavior.

Hough (1964) developed a 16 category system for analyzing classroom interaction. He devised his system to focus on observable behaviors associated with principles of learning.

Flanders (1965) devised a 10 category system of classroom observation which contained categories for student talk and silence or confusion. He also developed the matrix concept which facilitates the counting and sequencing of observational data.

According to Amidon and Simon (1965), the Flanders System is the most widely used and best known observational measure of verbal behavior.

Ober (1968) developed a modification of the Flanders System. His system, The Reciprocal Category System, includes 9 categories that
are reciprocal to both student talk and teacher talk with a single category for confusion or silence.

**Non-verbal Observational Systems in Educational Evaluation**

Non-verbal attempts at systematically observing classroom behavior are of a more recent origin than their verbal counterparts.

As a result of studying behaviors in mathematics classrooms Wright and Proctor (1961) devised a category system for classifying student behaviors into four broad categories: (1) process: ability to think; (2) content: mathematical structure; (3) attitude: curiosity and initiative; and (4) neutral.

Oliver and Shaver (1966) in studying recitation and socratic teaching styles utilized an observation system consisting of the following categories: (1) socio-emotional or affective; (2) cognitive; and (3) procedural.

Brown (1968) devised a system for observing and recording teacher behaviors titled the Teacher Practices Observation Record.

Hill (1969) developed a system that contains five major categories consisting of defining, amplification, background, naming, and examples.

Kounin (1970) in describing classroom management activities lists various non-verbal categories developed as a result of a five year study. Most of the categories relate to a teachers "with-it-ness," "smoothness," "overlapping," and "momentum."
Finally, Galloway (1968) developed a continuum of non-verbal communication that ranged from encouraging to restricting. Galloway assessed six dimensions within the encouraging-restricting framework. The dimensions assessed by Galloway are as follows: (1) responsive-unresponsive; (2) attention-inattention; (3) congruity-incongruity; (4) positive-negative affectivity; (5) supportive-disapproval; (6) facilitating-unreceptive. Through the use of a numeral category approach and an anecdotal descriptive approach, Galloway has systematized the observation of non-verbal behavior.

The current state of observational systems as they relate to educational evaluation according to Murray (1970) is that

Systematic observation is being used in pre-service and in-service teacher education programs to develop an awareness of the impact of verbal behavior and to analyze teaching behavior. At the same time, systematic observation continues to be used in carefully controlled empirical research designs related to teacher behavior or teacher characteristics.

(Murray, 1970, p. 7)

Educational Evaluation and Classroom Interaction

According to Laverd (1953), no single person, except possibly the child's parent, has more influence on the development of personality than the classroom teacher. Willey (1951) noted that contemporary educators now realize that education for the whole child is the paramount objective. To meet this objective teachers need to be aware of the social, environmental, physical, and emotional needs of the child.
Teachers interact with their students in various non-verbal as well as verbal modes. Though these two means of communication are highly correlated, the nonverbal form occurs less frequently. Recently, the study of classroom verbal communication has received augmented attention from educational researchers and writers.

The initial research in the area of classroom interaction was carried out by John Withall. Withall (1949) developed a technique that enabled him to measure the social-emotional climate in the classroom. He later improved and refined his measuring technique (Withall, 1951; 1952; 1960; 1962; 1963; and Withall and Lewis, 1963).

Educational research on classroom interaction involves several different systems at the present time. Probably the most widely used system today in the educational research area is the Flanders Interaction Analysis System. This system is employed to observe and code the verbal interaction of teachers and pupils. Interaction analysis refers to the process whereby certain observable behaviors between teachers and students are identified and categorized. According to Flanders (1970), teachers aren't really aware of how they are perceived by children in the classroom.

Flanders lists various conditions that he believes must be met before teachers can comprehend and subsequently improve their classroom behavior:

1. Teachers must have the desire to understand and improve their own behavior;
2. A climate of acceptance and support must be
established that is objective and non-threatening for the teacher participating;
(3) Teachers must have an opportunity for behavioral involvement;
(4) There must be an effective system of feedback to the teacher. (Amidon, 1971, p. 3 & 5)

In the Flanders System only verbal behavior is measured, because of the higher reliability obtained in contrast to measuring nonverbal behavior (Amidon, 1971). All teacher statements in the Flanders System are classified as either direct or indirect. Two categories dealing with student talk are added to the categories of indirect and direct statements by teacher. There is also a category for classroom behavior not designated as either student talk or teacher talk. This category is labeled silence or confusion.

The FIAS categories are found in outline form in Figure 1. Appendix B contains information that explains further the Flanders Category System and the use thereof.

Teacher Effectiveness Research
Employing the FIAS

Research employing the FIAS has been carried out on a large scale over the past two decades. Studies were completed in both New Zealand and Minnesota during 1956-1957 to determine the effects of teacher influence on student attitudes. Using the FIAS, teacher influence patterns were quantified and the following results were obtained

Teachers of classes that scored high on liking the teacher, motivation, fair rewards
and punishment, lack of anxiety, and independence used more indirect influence, while teachers of classes that scored low used less indirect influence. (Flanders, 1965, p. 64)

Flanders (1965) also noted from the above mentioned study that:

Teacher behavior exerts more effect on pupils' attitudes than pupil behavior exerts on teacher influence. (Flanders, 1965, p. 653)

Flanders (1965) carried out research involving public school teachers engaged in an in-service education training program. This study involving the FIAS was initiated in 1960 and aimed at evaluating the effectiveness of the in-service program in regards to spontaneous verbal behavior changes of teachers. The procedures used entailed pre and post measures of the in-service teachers' verbal behavior in their classrooms as well as pre and post measures of pupil attitudes towards their teachers. One conclusion reached was that:

In classrooms in which the teacher was more flexible and thus more indirect, both student attitudes and content achievement scores were superior. (Flanders, 1965, p. 123)

Hough (1966) lists the following advantage of the FIAS in doing classroom research:

1. It is designed for direct observation of classroom verbal interaction and does not require typescripts or video-tape;
2. It preserves the interactive, cause-effect quality of classroom verbal interaction;
3. The system is easily expandable into more than ten categories when detailed analysis is desired. (Hough, 1966, p. 86)

According to a study by Johns (1966) involving the use of the FIAS,
students of teachers whose verbal influence was more indirect than
direct asked more thought provoking questions in class than did students
of verbally direct teachers.

Snider (1966) in using the FIAS in a study involving teachers' verbal behavior and pupil attitudes found that a significant positive correlation existed between the indirect mode of verbal teacher influence and positive pupil attitude.

Emmer (1967) found that teachers who were trained in the use of the FIAS category 3, accepting and using the ideas of pupils, ended up having more of their pupils using category 9, pupil initiated talk.

Furst (1967) using a sample of high school students discovered that students of indirectly influencing teachers showed a higher achievement level in economics than did students of directly influencing teachers.

Finally, Weber (1968), in a field study of elementary age school children, found that verbal creativity is significantly associated with teachers who make more use of the FIAS categories 1, 2, and 3 which involve indirect teacher influence.

Overall, the FIAS has become well entrenched in the area of educational research and particularly in the area of teacher effectiveness. As a result of the dearth of assessment of classroom interaction in research on teaching effectiveness, researchers have in the past, had a difficult time explaining their results. The study of interaction analysis supplies needed information as to the verbal communication that occurred, and this helps greatly in explaining the results.
Summary

In the present chapter educational evaluative research has been reviewed from many and varied perspectives. A description of the historical development of evaluational research in education was given along with the various systems and approaches in educational evaluation that are in use today. A brief history of the different observational systems used in educational evaluation was given as well as an overview of evaluational studies in the area of teaching effectiveness. Finally, research was reviewed in regards to educational evaluation and classroom interaction.

In reviewing the literature on the evaluation of educational programs it was noted that evaluative research in the area of education has developed and progressed to its current state wherein it is receiving the attention that it has long deserved.

According to Suchman (1967), all social institutions need to provide proof of their effectiveness and legitimacy in order to justify their continued support by society.

It presently appears that the paramount approach to quality education is via the formal evaluation of innovative educational programs. Since educational programs eventually shape society their evaluation becomes all the more important.

As a result of the present review it was noted that various authors have successfully assessed teacher effectiveness through the solicitation of student attitudes towards their respective teachers. In conjunction
with this it was noted that there is currently a dearth of research reported in the area of student attitude change as it is affected by the participation of teachers in in-service educational programs.

This review of literature also pointed out the fact that observational systems have gained increasing popularity in educational evaluation over the past decade.

Finally, it was noted that the FIAS is probably the most widely used system today in the area of educational research.

In conclusion, it appears that the future of educational evaluation looks bright in regards to the current cry for accountability in education. Although current evaluational programs are far from perfect, they are much better than the impressionistic procedures heretofore employed.
CHAPTER III
METHODOLOGY

The primary aim of this study was that of evaluating the in-service teacher education program Self-Actualizing Education. This was accomplished by means of evaluating various objectives related to the interaction of students and teachers in regards to student attitudes towards teachers, student misbehavior, and student-teacher verbal communication.

Subjects

The subjects in this study consisted of both teachers and students from 4 rural towns in the state of Utah. There were 12 teachers in the study; 4 were males and 8 were females. There were also 531 students involved in the study; 240 were males and 291 were females.

The schools and towns represented in the study were: McKinley School, Tremonton, Utah; Central School, Brigham City, Utah; Hyrum School, Hyrum, Utah; and Providence School, Providence, Utah. The schools in the study represented Box Elder and Cache School Districts and were by design, rural in nature.

The teachers selected for the study were selected on a random stratified basis from those teachers who registered for the educational workshop Self-Actualizing Education. Two teachers were included in
the experimental treatment from each grade level one through six. One third grade teacher was lost to the study as a result of attrition.

The experimental design used to evaluate the student-teacher classroom interaction and the student misbehavior data was the one group pretest-posttest experimental design (Borg, 1971).

The quasi-experimental nonequivalent control-group design was used to evaluate student attitude changes (Borg, 1971).

During the taping of teacher-student classroom interaction, teachers were asked to engage their students in some type of question-answer activity to insure classroom interaction, as well as to provide the author with comparable data for pre-post analysis. Flanders (1970) refers to the type of interaction that the author sought to record as a level two pattern of interaction. This type of interaction involves open questions and the development of pupil ideas.

The students involved in the experimental treatment were the students of the teachers that attended the educational workshop. The students in the control group were students of teachers in the four schools who did not attend the workshop.

Objectives

The objectives of this study were:

1. To determine whether or not teacher talk incorporates more FIAS category 1, 2, and 3 responses and less category 6 and 7 responses, after teachers have completed the in-service communication skills
workshop titled *Self-Actualizing Education*;

2. To determine whether or not student talk shifts from responding to initiating, after teacher participation in the communication workshop;

3. To determine whether or not student misbehavior in the classroom decreases after the communication skills workshop;

4. To determine whether or not student attitudes become more favorable towards their teachers after the workshop.

**Measuring Instruments**

*The Flanders Interaction Analysis System.* This system was developed by Ned Flanders and Associates at the University of Minnesota as a research instrument intended to measure patterns of teacher-student interaction.

The Flanders System is concerned with verbal behavior only. This is due primarily to the fact that verbal behavior can be observed with much higher reliability than can non-verbal behavior. The Flanders System is also rooted in the belief that a teacher can consciously control his verbal behavior. According to Flanders (1970), the teacher chooses whether he desires to be direct, that is, to minimize or restrict students' freedom of action to respond, or whether he wants to be indirect, which would act to maximize or expand the students' freedom of action to respond. With his ten-category system Flanders can make an estimate of the balance obtained between response and initiative from
the percent of pupil talk, teacher talk, and silence or confusion.

**Student attitude surveys.** These are attitude surveys developed by the author, that follow closely the teacher attractiveness scales of Flanders (1970). These surveys measure teacher attractiveness on the basis of students answering yes or no to various declarative statements about their respective teachers (see Appendix C). A test-retest reliability of 0.87 was obtained on the student attitude surveys prior to commencing the evaluational effort. Flanders (1970) points out that of the many research projects he has undertaken, teacher attractiveness items have proven to be the most successful measures of pupil attitudes in the area of teaching effectiveness. This is largely due to the high reliability that they possess.

In this study a list of 8 declarative statements was read to students in grades 1-3. These statements vary from those used by Flanders (1970) primarily in the sense that they have been simplified in regards to sentence structure. These statements were positively geared toward the teacher. Each student marked yes or no to each statement as he followed along on an identical sheet. The most positive score possible was 8, while the most negative possible was 0.0. A similar list of 10 statements was given to students in grades 4-6. The most positive score possible was 10, while the most negative possible was 0.0. Students from the treatment classrooms and from a comparable number of control classrooms responded to this teacher attractiveness survey (531 total).
Student misbehavior checklist. This is a checklist developed by Hunt, Ashby, Koniarski, and Krams (1972). It operationally defines problem behaviors in the classroom. The following problem behaviors were recorded: O=no problem behavior being emitted; S=out of seat; H=hitting others; Y=yelling, talking out or making noise; and T=throwing objects. By referring to definitions of each of these above categories, the observer records the emission of various problem behaviors.

Data Collection

Collection of verbal interaction data. Verbal interaction of the participating teachers was coded using the FIAS before and after the workshop in order to get pre-treatment and post-treatment measures. Three twenty-minute recordings were made in each teacher's classroom, one representing a verbal interaction in the morning, one in the afternoon, and one randomly chosen in the morning or afternoon. Each of the three recordings were made on a separate day.

