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ABSTRACT

This pilot study was designed to help teachers become more aware of their own behavior and its effect on the emotions and attitudes of their students. An inservice program was offered to 22 teachers, affecting approximately 540 children in eight elementary schools in Albany, New York. It was hypothesized that the impact of human relations training techniques--sensitivity training, feedback of classroom interactions, a combination of these two, and a series of lectures on new media to enhance student motivation--should show a trend toward a positive effect on pupil anxiety, peer relationships, self-concept, and attitudes toward school, as measured by pre- and posttests of anxiety and compulsivity, and observations of classroom operations. No significant changes or trends were noted. However, teacher assessments of the results of their experiences indicated some attempts to move in positive directions as defined by the study. Further research in this field is suggested, with more time spent on training and special attention given to the selection of measurement instruments. (Author/RT)

Impact of Change in Attitudes Under Three Variations of Sensitivity Training

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Colonie Central School District #1

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Final Report

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II. Inside Cover Page

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Lastly, I am deeply indebted to the teachers for their patience and understanding and willingness to endure long after school meetings, numerous instructional interruptions with little reward other than possible professional and personal satisfactions. Working with them was a real rewarding experience for me.

V. Table of Contents:

VI. Introduction

A. 1 The Problem

In recent literature much attention is given to the anxieties in children and the ways in which pupils learn to cope with their anxieties. Pupil attitudes and their emotional status may be enhanced by building in teachers a greater sensitivity to their own classroom behavior that may be inadvertently causing negative attitudes and anxieties. Not only does a teacher have to be aware of the kinds of anxieties a pupil brings to the learning situation but he must also be cognizant of the effect of his own behavior on pupil anxiety, liking structure, self concept, values and attitudes toward school. A pupil's defenses against anxiety will be negatively effected by anything that lowers his self confidence, emphasizes helplessness, or causes him to feel unwanted. Therefore, this study sought through an inservice program of sensitivity training, to alter the behavior of the classroom teacher in directions which would facilitate and bring about the afore mentioned change in pupil behavior.

In the last few years the professional staff in South Colonie has more fully realized that the instructional situations created for youngsters could be improved if teachers were helped to become more aware of their own behavior and its effect on the emotional and attitudinal status of individuals in their classes. The pilot study was designed to help teachers become more aware of their own behavior and its effect on the emotional and attitudinal status of individuals in their classes. Since learning takes place in the interaction between teacher and pupil, it follows that the learning could be enhanced by a greater awareness on the part of the teacher of the emotional and attitudinal status of her pupils. As the teacher awareness of how learning seems to the pupil increases, teacher behavior and teaching strategies will be more consciously designed to improve the emotional and attitudinal status of her pupils. This should result in healthier self-concepts, a reduction in pupil anxiety, a more diffused liking structure within the class, and more positive attitudes toward school.

A. 2 Rationale and Review of Literature

Rogers (1967) reports that significant learning in-

creases when a teacher values, trusts, and truly accepts his pupils. In order for pupils to overcome their hesitations and anxieties these attitudinal qualities (empathic understandings) must exist in the personal relationship between the teacher and the pupil. Teachers may well engage in as many as 1000 interpersonal interactions with their pupils per day. Since learning takes place in the interaction between teacher and pupil it follows that the learning could be enhanced by a greater awareness on the part of the teacher of the emotional status of the pupil.

A more desirable learning climate is established when a teacher has the attitudinal qualities for empathic understanding. The teacher must have a sensitive awareness of how learning seems to the pupil. Jersild (1960) believes that many pupils suffer from needless anxieties. Rogers (1967, p. 9) reports "one could listen to thousands of classroom interactions without coming across one instance of a clearly communicated, sensitively accurate, empathic understanding". In the learning climate created by an empathic teacher it has been shown a more diffused liking structure among the pupil exists. There are not a few strongly disliked pupils. When pupils are highly involved with their peer groups a close correlation exists between the actual liking status and the utilization of abilities, self concept and attitudes toward school.

In a discussion on motivation Frymeir (1968) reports that pupils whose desire to learn is positive and optimal have healthy self concepts. Such pupils tend to feel they count, they are competent, other people like them, and they can do it.

There appears to be fairly common agreement in regarding anxiety as a response to an individuals self concept. Thus anxiety is woven into a pupil's attitudes and ideas relating to himself and to school. Research and theory suggest a major factor in the learning situation that may contribute to anxiety are certain qualities of the pupil-teacher interaction. The evidence seems to indicate in an understanding classroom climate, with a sensitive and empathic teacher, every pupil tends to feel liked by his peers and has a more positive attitude toward himself and school.

B. Objectives of Study and Statement of Hypothesis

The following major questions were raised to guide the course of the study:

1) What effect will an in-service program using human relations training techniques have on
   a. pupil self concepts?
   b. pupil defensiveness?
   c. pupil anxiety?
   d. pupil attitudes toward school?
   e. pupil movement from negative to positive peer relationships?
   f. pupil achievement?

2) What effect will an in-service program using human relations techniques have on
   a. observed teacher warmth and pupil perception of teacher warmth?
   b. the ratio of negative teacher comments to positive teacher comments?
   c. negative versus positive teacher attitudes toward pupils?
   d. a semantic differential of 10 items relating pupil characteristics?
   e. the number and severity of pupils considered problems by the teacher?

3) What effect will an in-service program using human relations techniques have on pupil-teacher interaction and the time interval frequency of positive pupil comments made toward teacher and others?

Human relations training is used here to mean techniques that will enable a teacher to become more aware of the way in which the affective domain mutually supports and is supported by the cognitive domain. In other words, the feelings of both teachers and students operant in a learning climate are assumed to have either a positive, neutral or negative effect on a given classroom learning experience. Thus, the term human relations training technique is used in a non-technical sense and is different from one of the treatments used in this study that incorporates some of the sensitivity training techniques of the t-group as defined by

such institutions as the National Training Laboratories of Bethel, Maine.

The hypothesis investigated herein states that the impact of human relations training techniques should have a positive effect on pupil anxiety, liking structure, self-concept, values and attitudes towards school as measured by tests of anxiety, compulsivity, and observations of classroom operations that check the factors related to liking structure. Further, teachers assessment of the results of their intervention experiences as compared to the observed patterns of their classroom behavior will indicate a gain in concern for positive pupil-teacher interaction in developing a more open classroom climate.

C. Limitations of the Study

Because of the limited number of teacher participants and the short term of the treatments used, this study was viewed as a pilot study positing expectations of directional movement rather than that of statistically significant changes. Nevertheless, appropriate sophisticated statistical analyses were applied to the data gathered.

