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Teacher Strategies to Improve Pupil Self-Concept

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TEACHER STRATEGIES TO IMPROVE

PUPIL SELF-CONCEPT

by

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<div align="right">Kathleen L. Van Horn</div>

For Dr. Borg
With many thanks
for all you've taught
me. From Kathy

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ABSTRACT

Teacher Strategies to Improve

Pupil Self-Concept

by

Kathleen L. Van Horn, Master of Science

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Department: Psychology

The purpose of this research was to assess the effects of the Utah
State University Pupil Self-Concept Program on the performance of in-
service elementary school teachers and on the self-concepts of pupils
in their classrooms. Four volunteer teachers were trained in the Self-
Concept behaviors as part of an inservice course. A single-subject
multiple baseline design was used to determine teacher effects for these
four teachers. The first teacher was the main subject, and the study
was then directly replicated three times using the other three experimental
teachers. Data on these four subjects were collected through observation
of program-related teacher behaviors. Results from the Teacher data
indicated that teachers will indeed exhibit changes in their use frequency
of the USU Pupil Self-Concept Program verbal behaviors when each of
these behaviors is taught. The use of negative behaviors decreased
in frequency while the use of positive behaviors increased in frequency.

Results from this data indicated that pupils whose teachers are trained to emit the Program's specific language skills receive significantly higher self-concept scores than do pupils whose teachers do not receive this training, provided there are no other interaction styles used in the classroom than that of the trained or untrained teacher.

A quasi-experimental design was used to assess pupil effects as a result of teacher training. The pupils in the four trained teachers' classes served as the experimental group. The control group consisted of the pupils in three additional volunteer teachers' classes. These teachers were not trained; therefore, the pupil control group received no treatment. A pupil self-concept measure was administered before and after the inservice course.

(234 pages)

INTRODUCTION

Problem

Educational researchers and behavioral scientists have become increasingly concerned with the effect of school environments on the self-concepts of children. The construct of self-concept has been defined in many ways. For example, one theoretical definition is that self-concept is the person's total appraisal of his appearance, background and origin, abilities and resources, attitudes and feelings which culminate as a directing force in behavior (LaBenne & Green, 1969). A more operational definition views self-concept as the interaction pattern a child adopts with other people. This definition is in behavioral terms and is based on the theory that children adopt transaction models as they observe them in adults and peers (Berne, 1953). Since children are human and, therefore, function as whole beings in whatever situation they find themselves, the responsibility of the school lies not only in developing intellect, but equally in fostering a sense of competence--self-concept of competence in work-- and building a total healthy self-concept (Sears & Sherman, 1964). Among the school variables that have been identified as affecting self-concept are: curriculum techniques, method of instruction, opportunities for peer group interaction, and teacher verbal behaviors. Thus, a specific problem area emerges: What teacher behaviors tend to enhance or detract from the self-concept of the children in the classroom? The experimenter helped to develop the 1973-74 USU

(Utah State University) Protocol Project Modules on Teacher Strategies
to Improve Pupil Self-Concept, (Teacher Anger, Verbal Description--Part I,
Verbal Description--Part II, and Self-Perception) which are directly
focused on this problem area and which identify 17 verbal behaviors
the teacher can employ or avoid in order to enhance student self-concept.

Although considerable theory related to teacher behavior and
classroom activities purported to harm or enhance the child's self-
concept in the educational setting now exists, the research evidence
to date in this broad area is scarce. Such evidence is even scarcer in
the specific area of the effect of teacher verbal behavior on pupil self-
concept. Therefore, the researcher used the 1974 USU Protocol Self-
Concept Module Behaviors in an attempt to add to the knowledge in this
specified problem area. Possible answers to two major questions con-
cerning these behaviors were sought: (1) To what extent does the Self-
Concept Training Program affect individual teacher use of the specific
verbal behaviors in the classroom? (2) Does teacher use of these
behaviors over a short time period affect pupil self-concept?

Hypotheses

The following null hypotheses were tested to answer the major
questions of the study:

Hypothesis #1: Teachers will not exhibit change in their use of
any of the self-concept verbal behaviors when each of these behaviors
is taught.

Hypothesis #2: There will be no significant difference (.05 level)
in the effect on self-concept scores of pupils whose teachers were

trained to emit specific language skills and pupils of teachers
without such training.

Definition of Terms

Self-concept. Self-concept is the person's total appraisal
of his appearance, background and origin, abilities and resources,
attitudes and feelings which culminate as a directing force on
behavior.

Protocol. "Protocols" are original records of classroom
events and student-teacher transactions.

Behavioral indicator. A behavioral indicator is a specific
behavior a teacher should use or avoid in the classroom to apply a
particular concept while teaching.