Three short segments of tapes (approximately 8-9 minutes each) were selected at random from the one hour's worth of each teacher's tape recorded classroom verbal interchange for both pre and post measures. The combination of these tapes provided approximately 24 minutes of pre verbal data (479 observations) and 24 minutes of post verbal data (479 observations) for each teacher involved in the study. This resulted in a total of 48 minutes and 958 observations for each teacher in the study. Coding of the tapes by three independent raters was accomplished after all tapes were made.
Inter-rater Reliability

In this study three raters experienced 15 hours of formal training in coding verbal interaction with the FIAS. Five hours were devoted to learning the 10 categories of the system, seven hours were devoted to practice in coding, and three hours were devoted to group discussion of the system. The coding results from a tape that all three raters had coded was chosen to establish a reliability coefficient between raters.

Totals from the 10 categories were made for each rater. These totals were then converted to percentages of total observations (500 observations). A Scott's coefficient (Flanders, 1966) of inter-rater reliability was then computed between rater A and B, A and C, and B and C. The three reliability coefficients were 0.94, 0.95, and 0.94 with the average being 0.94. This average is well above the minimum acceptable coefficient of 0.85 for conventional research purposes.

Observing Classroom Misbehaviors

Observation was made of the frequencies of student misbehaviors during each of three observation periods (20 minutes in length) in the classrooms of participating teachers, both before and after the workshop treatment. An observer would focus attention on one student at a time for a 10 second interval and would mark an appropriate misbehavior category until all students had been observed three times each during the period. The student misbehavior categories included: no problem behavior being emitted; out of seat; hitting others; yelling, talking out,
or making noises; and throwing objects. This procedure yielded a total of 18 behavioral observations on each student (see Appendix D).

**Research Design**

The present study employed two separate and distinct research designs. The first design utilized the one group pretest-posttest design. This research design consists of the following three steps:

The first step is the administration of a pretest measuring the dependent variable. The second step is the application of the experimental treatment (independent variable) to the subjects, and the final step is the administration of a posttest measuring the dependent variable again.

(Borg, 1971, p. 377)

Finally, differences attributable to the experimental treatment are derived by comparing pretest with posttest scores.

The one group pretest-posttest design was employed in this study in relation to the analysis of classroom interaction data collected by means of the FIAS. This design was also employed to measure changes in student misbehaviors as measured by the student misbehavior checklist.

The second research design employed in the present study was the quasi-experimental nonequivalent control-group design. Due to the impossibility of assigning subjects randomly to either the experimental or control group the nonequivalent control-group design was deemed appropriate and necessary. According to Borg (1971), the nonequivalent control-group design consists of the following steps: (1) the administration of a pretest, to both the experimental and control group, measuring
the dependent variable; (2) the application of the experimental treatment (independent variable to the subjects); and (3) the administration of a posttest to both the experimental and control group, measuring the dependent variable again.

The nonequivalent control group design was employed in that phase of the present research study involving the measurement of student attitudes towards teachers.

Data Analysis

In the present study a double-blind technique of data analysis was used to measure teacher-student classroom verbal interaction. The double-blind technique of data analysis serves to eliminate a strong source of bias sometimes found in research studies. The raw coding of data was keypunched and submitted for analysis to the Utah State University Computer Center. A Fortran program developed at Idaho State University was used in the final analysis. Appendix E provides an example of these computer-generated matrices.

Since the pretest-posttest data was matched on individual subjects a paired two-tailed t-test was employed to compare the differences between pre-treatment and post-treatment means of teacher-student classroom interaction, for the 11 participating teachers on each of the 12 indices.

In regards to the student misbehavior data, means were derived from both pre-treatment and post-treatment observations. A paired
two-tailed t-test was employed to compare the differences between the two obtained measures.

Analysis of the student attitude survey data was supplied from a regression analysis printout from the Utah State University Computer Center. A Duncan's Multiple Range comparison of means was used to test the significance of differences.
CHAPTER IV
RESULTS

Analysis of the data was accomplished by means of the following comparisons: (1) the comparison of the post-treatment classroom means derived from the student attitude surveys; (2) the comparison of means from the pre-treatment and post-treatment student misbehavior checklist; and (3) the comparison of pre and post-treatment data derived from the FIAS.

Student Attitude Toward Teacher Data

Table 2 lists the post-treatment classroom means derived from the student attitude surveys. The data was supplied from a regression analysis printout from the Utah State University Computer Center. A Duncan's Multiple Range comparison of means was used to test the significance of differences. No such significance was found between the treatment and control classes. Also, no significant difference was found between grade levels one through six.

Since the mean scores derived were not adjusted for the different number of items on the two surveys (8 items for grades 1-3 and 10 items for grades 4-6) an adjustment was made by calculating the proportion of positive responses (see Table 3) and an analysis of variance was run
Table 2
Post-treatment Classroom Mean Number of Positive Responses on Student Attitude Toward Teachers*

<table>
<thead>
<tr>
<th>Grade level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Classrooms</td>
<td>6.49</td>
<td>6.24</td>
<td>5.47</td>
<td>6.16</td>
<td>5.40</td>
<td>3.92</td>
</tr>
<tr>
<td>Control Classrooms</td>
<td>6.14</td>
<td>5.52</td>
<td>5.79</td>
<td>6.15</td>
<td>5.64</td>
<td>3.56</td>
</tr>
</tbody>
</table>

*Total of 22 classrooms with 531 total students responding.

Table 3
Post-treatment Classroom Adjusted Mean Proportion of Positive Responses on Student Attitude Toward Teachers*

<table>
<thead>
<tr>
<th>Grade level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Classrooms</td>
<td>.81</td>
<td>.78</td>
<td>.68</td>
<td>.62</td>
<td>.54</td>
<td>.39</td>
</tr>
<tr>
<td>Control Classrooms</td>
<td>.77</td>
<td>.69</td>
<td>.72</td>
<td>.62</td>
<td>.56</td>
<td>.36</td>
</tr>
</tbody>
</table>

*Total of 22 classrooms with 531 total students responding.
on these proportions. No significant differences were detectable between the treatment and control groups as a whole. However, in making within group orthogonal comparisons of subgroups of classes with partialed variance, some differences became apparent.

Comparisons of means for grades 1-3 versus grades grades 4-6 on both the within treatment and within control groups indicated a significant F-value (critical value of 7.71, .05 level, with df=1, 4) of 10.15 for the treatment group. A comparison was also made between grades 1-2 versus grades 5-6 in both the treatment and control groups. F-values for each of these comparisons were 22.55 and 7.09 respectively. The treatment F-value was significant (critical value of 10.13, .05 level, with df=1, 3).

**Student Misbehavior Data**

Table 4 lists by grade level the student misbehavior means derived from both pre-treatment and post-treatment observations. A paired, two-tailed t-test (t-value=2.78) yielded a significant difference (p<.05) between these two measures indicating a significant decrease in student misbehavior after treatment.

**Verbal Interaction Data**

A comparison of the pre and post-treatment data derived from the FIAS is found in Table 5. A more thorough explanation of each descriptive index listed in the table can be found in Flanders (1970).
Table 4

A Comparison of the Frequency of Misbehaviors Per Classroom*

<table>
<thead>
<tr>
<th>Grade level</th>
<th>Pre-treatment mean frequency</th>
<th>Post-treatment mean frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>34</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>34</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

Mean=13.55 Mean=5.45

*Total of 22 classrooms

T-value of 2.78 with df=10 yields a p .05.
Table 5

Comparison of Pre-treatment and Post-treatment Data Pertaining to Teacher-Student Classroom Interaction Derived from the FIAS

<table>
<thead>
<tr>
<th>Verbal interaction descriptive index</th>
<th>Z</th>
<th>Pre-treatment mean</th>
<th>Post-treatment mean</th>
<th>Mean difference</th>
<th>t value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total teacher talk (percentage)</td>
<td>11</td>
<td>64.64</td>
<td>62.64</td>
<td>2.00</td>
<td>0.95</td>
<td>NSD</td>
</tr>
<tr>
<td>2. Total pupil talk (percentage)</td>
<td>11</td>
<td>30.27</td>
<td>33.27</td>
<td>-3.00</td>
<td>-1.78</td>
<td>NSD</td>
</tr>
<tr>
<td>3. Indirect/direct teacher influence (I/D) (ratio)</td>
<td>11</td>
<td>2.16</td>
<td>1.44</td>
<td>0.72</td>
<td>3.17</td>
<td>.01</td>
</tr>
<tr>
<td>4. Revised indirect/direct teacher influence (I/D) (ratio)</td>
<td>11</td>
<td>7.62</td>
<td>3.18</td>
<td>4.44</td>
<td>1.38</td>
<td>NSD</td>
</tr>
<tr>
<td>5. Revised indirect/direct teacher influence-row 8 (ratio)</td>
<td>11</td>
<td>15.49</td>
<td>7.60</td>
<td>7.89</td>
<td>1.67</td>
<td>NSD</td>
</tr>
<tr>
<td>6. Revised indirect/direct teacher influence-rows 8-9 (ratio)</td>
<td>11</td>
<td>17.08</td>
<td>8.70</td>
<td>8.38</td>
<td>1.67</td>
<td>NSD</td>
</tr>
<tr>
<td>7. Extended indirect influence (percentage)</td>
<td>11</td>
<td>1.36</td>
<td>3.82</td>
<td>-2.46</td>
<td>-0.89</td>
<td>NSD</td>
</tr>
<tr>
<td>8. Extended direct influence (percentage)</td>
<td>11</td>
<td>5.09</td>
<td>4.91</td>
<td>0.18</td>
<td>0.26</td>
<td>NSD</td>
</tr>
<tr>
<td>9. Extended-revised indirect/direct influence (ratio)</td>
<td>11</td>
<td>0.84</td>
<td>0.44</td>
<td>0.40</td>
<td>0.77</td>
<td>NSD</td>
</tr>
<tr>
<td>10. 3/9 (ratio)</td>
<td>11</td>
<td>0.08</td>
<td>0.19</td>
<td>-0.11</td>
<td>-1.07</td>
<td>NSD</td>
</tr>
<tr>
<td>11. Vicious circle (percentage)</td>
<td>11</td>
<td>2.73</td>
<td>2.27</td>
<td>0.46</td>
<td>0.66</td>
<td>NSD</td>
</tr>
<tr>
<td>12. Pupil talk ratio-8/9 (ratio)</td>
<td>11</td>
<td>21.25</td>
<td>22.48</td>
<td>-1.23</td>
<td>-0.93</td>
<td>NSD</td>
</tr>
</tbody>
</table>
Pre-treatment and post-treatment means for each of 12 indices was given along with mean differences, t-values, and a statement of significance. Since the pre-post data was matched on individual subjects, a paired t-test was used to compare the differences of all 11 participating teachers on each of the 12 indices.

The most pertinent data, as far as objective 1 is concerned, was index 4 of the FIAS descriptive indices, revised, indirect/direct teacher influence ratio. The objective was to determine whether or not teacher talk would incorporate more FIAS category 1, 2, and 3 responses and less category 6 and 7 responses after teachers had completed the in-service communication skills workshop *Self-Actualizing Education*. The mean ratios for both pre-treatment and post-treatment values were obtained by dividing the sum of categories 1, 2, and 3 by the sum of categories 6 and 7 \[\frac{(1 + 2 + 3)}{(6 + 7)}\] for all 11 teachers. The mean difference of this ratio was not statistically significant.

The most pertinent data, as far as objective 2 is concerned, was index 12 of the FIAS descriptive indices, pupil talk ratio. The objective was to determine whether or not student talk shifts from responding to initiating after teacher participation in the communication skills workshop. The mean ratios for both pre-treatment and post-treatment values were obtained by dividing the sum of category 8 by the sum of category 9 for all 11 teachers. The mean difference of this ratio was not statistically significant.
CHAPTER V
DISCUSSION

The major objective of this study was that of evaluating the in-service teacher education program *Self-Actualizing Education* via the measurement of student-teacher classroom interaction, teacher attractiveness, and student misbehavior. Since one of the major weaknesses of most teacher education programs is a lack of any formal evaluation procedures (Borg, 1973), it was felt that an evaluation program would be highly desirable and beneficial.

Objectives

The results of this study in regards to objective 1 were not statistically significant. It was concluded, therefore, that teacher talk did not incorporate more FIAS category 1, 2, and 3 responses and less category 6 and 7 responses as a result of teacher participation in the workshop *Self-Actualizing Education*. As a result of this conclusion it appears that (1) the workshop was not effective in regards to training teachers to become effective communicators with students; (2) a nine week workshop may be too short a time to expect the kinds of changes in teacher behavior that were anticipated. It is a well known fact that teacher classroom behavior is a very stable entity (Borg, 1974). Nine weeks, therefore, may have been simply too short a period of training
for teachers to incorporate the new behaviors into their classroom behavioral repertoires. Finally, (3) the FIAS may not have been as sensitive to the types of desired verbal interaction changes proposed by the workshop Self-Actualizing Education as the research literature indicated. The fact that the FIAS simplifies all possible verbal interaction into ten categories may promote questions as to the possible oversimplification of particular verbal interactions encouraged in the classroom.