VIII. Methods and Procedures

A. and B. Subjects Involved - Treatments Used

The third and fourth grade teachers of the South Colonie Central School District were asked to participate in a study to test this hypothesis. Twenty two (22) teachers from eight (8) elementary schools volunteered to participate with their classes. This participation provided a pupil sample of approximately five hundred forty (540) youngsters.

A general statement about the project and a general description of the treatments to be used was given to the teachers. It was necessary to ascertain whether any of the teachers would object to the treatments that involved the use of some t-group techniques. Thereafter, the teachers were randomly assigned to treatment groups.

Three variations of human relations training techniques were designed as treatments to increase teacher awareness of her own behavior and its resultant effect on learning and the learning climate. These treatments were administered to three groups of teachers. A fourth group received a series of six educational media lectures and served as the control.

Group I was formed with five (5) teachers participating. This group received a form of human relations training somewhat comparable to t-group activity associated with the term sensitivity training.

Six teachers were assigned to Group II. This group received feedback information only. Mr. Moses Brand, School Psychologist, conducted the feedback sessions.

Group III received sensitivity training (as in Group I) and feedback information. The feedback sessions were led by Mrs. Felice Benedict, School Psychologist. Six (6) teachers were assigned to this group.

Group IV served as the control. Five (5) teachers were assigned to this group. They participated in six (6) educational media lectures conducted by a guest lecturer.

The human relations training for Groups I and III was conducted by Dr. Julian Roberts of Yeshiva University

and Mr. Peter Caffentzis, a NTL certified sensitivity trainer. Arrangements were made so that the participants spent a weekend together for intensive training at the Presbyterian camp at Hebron, New York. Five (5) follow-up sessions were held after the weekend retreat. Group III began their feedback sessions with the school psychologist before completion of the follow-up sessions.

Groups I and III participated in a weekend retreat from January 10 thru January 12 for intensive human relations with two trainers. After the weekend experience the group met for five, 3 hour "follow-up" sessions. The majority of the meetings were held at the Veeder School with each trainer working with one group.

COLONIE SCHOOL DISTRICT HUMAN RELATIONS TRAINING WEEKEND

ACTUAL DESIGN

7:45-9:00 p.m. Supper and bedding down

9:00-9:45 Explain the project - Harvey Nelson
Explain the research - Lee Wolfe
Explain the design and the weekend - Julian Roberts and Pete Caffentzis
Check for reactions

9:45-10:30

A. Sharing of Expectations

"How did you get involved in the project and what do you expect to happen during the weekend?"

B. Anxiety Reduction

What happens to the information we are gathering re:

1. Anonymity
2. Use of data context of discovery vs. context of evaluation
3. Unit of analysis
4. No discussion of experimental variable

C. Administer the "Prophecy Questionnaire"

10:45-11:30 Practice Session of Group I and Group III Meeting separately and working on design for Saturday evening.

"Role play a teacher doing a lesson and the rest of the participants will role play children in 3rd or 4th grade. We will do this for approximately 20 minutes. Then we will critique the exercise. The critique will not focus on whether the teaching was good or bad but on how did the "teacher's" behavior make you "the student" feel.

11:30-12:00 m Evaluation of Practice Exercise

"How does this exercise relate to you and to your needs as teacher?"

12:00m-3:00 a.m. Redesign the Saturday experience so participants have an opportunity to react to and decide what they wanted to do.

Saturday, January 11

9:00-10:00 a.m. Sensory awakenings - a series of physical exercises designed to relax and stimulate so participants can focus on bodily feelings and sensations.

10:00-10:30 Evaluation of sensory awakening and decision making (Group decides to continue emphasis on self rather than classroom)

10:30-11:00 Coffee

11:00-11:45 Blind walk - one participant closes his/her eyes and allows another participant to lead him/her in a blind walk. The leader's (guide) responsibility is to offer many sensory experiences to his "blind" partner.

11:45-12:30 p.m. Role Representation Exercise

Recall people - actual or substitute- who performed roles (mother, father, friend, etc.) then look at these role representers in triads - think of two in each triad who are similar in some way- find a word to describe this characteristic and then think of the opposite of the word, e.g.,

friendly----------hostile

Thus build a list of congruent constructs.
Object: to discover ambivalences within ourselves or in others.

12:30-2:00 Lunch

2:00-3:00 Discuss the relevance of the exercise in pairs

3:00-3:30 General session on what happened in the pairs

Examples: "I had difficulty since the feelings about a teacher I hated so overwhelmed me I couldn't think of anything else."

"I was surprised to find myself thinking about my minister rather than my family or teachers as needing my help."

"I had started thinking that I was becoming less selfish yet find several egocentered statements."

3:30-4:00 Break

4:00-5:30 p.m. Trust exercises

1. Falling back and trusting some one will catch you.
2. A long silence
3. Expression of frustration with the silence
4. Fantasy - close your eyes and think about today for 5 minutes. (after 5 minutes) Now let your thoughts go wherever they want to (15 min.). A member who had lost her husband exactly 6 months ago re-experiences her grief and begins crying. The group is stunned, regroups and begins asking what is happening. "Do I want to be a part of it?" Several members experience what has happened as part of a natural process and others experience it as an intrusion.

5:30-7:00 Supper

7:00-9:00 Translation of what has happened into how do I understand and use what I have experienced.

1. Participants meet in pairs.
2. Pairs meet in Groups I and III.
3. Harvey Nelson, Lee Wolfe, Julian Roberts and Pete Caffentzis join the groups.
4. Decide on dates and amount of follow-up.

Sunday, January 12

11:00 a.m. General Session

(Statements from Julian Roberts, Pete Caffentzis, Lee Wolfe and Harvey Nelson)
(Statements from individuals)
Where do we go from here - Julian Roberts, Harvey Nelson, Lee Wolfe and Pete Caffentzis
Harvey Nelson's role and Lee Wolfe's continuation in follow-up

1. Link to administrator
2. Impartial but informed observers

SAMPLE REPORT OF FOLLOW-UP SESSION
IN HUMAN RELATIONS TRAINING

Group I - January 15, 1969

3:30 p.m. Coffee

3:45-4:00 p.m. Readministration of Prophecy Statement

4:00-5:30 p.m. T-group mode
Began sharing experiences since the weekend
Exchange of perceptions of school environment
Opportunity arose to practice listening techniques described in "Handling Misunderstanding and Conflict"--

Group asked what the "rules" of t-group were--

1. here and now
2. speak for self
3. emphasis on what? rather than why?
4. no-other-directed value judgment statements (above taped)
5. re-entry problem raised
   some honest expressions of people towards each other pre-during-and post weekend (Example: One member did not like leader prior to weekend but since has changed)

5:30-5:45 p.m. Coffee break - Some of the informal conversations were taped.