Module. The USU Pupil Self-Concept Program consists of four
competency-based, Teacher Training Modules. Each module deals
with a particular concept and presents a few specific skills the
teacher can use to apply that concept in the classroom. Each module
contains: (1) A Student Guide--description of the concept and
behavioral indicators, two recognition lessons/keys, two application
lessons/keys. (2) A Discrimination Test/Key--one 16 mm color film
illustrating teacher behaviors at classroom speed. (3) A
Recognition Test/Key--a situational classroom script in which the
teacher must recognize underlined examples of the module behaviors.
(4) An Application Test/Key--a situational classroom script in

which the teacher must supply the module behaviors at keyed

places using her[1] own words.

Teacher Behaviors Covered in the Self-Concept Protocol Modules

Teacher Anger Module. (1) I-message (I+) as a way to express anger means the teacher simply tells the student how some unacceptable behavior is affecting her. The statement usually begins with "I" (positive behavior). (2) You-message (Y-) as a way to express anger means the teacher uses "you" in the message and condemns the student for some unacceptable behavior (negative behavior). (3) Why question (W-) as a way to express anger means the teacher asks a student why he is behaving unacceptably (negative behavior). (4) Sarcasm (S-) as a way to express anger means the teacher speaks caustically to the student, insulting him (negative behavior).

Verbal Description--Part I Module. (1) Talking to the Situation (TS+) means the teacher simply describes the ongoing situation. The child does not tell the teacher how he feels first (positive behavior). (2) Restating the Situation (RS+) means the teacher restates and describes a child's spoken feelings, problem or complaint. The child does speak first (positive behavior). (3) Verbal Judgement and Labeling (VJ-) means the teacher diagnoses a child's spoken or unspoken problem/feelings and makes a remark

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[1]Only female teachers were used in this study; therefore, only female pronouns will be used to represent them in this paper.

that judges or labels his character (negative behavior). (4) Should and Could Remarks (SC-) means the teacher tells a child what he should do and/or tells him what he could have done under certain conditions.

Verbal Description--Part II Module. (1) Appreciative Praise (AP+) menas the teacher praises the act not the child's character. She uses VERBAL DESCRIPTION to describe a positive situation (positive behavior). (2) Evaluative Praise (EP-) means the teacher praises the person, not the act. She uses VERBAL JUDGEMENT to evaluate the child (negative behavior). (3) Inviting Cooperation (IC+) means the teacher uses VERBAL DESCRIPTION to ask rather than tell children what to do. Fairly immediate action is expected from the child (positive behavior). (4) Direct Command (DC-) means the teacher uses VERBAL JUDGEMENT to tell her children what to do instead of inviting cooperation (negative behavior).

Self-Perception Module. (1) Modeling (M) means the teacher makes favorable self-perception statements about herself as a model for her children. (2) Teacher Reinforcement (TR) means after a child makes a favorable self-perception statement about himself, the teacher gives him verbal reinforcement. (3) Teacher Extinction (TE) means after a child makes an unfavorable self-perception statement, the teacher either ignores the unfavorable remark or expresses her own feelings about the remark using an "I-statement." She avoids direct countering of such unfavorable self-perceptions. (4) Prompting (PR) means the teacher asks the child a question about himself. She words the question so that the child's answer may be

either positive or negative. If positive, she will respond with TR;
if negative she will use TE. (5) Elicits Praise (EP) means the
teacher asks the child a question about himself. She words the
question so the child's response will be positive.

See The Method section for more detailed descriptions and
examples.

REVIEW OF THE LITERATURE

Review of Previous Research

Research Related to Self-Concept Change

The four modules in the USU self-concept series are designed to train teachers in ten specific positive behaviors and to extinguish seven negative behaviors that were hypothesized to relate to pupil self-concept. These behaviors were drawn primarily from the theoretical work of Ginott (1972) and Gordon (1970). However, there is practically no previous research evidence which directly relates the Self-Concept teacher verbal behaviors used in the USU Modules to changes in pupil self-concept except for those in the Self-Perception module. The behaviors included in this module are aimed at increasing the frequency with which pupils make favorable self-references and at reducing the frequency of their negative self-references. Experimental research by Marlowe (1962) demonstrates that, through operant conditioning, the rate at which subjects make positive self-references can be significantly increased. Seventy-six subjects completed the Marlowe-Crowne Social Desirability scale which served as the measure of need-for-social-approval. Each subject was then individually interviewed for fifteen minutes under either control or experimental conditions. Experimental subjects were reinforced by the experimenter's stating "Mm-Hm" each time subjects verbalized a positive self-reference. Control subjects received no

reinforcement. The experimental and control groups were divided into subjects with a high need for social approval, and subjects with a low need for social approval. The results obtained indicated that the rate of emitting positive self-references in an interview situation can be altered by operant conditioning, in this case reinforcement, and that subjects with a strong need for social approval produced significantly more positive self-references under positive reinforcement than a comparable group of low-need-for-approval subjects. However, Marlowe did not test his subjects specifically for self-concept change. Likewise, Krop, Calhoon, and Verrier (1971) demonstrate that a child's self-descriptive responses can be modified in a positive direction by reinforcement. Their research also indirectly supports the theory that reinforcing positive self-perceptions can bring about a positive, lasting change in self-concept.