The results in regards to objective 2 were not statistically significant. It was concluded, therefore, that student talk did not shift from responding to initiating as a result of teacher participation in the workshop Self-Actualizing Education. As a result of this conclusion it appears that (1) the workshop was not effective in regards to training teachers to communicate acceptance to their students; (2) nine weeks may have been too short a period in which to expect measureable changes in teacher behavior to occur; and (3) the FIAS may not have been as sensitive to the types of desired verbal interaction changes proposed by the workshop.

The results in regards to objective 3 were significant (p < .05) indicating a significant decrease in student misbehavior. The findings in regard to this objective were tenuous at best. The data in regards to objective 3 were collected as a by-product of the present research effort. Due to a lack of funds it was impossible to hire and train an independent rater for the purpose of measuring student misbehaviors.
in the classroom. Therefore, the author decided to collect student misbehavior data as a by-product of the present research effort.

To assure a minimal amount of contamination the author followed the behavioral observation procedures developed by Hunt, Ashby, Koniarski, and Krams (1972). This entailed the objective charting of operationally defined student behaviors as they occurred in the actual classroom.

In regards to objective 4 the results indicated no significant differences between the treatment and control groups. It was therefore concluded that student attitudes did not become more favorable towards their teachers as a result of teacher participation in the workshop *Self-Actualizing Education*. As a result of this conclusion it appears that (1) the workshop was not effective in regards to facilitating positive student attitude changes towards teachers; (2) a nine week treatment condition applied to teachers may be too short to have a pronounced effect on student attitudes; and (3) since the students participating in the experimental and control group came from the same schools, this may have served as a contaminating variable and therefore is noted as a possible limitation of the present study.

**Summary**

The preordinate, normative type evaluation approach employed in the present study was not adequate with regards to the sensitive measurement of various of the evaluational objectives.
As a result of the aforementioned finding, as well as the non-significant differences found in this study, the following review of four contemporary evaluation models is offered. It is felt that these models and the many other models that they are representative of may prove to be more appropriate for use by future evaluators than the heretofore employed preordinate type.

Evaluation Models

The adversary model. The adversary model of educational evaluation comes from the area of law. This model incorporates the following format: (1) one advocate argues to support a proposition, program, issue, etc., while another rejects the issue or supports a totally different point of view; (2) witnesses are called and the trial proceeds to some type of conclusion; (3) a judge is present, as well as a jury (in some cases); (4) the advocates present the strongest evidence possible in support of their positions; and (5) for an evaluation, the evidence would probably consist of data collected by means of standard evaluation techniques (Owens, 1971; Auerbach, Garrison, Hurst, and Mermin, 1961). Figure 1 depicts in cube form possible applications of the adversary model.

According to Owens (1971), it is important to note that adversary proceedings, such as those previously mentioned, do not aim at debunking traditional designs for analyzing and collecting data, they simply facilitate the use of an alternative approach to synthesizing, interpreting, and reporting evidence.
The primary advantage of the adversary model of educational evaluation over most contemporary approaches to evaluation are listed as follows: (1) elimination of bias; (2) in-depth examinations; (3) cross-examination; (4) freedom to examine all relevant information; (5) increased public involvement; (6) witnesses; and (7) flexibility to decision maker.

In comparing this model of educational evaluation to that employed in the evaluation of the workshop Self-Actualizing Education one paramount strength is noted in regards to the adversary approach. This approach eliminates bias by allowing the evaluator to be totally biased. This problem presented itself most clearly in the present study. The author found himself in the precarious position of writing a critical report of a program developed in part by two of his closest professors. The use of the adversary model of evaluation would have eliminated this conflict of interest entirely. It is recommended, therefore, that (1) future evaluators of educational programs pay particular attention...
to the possibility of a conflict of interest in their evaluational efforts and (2) that they review the adversary model of evaluation as a possible alternative approach to program evaluation.

Stufflebeam's (CIPP) model. The (CIPP) model views evaluation as a process "to acquire and use information for making decisions associated with planning, programming, implementing, and recycling program activities (Stufflebeam, 1967, p. 126)." Four types of evaluation are incorporated in this model: (1) context evaluation; (2) input evaluation; (3) process evaluation; and (4) product evaluation. Figure 2 contains an outline of Stufflebeam's model for product evaluation.

According to Stufflebeam (1970), the primary purpose of product evaluation is that of measuring and interpreting program attainments. He notes that such an evaluation is an ongoing process that should take place throughout the program period, not solely at the end of it. Thus, his model of evaluation becomes a cyclical one wherein feedback is being constantly furnished to decision makers.

In comparing this model of educational evaluation to that employed in the evaluation of the workshop Self-Actualizing Education, one major distinction noted is that the Stufflebeam model facilitates constant input and thus provides for continuous revision of the evaluation process if such revision is deemed necessary. This is an important aspect of educational evaluation that most contemporary evaluational designs do not incorporate into their programs. The evaluation of the Self-
<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>CONTEXT EVALUATION</th>
<th>INPUT EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To define the operating context, to identify and assess needs and opportunities in the context, and to diagnose problems underlying the needs and opportunities.</td>
<td>To identify and assess system capabilities, available input strategies, and designs for implementing the strategies.</td>
</tr>
<tr>
<td>METHOD</td>
<td>By describing the context; by comparing actual and intended inputs and outputs; by comparing probable and possible system performance; and by analyzing possible causes of discrepancies between actualities and intentions.</td>
<td>By describing and analyzing available human and material resources, solution strategies, and procedural designs for relevance, feasibility and economy in the course of action to be taken.</td>
</tr>
<tr>
<td>RELATION TO DECISION-MAKING IN THE CHANGE PROCESS</td>
<td>For deciding upon the setting to be served, the goals associated with meeting needs or using opportunities, and the objectives associated with solving problems, i.e., for planning needed changes.</td>
<td>For selecting sources of support, solution strategies, and procedural designs, i.e., for structuring change activities.</td>
</tr>
</tbody>
</table>

Figure 2. Stufflebeam's four types of evaluation
<table>
<thead>
<tr>
<th></th>
<th>PROCESS EVALUATION</th>
<th>PRODUCT EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBJECTIVE</strong></td>
<td>To identify or predict, in process, defects in the procedural design or its</td>
<td>To relate outcome information to objectives and to context, input, and process</td>
</tr>
<tr>
<td></td>
<td>implementation, to provide information for the preprogrammed decisions, and to</td>
<td>information.</td>
</tr>
<tr>
<td></td>
<td>maintain a record of procedural events and activities.</td>
<td></td>
</tr>
<tr>
<td><strong>METHOD</strong></td>
<td>By monitoring the activity's potential procedural barriers and remaining alert to</td>
<td>By defining operationally and measuring criteria associated with the objectives, by</td>
</tr>
<tr>
<td></td>
<td>unanticipated ones, by obtaining specified information for programmed decisions,</td>
<td>comparing these measurements with predetermined standards or comparative bases, and</td>
</tr>
<tr>
<td></td>
<td>and describing the actual process.</td>
<td>interpreting the outcomes in terms of recorded context, input, and process</td>
</tr>
<tr>
<td><strong>RELATION TO</strong></td>
<td>For implementing and refining the program design and procedure, i.e., for effecting</td>
<td>For deciding to continue, terminate, modify, or refocus a change activity, and for</td>
</tr>
<tr>
<td><strong>DECISION-MAKING IN</strong></td>
<td></td>
<td>linking the activity to other major phases of the change process, i.e., for</td>
</tr>
<tr>
<td><strong>THE CHANGE</strong></td>
<td></td>
<td>recycling change activities.</td>
</tr>
<tr>
<td><strong>PROCESS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROCESS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROCESS</strong></td>
<td></td>
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</tr>
</tbody>
</table>

Figure 2. Stufflebeam's four types of evaluation (continued)
Actualizing Education program undertaken by the author may have been much more effective and more sensitive to change, had the model of Stufflebeam been incorporated into the evaluational design. Thus, rather than thinking of evaluation as a way to determine whether or not the program has achieved its objectives, it is viewed more as a continual process of monitoring and providing feedback to evaluators in order that they might more effectively fit the evaluation to the program.

The discrepancy model. Worthen and Sanders (1973), in reviewing models of educational evaluation, point to the discrepancy model of Malcolm Provus as an example of a model which compares performance against standards. The aim of evaluation as noted by Provus (1969) is to determine whether or not to maintain, improve, or terminate the program being evaluated. Provus lists three activities that program evaluators must complete if they are to perform a worthwhile evaluation. They are as follows:

1. define program standards; (2) look for a discrepancy between observations about the program and the standards or objectives for that program; and (3) use the discrepancy information as feedback to the program developers. (Worthen and Sanders, 1973, p. 207)

According to Owens (1971), the discrepancy model incorporates the following five stages:

1. the first stage serves to assess viability and feasibility of the program design; (2) the second to assess the installation of the program and the validity of program assumptions; (3) the third to assess the fidelity of the operating program to the program design, and to assess the relationship
between process and interim products; (4) the fourth to compare the terminal products with the program design; and (5) the fifth to compare the cost of the program being evaluated with that of other programs with the same goals.

(Owens, 1971, p. 300)

In comparing this model of educational evaluation to that employed in the present study, it is important to note that the discrepancy model provides information as to those discrepancies which exist between various areas of the program and standards which govern those areas. This discrepancy information is used to tease out weaknesses of the program. No such feedback system is found in the traditional normative evaluation approach undertaken in the present study. Therefore, by using the discrepancy approach to evaluation, program shortcomings could have been pinpointed much more easily and specifically and program changes could have been implemented accordingly. The reader is referred to Worthen and Sanders (1973) for a comprehensive description of the discrepancy model.

Stake's responsive model. Stake (1972) points out that the great majority of contemporary educational evaluation programs are preordinate. Thus, they are based on prespecification. They focus on stating goals, using objective tests, relying on standards upheld by program personnel, and finally terminating as research-type reports. Stake offers responsive evaluation as an alternative to the aforementioned preordinate type of evaluation. Responsive evaluation entails both the description and judgment of educational programs based on a process of formal inquiry. Worthen and Sanders (1973) note that
Stake has presented two data matrices upon which the program evaluator lists information pertinent to a rational judgment of the proposed program. Figure 3 contains an example of a matrix described by Stake.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>C</td>
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</table>

Figure 3. An evaluation matrix for outcome decisions

In summary, Stake's model is an organizational framework that places much emphasis on the explication of judgmental criteria.

The educational evaluation program employed by the author in evaluating the in-service education workshop *Self-Actualizing Education* entailed a preordinate approach to evaluation (Stake, 1972). In retrospect, an alternative approach to such an evaluation is the responsive evaluation approach proposed by Stake (1972). The responsive model of evaluation may have been more appropriate in evaluating the workshop *Self-Actualizing Education* due to its sensitivity to program objectives, program background, and its orientation to program activities more
than program intent. In the responsive model, the structure serves the purposes of the proposed evaluation program rather than dictating them. Future evaluators of educational programs such as the workshop Self-Actualizing Education are referred to Worthen and Sanders (1973) for a comprehensive summary of Stake's model.

In conclusion, Stake (1972) points out that the normative, preordinate type of evaluation employed in the present study is most effective when one is trying to determine whether or not specified goals have been reached, since the measurements made in this type of evaluation are usually quite objective and reliable.

Recommendations to Future Evaluators

As a result of the current research effort the following recommendations are noted: (1) that future evaluators employ an evaluation model that employs a feedback system whereby program shortcomings can be pinpointed and changes made during the course of the program; (2) that future evaluators be alert to the possibility of a conflict of interest in their evaluational efforts; (3) that future evaluators focus on structuring their evaluations so as to best serve the interest of the evaluated program; (4) that future evaluators choose very carefully between employing a more traditional preordinate approach to evaluation or a contemporary evaluation model such as those of Stake, Stufflebeam, and Provus; (5) that evaluators who choose to use the FIAS for coding classroom interaction review Mirrors for Behavior (1970) and
subsequently incorporate other interaction analysis systems such as the Florida Taxonomy of Cognitive Behavior, Amidon System, Miller-Hughes System, and the Honigman System into their interaction analysis, as well as the FIAS, in order to get a superior and more sensitive measure of the classroom interaction; (6) that in future evaluation efforts achievement be considered as an additional measure of student outcome; (7) that evaluators look at various standardized attitude measuring instruments such as Beere (1973) and Lewis (1974), which may be superior to the Flanders adaptation employed by the author in the present study; (8) that future evaluations be carried out sometime during the middle of the school year so as to avoid the extraneous variables that are found both at the beginning and the end of a school year; (9) that if in future evaluation efforts, a major attempt is made to measure student misbehaviors two independent raters should be trained and subsequently placed in the actual classroom to collect student misbehavior data. Interrater reliability can be obtained on the raters and operationally defined student behaviors can be objectively charted; (10) that future evaluators be aware of the Instrument Exchange Program of the Clearninghouse for Applied Performance Testing, as a viable means of obtaining references in regards to most of the current performance testing instruments available; and (11) in view of the fact that few in-service education programs attempt to focus on student outcomes, it is hoped that future evaluation studies will continue to focus on these outcomes.
Finally, in regards to the workshop **Self-Actualizing Education** and with the aforementioned recommendations in mind, it is noted that overall, the percentage of teacher talk in the classroom did decrease and that the overall percentage of pupil talk did increase, though neither did so to a statistically significant level. Keeping in mind the fact that the FIAS may have been somewhat insensitive to minor changes, this shift in teacher-student behavior may become more evident in future evaluations. It is also noted that student talk did tend to move in the direction of more student initiated talk and less student responding, though not to a significant degree. However, it is also noted that teacher talk became somewhat more directing and somewhat less indirect, after the workshop experience.