5:45-6:45 p.m. Color, animal, car, music--association for each member re every other member--shared perceptions--only time to recognize similarities and differences in way we see ourselves and are seen by others--and in the way others see others and the way we see others.

Expression of desire to share feelings of how others saw an individual (Harvey-bear) but another group waiting to use the room and we had to leave.

Asked group to fill out reaction sheet informally - but between our session and next day.

Subsequent sessions for Group I and the five for Group III were similar in nature and designed primarily to increase awareness of self and others. Role playing techniques were used, as were simulation of grade level meetings to explore the processes involved in group interaction.

At the completion of the "follow-up" sessions, Group III met for "feedback" sessions under the leadership of Mrs. Felice Benedict. Group II began to meet for "feedback" sessions with Mr. Moses Brand. There were six, 3 hour sessions. The participants were given Robert Maeger's DEVELOPING ATTITUDE TOWARD LEARNING for background reading. Five tapes of classroom interactions were made outside the school district and were used to generate discussions. The leaders function was to guide the discussions so that participants revealed their feelings and judgments for group reactions.

While Group II and III were meeting, Group IV was participating in a series of five, 3 hour seminars with Mr. Phillip Morrison of the Division of Communication, State Education Department. Robert Maeger's PREPARING "INSTRUCTIONAL OBJECTIVES" was given as background reading. Techniques for using various audio-visual materials and equipment to achieve instructional objectives were demonstrated and discussed. This group made one field trip to the Niskayuna Central School District to investigate independent pupil instructional programs.

At the initial and final session (Group III at the end of the "follow-up" sessions also) of each group each participant was asked to predict in terms of their understanding of the project, how effective or helpful the time spent and the activities engaged in would be in increasing teacher effectiveness in the classroom.

All treatments were completed by the middle of March so that post testing could be started.

Pre-testing was completed by January 10, 1969, and data were collected by testing, survey, taping and observation.

C. Procedures and Instruments Used

Participants were sent directions for administering

tests, surveys and ranking of pupils early in October. The Project Director visited those groups that had questions about their responsibilities and the pre-test materials. The teachers participating were asked to:

1) observe and rank the students in their class on anxiety. The Ranking Students on Anxiety Scale, published by the Bureau of School and Cultural Research, State Education Department was used.

2) administer the Kuhlman Finch Test of Scholastic Aptitude.

3) administer a two part Student Selection Survey so an analysis of the sociometric structure of the classroom could be made.

4) administer Opinion Survey II. This 62 item survey was designed to measure the students tendency to respond compulsively in either unconstructive or constructive fashion in the learning situation.

5) administer Opinion Survey III. This 17 item survey was designed to measure the factors frequently shown to exert an effect on student's acceptance of self, attitudes toward other students in school and teachers, and his level of academic performance.

1) Observations

Each teacher was observed three times during the course of the study. These observations were conducted by the building principals of the schools involved. After each observation the principals ranked the observation using the Referents for Observation - Teacher to Pupil Warmth Versus Hostility as developed by Robert O'Reilly. An increase in the use of positive reinforcers by the teacher and an observable change in teacher warmth were posited as a result of treatments. (see figure A & B, pages 15, 16, 17)

2) Taping

A total of four 20-30 minute tapes (2 pre and 2 post) were made of classroom interactions for each teacher in the study. These were made by project assistants (graduate students) who observed and recorded positive and negative comments

directed at the children by the teacher. The graduate students met one morning with Mr. Lee Wolfe and Dr. Robert O'Reilly to discuss the nature of the project, their duties, and the category classification system attached. The assistants were given a preliminary scale and four tapes to study together.

The assistants met on three separate occasions in a classroom at S.U.N.Y., Albany, to listen to the tapes and mutually develop an understanding of the scale and how it applied to the typical teacher responses being listened to. This was done by listening to a section of the tape for three or four minutes and then stopping the tape to discuss these teacher responses and their classification on the +3 to -3 scale.

When the five assistants seemed to be in agreement, they listened to a large portion of the tape making check marks on a scale without knowing how the others were rating the same material. After the machine was turned off, they compared results. In the +1 category for example the five had been in agreement ranging between 28 and 30 check marks by each observer for the same portion of a tape. The other categories showed similar results.

The observers mentioned the fact that they might have trouble with the facial expressions, intonations, and other cues that a teacher might give that are not audible. However, we remembered and kept reminding ourselves, that we were not to let this interfere and that we were only to check off what had been spoken and could be found on the tape. The observer was supplied with seating charts which contained Teacher to Pupil Warmth vs. Hostility scales and tally boxes. The tapes and tallies were used to establish pre-post, positive/negative comment ratios. It was posited that an analysis of the tapes would reveal a positive change in the teachers p/n comment ratio and that an analysis of the tally sheets of individual children would reveal shifts in the placement of positive and negative comments.

FIGURE A

REFERENTS FOR OBSERVATION RECORD FOR SOCIAL CLIMATE INDEXES

Teacher to Pupil Warmth Versus Hostility

Warmth

+3 level

Teacher frequently uses the reinforcers, "good, fine, right" and longer statements such as "That was a very good idea." T accepts student feelings whether negative or positive. The teacher uses other more emotive positive reinforcers, may touch students, smiles frequently, and generally has established a warm positive rapport with all or nearly all members of the class. Friendly concern may be shown for the student's personal life and school problems.

+2 level

Some of the same indicators of warmth as in level +3 are in evidence, but reduced in intensity (e.g., short, positive reinforcers tend to be used rather than longer, more emotive statements, and physical contact is generally avoided). Some acceptance of positive emotional feelings of P observed; negative emotional expressions, ignored, returned, or avoided. Occasionally, statements or actions of negative intent may be observed, but are quite mild (e.g., "Stop that!") T does not respond to all P's with warmth or the same level of warmth.

+1 level

Demonstration of warmth or positive feeling reduced to mechanical use of positive reinforcers of relatively short duration (e.g. "O.K., right, good"). Negative reinforcers occasionally used but do not predominate over positive reinforcers or warmth statements. T is quite selective in use of warmth indicators, responding to only a handful of P's.

Neutral

0 level

No evidence of positive or negative affect in T behavior. T maintains a formal distance with P's, but shows respect for them as human beings; T is impersonal, treats P's as a group.