Felker and Thomas (1971) based their correlational study on the proposition that positive self-concept is due partly to the ability to utilize favorable self-references. This implies that a child with a negative self-concept hasn't learned to give himself any kind of verbal reward. For example, he hasn't learned to say favorable things about himself such as, "Gee, I really think I understand this kind of math problem." Positive relationships were hypothesized between self-concept and each of four other variables: locus of control; verbal fluency; positiveness of statements designated by children as "good to say to myself while doing school work"; and positiveness of self-directed statements chosen by children to say after completing an academic task. The Piers-Harris Scale was used

to measure self-concept for the all white, 4th grade sample of 66 boys and 65 girls. The obtained results supported all but the last of these four hypothesized relationships. However, the favorable results were reported as tentative due to the homogeneity of subjects and the relatively small sample size considering the population to which one might generalize the findings of such a study. Although tentative, the overall positive linear relationship demonstrated between the child's self-concept and his ability and tendency to voice favorable self- references indirectly supports the Teacher-Reinforcement, Teacher-Extinction, and Teacher-Extinction-and-Teacher-Reinforcement behaviors described in the Self-Perception USU Protocol Module. These particular behaviors are used to reinforce students' positive self-references. Voicing favorable self- references is positively related to self-concept (Felker & Thomas, 1971). Reinforcement increases the use of favorable self-remarks in children (Marlowe, 1962 & Krop, et al., 1971). Thus a rationale exists for teachers using the USU Self-Perception Module behaviors in their classrooms to enhance pupil self-concept.

Further experimental research by Felker, Stanwyck, and Kay (1973) demonstrates another way to cultivate self-rewarding behavior in children, modeling of self-praise statements by adults. Modeling of favorable self- references was found effective in their research conducted at Purdue University. The subjects were elementary school children in inner city schools (N=102 classes) who were exposed to modeling and four other approaches for encouraging self-rewarding behavior in children. Class means were compared rather than individual

scores. Again the Piers-Harris Self-Concept Scale was one test that was used. The results showed some significant pre-post gains in self-concept, but differences between students in experimental and control classes were not significant. Previous experimental research by Bandura and McDonald (1963) has also shown adult modeling to be a very powerful tool in bringing about changes in the behavior of children. According to such research, children do tend to pattern their speech habits after what they hear. Furthermore, the teacher's use of modeling can be a signal to her children that this kind of self-praise is not only appropriate, but desirable (Bandura, 1977). According to Berlo (1960), the language patterns we adopt tend to change as well as reflect what we think and feel about ourselves and our environment. Therefore, it seems possible that positive effects could occur from the use of Teacher-Reinforcement, Teacher Modeling, and other teacher verbal strategies aimed at enhancing students self-concept in the classroom.

The research of Landry, Schilson, and Pardew (1974) offers some empirical evidence that self-enhancing education does increase pupil self-concept at the preschool level. The experimenters investigated the effects of a preschool self-concept enhancement program on a group of four-year-olds. They used a pre-post test experimental design. The self-concept of the experimental group (N=34) increased significantly (dependent t, one-tailed, .01 level) on 14 variables of the Thomas Self-Concept Values Test, while the control group (N=18) failed to increase significantly on any of the test's variables. The experimental group also differed significantly from the control

group in self-concept gains on five variables, (one-tailed, .01 level).
Since the no-treatment group used to control for intervening variables
did not increase, the gains made by the experimental group can be attributed
to the self-concept enhancement program. The apparent success of
this program seems to validate the place of self-concept enhancement
in our education systems. However, the authors are vague about the
program itself. Children in the experimental group were given
"mediums for expression" which, in some way, were the self-concept
enhancement activities. What parts of this program depended on teacher
verbal behavior and what parts on methodology is not clear. However,
the children seemed to pick up positive verbal behaviors as a result
of specific awarenesses "taught" by the activities. (Perhaps teacher
verbal modeling may have helped teach these awarenesses.) For
instance, an awareness of the relationship of behavior in one person
and resultant behavior and feelings in another person was reflected
in children settling disputes by verbalizing rather than hitting
and/or crying. However, the mere fact that this study demonstrates
some observable self-concept gains for subjects in the school
self-enhancement program supports the potential worth of the USU
Self-Concept Protocols for teacher education.