In regards to the aforementioned interaction trends, it is recommended that the workshop **Self-Actualizing Education** focus more attention on training teachers (1) to identify the communication killers noted by Barcus, Bertoch, and Nielsen (1974), and (2) to replace these forms of communication with more of the indirect forms of communication noted by Barcus, Bertoch, and Nielsen (1974). To facilitate the shift from controlling restrictive talk to motivational talk it is recommended that workshop leaders devote more time to the communication killers previously mentioned. This could take the form of more workshop time being focused on the communication killers or to the employment of booster sessions after the workshop has terminated.

In conclusion, it is recommended that (1) the in-service teacher
education program Self-Actualizing Education be revised according to the suggestions noted in this study and (2) that future evaluators of the workshop Self-Actualizing Education pay particular attention to the aforementioned recommendations for evaluators. Finally, it is hoped that teacher-student communication will continue to be a primary concern to both educators and mental health professionals as well.


Cronbach, L. J. Course improvement through evaluation. *Teachers College Record,* 1963, 64, 672-683.


Horn, E. *Distribution of opportunity for participation among the various pupils in classroom recitations*. *Teachers College Contributions to Education*, No. 67, 1914.


Shapiro, I. S. *Is group parent education worthwhile?* Marriage and Family Living, 1956, 18, 154-161.


Stake, R. E. *The countenance of educational evaluation.* Teachers College Record, 1967, 68, 523-540.


Withall, J. The development of a climate index. Journal of Educational Research, 1951, 45, 93-99,
Withall, J. Assessment of the social-emotional climates experienced by a group of seventh graders as they moved from class to class. Educational and Psychological Measurement, 1952, 12, 440-452.


Appendix A

Self-Actualizing Education Workshop Program

Self-Actualizing Education

Michael R. Bertoch
Elwin C. Nielsen
Carolyn Barcus

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PREFACE

This book is an attempt to synthesize into active form the latest and best material available relative to teacher-student relationships. For several years the authors have conducted classes and workshops for teachers designed to help them develop better methods of motivating, disciplining and relating to students. During this time, we have looked for textual and illustrative material to supplement our teaching and have found many excellent resources. However, we could not find a single source touching upon all the aspects of relationship skills we find teachers needing, hence, this attempted synthesis.

Furthermore, as many others have done, we have found there is a vast and important difference between knowing something well enough to talk about it, and being able to do it. Therefore, we have attempted to incorporate numerous practice exercises into this manuscript in order that participants will gain applied skills in relating to and motivating students.

We have gleaned ideas from many sources, and would like to mention just a few that have been most useful to us. First, and most basic are the works of Dr. Carl Rogers, whose thinking underlies not only our own, but many other people in the field as well. We recommend that those interested in the area of teacher-student relationships read extensively Dr. Rogers’ books and articles. We also have appreciated and commend to our readers the works of Dr. Fritz Perls, Dr. Thomas Gordon, Dr. William Glasser, and Barry Stevens.

This volume was developed and field tested with the support of monies from the Kellogg Foundation, under a rural development grant to Utah State University.
SELF ACTUALIZING EDUCATION

Instructor Manual

GOAL-1

TO HELP PARTICIPANTS APPRECIATE THE NEED FOR MORE EFFECTIVE COMMUNICATION WITH STUDENTS.

Behavioral Objective 1.1

Participants will recognize the need for man in general to belong and will recognize that every student has the need and right to belong to the classroom group. This will be indicated when 80% of the teachers mark agree with 80% of the statements on "Need to Belong: Evaluation."

LEARNING ACTIVITY 1.11

Participants will read "The Need to Belong." (Note: Instructor may introduce by saying something like the following. One of our purposes in today's session is to help you understand how each of us and more especially, our students, have a need to be an effective, worthwhile member of the classroom group.)

1.11 The Need to Belong

Professional people have long been interested, as has the lay public, in the way various needs affect man's behavior. Sigmund Freud saw man's primary need as evolving around life and death instincts. One of the needs arising from instinct was sexual satisfaction. Freud saw many of man's neurotic behaviors being the result of aborted sexual satisfaction.

Alfred Adler, a fellow psychiatrist and contemporary of Freud disagreed with him. He saw man's neurotic behaviors as arising when he felt neglected or unaccepted. Adler suggested that when man feels he does not belong to a family, peer, work or other significant group, he behaves in ways not acceptable to society.

According to Adler and his disciple, Rudolph Dreikurs, much of man's behavior can be attributed to one single factor—his striving to belong. The child in the classroom who belongs listens, follows directions, completes his tasks on time. The child who doesn't feel "belongingness" pokes the child in front of him, taps his fingers for attention instead of being "on task," tells the teacher, "I won't do it," etc. These behaviors are feeble attempts to belong, to gain recognition from the group to which he is seeking "belongingness."

Students who lack "belongingness" feel lonely, worthless, desperate, and hopeless. They are unable to communicate their needs, hopes and desires to others without somehow causing
resentment from the listener. The listener in turn, being irritated and resentful, fails to communicate effectively with this student. Instead he gives off more verbal and non-verbal cues to the student which say in effect, “You’re right—you don’t belong here.”

Thus, unless this merry-go-round pattern is broken, the non-belonging child is stuck forever doubting his worthiness to belong. Ineffective in his own interpersonal communication skills, he continues to alienate people. Though his utmost need is to belong, he doesn’t know how. Let’s have a closer look at such people. Let’s see if we can feel “where it’s at” for such children in our classroom.

LEARNING ACTIVITY 1.12

Participants will view the multi-media presentation, “The Sounds of Silence.” (Instructor: If feasible have participants follow the words to the presentation.)

1.12 “The Sounds of Silence” by Paul Simon

Hello, darkness, my old friend,
I’ve come to talk with you again.
Because a vision softly creeping,
Left its needs while I was sleeping,
And the vision that was planted in my brain, still remains
Within the sound of silence.

In restless dreams I walked along,
Down the streets of cobble stone,
’Neath the halo of a street lamp,
I turned my collar to the cold and damp,
When my eyes were stabbed by the flash of a neon light,
Split the night and touched the sound of silence.

And in the naked light I saw
Ten thousand people, maybe more,
People talking without speaking,
People hearing without listening,
People writing songs that the voices never shared, no one dared,
Disturb the sound of silence.

“Fools,” said I, “You do not know
Silence like a cancer grows,
Hear my words and I might teach you,
Take my arms and I might reach you.”
But my words like silent raindrops fell
And echoed in the walls of silence.
And the people bowed and prayed,
To the neon god they made,
And the sign flashed out its warning,
In the words that it was forming
And the sign said, the words of the prophets are written on the subway walls
And tenement halls,
And whispered in the sound of silence.

**LEARNING ACTIVITY 1.13**

Participants will participate in an instructor led discussion over Activities 1.11 and 1.12. (Instructor: See outline for instructor presentation.)

**1.13 Outline for Instructor Led Discussion**

1. **Tell:** There is scientific and observational data on animals and human beings which corroborate Adler and Dreikur’s statement that man, above all else, needs to belong in order to be a person who functions and communicates effectively in society.
   
   a. Harlow’s monkey experiment
   b. Korean war prisoners

2. **Ask Group:** To how many things (organizations, etc.) do you belong?
   
   Ask specific individuals to enumerate such things as family, bridge club, etc.

3. **Tell:** Imagine I have power to take all those things which you belong to away from you. Close your eyes and imagine how you would feel.

   Instructor comments to group—low and slowly—"People walk by you. No one notices you. You are alone. No one cares about you. How do you feel? Jot your feelings in the margin."

4. **Ask:** What are you feeling now after your "right to belong” has been taken away?

   Note: Get class to relate actual feelings; i.e., lonely, worthless, frustrated, etc. Write them on the board.

5. **Tell:** This is what some of your students may be feeling. A few may have this feeling most of the time; others may be feeling a state of “non-belongingness” only in particular classroom situations. Close your eyes and look at your class or children you have known. Find one that you imagine felt as you have just talked about feeling. Look at that child for a minute. Can you feel what he may be feeling? Does he have the need and right to belong?

**LEARNING ACTIVITY 1.14**

Participants will complete “Need to Belong: Evaluation.”
1.14 Need to Belong: Evaluation

Circle Agree, Disagree, or Not Sure under each of the following statements.

1. All people, despite race, background, creed, etc., have the need to feel they belong to something.
   
   Agree  Disagree  Not Sure

2. All students in our public educational system and in my classroom have a right to belong to the classroom group.
   
   Agree  Disagree  Not Sure

3. All students in my classroom have a need to feel they belong to the classroom group.
   
   Agree  Disagree  Not Sure

4. When a student does not feel he belongs, his learning readiness may be impaired.
   
   Agree  Disagree  Not Sure

5. The need for belongingness is so strong it rivals closely our need for physical sustenance.
   
   Agree  Disagree  Not Sure

INSTRUCTOR:

Tell: Most teachers we find would agree that all of their students have the “right to belong.” Our purpose in these nine sessions is to teach you skills that will help you communicate more effectively with students. Effective communication with students, we believe, will help them feel a sense of “belongingness,” which in turn most aptly sets the stage for learning readiness.

Behavioral Objective 1.2

Participants will exhibit understanding of the communication process by answering correctly 75% of the quiz questions on the concept of communication.

LEARNING ACTIVITY 1.21

Participants will discuss communication processes with the instructor.
1.21 Discussion Outline: The Communication Process

1. What are two ways we communicate?
   (Verbally and non-verbally)

2. What is the process we go through to communicate?
   a. It takes at least two people; the Sender and the Receiver.
   b. The sender proceeds through three steps:
      1. He decides in his thoughts what he wants to communicate.
      2. He selects the means by which to communicate, verbally or non-verbally or both.
      3. He transmits the message.
   c. The receiver proceeds through the following steps:
      1. He senses the message (hear, see, feel).
      2. He decides by his thinking processes what the message means.
      3. He sends back a response (verbally, non-verbally or a combination).

3. Diagrammed the process looks like this:

4. There are several areas where communication breaks down. Three of these are:
   a. Sender selects inappropriate message to express his ideas or feelings.
      Example:
      Person has foot on new couch and you want him to remove it. You say: "People sure are getting gross today."

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Receiver replies: "Yea, they sure are." (Did not recognize you were referring to him and wanted him to remove his feet.)

b. Sender says one thing verbally, another non-verbally.

Example:

"Please pass the salt." (Said to wife in a shouting voice.) Message better expressed would have been: I am really upset with you.

c. Communication also breaks down when the Receiver is not "tuned-in" to the Sender's message because he (the receiver) is not listening. We will talk in depth about listening skills later.

5. In summary, there is communication failure anytime a message is received with different meaning than the sender intended.

INSTRUCTOR TELL:

6. Without any words, divide into groups of not more than seven per group. After groups are formed tell:

"Pay attention to:

How did you decide which group to join?

What are your imagines about the people in your group? Notice anything else about you as you join the group?"

7. Discuss communication and the effects of feelings on communication and breakdowns in communication.

INSTRUCTORS:

As the group is five minutes into the discussion, break in, saying: Notice the communication in your group. Do you have a leader? Why? Was it important that you introduce yourselves? Why? How are you feeling about what's happening in the groups? Is this a familiar feeling? Why?

LEARNING ACTIVITY 1.22

Participants will complete the quiz on "The Communication Process."

1.22 Quiz: The Communication Process

1. What are two basic ways messages are sent?
2. What three processes does the sender go through to send a message?

3. What two processes does the receiver go through to respond to sender's message?

4. What are three ways the communication process can break down?

Behavioral Objective 1.3

Participants will recognize judgemental communication as a detriment to the concepts of belongingness. Eighty percent will state their agreement that such communication modes from teachers to students are alienable to a state of student belongingness.

Learning Activity 1.31

Participants will read concept paper, "Judgements."

1.31 Concept Paper: Judgements

Judgement as defined by Webster includes: criticism, to act as a judge, to decide, to come to a conclusion, an opinion. Obviously, judgement is a necessary act. Teachers especially need to perform the judgement act. It is not judgement per se that is in question. The important thing is to be aware of your judgements and the effect they have on your relationships with other people.

Only in a relationship where judgements are eliminated, where a person can know that no matter who he is and how he is, he is accepted and belongs, can he be free to look at who he is and how he is. Then, in being able to see himself, he has some choice in changing or not changing.

Judgement communicated in a way which "puts down" or causes the student to lose self-esteem is not helpful to student growth but rather causes students to become resentful and less available to the learning process. In addition to "put down" judgement messages, teachers should be aware of another type of judging which can, on occasion, impede communication. We are referring to the positive evaluation judgement. Have you ever noticed
that you have commented in a discussion that a student made a very good statement, his only one? This frequently happens because when you make a strong positive evaluation the other person now has a feeling that you expect such comments from him regularly. But his next comment, or his next piece of any kind of work, may not be so brilliant. Thus he will be hesitant to produce for fear he will not live up to expectations.