FIGURE A (con't)

-1 level

At this level, negative reinforcers begin to predominate over positive responses to P's. A low level of passive aggression may be indicated in ignoring P responses. Some typical responses might be glaring at P's, making mild negative statement to P's, or disbursing mild punishments.

-2 level

Negative or hostile responses to P's definitely appear to predominate over positive responses, but are limited mostly to verbal behaviors. Passive-aggressive responses ("blocking" P wishes) may be frequent, and sarcasm first appears at this level.

-3 level

This level includes all indicators for levels -1 and -2, but in addition, rather extreme threats or and/or actual physical punishment make their appearance. P's definitely appear afraid of T and may make placating moves. Fear and hostility are a relatively constant state in this atmosphere.

Hostility

FIGURE B
DESCRIPTORS FOR THE RATING SCALE

The descriptors of the rating scale were mutually arrived at by observers for the South Colonie project. I believe they were carefully followed as we kept talking to each other about them during our work.

+1 "Yes", "Good", "O.K.", or, teacher repeating the right answer after the child.

+2 "That's fine", "Very Good", "Much better".

+3 "Wonderful!", "Excellent", "Terrific". Longer statements expressing approval such as "That was a very good thought" (or idea or contribution)
Superlatives used in praise.
Physical contact such as hugs, embraces, caresses.

0 Registers nothing positive or negative to observer or student. Exp., Teacher calls on student, student answers, teacher says nothing and is expressionless then moves on to another subject, question or student. This may be negative and it is hard to rate or decide upon. The teacher may well have had a technique that will develop later when she comes back to the original student and says, "You were right in the first place, why did you look surprised?" etc. From the instructions given us it would seem that a zero is indicated when a teacher does nothing even though doing nothing may be negative.

-1 "Wrong", "No", One word negative statement which indicates that the child did not give the correct response. "Let us try again later", "You may have been confused about my question", "That's a right answer for another question, (ha-ha)", "You made a good beginning, but you didn't get to the answer".

-2 "All wrong", "Wrong again", Something stronger than -1 but not insulting.

-3 Insulting comments. "You really are stupid", "Terrible", "Very poor", "Unprepared again!", "Ridiculous".

3) Compulsivity Survey

The seven subtests in this battery were designed to measure the student tendency to respond compulsively in either an unconstructive or constructive fashion in the learning situation. Constructive compulsivity is positively correlated with success in school achievement while unconstructive compulsivity is negatively correlated with school achievement. The total test battery has demonstrated more than moderate internal reliability (r_{tt}=.71), while the individual subtests tend to be moderately reliable (N = 2000).

4) School Alienation Survey

Included in this battery were measures of the student's tendency to feel alienated toward school, isolated from the status structure of the community, isolated from the social structure of the school, sensitive about the social status of his family in the community, and to realize that he has motivational problems in relation to the academic demands of the school. Also included in this battery were measures of the tendency to deny personal problems (a mental health variable and condition) may be a major factor in mitigating the effects of social class and social status on the perception of social acceptance and the academic performance of some students in the classroom situation. Such factors have frequently been shown to exert an effect on student's acceptance of self, attitudes toward other students in school and teachers, and his level of academic performance.

5) Test Anxiety Scale for Children (Sarason) and Lie Scale for Children

The measure of anxiety consisted of a weighted combination of scores from the Test Anxiety Scale for Children (TASC) and the Lie Scale for Children (LSC). The TASC and LSC were developed by S. B. Sarason et al. (1960) for use with children in grades one through six. The tests were administered in booklet form, with the 11 LSC items interspersed at regular intervals among the TASC items. The test was preceded by verbal instructions designed to stimulate honesty in responding.

The combined anxiety-lie score are referred to as the TASC-adjusted (adj.) score. The formula used in obtaining

the S's TASC (adj.) score will be TASC (adj.) = $LSC_{score} \frac{SD_{tasc}}{SD_{lsc}}$ + TASC score. The formula, in effect, adjusts the LSC scores of the Ss to the same variance as their TASC scores. The TASC (adj.) score for each S thus represents the arithmetic sum of his TASC score and his weighted LSC score. The use of the combined anxiety-lie score is suggested by a number of studies (e.g., S. B. Sarason et al., 1960) which indicate that the predictive validities of scores from anxiety questionnaires are substantially affected by Ss' tendencies to deny the experience of negative affect.

6) Teacher Prophecy Statements

In each of the teacher groups, the participants were asked to make a prophecy statement at the beginning of each treatment and at the end of each treatment by responding to the following:

> What is your best guess, in terms of present understanding of the project, as to how effective or helpful the time spent and activities engaged in (whole involvement in the project) will be in achieving its stated goals: increasing teacher effectiveness in the classroom.

IX. Results

The correlations among several of the more important variables are in Table II, page 22. The hypothesis investigated herein states that the impact of human relations training techniques should have a positive effect on pupil anxiety, liking structure, self-concept, values and attitudes towards school as measured by tests of anxiety, compulsivity, and observations of classroom operations that check the factors related to liking structure. Table 1 on page 21 shows the pre-post tests used with means scores and standard deviations.

The pretest variables are numbered 1-10. The corresponding post-test variables are Nos. 11-20. For example, variable 1 is pretest Test Anxiety Adjusted, variable 11 is post-test Test Anxiety Adjusted. The Table is broken into four basic parts. The triangle to the left of center is composed of the correlations among post-test variables. The upper right square contains the correlations among pretest and post-test variables where one variable was measured in the pretest, the other post-test. Within this particular section there is a diagonal which is noted between two lines; to illustrate, the first number of that diagonal is 42, which means that the correlation between Test Anxiety Adjusted pretest and the same variable post-test was 42.

This diagonal is made up of values which reflect the stability of both the trait and the measure, and in that sense are similar to reliability coefficients. Establishing proper values for this diagonal is rather difficult. On the one hand, if correlations are too high one would expect that the treatments have not been differentially effective. On the other hand, if the correlations are too low we would argue that the variables are not reliably measured or that the traits themselves are so unstable as to be relatively meaningless. The stability appears to be a problem; specifically, notice that there are three values in the 30's.