Research Related to the Specific Module

All of the pertinent research related to the Self-Perception
protocol behaviors is cited above under self-concept change. The
behaviors in the Teacher Anger module are not based on specific
research; they are, instead, backed by a great deal of theory to be

discussed in the next section. However, there is some research evidence which is indirectly related to the behaviors in the Verbal Description--Part I and Verbal Description--Part II Modules.

Verbal Description--Part I. The two positive teacher verbal behaviors taught in this module, Talking-to-the-Situation (TS+) and Restating-the-Situation (RS+), are closely related to two characteristics of communication that have been called "Nonpossessive Warmth" and "Accurate Empathy." Both of these verbal behaviors have been studied mainly in counseling situations. However, there are a few studies that have looked at these skills in educational settings. For example, Truax and Tatum (1966) hypothesized that these two variables would affect preschool children's adjustment to school. They administered pre and post measures of adjustment to preschool, adjustment to the teacher, and adjustment to peers to each of their 20 child, preschool sample. Observational data were then collected on the teacher's use of both of these behaviors in the classrooms. These were collected by an observer situated behind a one-way screen. Therefore, the teacher-child interactions were more likely to be representative of the action that would have taken place without the observer. At the end of the study, the children were divided into the group receiving the highest levels of Nonpossessive Warmth and Accurate Empathy during the year and the group receiving the lowest levels. The high group showed a significant increase (.05 level) over the low group in adjustment to preschool.

Stoffer (1970) also studied these skills in an educational setting. His sample consisted of 35 children who were experiencing

behavioral and academic problems in grades one through six. For
approximately three months, aides spent one-half to one hour twice
a week interacting on an individual basis with these children. It
was found that children whose aides were rated high on Nonpossessive
Warmth and Accurate Empathy made gains in achievement
and were rated as presenting fewer behavior problems than children
whose aides were rated low on these characteristics. Since significant
positive relationships were found between both Nonpossessive Warmth
and Accurate Empathy and positive changes in the children's behavior
and achievement (.05 level), it is possible that these two elements
are highly important in dealing with children who are experiencing
academic and behavioral problems in school.

Finally, Good, Biddle and Brophy (1975) provide some of the
strongest research evidence regarding the importance of Restating-
the-Situation (RS+) in a school setting. They describe three research
studies conducted by Aspy (1973) that support the positive effects of
RS+ (what Aspy refers to as "interchangable responses"). In the
first study, the frequency of third grade teachers' RS+ remarks
was positively correlated with their children's reading achievement.
In the second study, the pupils of reading teachers who were trained
to use RS+ remarks made greater gains in reading achievement than
the pupils of teachers who were not trained to use this strategy.
In the third study, when elementary school teachers were trained
to increase their use of RS+ remarks, student absences decreased.

Although these results need to be replicated, they support the
potential importance of using the TS+ and RS+ strategies to improve

pupil self-concept. Furthermore, research has shown that a relation-
ship exists between achievement and self-concept (Wattenberg and
Clifford, 1964). Thus, there is some rationale for training teachers
to use both RS+ and TS+ to increase not only pupil self-concept, but
also pupil achievement.

Verbal Description--Part II. Verbal Description--Part II module
behaviors are based upon research dealing specifically with Evaluative
Praise of the person versus Evaluative Praise of the act and upon
research on the effects of different kinds of praise on children's
behavior. There is little direct evidence in the research literature
regarding Ginott's (1972) theories on the different effects on the
child of Appreciative Praise versus Evaluative Praise. Most of the
research deals with person-oriented praise (You are a good boy)
versus task-oriented praise (That's a good job). Both contain an
evaluation; therefore, this type of performance-oriented praise is
not exactly the same as the descriptive Appreciative Praise statement,
i.e., "The expression in your voice was exciting" versus the
evaluative statement, "You read the story well."

Also, the research in this area discusses not only the effect
of different types of praise on self-concept, but, more often, the
effect on achievement. For example, Baron, Bass and Vietze (1971)
found that for black girls of high school age, personal praise was
generally more effective in raising self-image than task performance
praise. Research also suggests that the type of verbal reinforcement
black children receive is diffuse rather than precisely focused on
the adequacy of any act (Dreger and Miller, 1968). Hess and Shipman
(1965) suggest that Baron's 1970 population is generally more likely

to see vague evaluative praise as self-relevant because lower-class mothers seem to be more inclined to use vague, impersonal praise to affect their children's behavior than middle-class mothers. The study by Baron, Bass, and Vietze (1971) points out that, "although there is some contradictory evidence, it has generally been suggested that lower class children are likely to place a higher value on person-oriented as opposed to performance-oriented praise. The reverse tends to be true for middle-class children." They cite research using similar reinforcers by Zigler and Child (1969) and Havighurst (1970) to support this last view.