Very infrequently, such as at grading time, teachers must make judgements about students. More frequently they will desire to provide social reinforcement to a student in order to encourage him. But most of the time a student will get just as much encouragement from a non-evaluative statement such as "I see you have given that some careful attention," or "you seem to feel strongly about that."

The teacher who is concerned about maintaining good communication with his students will avoid all "put down judgements" and will be very aware of the effects of any other judgements he may make.

**LEARNING ACTIVITY 1.32**

Instructor will ask class if they agree that judgement messages if sent in a "put down" form hinder student belongingness and teacher-student communication. Provide for brief discussion allowing participants to make personal observations.

**Behavioral Objective 1.4**

Participants will be able to recognize five communication killers statements from a teacher-student interaction description.

**LEARNING ACTIVITY 1.41**

Participants will complete exercise on Observation vs. Judgement. (See Instructor Outline)

**1.41 Instructor Outline: Observation vs. Judgement**

1. **Tell:** Judgmental communication inhibits most individuals from continuing to talk openly and explicitly. Judgements include criticism, blaming, jumping to conclusions, name calling, shaming, ridiculing, probing, and interrogating.

   Recognition of a judgement is the first step in eliminating them from communication.

2. **Direct each person to verbally do the following until each has had one opportunity.**

   1. **Pick out objects or people in the room and make an observational statement about each. Observations contain only descriptions of what is there.**

      "The wall is green."

   8
"You have on a red shirt."
"You are smiling."

2. Return to the same objects. This time make a judgmental statement about each. Judgments contain what you think about what is there.

"I hate the color of this room."
"The color of this room is nice."
"That dress becomes you."

LEARNING ACTIVITY 1.42

Participants will read and discuss in small groups "Communication Killers." (See Instructor Outline)

1.42 Instructor Outline: Communication Killers

Instructor:

Tell: Read through the list of Communication Killers.

Communication Killers

1. Making judgements of the other. Positive and negative criticism, blaming, disagreeing.

2. Lecturing. Telling the other person what he must or should do. (Giving musts or shoulds)

3. Pursuading with logic, preaching, promising, warning.

4. Supporting, with sympathy, or the reassurance that things aren't as bad as they seem, or that they will get better.

5. Playing Psychoanalyst (interpreting, analyzing, interrogating).

6. Diversionary tactics. Trying to kid the other person out of his problem, or distract or in some way avoid or help him avoid the problem.

Instructor: Direct participants to take each of the following statements and pick out the judgement (some are hidden). Say the statement and judgement out loud. Pick out other communication killers in the same way.

Exercise 1.42: Identifying Communication Killers

Example:

(Statement) "Don't talk to your mother like that."

(Judgement) "You are obnoxious and bad."
"I don’t care what other parents do, you have to do the yard work!"
"Now you go back up there and play with Ginny and Joyce!"
Non-verbal: physically putting child in his room
"One more statement like that and you’ll leave the room!"
"If you’re a good boy, Santa Claus will come!"
Non-verbal: Spanking — Rewarding
"You ought to do this . . ."
"Why don’t you ask both Ginny and Joyce to play down here?"
"I suggest you talk to your teachers about that."
"College can be the most wonderful experience you’ll ever have."
"Let’s look at the facts about college graduates."
"Look at it this way—your mother needs help around the house."
"You’re not thinking clearly."
"You’re very wrong about that."
"Well, I think you’re pretty."
"I think you’re right."
"You’ve always been a good student."
"You’re a spoiled brat."
"You’re acting like a wild animal."
"You’re just jealous of Ginny."
"You really don’t believe that at all."
"You’ll feel different tomorrow."
"Don’t worry, things will work out."
"I used to think that too."
"You usually get along with other kids very well."
"Why do you suppose you hate school?"
"How many other kids have you talked to about the work they have to do?"
"What will you do if you don’t go to college?"
"Let’s not talk about it at the table."
"How’s it going with your basketball?"
"We’ve been through all this before."

**LEARNING ACTIVITY 143**

Participants will complete "Judgement Quiz."
1.43 Judgement Quiz

The following teacher-student interaction contains some inappropriate judgement statements on the part of the teacher. Underline those judgement statements.

Situation: Teacher has just given a math assignment to the class and she is walking around the class and interacting with students about their work.

Teacher: (Johnny is daydreaming)
Johnny get to work or there'll be no recess.

Johnny: Ah, Mrs. Jones ....

Teacher: Don't ah me!

Teacher: (To busy Suzan)
Good working on math problems, Suzan.

Teacher: (To class)
I wish you would all work like Suzan.

Billy: I don't know how to do this one.

Teacher: Just a minute, can't you see I'm busy!

Teacher: That's fast work, Fred.

Teacher: Billy, you'll never be able to work as fast as Fred, slow down and be more careful.

Behavioral Objective 1.5

Participants will show awareness of their present judgemental behavior by counting their judgements to students on a fixed interval schedule. (Note: Participants will pick out 5 five minute periods during each day for the next week.)

Learning Activity 1.51

Participants will be instructed how and when to count and record judgements

Learning Activity 1.52

Participants observe their normal behavior for two days and then attempt to eliminate judgements for two days. They will count and record these observations.
Participants will report on the number of judgements and the type they most often use.

Behavioral Objective 1.6

The participant will demonstrate recognition of covert messages by identifying correctly the covert message sent by a fellow participant in a series of statements.

Participants will read the concept paper, “Covert Messages.”

1.61 Concept Paper: Covert Messages

There are two parts of a verbal message: the overt message and the covert message. The overt message is contained in the meaning of the words themselves; the covert message is carried by the tone of the voice and the non-verbal clues that go with the words. The sender of the message may or may not be aware of the covert message he is sending, so the covert message is not always consistent with the overt message. It is the emotional content of the covert message that the receiver reacts to, and it is this part of the message that must be made explicit if communication is to reach a meaningful level.

Participants will complete the exercise, “Practice in Congruent and Non-Congruent Covert Messages.”

Instructor must demonstrate exercises C and D before participants attempt to practice these skills.

A. Say the following statements to yourself in a way that your tone of voice and other non-verbal clues (facial expressions, tone of voice and body language) send the same message as does your words.

“I am glad to see you.”
“I don’t like having you here.”
“You look really nice today.”
“I am feeling very angry with you.”

B. Go back to each statement, this time saying it in a way that the tone of voice and other non-verbal clues send a different message than do the words being said. Feel free to make up your own statements. Pay attention to the covert message being sent.
C. Find someone in your group with whom you will work and find a space in which to work. Take turns saying statements to the other. The listener is to judge whether the messages are congruent (both overt and covert are the same) or mixed (covert is different than the overt).

D. Instead of judging the messages as mixed or congruent, listeners respond to the covert message by saying either of the following:

- "What I hear you saying is ............"
- "I imagine you are ......................"

Example: Covert messages are anger and unwillingness to talk about it.

- "What I hear you saying is you are angry and you do not want to talk about it."
- "I imagine you are angry."

Continue until you are able to accurately identify the covert message.

E. In the next week pay attention to the messages being sent, and notice which is more comfortable for you to respond to, the overt or the covert messages, if it's a mixed message. Give yourself permission to not judge your responding to the messages. Also, notice when it is that you send mixed messages. Are you noticing or are you judging immediately?
GOAL—2

TO TEACH PARTICIPANTS HOW TO LISTEN TO THEIR STUDENTS.

Behavioral Objective 2.1

Participants will demonstrate the listening skills of silence, non-committal acceptance, invitations to continue, parroting, paraphrasing, and reflecting in writing and verbal expression to the satisfaction of the instructor.

LEARNING ACTIVITY 2.11

Participants will read, "Communicating Acceptance."

2.11 Communicating Acceptance

Listening, as used here, means wanting to understand how the other person feels, to find out what is really worrying or bugging him. It is giving him your full attention, being non-judgmental, and confident that he is capable of handling his problem if he has an opportunity to talk about it. Understanding exactly what the person feels involves responding to the emotional message, to the feelings behind the words.

Carl Rogers first pointed out most clearly that when an individual can some how communicate acceptance and appreciation to another person, then that individual can be a very powerful helping agent to the other person. When a person feels completely, unconditionally accepted for what he is, then he is able to drop his defensive aggressive or apathetic posture and consider himself as he is and as he would like to become. Thus a climate or relationship of acceptance fosters growth, problem solving and general constructive change. Non-acceptance, on the other hand, produces defensiveness, withdrawal, anger, and retaliation. We cannot force growth. We can only encourage it in people, as we do in flowers, with nurturance and a sunny atmosphere.

This is not to say that we must approve everything a person does. Rather, we must realize that he likely is doing his best under his circumstances and within the limits of his self esteem. We can help by accepting, not condemning.

LEARNING ACTIVITY 2.12

Participants will participate in the activity, “How to Listen—Discussion and Exercise” (Instructor should walk teachers through the learning activities by reading the directions and taking ample time for demonstrations and discussions where needed. Demonstration is particularly needed on exercises 3 and 4. Demonstrate and have participants experience killer communications and facilitative communications.)
2.12 Outline: How to Listen—Discussion and Exercise

Acceptance is communicated by eliminating judgements, both overt and covert judgements. The following are suggestions of things to say, since we have thrown out all killer communications. They are:

1. Silence

2. Non-committal acceptance, brief expressions, such as “oh,” “I see,” “mm-hmm,” or “really.”

Silence and non-committal acceptance are potent in getting others to say more, if your non-verbal clues indicate interest. WAIT OUT THE PAUSE. Silence puts pressure on the sender to send more.

3. Invitations to go on.

Statements that invite the person to go on:

"Tell me more about it."
"Would you like to talk about it?"
"I’m interested in what is happening for you."
"Let’s talk about it."

Feel free to use phrases that are comfortable and natural to you, if you have such phrases.

Invitational statements set the stage. They communicate, “I’m willing to listen,” “I have the time,” “I am interested.” Silence, short expressions and invitations only get the other person to begin talking. To facilitate a deeper level, other listening skills are needed.

4. Facilitive listening

As a listener, your task is to make sure you understand exactly what the person is saying and feeling. Here are some tools to help you in this task.

a. parroting—repeating the other person’s words. This is effective if used in a limited fashion.

b. paraphrasing—saying what the other person said in your own words. “Let me be sure I understand. You said ______________________.”

c. reflecting the covert messages or feelings

"What I hear you saying is ______________________.”
"I imagine you feel ______________________.”
"That must make you feel ______________________.”

15
Read the following phrases. On each phrase, practice writing a statement, first parroting it then paraphrase it.

"I'm tired of school work."

"John hit me!"

"Why can't I be the helper today?"

"Do you know why I hate school?"

(DON'T WORRY ABOUT BEING WRONG. IF YOU ARE INTERESTED AND CLOSE TO WHAT HE IS FEELING, HE WILL CORRECT YOU.)

Working with a partner, give one another statements or short problems. Use short expressions or invitations if you would like to hear more of what he has to say. If the person is willing to go on, use parroting and paraphrasing to make sure you understand. If feelings are shared, practice reflective feelings. Spend 30 minutes on this exercise.

Return to your small groups. Discuss the problems or successes you are having as a facilitative listener. Spend 15 or 20 minutes discussing.

Short break—during the break, find a person with whom you are willing to work.

With your partner, choose a problem in your life that you would be willing to talk about with this person. One person begin talking, the other become the listener, using the listening skills practiced previously as they seem appropriate.

Change roles when you're ready to change. When both partners are finished discuss the communication that went on between you, using the phrases:

"I was aware that I ____________ ."
when talking about you

"I imagine that you ____________ ."
when talking about your partner

During this coming week, be alert for appropriate opportunities to practice your listening skills. Pay attention to which skills are most difficult for you. REMEMBER—listening takes time. If you are busy, it helps to say, “I want to hear what you're saying. Now is a bad time for me,” and tell them when you will be available to listen. The sooner you are available the more the person will believe you really are interested.

(DO NOT MAKE YOURSELF LISTEN IF YOU ARE NOT INTERESTED!)

If you are not interested, your covert cues will tell the other person that and your effectiveness will be limited. Give yourself permission to decide whether to listen or not to listen.
GOAL–3

TO HELP PARTICIPANTS MORE EFFECTIVELY CONFRONT STUDENTS WITH TAKING RESPONSIBILITY FOR THEIR OWN BEHAVIOR.

Behavioral Objective 3.1

In a written situation the participant will correctly identify and express his own feelings in eight out of ten circumstances.

LEARNING ACTIVITY 3.11

Participants will read the concept explanation: Responsible Language.

3.11 Responsible Language

Many people do not know how to take full responsibility, and instead they tend to irresponsibly place the blame for their problem on the other person and strike out in anger at him or else vaguely communicate so that the other person may not realize what is wanted. Implicitness, not talking about what you are feeling is another means of avoiding full responsibility. Implicit communicators rely upon hints, sarcasm and the mind reading ability of the listener for communication to transpire.