Several of the relative values may be of interest. For example, looking at the first three, Test Anxiety Adjusted has a lower correlation than does the Lie and Test Anxiety from which it is derived. At first this seems indefensible, since two components went into the adjusted score and hence one might expect higher reliability. However, if it is considered that this is really a difference score where the Lie

TABLE 1
Means and Standard Deviations
for Each Treatment Group

Variable	Means Treatment Groups ST-F	ST	F	C	Standard Deviations Treatment Groups ST-F	ST	F	C
PRETEST								
Year	3.35	3.38	3.63	3.54	.48	.49	.49	.50
Stud Sel 11	5.99	7.23	6.62	5.35	3.50	3.69	3.66	2.81
Stud Sel 12	5.91	8.74	6.28	6.55	4.53	5.78	4.85	5.58
Stud Sel 13	3.03	5.28	3.79	4.23	2.77	3.08	2.69	2.67
Stud Sel 21	4.42	5.54	5.11	4.78	2.47	2.44	2.49	2.30
Stud Sel 22	4.60	5.80	5.92	5.09	2.92	2.80	3.38	2.46
Stud Sel 23	4.62	5.84	4.78	5.59	3.04	2.83	2.27	2.23
LIE Scale	3.56	3.43	4.07	3.05	2.63	2.37	2.64	2.91
Test Anxiety	11.93	12.25	12.15	12.39	7.15	6.44	6.58	7.57
School Alien	4.61	4.34	4.59	5.38	3.13	3.13	3.69	3.26
Self Concept	17.72	18.28	17.35	17.64	2.67	2.80	2.86	3.01
Construct Comp 1	10.45	11.08	10.84	11.28	2.58	2.15	2.34	1.66
Construct Comp 2	5.50	5.70	5.89	5.85	1.58	1.46	1.53	1.59
Construct Comp 3	4.39	4.43	4.45	4.65	1.49	1.45	1.57	1.40
Construct Comp 4	3.89	4.28	4.42	4.28	1.40	1.19	1.20	1.27
Unconst Comp 1	3.34	3.13	3.08	3.49	1.17	1.16	1.22	1.07
Unconst Comp 2	3.84	3.49	3.55	3.66	1.63	1.60	1.60	1.50
Unconst Comp 3	5.34	4.97	5.23	5.72	1.90	2.09	2.31	2.28
Construct Compul	24.25	26.60	26.26	26.20	4.91	4.53	4.54	4.00
Unconst Compul	12.53	11.59	11.86	12.86	3.16	3.33	3.49	3.36
Test Anxiety Adj	21.97	21.86	23.57	20.99	7.30	6.39	7.48	6.82
Stud Sel Disc 1	1.58	1.69	1.51	.57	2.37	2.53	2.33	2.35
Stud Sel Disc 2	1.31	2.94	.36	1.46	3.43	4.45	4.24	4.81
Stud Sel Disc 3	-1.59	-.55	-.99	-1.36	2.20	2.12	2.29	3.23
Intelligence	39.47	45.50	39.72	42.67	13.43	12.41	14.11	11.94
Chronolog Age	26.54	25.85	29.57	27.21	8.53	6.82	8.49	6.77
Sex	1.50	1.52	1.40	1.41	.50	.50	.49	.49
POST-TEST								
Stud Sel 11	6.08	7.37	8.21	6.56	3.25	4.22	3.62	3.28
Stud Sel 12	5.25	7.85	7.80	6.88	4.25	5.89	5.01	5.05
Stud Sel 13	2.80	4.75	5.53	3.52	2.19	3.31	3.69	2.33
Stud Sel 21	4.39	5.62	6.72	4.78	2.01	2.84	2.95	2.01
Stud Sel 22	4.24	5.37	6.64	5.19	1.97	2.91	2.81	2.42
Stud Sel 23	4.61	5.36	7.36	5.55	2.56	3.12	2.86	2.02
LIE Scale	3.54	4.20	4.28	3.29	2.61	3.06	2.86	2.44
Test Anxiety	11.84	10.59	11.34	10.44	7.76	7.10	7.44	6.96
School Alien	5.01	4.14	5.47	5.70	4.20	3.58	3.91	3.90
Self Concept	17.80	17.97	18.09	17.64	3.17	3.03	3.12	2.96
Construct Comp 1	10.31	11.28	10.13	11.07	2.57	2.53	3.08	2.38
Construct Comp 2	5.03	5.86	5.50	5.54	1.81	1.51	1.67	1.75
Construct Comp 3	4.28	4.38	4.26	4.43	1.66	1.56	1.76	1.70
Construct Comp 4	3.97	4.17	4.37	4.40	1.51	1.36	1.36	1.34
Unconst Comp 1	3.32	2.75	3.17	2.97	1.14	1.25	1.16	1.21
Unconst Comp 2	3.44	2.90	3.51	3.20	1.69	1.58	1.58	1.65
Unconst Comp 3	5.12	4.79	5.19	5.10	2.22	2.15	2.31	2.39
Construct Compul	23.60	25.70	24.26	25.44	5.54	5.24	5.92	5.41
Unconst Compul	11.88	10.44	11.87	11.27	3.34	3.34	3.40	3.79
Test Anxiety Adj	21.74	22.37	23.37	19.70	6.90	7.11	7.10	7.35
Stud Sel Disc 1	1.69	1.75	1.48	1.78	3.10	2.70	2.39	2.44
Stud Sel Disc 2	1.01	2.48	1.16	1.69	3.57	4.86	3.48	4.55
Stud Sel Disc 3	-1.81	-.61	-1.84	-2.03	2.97	1.98	3.10	2.56
N	137	116	116	96				

Table 2 CORRELATIONS AMONG VARIABLES USED IN FURTHER ANALYSES[a]

	LIE	TA	ALN	SC	CC	UC	D1	D2	D3	TAD	LIE	TA	ALN	SC	CC	UC	D1	D2	D3	
1	54	44	25	-24	-20	12	-09	-26	05	42	11	30	24	-18	20	14	03	-26	06	1
2		-51	-02	07	-12	-18	-01	-04	16	22	50	-31	02	08	-12	-11	-001	-07	11	2
3			27	-32	-07	31	-08	-23	-12	20	-42	64	22	-27	-08	26	03	-19	-06	3
4				-26	-26	26	-13	-19	-12	14	-06	21	55	-27	-26	26	-02	-17	-07	4
5					22	-21	12	21	12	-20	05	-24	-19	44	17	-24	06	16	06	5
6						-09	-001	21	09	-21	-09	-11	-25	23	48	-14	11	25	01	6
7							-06	-19	-14	14	12	26	27	-22	-05	37	04	-14	-08	7
8								34	11	-02	04	-07	-10	07	-02	-02	30	37	15	8
9									24	-19	05	-24	-21	16	14	-18	20	67	26	9
10										-01	13	-15	-09	-19	07	-18	10	14	39	10
11											52	43	18	-21	-14	06	-03	-25	-05	11
12												-55	-08	13	-08	-27	02	01	06	12
13													26	-34	-05	35	-05	-25	-11	13
14														-35	-30	36	-11	-17	-08	14
15															27	-29	08	19	09	15
16																-11	-02	10	-06	16
17																	-03	-11	-13	17
18																		40	19	18
19																			27	19
20																				20