In contrast, research by Rosenhan and Greenwald (1965) and McGrade (1966) failed to replicate Zigler and Kanzer's (1962) finding that lower class subjects performed significantly better when given personal rather than achievement focused praise. Baron, et al., (1971) suggests that this replication failure may be due to the subject's inability to perceive differences in types of praise. Also, there may have been a difference in the way Zigler and Kanzer's experimenters delivered the types of praise reinforcers which no one has duplicated in a subsequent study. This is possible, Baron suggests, because none of these studies collected data on the subject's perception of the different types of praise being offered.

Thus, from the available evidence, it is possible that Evaluative Praise may be useful in some situations as a device for improving achievement and may also be more effective in raising the self-concept of some children than Appreciative Praise. Baron, Bass and Vietze (1971, page 507) conclude that "which type will be more

effective probably depends upon which is seen as more relevant by the person in any given situation." Rosenhan and Greenwald (1965) support this general position with data on a child population. However, Retish (1973) seems to disagree with this viewpoint. His study relates social status of children among their peers to their self-concept. Therefore, since Evaluative Praise is always a comparison, the teacher's use of such praise could cause some children to lose peer status by accentuating their perceptions of their short-comings in relation to their classmates. Consequently, their self-concepts would also lessen.

Rosenshine's (1971) review further examines studies that attempted to link praise to classroom achievement. He suggests that particular types of approval may have positive or negative effects on children's achievement and points out that further research involving these variables should study whether certain teacher behaviors have different effects on the sub-groups within a class. The examples of praise statements found in the Verbal Description--Part II module mainly utilize Ginott's (1972) theoretical ideas of Evaluative versus Appreciative Praise and the relative negative and positive effects on a child's self-concept. However, Eisenberger (1970) maintains that praise statements must vary to be effective. Further-more, since there is some research evidence that individual children respond differently to various kinds of praise statements, (Baron, et al., 1971), teachers must weigh each situation and choose the type of praise which seems best.

Finally, the literature consistently supports the use of praise in exchange for the use of negative judgemental messages in the classroom. Therefore, the use of Appreciative Praise or Evaluative Praise is more effective in enhancing children's self-concepts than the use of different types of statements such as Verbal Judgement (Haas & Maehr, 1965; Ludwig & Maehr, 1967; Videbeck, 1960). When a child is praised for his performance, his self-concept of his abilities increases. However, when the teacher is negatively judgemental, children's self-concepts tend to decrease. Often, the changes in an individual's self-concept occur not only in the specific area of the performance that was praised or judged, but may spread to unrelated areas of performance (Maehr, Mensing & Nafzger, 1962). This evidence offers general support for using Verbal Description instead of Verbal Judgement in the classroom. Constructive criticism can be descriptive; the teacher can describe specific ways in which the child's performance can improve instead of judging the child's character when performance is unsatisfactory.

Research Evaluating the Effectiveness

of the USU Pupil Self-Concept Program

Borg (1977) published the results of the first research evaluation study conducted during 1974-76 using the USU Protocol Self-Concept Modules. The experimental teachers (N=12) who were trained to use the self-concept behaviors, received significantly more favorable post-treatment scores on 11 of the 12 behaviors that were analyzed (.05 to .01 levels) than did the control teachers (N=16). However, pupil gains on the Piers-Harris self-concept measure administered before and after treatment were not significant for either the

experimental or control group classrooms. The small group of inter-mediate minority pupils in the experimental classrooms did make a gain of about 2 1/2 points on the Piers-Harris Children's Self-Concept Scale. This was the only gain for either group that approached significance. A one-year follow-up study was then done to determine whether pupils' self-concepts would improve over that period of time in the classrooms of teachers who had been trained with the USU Pupil Self-Concept Program and who had been giving sepcial attention to pupils with initially low self-concept scores. Although the teachers' use of the self-concept verbal behaviors remained at approximately the same level, there were no significant changes in pupil self-concept as measured by the Piers-Harris Self-Concept Test. Borg offers the high pretest self-concept scores achieved by the pupil sample as one reason for the negligible pupil effects shown in this study. Given the measure used, there was little room for empirical evidence of self-concept improvement.