Frequently, people do things which you do not like. We might say that such things cause you to have a problem. When that happens, there are only three responsible things that you can do:

1. Change the other person’s behavior.
2. Change the environment.
3. Change you.

When another person’s behavior causes you a problem, you may not be able to get him to change his behavior but if you can, this is probably the best way to solve your problem in most cases. There are two main ways to get him to change his behavior, one is to compel him with pressure, guilt or force, and the other is to get him to want to change. Compelling someone else to do what you want is at best an uncertain course, but on the other hand most people are humane enough that they will usually not cause you discomfort if they realize it and can help it. The most frequent difficulty is that we do not appreciate when we cause someone else a problem, because the person does not openly and directly communicate with us. Most people seem not even to know how to communicate in this way, although it is really very simple. One simply keeps the channels of communication open by avoiding judging the other person while he sends a message which consists of two main parts.
1. a non-judgemental description of what is happening, non-specific to the person involved.
2. a description of how the incident makes you feel and its tangible effect on you.

Thomas Gordon has described this kind of communication process and labels it an "I Message." We think of it simply as part of responsible communication. Here is an example.

The Problem: Your guest lights a cigarette in your home. You do not like people to smoke in your home.

1. "When I have neglected to mention that we do not like people to smoke in our home and a guest lights a cigarette, I get very embarrassed and don't know how to handle it."

2. "When people smoke in my house, the smell sticks to everything and I dislike it."

Keep in mind that he is free to refuse to help you with your problem, i.e., may keep on smoking; however, he is much more likely to be inclined to help than if you create hostility and anger by criticizing or if you speak so irresponsibly that he doesn't know what you want.

Carl Rogers, Thomas Gordon, and others have pointed out that it takes a certain amount of courage to send these responsible types of messages but the rewards are generally well worth the risks. When you send such a message you open yourself up, revealing your humanness. You tell the other person that you are a person capable of being hurt or embarrassed or frightened. Thus it takes inner courage and security for a person to expose these inner feelings in a relationship.

**LEARNING ACTIVITY 3.12**

*Participants will complete the concept test on Responsible Language.*

**3.12 Concept Test: Responsible Language**

1. List the three responsible things that you can do when someone else's behavior causes you a problem.

2. List two irresponsible things which people often do when someone else's behavior causes them a problem.
3. List two main ways to get another person to change his behavior.

4. What are the two main components of a message which responsibly communicates your problem?

5. What is the main risk involved in communicating responsibly to another person about your problem?

**LEARNING ACTIVITY 3.13**

Participants will complete Applied Practice Exercise: Responsible Language.

**3.13 Applied Practice Exercise: Responsible Language**

The purpose of this exercise is to provide you with practice in sending responsible messages about your problem in the hopes that it will elicit helpful behavior from the other person. For each of the following problems write a message that will communicate to the other person what your problem is.

**Exercise A**

1. A student in your classroom appears about ready to tip the paints onto the rug.

2. A child is tugging at you for attention while you are talking to another teacher.

3. A child is getting too close to the valuable display a guest lecturer brought.
4. A child has his muddy feet on top of his desk.

5. Your child wants you to play with him after you have had a very tiring day.

6. A child steps on you while running into your room.

7. Your spouse comes late to pick you up.

Exercise B

Divide into groups of three. Take each of the situations in Exercise A for role play situations. One person be the child, while the second plays the role of the person who is attempting to communicate responsibly. The third observe to see whether the communicator was able to avoid criticism while at the same time getting in both components of the responsible message. (In item number two he can also play the part of the third person.) After each attempt take a moment to evaluate. First the communicator evaluate to determine how well he thinks he did, then the listener (child) then the observer, also evaluate his "I message." Also change roles after each situation so that each person gets to function in each role for all seven problems.

LEARNING ACTIVITY 3.14

Participants will complete the Responsible Language Quiz.

3.14 Responsible Language Quiz

Identify and write what you would feel in each situation below. Then write a response to this situation using responsible language. (Keep lines of communication open.)
1. A child in your class picks his nose and eats it.

2. Your principal makes snide remarks about the appearance of your room.

3. A fellow teacher leaves the outside door open, causing a draft in your room.

4. The classroom next door is so noisy, it's difficult for your class to concentrate.

5. A child in your room comes to school poorly dressed and the other children make fun of him.

6. A child is left off at the school an hour before the school doors are open and he stands outside waiting.

7. A child in your room has a cut that seems to be infected and unattended.

8. Your own child wants to attend an out-of-town ball game and has a ride with a boy you do not know.

9. Your spouse constantly leaves clothing all over the bedroom.
10. Your neighbor’s children cut through your yard and are making a path across your lawn.

Behavioral Objective 3.2

Each participant will practice owning his own projected feelings to the satisfaction of the instructor.

LEARNING ACTIVITY 3.21

Participants will read and follow the directions of the concept explanation: Owning Feelings. Instructor should “walk participants through” this exercise by reading the following instructions to them and waiting appropriate times for them to complete each step.

3.21 Owning Feelings

1. Close your eyes and imagine all of the things or people that make you angry. Jot these in the margin. Now go back to each of those things that make you angry and reown them by saying, “I make me be angry when ________________ .” For example, perhaps one of the things that you noted that makes you angry is when your spouse contradicts you when you are telling about something. In this case you might say, “I make me be angry when my husband interrupts and contradicts me when I am talking to my friend.” Go through each instance where someone makes you angry and reown it. As you do, stop and listen to what you said. Does it fit, when you really pay attention to what is inside of you? Who taught you to lay the source of your anger outside of yourself? Which is the most true way of looking at things? Which is the most helpful?

Now close your eyes and imagine all of the things or people that make you feel glad or happy. Jot these down in the margin. Now reown each of these things, saying, “I make me happy (glad) when ________________ .”

2. Look at each person in the group and pick out one thing about him which makes you happy or which you like. Jot it down. Now go around to each person and tell him the thing that you thought about him. Now go around the room again and reown each thing. Consider which ones fit.

Instructor should now lead a discussion to see if the following things come out from the group. (If they don’t come, don’t force them.)

3. Note that most of the things that you thought about someone else fit you quite well. We human beings seem unable to attribute much to anyone else that is not characteristic of
ourselves. It is our nature to see in others that which resides in ourselves, but which, for a variety of reasons we are hesitant to acknowledge about ourselves. This principle is related to our discussion of responsible language. If you are a mature responsible person, what is the value of placing the responsibility for your life in the hands of other people?

**LEARNING ACTIVITY 3.22**

*Participants will complete Final Test: Owning Feelings.*

**3.22 Final Test: Owning Feelings**

Write three or four classroom situations which make you angry. Then rewrite into owning messages.

**Behavioral Objective 3.3**

The participant will select owner rather than avoider words in eight out of ten written sentences. He will also use “owner” words in 80% of situations presented in role play situations.

**LEARNING ACTIVITY 3.31**

*Participants will read concept explanation: Avoider vs. Owner Words.*
3.31 Avoider vs. Owner Words: Concept Explanation

If a person is to be truly captain of his own ship and master of his own soul, or even if he is merely striving to be a mature individual, that person needs to reown all of the responsibility placed outside himself, by the above method. The really mature individual also is responsible in other ways. It helps, for example, if he becomes aware of ways our language helps us slip out of being responsible. Words may be, and often are, used by most of us in a way that they help us to avoid taking responsibility for what we think and do. One of the most frequent ways that we avoid taking full responsibility is by using words that we shall hereafter refer to as avoiders. Words that show full responsibility will be called owners. Avoiders are passive words like:

"I can do it."
"I didn't have the time."
"That makes me angry."

Owner words are action words like:

"I will do it."
"I didn't take the time."
"I am getting angry."

Qualifiers are another way of avoiding. Words like:

probably
maybe
possible
think

leave us just enough room to escape assuming full responsibility for our behavior. We use these words to hedge our bets, to leave the back door open from the citadel of responsibility. Of course we don't really mean to be irresponsible. We are just being prudent. Or are we?

LEARNING ACTIVITY 3.32

Participants will complete the Concept Test #1: Avoider vs. Owner.

3.32 Avoider vs. Owner: Concept Test #1

1. List five avoiders.
2. List five owners.
LEARNING ACTIVITY 3.33

Participants will participate in applied practice exercises: Avoider vs. Owner.

3.33 Avoider vs. Owner: Applied Practice

1. a. In your small groups, brainstorm all of the avoiders and qualifiers your group is aware of in our language.
   b. When your list is complete, or as incomplete as you are content to let it be, go through your list and have each person use each avoider or qualifier in his or her favorite way.
   c. Now go back and each person replace the avoider or qualifier he or she used with owners or with “I imagine.”

2. Break into groups of three. Each person pick out a situation in his life which has caused or which does cause him difficulty. Discuss that situation with person number two attempting to use owners in describing the situation, and if desired, its solution. Person number three will observe and attempt to find places where the person used avoiders where owners could have been used. Discuss these possibilities in a helpful way. Then switch roles until all three have had the opportunity to be in each role.

3. Through the next week, pay attention to your words and to you. Look for opportunities to practice using messages to express your own feelings, to reown your feelings, and to use responsible language.

LEARNING ACTIVITY 3.34

Participants will complete Concept Test #2.

3.34 Avoider vs. Owner: Concept Test #2

1. From a list of avoiders, qualifiers and owners, participants will pick 80% correctly.

2. Replay section 3.33 for five minute segments. This time the observer will tally avoiders, qualifiers and owners. A passing score is when the sender uses at least four owners for each avoider or qualifier.
Behavioral Objective 3.4

Given a list of ten problem situations between students and teachers, the participant will name the person responsible for solving the problem eight times.

**LEARNING ACTIVITY 3.41**

Participants will read the concept explanation: Responsible Language.

### 3.41 Responsible Language

A critical part of responsible language is for each person to own or admit his own feelings, and his part of the problem. Most people find it much too easy to blame the problem on someone else and avoid responsibility for one's own contribution to the problem. On the other hand, many people have a strong tendency to take the responsibility for problems when they could leave themselves out of it and let the other person handle it.

There are those of us around who belong to the “I am responsible for the world” club. Such people take responsibility for every one and everything. They feel that whatever the problem, it is up to them to solve it and make things right. They fail to stop to consider that depriving the other person of the privilege of handling his own problems robs him of the self-satisfaction and growth that comes from so doing.

Let us consider some examples. If your child keeps his room looking like the latest earthquake disaster area, and you don't like it, it is your problem. If it bothered him too, but he just didn't know how to clean it up, or didn't have the facilities, then it would be his problem too. Now if his room doesn't bother him, but your nagging him about it does, then he has a problem, but it isn't his room, it is your nagging. In this case it is possible that in order to solve his problem he may have to help you solve yours.

The point is that for communication purposes, whoever is bothered about something has the problem. If two of you are bothered about the same thing, only then do you both have the same problem. If I am doing something that you don't like, you are the one who has the problem. If you tell me about it I may then have the problem of dealing with the fact that my friend doesn't like my behavior, and in order to solve my problem I will solve yours. On the other hand, instead of telling me about your problem, you lay your problem on me and brand me as a thoughtless, inconsiderate clod I am likely not to care what you think, and I will probably not be very interested in helping you to solve your problem. In fact, I just may become sufficiently annoyed that I will do my annoying behavior for you even more, and increase your problem. Thomas Gordon has discussed this notion much more extensively, for those who wish a more complete exposition.

**LEARNING ACTIVITY 3.42**

Participants will complete the concept test on responsible language.
3.42 Concept Test: Responsible Language

Read the following examples of interaction between people and decide who, for the purpose of communication, has the problem, you, the other person, both of you, or neither of you. Identify each person's problem.

1. Your guest lights a cigarette and your house has a no smoking rule.

2. Your child wants to buy a model, has spent his allowance, and wants to borrow the money from you.

3. A child in your classroom interrupts your conversation with another child.

4. Your husband or wife wants to go out to a movie and you want to watch a special TV program.

5. Your child drives the family car too fast and gets a speeding ticket.

6. A child in your classroom appears about ready to tip paints onto the rug.

7. Your teenage daughter wears only two different pant suits to school. The other twelve pairs are too short.

8. Your child rides his bike in your flowers. You lock up the bike.

9. A student in your class ridiculed another student and hurt his feelings.

10. A student who constantly talks in class has become a disruptive influence.
Answers

1. You
2. Your child
3. You
4. Both
5. Your child (could be you if you get angry)
6. You
7. Your teenager
8. Both
9. The hurt student
10. You and perhaps other students (if they are bothered)

Behavioral Objective 3.5

Given a list of ten statements which students might use to avoid responsibility, each participant will respond with eight correct responsible confrontations. He will also role play responsible confrontation for three minutes, making no more than 20% errors.

LEARNING ACTIVITY 3.51

Participants will read Concept Explanation: Confrontation.

3.51 Concept Explanation: Confrontation

Although most problems will be solved using responsible language and problem solving techniques, there are times when it is necessary to confront the other person gently and in a caring way with his own responsibility. The most important thing that you can do as you work on this concept is to keep in mind the things that you have learned up to now about responsible communication. We cannot stress too strongly that responsible communication is not the same as criticism, and that it only is of value if the other person first knows that you really care about him.

Confronting an individual with reality, his behavior, and the consequences of his behavior in a caring way is a useful communication skill. It is important to remember that behaviors, and inconsistencies between words and behaviors, are what are confronted, not the person's feelings.