No.	Variables	
1	11 Test Anxiety Adj	TAD
2	12 Lie Scale	LIE
3	13 Test Anxiety	TA
4	14 School Alien	ALN
5	15 Self Concept	SC
6	16 Construct Compul	CC
7	17 Unconst Compul	UC
8	18 Stud Sel Disc 1	D1
9	19 Stud Sel Disc 2	D2
10	20 Stud Sel Disc 3	D3

[a]Decimals omitted.

essentially adjusts the Test Anxiety, and then if one considers the problem of reliability of differences, then it is reasonable to expect this lower value. One of the reasons for maintaining the Lie and Test Anxiety for further analyses was this loss of reliability. Note further for the last three variables (the discrepancies), that the second one, which pertains to a cognitive dimension, was considerably higher than the other two.

The validities of various variables may also be commented upon from this table. As an example, for the compulsivity dimensions note that constructive compulsivity and unconstructive compulsivity correlate -.09 and -.11, considering the pretest-pretest and post test - post test coefficients respectively. Variables may also be compared with "outside" variables, for example, constructive compulsivity and unconstructive compulsivity as against alienation. The correlation between constructive compulsivity and alienation is -.26 for pre-pre and -.30 for post-post, while the correlation between unconstructive compulsivity and alienation is .26 for pre-pre and .36 for post-post. Such directions and magnitudes might be hoped for from the titles given the dimensions.

The similarities of the coefficients post-post as compared with pre-pre (and of pre-post compared with post-pre[1]) seem to hold up as one looks at the rest of the Table. This in itself is an indication of validity as may be noted in 1959 article by Campbell and Fiske in the Psychological Bulletin. Additional conclusions can be easily drawn from this table by the reader.

Another source of data shown in Table 3, page 24, is that observations by the principals. Here both the pupil-to-teacher warmth and the teacher-to-pupil warmth was rated. Unfortunately, the number of principals per treatment group ranges from one to three. Further, there was no over-lapping of principals from one group to another and one would assume no tight control over the way in which they rated, so that

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[1] In other words, the two triangles within the upper right hand corner of the table may be compared. These triangles, with hypotenuses along the stability diagonal, contain coefficients which appear to correspond quite highly.

TABLE 3
OBSERVATION OF CLASSROOM INTERACTION

Principal Observers	Teacher	Treatment Group	Observation 1			Observation 2			Observation 3		
			Date	I	II	Date	I	II	Date	I	II
A	4-1	4	12/18/68	+1.8	+2.0	2/28/69	+2.0	+1.6	3/8/69	+3.1*	+3.1*
A	4-2	4	12/17/68	+1.0	+1.0	3/25/69	+1.8	+2.0	?	+2.1	+2.1
A	4-3	4	12/13/68	+2.7	+2.8	-	-	-	-	-	-
A	4-4	4	12/4/68	0	+1.8	3/25/69	+0.5	0	5/8/69	+2.1	+1.1
A	4-5	4	12/12/68	+1.9	+2.0	3/25/69	+2.2	+2.0	5/8/69	+2.7	+2.2
B	3-1	3	1/8/69	+3.0	+3.0	3/3/69	+2.7	+2.8	5/9/69	+3.0	+3.5
B	3-2	3	1/8/69	+2.0	+2.0	2/27/69	+2.7	+2.2	5/9/69	+1.0	+1.0
B	3-3	3	1/9/69	+1.0	+1.0	2/27/69	+1.4	+1.0	5/9/69	+1.2	+1.7
B	3-4	3	1/8/69	+2.0	+3.0	3/3/69	+1.8	+2.2	5/9/69	+2.4	+2.8
C	3-5	3	12/12/68	+1.2	+1.7	2/24/69	+1.3	+1.3	5/8/69	+1.6	+2.4
D	3-6	3	1/7/69	+1.0	+1.0	3/17/69	+1.2	+1.6	5/6/69	+1.0	+1.0
E	2-1	2	1/13/69	+2.4	+2.8	2/25/69	+2.0	+2.0	5/6/69	+2.3	+2.6
E	2-2	2	1/9/69	+2.2	+1.8	2/25/69	+2.0	+2.0	5/6/69	+2.3	+2.6
E	2-3	2	1/13/69	+1.5	+1.8	2/25/69	+2.4	+2.3	5/6/69	+2.6	+2.8
F	2-4	2	12/17/68	+0.4	+0.4	2/4/69	+1.5	+1.7	5/6/69	+1.4	+1.1
F	2-5	2	12/17/68	+1.3	+1.8	2/3/69	+1.9	+2.1	5/6/69	+2.5	+2.4
F	2-6	2	12/17/68	+0.6	+0.7	2/4/69	+1.4	+1.7	5/6/69	+1.9	+2.1
G	1-1	1	12/18/68	+3.0	+3.0	2/17/69	+3.0	+3.0	5/7/69	+2.5	+2.5
G	1-2	1	1/7/69	+3.0	+3.0	2/15/69	+2.0	+3.0	5/7/69	+3.0	+3.0
G	1-3	1	1/10/69	+3.0	+3.0	2/25/69	+3.0	+3.0	5/5/69	+3.0	+3.0
H	1-4	1	1/10/69	*+2.0	+2.0	3/4/69	*+2.0	+2.0	5/14/69	+2.0	+2.0
	1-5	1	1/10/69	+2.0	+2.0	3/4/69	*+3.0	+3.0	5/14/69	+2.0	+2.0

I Pupil to teacher warmth
II Teacher to pupil warmth
*Note on paper
*Superior

extensive analysis seemed unwarranted. In looking at this Table one might note that Group No. 1 was an exceptional group according to their ratings. Also, there seems to be a reasonable consistency in the Table from one observation to another, i.e., from one time to another for the same person and for the same observer. One wonders, of course, to what extent this is a general halo effect and to what extent this indicates the consistency of the person being observed.