Borg, Ascione and Van Horn (1978) then adapted the Protocol Self-Concept Program behaviors for use in mainstreaming settings. Ten teachers from an Urban school district in northern Utah were trained to use the behaviors in their classrooms. Their pre and post performance was compared with that of eight control teachers who received no training at all. An analysis of variance was run on adjusted post scores for teacher performance on 12 of the behaviors observed. The other four behaviors were usually too low to be analyzed. In contrast to the previous study, the experimental group received significantly more favorable post-treatment scores than the control group on six

out of the twelve behaviors analyzed (.05, .01 levels). An analysis
of covariance was also run on the adjusted pre and post scores for the
two groups. This analysis yielded four significant differences in
favor of the experimental group. The performance of the control
group never significantly exceeded that of the experimental group.

Student self-concept was also tested during this study. However,
a different measure, the Self-Observation-Scale was used instead of
the Piers-Harris Self-Concept Scale. This test yielded T scores on
each factor for each child tested with higher scores indicating more
positive self-perceptions. The posttest scores were analyzed with
a 2 (Experimental versus Control group) x 3 (Pupil Classification:
Normal Anglo--Handicapped--Normal Minority) analysis of covariance
using pretest scores as the covariate. The handicapped children scored
lower on each factor of the self-concept measure, both on the pre
and posttest, as compared to the other two subgroups. However, gains
made by the handicapped experimental children were not significantly
greater than those made by the control group handicapped children.
Since this was the first attempt to assess the effects of the
Self-Concept Verbal Behaviors on handicapped children, separate analyses
were done on subgroups of learning disabled versus emotionally dis-
turbed children in the control and experimental groups. The test
data for each factor were analyzed using a dependent means t test.
It was expected that experimental children in both subgroups would
improve over control children. However, the data showed only weak
differences for the emotionally disturbed children and none at all
for the learning disabled groups.

A final evaluation study was conducted during 1978-79 to assess the effectiveness of the again revised USU Pupil Self-Concept Program in mainstreaming classrooms (Borg & Ascione, 1980). Thirty-nine teachers from the same school district as the 1977-78 study were randomly assigned to either the Pupil Self-Concept Program or another treatment program. The latter group served as a control group for evaluating the Pupil Self-Concept Program. Both groups of teachers received identical amounts of training using the same module formats, but on differing content. The final sample included 15 experimental group teachers and 19 control group teachers. Since it was determined that the Self-Observation-Scale used to measure pupil self-concept during the previous study may not have been sensitive to the particular types of manipulations the program made in Teacher behavior, Borg and Ascione (1978) developed a new scale. The What-I-Think-Scale (WITS) not only measured school- and academic-related self-concept, but also changes in pupils' perceptions of their teachers' classroom behavior. Since this was the first study to use the WITS, an additional measure of pupil self-concept was considered necessary. The Intermediate Piers-Harris Self-Concept Scale was chosen in spite of the ceiling effect that had occurred with its use in the 1974-76 studies (see above).

The control group for this experiment was trained with the Classroom Management Program. This training brought about a few changes in teacher verbal behavior that were similar to those effected by the experimental Pupil Self-Concept Program. Since both programs

taught verbal behaviors, such as praise, there was a potential lack of independence between not only the scores of the two groups, but also between the individual teacher scores within each group. Such a potential lack of independence leads to underestimating group treatment gains. Therefore, a multivariate analysis of variance (MANOVA) in which the experimental-control group difference was the independent variable and the scores for the behaviors were the dependent variables was conducted to compare the pre and post teacher performance. No significant difference was found between the two groups before training. However, the results of the MANOVA on post scores revealed a significant difference between the experimental and control group teachers ($p < .005$). Univariate tests indicated that the experimental group had more favorable post performance scores than the control group on four of the twelve behaviors analyzed by this method. In addition to the MANOVA, an analysis of covariance (with pre scores as a co-variate) on the postscores was run on each behavior. The results from this method indicated that the experimental group performed significantly more favorably on six of the twelve measures of teacher behavior (.05 level). The experimental teachers had more favorable mean scores on eleven of the twelve behaviors measured. These previous studies suggest that in group situations the training program used in this Thesis study is effective in producing favorable changes in trained teachers' use of the pupil self-concept behaviors.

A 2 (Treatment: experimental, control) x 3 (Pupil Classification: nonhandicapped nonminority, handicapped, nonhandicapped minority) analysis of covariance (using prescores as the covariate) was used to analyze children's post scores on the WITS and Piers-Harris. The ANCOVA on the WITS did not yield a significant main effect for either treatment or pupil classification. However, a significant treatment x pupil classification interaction was found, $(p < .025)$. Scheffe' tests showed that experimental group handicapped pupils scored significantly higher than the control group handicapped pupils $(p < .05)$. ANCOVA on the Piers-Harris yielded a significant main effect for pupil classification $(p < .025)$ because the handicapped group scored lower than the other two groups on this measure. Subsequent Schaffe' tests also indicated a significant treatment x pupil classification interaction, $(p < .025)$ with the experimental group handicapped children showing higher posttest scores than the control group handicapped children. The results for both measures of pupil self-concept support the effectiveness of the training program in enhancing the self-concepts of handicapped pupils although no enhancement was obtained for either the nonhandicapped nonminority or minority pupils in this study. Ceiling effects may again have prevented greater changes emerging, especially for nonminority pupils. Since teachers were targeting handicapped pupils, other pupils, such as minority pupils, may have had less contact with changes in their teacher's behavior.