Confronting consists of constantly bringing the attention of the individual back to what is happening, to his responsibility in what is happening, and to what will happen if he continues as he is behaving now. Unless the overt and covert messages are "I care about you" messages, confronting will become alienating. If you have a problem with the situation, too, use another communication method.
**LEARNING ACTIVITY 3.52**

*Participants will read the list of Do's and Don't's of Confronting.*

### 3.52 Confrontation Do's and Don't's

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>DON'T</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRESENT</strong></td>
<td>What are you doing now?</td>
</tr>
<tr>
<td></td>
<td>What did you do today?</td>
</tr>
<tr>
<td></td>
<td>What can we do today?</td>
</tr>
<tr>
<td><strong>BEHAVIOR</strong></td>
<td>What are you doing now?</td>
</tr>
<tr>
<td></td>
<td>What’s going on?</td>
</tr>
<tr>
<td></td>
<td>What did you do in class?</td>
</tr>
<tr>
<td></td>
<td>What are you willing to do?</td>
</tr>
<tr>
<td><strong>PERSONAL</strong></td>
<td>How can I help you?</td>
</tr>
<tr>
<td></td>
<td>It is important to me how you are doing.</td>
</tr>
<tr>
<td></td>
<td>Is there some way I can help you do it?</td>
</tr>
<tr>
<td></td>
<td>I care.</td>
</tr>
<tr>
<td></td>
<td>I would like to help you do better.</td>
</tr>
<tr>
<td><strong>VALUE</strong></td>
<td>Is this helping you?</td>
</tr>
<tr>
<td></td>
<td>How will that help you?</td>
</tr>
<tr>
<td></td>
<td>Is your behavior helping you?</td>
</tr>
<tr>
<td></td>
<td>Does that help you to do better?</td>
</tr>
<tr>
<td></td>
<td>Will that help you in the future?</td>
</tr>
<tr>
<td></td>
<td>Was that a good thing to do?</td>
</tr>
<tr>
<td></td>
<td>How do you feel about you?</td>
</tr>
</tbody>
</table>
**3.53 Applied Practice in Confronting**

**A.** From the following situations, select the examples where the skill of confrontation could be useful. Check each.

- 1. Your husband or wife comes home and tells you he or she has been demoted.
- 2. A child in your class says, "He made me do it."
- 3. Your daughter tells you she is going to elope with the local "good for nothing."
- 4. A friend comes to you and says, "I just don't know what to do. I'm so depressed."
- 5. A student is caught throwing spit.
- 6. A student never gets his work finished.
- 7. A child says to you, "No one likes me."
- 8. A fellow teacher says, "It's not fair that I'm the one that always has to straighten up this lounge."

**B.** 1. With two other people, discuss your choices of possible situations where confrontation may be called for. Why did you categorize them as you did?

2. Remaining in your Triads, one person is to choose a situation from the list (or one of your own choice) to role play. Another becomes listener—confronter, and the third is to assist the confronter by suggesting possible confrontation phrases, as from the list, and by helping the listener—confronter recognize if he makes judgement attempts to persuade, etc.

Remember: (1) LISTEN TO FEELINGS, CONFRONT BEHAVIORS AND INCONSISTENCIES.

(2) YOU MUST CARE WHAT WILL HAPPEN TO THIS PERSON.

3. Change roles and repeat the process:

4. Join your group and discuss your observations, successes and difficulties with the process of confrontation.

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**LEARNING ACTIVITY 3.54**

*Have participants complete confrontation proficiency test, parts 1 and 2.*
3.54 Confrontation Proficiency Test

Part 1

For each statement write a responsible confrontation statement. Assume that you have previously listened for covert messages and other meaningful problems.

1. Miss Jacobs, I had to help my little brother deliver his papers last night, so I didn’t get my paper written.

2. I don’t need to learn about math. I am going to be a beauty operator, and how is math going to help me?

3. I try and try and I just can’t seem to get away early in the morning to get here on time.

4. I forgot.

5. You’re being unfair. None of our other teachers make us do this much homework.

6. It was Jack’s fault. He hit me first and all I did was hit him back and I wouldn’t have even touched him if he didn’t ask for it.

7. Mr. Zook has it in for me. He just sits around watching for some excuse to give me a bad time.

8. I will make a bargain with you, Teach. You sign my eligibility slip and I won’t tell everyone that I saw you down at the Cactus Club the other night.
9. I would have won but he lucked out on the King-Rook play.

10. Teacher: I haven't seen your homework for several days, Jack, what is happening?
    Student: I don't know.

**Part 2**

Divide into groups of three and have two people role play a problem situation with a student, while the third observes, using the list of confronting do's and don't's. Tabulate the proportion of do statements used, as well as the number.
GOAL—4

TO HELP PARTICIPANTS USE EFFECTIVE PROBLEM NEGOTIATION AND PROBLEM SOLVING METHODS WITH STUDENTS.

Behavioral Objective 4.1

Participants will achieve five or six correct on an evaluation testing knowledge of the negotiation process.

LEARNING ACTIVITY 4.11

Participants will read the concept paper, "Negotiation."

4.11 Negotiation

Negotiation means settling a problem with another person to the satisfaction of both people. Making a deal necessitates laying aside power and revenge, listening to the other, owning feelings, choosing solutions and evaluating the effectiveness of the solution chosen. In essence, it requires all the communication skills learned thus far. This problem solving method is used when both people have a problem in a given situation.

Negotiating a problem between two people need not be a win or lose proposition. Certain skills are needed to implement a successful contract and make it work effectively, eliminating power and resentment. A contract that both help devise is more apt to be carried out by both parties.

The steps in negotiating a problem are:

1. **Setting the stage**—choose a time when things are not pressing for either person, a private place to talk, and paper and pencil.

2. **Tell about process**—It is important that the other person know that this is not the usual "I'm telling you how it is!" session. Stress that you are looking for a **fair** solution to the problem, not for one to win and one lose.

3. **Defining**—Each talks about their side. Use "I-messages" and "I-imagine"; avoid "You-messages." Write the problems on paper.

4. **Brainstorming**—on all possible solutions **without evaluation**—both people contribute. Write the ideas down on paper.

5. **Evaluate and choose**—going through the possible solutions and eliminating unacceptable ones. Decide on one to try for a **week**.
6. **Do it**—make sure both know who is doing what when. Also discuss what happens if one does not follow through as agreed.

7. **Evaluation**—meet again to check out how the solution is working. Set up a specific meeting time. This is an important step.

---

**LEARNING ACTIVITY 4.12**

*Participants will complete "Negotiation: Evaluation."*

**4.12 Negotiation: Evaluation**

1-3. List the three things essential to a proper setting for the negotiation process.

1.

2.

3.

4. In the defining of the problem, always avoid using __________ messages.

5. In the brainstorming for solutions, it is important to evaluate as you go along.

   T   F   (Circle one)

6. The evaluation of how the solution is working is an optional step.

   T   F

**Behavioral Objective 4.2**

Participants will negotiate a problem with other class members to the satisfaction of the instructor.

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**LEARNING ACTIVITY 4.21**

*Participants will negotiate a problem with a class member.*
4.21 Negotiating a Problem

Choose a person with whom to work. Decide who is A and who is B. Look at the instructions for role A and role B. Start with problem one and negotiate. Person A is in charge of the negotiation. Each person should read only the description of his own role, and should not know the instructions for the other person’s role.

Upon completion of the negotiation, you may switch places, allowing person B the opportunity to be in charge of negotiating the alternate problem.

Person A:

Problem #1

As the teacher, you are concerned about Johnnie’s seeming lack of motivation. He does not turn in assignments, he appears bored, and frequently distracts other students. Nothing you have tried seems to change this. You want to be a good teacher and help Johnnie before the year ends.

Problem #2

You and the teacher next door share a materials room between your classrooms. He (she) is constantly taking the last of some material without replenishing the supply so when you need it in a hurry, you have to go clear across the school to the main supply room for it. You have mentioned this to him (her) several times and get an apology and promises each time.

Person B:

Problem #1

As a student, you find little of interest to you in Mr. (Ms.) Smith’s class. It’s easy to become distracted, where you’re sitting, especially since you frequently don’t understand what it is you’re to be doing. Mr. (Ms.) Smith doesn’t give enough explanation. Besides, he (she) doesn’t seem to care about you anyway.

Problem #2

You share a small supply room with a fellow teacher. He (she) is constantly nagging at you because supplies are depleted and it always seems to be your fault. You are always told that it is your responsibility to keep it replenished when he (she) goes down to the main office, and to the lounge, which are across from the main supply room, several times a day, and you seldom go down there. You even park in the back and come in the back door, whereas he (she) comes by the supply room every morning.
LEARNING ACTIVITY 4.22

Participants will discuss their negotiation with each other.

LEARNING ACTIVITY 4.23

Participants will discuss their negotiation with their group.

Behavioral Objective 4.3

Participants will practice the negotiation of a problem with a family member, professional cohort, or child in classroom during the next week.

LEARNING ACTIVITY 4.31

The participant will choose a person in the next week to negotiate with on a problem.

4.31 Negotiating a Problem

Choose a family member, cohort at school, friend, or child with whom you have a problem that could possibly be solved by the negotiation method. Sit down with this person and say, “I am taking a class on communication and in this class, I am to try this problem solving method. You and I seem to have a problem with _____________. Would you be willing to try this with me?”

LEARNING ACTIVITY 4.32

The participant will report to the group on what happened in the negotiation.

4.32 Reporting a Negotiation

Report what happened in your negotiation to your group.
Appendix B

Specific Aids in Differentiating Among Categories in Flander's Interaction Analysis System

Even after an observer becomes familiar with the category system, he will find that he needs additional help in making some of the more subtle distinctions required in categorizing. This portion of the manual is intended as a guide to the observer in making these distinctions. First, some informal guides for differentiating between two or more specific categories are outlined; and secondly, some established ground rules applying to the system are given.

Category 1, Accepting Feelings, versus Category 3, Accepting Ideas: Probably one of the first problems an observer encounters is that of distinguishing between these two categories. If we remember that a 1 is used when a pupil is exhibiting emotion and a 3 is used when he is stating an idea, the problem is somewhat less puzzling. When the teacher reflects what the pupil has said he may be reflecting an idea. If the pupil has exhibited strong emotion, chances are good the teacher was dealing with the emotion. If the pupil's emotion and idea are fused, then the teacher may be trying to relate the emotion to the idea, in which case Category 1 is used. The following examples indicate two types of teacher statements that are similar, yet one is a 3 and the other is a 1. A child disturbed by a very hard arithmetic problem might say, "I hate arithmetic because it is so hard. I don't see why we need to learn it." A response by the teacher such as "Sometimes trying to make numbers add up does get a little discouraging and maddening," is an example of a 1. Another child might say, "I think if you add these numbers you can't possibly come up with anything but a negative number." The teacher responds by saying, "All right now. John has suggested that the answer to our problem must be a negative number." The teacher is using a 3.

Category 1, Accepting Feelings, versus Category 2, Praise or Encouragement: Although Categories 1 and 2 have some similarities, it is important to remember that Category 1 includes no expression of teacher value, while Category 2 refers to teacher approval of an action. A teacher using a Category 1 statement is saying, "I am willing to listen to you express your feelings," or "I will try to understand your feelings." But a teacher using a Category 2 statement says, "That is a good idea. I like what you are saying." "Continue, I should like to hear more about your idea."

Category 2, Praise and Encouragement, versus Category 3, Accepting Ideas: Again, Category 2 is primarily encouraging by giving value to an idea. The teacher is making a judgment. Any positive type of judgment he makes—that he likes the pupil's viewpoint—falls into Category 2. Category 3, on the other hand, refers to restatements or
clarifications of pupils' contributions. No element of teacher value is present in this category. The teacher simply says, "I think I understand what you are saying. Are you saying that if we work the problem this way, although it is not the way I showed you, we shall still come out with the correct answer?" The teacher in this case has given no indication of his personal feelings about the pupil's statement.

Category 4, Asking Questions, versus Categories 2, 3, 6, and 7: Teachers' questions can be of such various types and can often be stated in such diverse ways that they could properly be placed in any one of seven categories. The effect of the question on the pupils is the criterion that must be used for differentiation of questions. To illustrate this point, here are some sample questions and their probable categories. "Why do you think we are in school today? Do you think we are here simply to watch Johnny act as he pleases?" (This statement has the effect of criticizing Johnny--stops him from exhibiting certain kinds of behavior. Category 7, Criticism.)

"How many of you, I wonder, know what Billy means when he says that we ought to subtract 3 from 6 to see if we get the same answer?" (This statement has the effect of using Billy's idea. Category 3, Accepting Ideas.)

"Do the rest of you like Johnny's ideas as much as I do?" (This statement has the effect of praising Johnny for his idea--the teacher's value is evident. Category 2, Praise or Encouragement.)

"Nancy, will you please close the window?" (This statement has the effect of giving directions--assumes compliance. Category 6, Giving Directions.)

"What steps do you think we ought to take now in order to finish our group project?" (This is a question, the class will try to answer it, and the teacher expects some answers. Category 4, Asking Questions.)

Category 4 is used when the teacher is questioning in order to get an answer from a pupil or a group of pupils. The problem of determining "when a question is a question" is one that can be cleared up fairly easily through practice with tapes.

Category 4, Asking Questions, versus Category 5, Lecturing: Ideas or opinions phrased as rhetorical questions are not categorized as questions and belong in Category 5, not Category 4. When a teacher, after asking a question, continues to talk, the question probably does not belong in Category 4. Although such rhetorical questions are difficult to categorize at the time they first occur during an observation, the observer can usually distinguish between true and rhetorical questions of a particular teacher after he is familiar with the teaching style of the teacher.