Perhaps somewhat more helpful are the (teacher warmth) observations by outside observers. There were two pretest observations and two post-test observations. The total results are tallied for each observation indicating not only the number of students who received each of the tallies but the total number of tallies and the total numbers of pluses and minuses. In a few instances the means are also tabled. This computing of the means seemed unnecessary for more than illustration, since tight controls on the amount of time, and probably on just when the observations were made, were not possible. The variability among pretest observations, for example, may be noted. For a given teacher these variations are often so considerable that for the averages of post-test observations when compared with the pretest averages to indicate any great differential changes for treatments appears a bit hopeful.

The major premises or assumptions on which the experimental analyses were set up were that

1. The four groups of teachers were initially randomly allocated to the respective treatment groups. (see Chapter VIII, p. 5 .)

2. The observations on the children were not sufficiently independent of one another to consider the student as the "unit for analysis"; rather, the mean of students's responses within classrooms constituted the unit for analysis since classrooms were regarded as independent.

3. A linear model, analyzing variables in their initial metrics, was sufficent for these data in general.

4. Certain sampling, or distributional, assumptions

would not be unreasonable for these data, meaning that significance testing procedures (for ANOVA & ANCOVA) would be appropriate. (Robustness seems relevant here.)

Other, more tacit, assumptions include the following:

1. Both dependent and antecedent quantitative variables were "reliable" in the sense that the true score portions of the (mean) observations dominated the error score portions of the same variables. (This seems more reasonable when using the means as the units than it would have for initial observations.)

2. The dependent variables were generally appropriate, in the sense of being sensitive indicators, of experimental effects when they existed.

In Table IV is presented the summary information for the ANOVA and ANCOVA studies. Ten dependent variables were observed following the experimental treatments; these ten corresponded to ten independent variables observed prior to the treatments. Those twenty were selected from the larger set of variables identified in Table I. Because the experimental groups could be meaningfully identified with respect to planned contrasts, it was decided that planned comparisons procedures would be used throughout the analysis. Such comparisons tend to be the most powerful, or sensitive, of all possible statistical inferential procedures in ANOVA. Such power is typically sufficient for detecting practically important differences in education treatments, especially when based on the means as a unit for analysis.

The (orthogonal) contrasts are specified in the following table, where the first group of teachers received sensitivity training, the second group feedback sessions, and the third group both sensitivity training and feedback sessions. The fourth group was the control. For the A contrast all three "experimental" groups were compared with the control. Likewise, for contrast B the groups receiving one type of "treatment" only were compared with the group which received both. The final (C) contrast was to compare the effects of sensitivity training with those of the feedback sessions.

As can been seen from Table IV, page 28, only two of the F tests (The same for ANOVA & ANCOVA) were found to be significant at the .05 level of significance. Since thirty non-independent tests were run (for either the ANOVA or ANCOVA) using correlated dependent variables; between 1 and 3 such tests would appear to be significant by chance alone at the .05 level. Simply stated, then, there appears to be no statistical evidence of effects of any of the treatments using these data for analysis.[2] In fact, for no dependent variable was it found that all F ratios were even greater than unity, using either ANOVA or ANCOVA methodology.

Further speculations might be made about possible inappropriateness of our initial assumptions, perhaps especially on tacit assumption #2. Nevertheless, we wish to point out that any logical inferences about experimental effects must be (highly) qualified given this overwhelming amount of nonsignificant statistical data.

Prophecy Statements:

Group I - There were six participants in Group I. The initial statements indicated that five of the six looked positively to the possibility that the project goal of helping teachers become more effective in the classroom could be met. One expressed doubt, but the doubt was qualified in two ways. First, the doubt seemed to relate to the collection of data from students and observations in the classroom. The doubter seemed to question the validity of such an approach to evaluation. On the other hand, there was expressed a positive hope that the personal experience of the participant in some sensitivity training type experiences would be helpful. Since a corresponding training period (to those in the other treatment groups) followed the weekend intervention, this group was asked to fill out the prophecy statement at the beginning of the five follow-up sessions. All indicated that they had positive hopes since in a three-day period they began to become aware of student needs and of perceptions of self and others in interaction. The final statements were all indicative of achievement of the goal. They all indicated, in one phrase or another, that there had been growth in self awareness, awareness of others, use of verbal and non-verbal responses to situations in the classroom.

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[2]Additional, multivariate analyses of variance were carried out for these data. The results for these analyses were likewise non-significant.

TABLE 4

Analyses of Variance and Covariance for Selected Variables

Variables/ Source of Variation		Degrees of Freedom		Sum of Squares		F		Significance	
				ANOVA	ANCOVA	ANOVA	ANCOVA	ANOVA	ANCOVA
TAADT	A	1	1	28.50	18.14	7.78	5.36	$p<.05$	$p<.05$
	B	1	1	3.16	1.79	.86	.52	no	no
	C	1	1	1.42	.07	.38	.02	no	no
	E	16	15	58.58	50.74				
LIE	A	1	1	1.39	.34	2.35	.65	no	no
	B	1	1	1.02	1.02	1.72	1.96	no	no
	C	1	1	.08	.30	.13	.57	no	no
	E	16	15	9.59	7.80				
TAAT	A	1	1	5.41	5.29	.87	1.58	no	no
	B	1	1	1.18	3.50	.23	1.05	no	no
	C	1	1	3.94	1.62	.77	.48	no	no
	E	16	15	81.35	49.95				
ALIEN	A	1	1	2.39	.50	1.68	.41	no	no
	B	1	1	.01	.06	0	.04	no	no
	C	1	1	4.20	3.85	2.95	3.18	no	no
	E	16	15	22.87	18.26				
SC	A	1	1	.20	.05	.22	.07	no	no
	B	1	1	.04	.28	.04	.40	no	no
	C	1	1	.10	1.14	.11	1.65	no	no
	E	16	15	14.08	10.46				
OC	A	1	1	3.35	1.32	.83	.42	no	no
	B	1	1	8.22	.03	2.05	0	no	no
	C	1	1	5.26	4.11	1.31	1.33	no	no
	E	16	15	64.03	46.11				
CC	A	1	1	.06	1.62	.06	2.31	no	no
	B	1	1	.89	.02	.96	.02	no	no
	C	1	1	4.91	4.32	5.33	6.17	$p<.05$	$p<.05$
	E	16	15	14.72	10.59				
DISC 1	A	1	1	.03	.18	.02	.13	no	no
	B	1	1	.04	.04	.03	.02	no	no
	C	1	1	.15	.09	.11	.06	no	no
	E	16	15	21.18	20.68				
DISC 2	A	1	1	.02	.01	0	0	no	no
	B	1	1	2.56	2.13	1.12	1.23	no	no
	C	1	1	3.86	.16	1.69	.09	no	no
	E	16	15	36.54	25.97				
DISC 3	A	1	1	1.57	.77	1.18	.75	no	no
	B	[illegible]	1	.10	.22	.07	.21	no	no
	C	1	1	3.32	1.68	2.51	1.04	no	no
	E	16	15	21.26	15.43				

There were one or two who questioned the degree of lasting effect of the treatment.