Review of Pertinent Opinion and Theory

Opinion Regarding Self-Concept Theory and Measures

Wylie (1974), in Volume 1 of her Review of Methodological Con-
siderations and Measuring Instruments for the Self-Concept, lists
and discusses a variety of theories which accord an important, or even
central role, to the self-concept. Some of these theorists have been
called phenomenological theorists who deal with the conscious self-
concept, while others are interested in investigating the non-phenomenal
construct or unconscious self-concept. These theories are criticized
as being ambiguous, incomplete, and overlapping. Wylie maintains that
none of them have received any large amount of systematic, empirical
exploration. Furthermore, she points out that studies claiming to
be empirical studies relevant to self-concept do not always address
themselves to any one theoretical position. Finally, she also considers
that research attempting to predict behavior from theoretical, inferred
traits, is possibly founded on an empirically mistaken assumption that
individual differences in inferred variables such as self-concept,
have substantial influence in creating the individual differences
observed in behavior. This may not be so, especially when behavior
is observed across situations. Consistencies or inconsistencies in
such observed behavior may not be attributable to any inferred trait
such as a high or low self-concept.

How to validly define and measure theoretical, inferred traits
is another problem for researchers. Wylie (1974) suggests that the
viability of the above basic assumption about self-referent constructs

could be more scientifically tested. However, researchers involved in the empirical study of such constructs would first have to reconceptualize the constructs they wish to study. For example, she thinks a more molecular conceptualization might have increased scientific utility. Therefore, scientists who wish to study learning self-concept may first want to reconceptualize an operational definition for learning self-concept rather than running a study and using a test that supposedly tests some sort of gobal self-concept. Obviously flaws in conceptualization of such constructs can lead to other avoidable methodological flaws. She calls for a more wide spread and serious commitment to "the conceptual and methodological rigors necessarily involved in scientific work" in order that the study of self-referent constructs can add to our scientific knowledge of personality.

Theory Applicable to all Modules of the Self-Concept Program

In spite of the dearth of direct research evidence found in the literature, a great deal of theory does provide rationale for the USU Self-Concept Program behaviors. Research by Good and Brophy (1972) clearly shows that teachers behave differently toward different pupils in many ways that could have an effect on pupils' self-concepts. Similarly, research by Kinch (1968) proposes that the individual's conception of himself is based on his perception of the way others are responding to him and supports the earlier theories of the "looking glass self" and "taking-the-role-of-the other" (Cooley, 1902; Mead, 1934). The results suggest that frequent favorable perceptions expressed by others will lead to favorable change in a person's self-concept, especially when the perceptions come from persons

regarded as important. Normally the teacher is a person of importance
in the child's eyes. She is also available to make frequent, timely,
and, hopefully, consistent responses to which the child can react.
Thus, the teacher as a significant person in a child's life has great
power to affect her students' attitudes. Coopersmith and Silverman
(1969) believe a child with a negative concept of himself and his abil-
ities will seldom realize his potential at school regardless of his
intelligence. To encourage such a child to see himself as able to
achieve success in school, his teachers must help him change this neg-
ative self-concept.

More recent theory for the USU Self-Concept Program behaviors is
drawn from Mattocks and Jew (1974). They stress that personality
theorists have had to consider the self in their work because it is
increasingly evident that a child's attitudes and feelings about himself
(his self-concept) intricately interweave and interact with what he
thinks, remembers and perceives to potently determine his behavior.
If a child has an impaired self-concept due to his home environment,
they suggest the teacher is his next, and sometimes only, hope of
improving his self-concept. They identify and discuss nine areas in
which the teacher can help to shape pupil self-concept in the school
setting:

    a. "Picking up Cues."

    b. "Promoting Consistency in Self-Concept through Teacher-Parent
       Contacts."

    c. "Promote Confidence and Integration."

    d. "Awareness of Body Image."

    e. "Learning by Doing and Thinking."

  f. "Mistakes are not Tragedies."

  g. "Avoid Unreasonable Demands."

  h. "Utilize the Child's Natural Curiosity."

  i. "The Correct Use of Reward and Punishment."