A question followed by a period of silence is usually one that was meant to be answered, so it falls in Category 4. A restatement by the teacher of the original question likewise would fall in this category.
Category 5, Lecturing, versus Category 6, Giving Directions:
The most frequently used of all the categories is Category 5, giving opinion or information. In general, when a teacher is trying to communicate his own thoughts, whether they be in the form of idea, opinion or whatever, Category 5 is used. This holds true unless a statement is a specific direction with compliance expected, or when it is a statement of criticism.

With a teacher who is giving very long and complicated directions, it often becomes difficult to differentiate between Categories 5 and 6. When a statement is made in such a way that the observer can predict compliance on the part of a student or several students, either long term or short range, then the statement is obviously a direction, Category 6. For example, a teacher may say, "I want you all to go to your seats now and sit down," or, "Johnnie, please stand up." On the other hand, if the teacher says, "Now I want you all to think about this question between now and tomorrow, and then come in with some ideas," the categorizing is not so clear cut. Long-term directions such as this one are classified as directions, particularly when the observer can predict compliance.

Sometimes a teacher says, "Boys and girls, I want you to go home tonight and ask your mothers and fathers about the different kinds of insurance they have," or "I want you all to think carefully about this problem for the next few minutes." At some point the observer must realize that he can no longer predict or even be fairly sure of compliance because of the broad nature of the direction. In such case the statement is not classified as a direction.

Category 6, Giving Direction, versus Category 7, Criticizing:
Often the line between criticism and direction is difficult to determine because the two are used together. Criticism and direction are both designed to change the behavior of the pupil or pupils. A statement such as, "I don't like the way you have been doing your work. I want you to do it another way," is criticism. On the other hand, a simple statement, "Please sit down, Johnnie," is a direction. Criticism and direction are often used together in a kind of vicious circle. The teacher may say, "I don't like what you are doing. Don't do it anymore." And then she will say, "All right now, go to your seat. I told you to go to your seat. Johnnie, why don't you listen to me?" This sequence is criticism, direction, criticism, direction--the common sequence seen in a classroom when a teacher gives a direction, expects compliance, does not receive compliance, criticizes, gives another direction: and then, when no compliance is forthcoming, the teacher gives more criticism.

Category 8, Student Talk--Response, versus Category 9, Student Talk--Initiation: In general, when the student is responding to a teacher question or to teacher direction, the statement is categorized as an 8. If, during his response, the student shifts to ideas of his own, then the
shift has been made to Category 9. Such shifts from 8 to 9 are quite common. The following is an example of a shift from an 8 to a 9: The teacher asks the question, "What is the first angle on page 5 called?" After some thought John says, the first angle on page 5 is a right angle, but I don't think that the name is as important as the size of the angle. The angle is 90 degrees, and we find that out by subtraction." This statement shows a clear shift from the answer to the teacher's question over to the student's own ideas. When a pupil, in breaking into some interaction, tries to initiate an idea of his own, then clearly the 9 is used. In general, if the teacher's question is very narrow in scope, or if it is something similar to a direction, then the student response that follows is likely to be an 8. Student talk following a broad type of question may fall into Category 9. Before making the decision that a student statement belongs in this category, the observer can explain to himself how the initiative is shown and then he can more confidently use this category.

Category 9, Student Talk--Initiation, versus Category 10, Confusion: During spontaneous student-to-student communication, a series of 9's would normally occur. In order to show when a different student begins to talk, a 10 is inserted in the sequence of 9's to indicate that one student has stopped and another student has begun. This device is necessary in order to differentiate this condition from one in which the same student talks at length.

Ground Rules

Because of the complexity of the problems involved in categorization, several ground rules have been established. These rules of observation aid in developing consistency in trying to categorize teacher behavior. They have been useful in working in classrooms with all subject areas and at all grade levels.

Rule 1: When not certain in which of two or more categories a statement belongs, choose the category that is numerically farthest from Category 5. This is true except when one of the two categories in doubt is Category 10, which is never chosen if there is an alternate category under consideration. Because those categories farthest from the center (5) of the category system are less frequently occurring, the observer maximizes information by choosing the less frequently occurring category (except 10) when there is a choice. For example, if the observer is not sure whether it is a 2 or a 3, he chooses 2. If in doubt between a 5 and a 7, he chooses a 7, etc.

Rule 2: If the primary tone of the teacher's behavior has been consistently direct or consistently indirect, do not shift into the opposite classification unless a clear indication of shift is given by the teacher. The trained observer is in the best position to judge whether or not the teacher is restricting or expanding the freedom of action of class members. If the observer feels that the teacher's pattern of behavior
is generally one of expanding the freedom of students to act, a slightly more direct statement in a very indirect pattern may tend to look, in contrast, like a more direct statement than it actually is. On the other hand, he must remain alert to shift as the teacher shifts momentarily to one of the more direct categories. Conversely, if the observer feels that the teacher has been consistently restrictive in his behavior, he is particularly careful in his use of the indirect categories.

In observing this rule the observer is reacting to the general tone of the teacher's influence, either direct or indirect, and does not use the opposing categories unless it is clear that the teacher has shifted from this more general pattern. He must, of course, be certain that the teacher has established a direct or indirect pattern before he categorizes consistently in either of the two areas. Clearly he must also be ready to change when the teacher obviously moves all the way up the system; that is to 1 or 2 from 6 or 7, or when the teacher moves all the way down to a 6 or 7 from a 2 or 3. This rule is often called the rule of the unbiased biased observer; that is, the observer is operating in a climate of general direct or indirect influence, and although he is ready to move to the opposite set of categories, he must feel that the teacher has definitely moved to the opposite type of influence before he is willing to grant a change in interaction pattern.

Rule 3: The observer must not be overly concerned with his own biases or with the teacher's intent. Rather, he must ask himself the question, "What does this behavior mean to the pupils as far as restriction or expansion of their freedom is concerned?" If, when the teacher attempts to be clever, pupils see his statements as criticism of a pupil, the observer uses Category 7, rather than Category 2. If the teacher in being sarcastic says how good the children are, again Category 7 is used. If a statement intended as a question has the effect of restricting students' freedom so that it becomes a direction, then it must be classified as a direction. The effect of a statement on the pupils, then, not the teacher's intend, is the crucial criterion for categorizing a statement.

This rule has particular value when applied to the problem of helping teachers to gain insight into their own behavior. In trying to categorize their own tapes teachers comment, "but I meant . . .," or "I was really trying to get the pupils to talk more," or "I think that I wanted them to answer that question." All these protests indicate that the teacher is thinking about his intent rather than the effect of his behavior on the class members.

The meaning and value of this category system for an individual teacher comes from the attention it gives to the effect of teacher behavior on the freedom of the class. Use of this criterion requires a great deal of training, particularly when a teacher is categorizing a tape of his own teaching. He must learn to be non-defensive about categorizing the behavior, recognizing that there is absolutely no
evaluation or good-bad orientation implied in the category system. The question is simply, "What category best describes this particular bit of interaction?"

Rule 4: If more than one category occurs during the three second interval, then all categories used in that interval are recorded; therefore, record each change in category. If no change occurs within three seconds, repeat that category number. This rule is concerned with the situation in which statements from two categories occur during a three second period. Generally an observer writes down a category number every three seconds. The pace of recording is generally maintained so that only one category number is written during this period.

However, if there is a change in categories during this interval, the observer records the change. Within the three second interval, for example, the teacher may ask a question, the child answers, and the teacher praises the child. The observer attempts to record all three of the categories. The fourth rule, therefore, is that a category number is recorded every three seconds unless the teacher changes categories within the three second interval. If he changes categories, or if more than one category occurs during the three second interval, then all categories used in the time period are recorded.

Rule 5: If a silence is long enough for a break in the interaction to be discernible, and if it occurs at a three second recording time, it is recorded as a 10. (This rule is listed because observers tend to ignore short periods of silence.) The 10 is also used when two people are talking at once and when there is slight confusion in the classroom so that the observer cannot identify a single speaker. Breaks in the interaction in the form of silence or confusion are classified in Category 10.
Appendix C

Student Attitude Surveys

Student Attitude Survey Grades 1-3

I WANT YOU TO DRAW A CIRCLE AROUND THE YES BEFORE EACH NUMBER IF YOU AGREE WITH THE SENTENCE. DRAW A CIRCLE AROUND THE NO BEFORE EACH NUMBER IF YOU DO NOT AGREE WITH THE SENTENCE.

FOR EXAMPLE IN NUMBER 1, IF YOU LIKE YOUR TEACHER CIRCLE [YES]. IF YOU DO NOT LIKE YOUR TEACHER CIRCLE [NO]. YOUR TEACHER WILL NOT SEE YOUR ANSWERS SO DO YOUR BEST TO ANSWER THE WAY YOU REALLY FEEL. AS I READ EACH QUESTION I WANT YOU TO READ IT SILENTLY AND THEN MARK EITHER YES OR NO. LET'S BEGIN.

YES NO 1. I LIKE MY TEACHER.
YES NO 2. I WANT TO GROW UP TO BE LIKE MY TEACHER.
YES NO 3. MY TEACHER HELPS ME.
YES NO 4. MY TEACHER LIKES TO TALK TO ME.
YES NO 5. MY TEACHER LISTENS TO ME.
YES NO 6. MY TEACHER LIKES ME.
YES NO 7. I WOULD LIKE TO HAVE THIS TEACHER NEXT YEAR.
YES NO 8. THIS IS THE BEST TEACHER I HAVE EVER HAD.

Student Attitude Survey Grades 4-6

I WANT YOU TO DRAW A CIRCLE AROUND THE YES BEFORE EACH NUMBER IF YOU AGREE WITH THE SENTENCE. DRAW A CIRCLE AROUND THE NO BEFORE EACH NUMBER IF YOU DO NOT AGREE WITH THE SENTENCE.

FOR EXAMPLE IN NUMBER 1, IF YOU THINK YOUR TEACHER IS FAIR CIRCLE [YES]. IF YOU DO NOT THINK YOUR TEACHER IS FAIR CIRCLE [NO]. YOUR TEACHER WILL NOT SEE YOUR ANSWERS SO DO YOUR BEST TO ANSWER THE WAY YOU REALLY FEEL. AS I READ EACH QUESTION I WANT YOU TO READ IT SILENTLY AND THEN MARK EITHER YES OR NO. LET'S BEGIN.

YES NO 1. MY TEACHER IS FAIR.
YES NO 2. MY TEACHER UNDERSTANDS ME.
YES NO 3. MY TEACHER MAKES ME FEEL THAT I BELONG TO THE CLASS.
YES NO 4. MY TEACHER LIKES TO LISTEN TO WHAT I HAVE TO SAY.
Appendix C Continued

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<td>MY TEACHER LIKES ME.</td>
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<td>I AM ABLE TO GO TO MY TEACHER WITH MY PROBLEMS.</td>
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### Appendix D

#### Student Misbehavior Checklist

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### Appendix E

**Computer-generated Interaction Analysis Matrices**

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0.70  TOTAL TEACHER RATIO  
0.25  TOTAL PUPIL RATIO  
1.26  I/D RATIO  
0.90  REVISED I/D RATIO  
6.67  REVISED I/D RATIO ROW 8  
7.34  REVISED I/D RATIO ROWS 8-9  
0.01  EXTENDED INDIRECT INFLUENCE RATIO  
0.04  EXTENDED DIRECT INFLUENCE RATIO  
0.06  EXTENDED I/D RATIO  
0.25  CELL 3/9 RATIO  
0.04  THE VICIOUS CIRCLE RATIO  
11.89  PUPIL-TALK RATIO
VITA

Gerald E. Manwill

Candidate for the Degree of

Doctor of Philosophy

Dissertation: An In-service Education Evaluation of the Communication Skills Workshop Self-Actualizing Education

Major Field: Psychology

Biographical Information:


Education: Attended elementary school in Ogden and Roy, Utah; graduated from Bountiful High School in 1965; received the Bachelor of Science degree from Weber State College, Ogden, Utah, with a major in psychology in 1971; completed the requirements for the Master of Science degree, with a major in psychology, at Utah State University in 1974.

Professional Experience: Psychometric examiner; University Affiliated Exceptional Child Center, Utah State University under Dr. Glendon Casto, 1972-73; Psychometric examiner; Laboratory For The Diagnosis and Treatment of Learning Disabilities, College of Education, Idaho State University under Dr. Evlyn Thirkill, 1972-73; Coordinator of the "Advocacy of College Aged Handicapped Youth Program" under Dr. Marvin Fifield, University Affiliated Exceptional Child Center, Utah State University, 1973; Vocational Education Counselor, Logan High School, Logan, Utah under Ms. Rhea Wallentine, 1973; Research team member, University Affiliated Exceptional Child Center, "Project Work Simulation Development," Utah State University under Mr. Herbert Miller, 1973; Graduate research assistant under Dr. Michael Bertoch Ed. D., Department of Psychology, Utah State University, 1973-74; Counseling internship; Utah
State University Counseling and Testing Center, Utah State University under Dr. Michael Bertoch, 1973-74; Clinical Internship; 12 month full time at the Wyoming State Hospital under Dr. Reed Morrill, 1974-75; Consulting group therapist; Evanston Junior High School, Evanston, Wyoming.

Affiliations: Member, Phi Kappa Phi National Honor Society, 1971 to present.