Group II - There were six participants in treatment Group II. Three seemed to feel at the outset that the project could have some effect on the way teachers communicated with children, and three were very doubtful whether the project would have any beneficial effect at all, one indicating that if it did, it would probably not be a lasting effect. At the close of the final session, teachers indicated they were grateful for the experience, were clearer about objective of the project, and felt some lasting effect with regard to developing rapport between teacher and student, and of attitudes towards students in class.

Group III - There were seven participants in Group III. Five of them anticipated that the project goal could be achieved in the light of their understanding that the weekend intervention and the follow-up sessions, plus the feedback sessions would enable them to become more sensitive to the student-teacher relationships they establish in their classrooms. One doubted that any influence could have any really lasting effect, and one indicated that it would have so minimal an effect (if any at all) because of being too "well guarded and resistant towards relating to any of the participants present". This group was also asked to respond again when the follow-up sessions began. The second set of responses revealed that three felt that they could not see how the weekend would really change classroom behavior, although it may have helped them some; one of the three felt less optimistic about the project; two felt that they might have become more "aware" persons, but doubted that this would have lasting effect; one was positive and optimistic, and one wanted to see more specifics about what to do in the classroom. The final statement included reaction to the feedback sessions as well. Here, one indicated a "none" in terms of increasing classroom effectiveness and also indicated that there was no gain in sensitivity; two indicated personal gains in sensitivity to others, but none in terms of classroom effectiveness; one found nothing positive in the experience because "it wasn't until many hours had been spent that I began to get the idea"' one indicated no increase in classroom effectiveness, though very positive about insights that individuals in the project gained; a final one was very positive about gains that could be transferred to the classroom but doubted

how long these gains would last.

Group IV - There were four people in this group. All felt that they would be helped to understand their children and more sensitive to their needs in the first prophecy statement. In the final statement, all felt they would be more effective in using certain audio-visual aids, two indicating that this would meet individual needs more than before, but none referred to sensitivity to children's anxiety, concerns, as in the early statements.

X. Discussion

A. Interpretation of findings

It is difficult to discuss the results of a pilot study when there is some doubt cast upon the length of time involved in the study and the relationship between time and the types of intervention used is so important and real a factor. Suffice it to say that the overwhelming statistically treated evidence gathered in data relating to students and anticipated changes in students was negative and did not support the major hypothesis. Perhaps here, an examination of the kind of data gathered is essential. The tests of student anxiety, alienation and opinion surveys are perhaps not really germaine to an assessment of the kinds of changes human relations training can effect in a short-term project. For example, in the treatment that emphasized use of audio-visual materials for greater class motivation, even the final prophecy statements indicated a hope to be able to use these materials and instruments rather than evidence that showed actual use of these devices. Here, a concrete measure was possible. The measure of self-actualization of a teacher, which by theory (see Roger, Carl, in Freedom to Learn) should lead to a more open, sensitive classroom climate could not be ascertained either by the instruments used (except for the classroom observations of teacher-pupil warmth and pupil-teacher warmth) or under such a short-term assessment. In the instance of the observations and the taping, questions arose as to the number of principals involved in rating, and the consistency of raters of the same subject rather than consistency in use of the rating scale. The anxiety, compulsivity and alienation scales, while very valid in assessing the factors they are designed to assess (see section IX), are not necessarily related to self-actualization growth in parallel direction. For example the study of the use of sensitivity training techniques with a social studies class (see Roberts), indicated that when students are first faced with an open, free climate, they frequently become more anxious than they were, if not just as anxious. The time to adjust to a new climate was certainly not a factor considered in the design of this pilot study.

Another very pertinent factor involved in this study was the nature and selection of the participants. No test was made of the degree to which participants were open to new ideas as a controlling factor. Such a measure could have been

used as a covariant, since by admission, some participants were reluctant to accept certain of the interventions (see prophecy statements IX p. 27.).

B. Implications

Several implications become clear upon assessment of the results of the pilot study.

1. Some means should be taken to equate the groups in terms of individual participant's willingness to accept new ideas, techniques or methods of teaching and learning.

2. Use of certain kinds of human relations training techniques, particularly those commonly referred to as sensitivity training or t-group, cannot be adequatly measured (a) based upon short-term administration or intervention, (b) through the use of measures not directly designed to assess the potential for growth towards self-actualization as defined by Rogers and Shostrom, and (c) until further study is made as to which kind of person is more receptive to these specialized learning techniques.

3. It seems proper at this time to suggest that the use of multiple techniques that combine personal growth, task orientation, problem-solving and decision-making skills involving administration and teachers (and subsequently students and community members), may prove to be more effective in achieving the goals of an open, trusting climate for teaching and learning. An extension of the pilot study should incorporate such a combination of interventions techniques. This would call for knowledge of student and professional assessments of the school climate at the start of such a study, controlling for differences among personalities more or less resistant to change, and helping them learn in terms of relevant tasks to be performed and decisions to be made.

4. Great care must be executed in defining and differentiating the intervention techniques and in

allowing for follow-up activities in the schools involved in the study.

XI. Summary

This pilot study was designed to help teachers become more aware of their own behavior and its effect on the emotional and attitudinal status of individuals in their classes. An inservice program was offered to twenty-two teachers, affecting approximately 450 children in eight elementary schools of the Colonie School District, Albany, New York. The hypothesis examined projected that the impact of human relations training techniques (sensitivity training, feedback of classroom interactions, a combination of these two, and a series of lectures on new media to enhance student motivation) should show a trend towards a positive effect on pupil anxiety, liking structure, self-concept, and attitudes towards school as measured by pre-post administration of tests of anxiety, compulsivity and observations of classroom operations. No significant changes of trends were noted. However, teacher assessments of the results of their intervention experiences as seen in their prophecy statements and in statements of new behaviors occurring in their classroom behavior indicated some positive trends, or at the very most attempts to move in positive directions as defined by the study.

Caution must be taken to define the treatments carefully, to ascertain the degree of receptiveness of participants to new ideas, to spend enough time with the intervention used, and to reach top administration as well as teachers if change in school climate is to be achieved. Especial attention must be given to selection of appropriate measures of the changes to be derived through a given intervention.

XII. References

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