Although these ideas powerfully imply the vital role the teacher could play in shaping or reshaping a child's self-concept, they are never really defined in terms of specific behaviors the teacher could actually use in given situations. However, the USU Self-Concept Program behaviors do fit into many of these areas of teacher effectiveness. For example, if the teacher learns to recognize the difference between Verbal Judgement behaviors and Verbal Description behaviors (from the program modules Verbal Description -- Part I and Part II) and to apply these to her teaching, she will have a definite way to cope with areas c, d, f, g, h, and i (listed above). The "I-Message" from Teacher Anger could be applied to area d, if necessary; and the importance of teacher Modeling as discussed in the module on Self-Perception suits areas e and f. However, in area f it is suggested that the teacher freely admit her own errors. In this case, she would have to be careful not to verbally model an unfavorable self-reference. Perhaps she could make an impersonal statement instead of a personal one: i.e., a map she is trying to hang continually falls off the wall, "I guess that won't work. I'll have to try another way to get it to stay up there," versus, "I simply can't hang this map!" The second statement only models defeat and is a negative self-reference. It seems, however, that in spite of some discrepancies, these ideas do add to the theoretical rationale for the teacher verbal behaviors in the U.S.U. Self-Concept Program Modules.

Theory Applicable to Specific Modules

Theoretical concepts from the work of Gordon (1970) and Ginott (1972) provide the major background for the Self-Concept Program verbal behaviors. The communication model used for illustration is taken from Berlo (1960).

The Teacher Anger Module. According to Gordon (1970) and Ginott (1972) Teachers need a positive method of dealing with anger in the classroom. Teachers often feel guilty when they become angry. However, anger is a human feeling and can be safely expressed without insult to children's self-concepts. There are many negative ways to deal with anger, for example, You-Messages, Why Questions and Sarcasm. However, as Gordon (1970) points out, the teacher manufactures anger as a consequence of experiencing a primary feeling. The positive I-Message, taken directly from his work, functions to express the feelings to which Anger is a response. It is a safe style of communication teachers can learn to replace the negative styles which only provoke resistance and rebellion. The I-Message preserves student self-concept and allows the honest communication of teacher feelings in the classroom. (See The Method -- Program section for a Description of the Teacher Anger behaviors.)

The Self-Perception Module. The self-perception teacher behaviors are based on both research evidence stated above and on the theory of Gordon (1970) and Ginott (1972). The teacher modeling strategy involves the teacher making positive evaluations about herself. In theory (Ginott, 1972), the self-concept thrives on favorable conclusions the child can learn to make about himself and his abilities.

Ginott believes it is alright to draw evaluative conclusions about oneself and voice them in a favorable self-referent statement. Children can learn to make favorable self-conclusions and to voice them by copying the teacher who specifically models such behavior.

Research cited above has shown that self-rewarding behavior in children increases if the teacher provides reinforcement for such behavior whenever it occurs. The Self-Perception Module teaches three ways to provide positive verbal reinforcement for self-rewarding behavior. The Teacher Reinforcement behavior is based on Ginott's (1972) concept of Appreciative Praise. According to Ginott, praise really consists of two parts: What the teacher says to the child and what the child says to himself. Thus, when the teacher praises a child she must be careful to tell him precisely what she likes about his help, work, ability - the ACT he has done - and from this let him draw his own conclusions about himself. According to Ginott these conclusions will be positive, productive ones if teacher praise statements verbally describe events or situations appreciatively and realistically. Reinforcement of children's positive self-remarks expressing such personal conclusions can increase their self-concepts.

Ginott's (1972) theory also supports the use of Teacher Extinction to discourage children expressing negative self-remarks in the class-room, i.e., "Everyone is smarter than I am." He points out that the teacher can ignore such remarks, especially if they are made in front of peers. The result in this case is non-reinforcement of the expressed, negative self- reference. The other alternative is for the teacher to express her own honest feelings about hearing the

child judge himself negatively. Gordon (1970) suggests the "I-Statement," i.e., "I don't like to hear you say that about yourself," as an acceptable way to verbally extinguish children's use of negative self-references. This approach is safe because the teacher states her feelings and does not disagree directly with the child's already formed conclusion of himself in a given situation. Ginott (1972) maintains that any Teacher Extinction response must only convey understanding and acceptance since direct disagreement is harmful to children's self-concepts. An I-Statement, honestly expressed, may be an important enough response to the child to keep him from making negative evaluation remarks about himself. (See the Method -- Program section for a Description of the Self-Perception behaviors).

The Verbal Description-- Part I Module. The concept of Verbal Description versus Verbal Judgement is based mainly on the theory of of Ginott (1972), Gordon (1970) and on counseling theory, i.e., Rogers (1951). Ginott (1972) believes teachers must convey their caring and concern and be cautious of deepening anxiety or creating bitter resentment when communicating with children. Therefore, it is the teacher's job to focus communication with children on their feelings by (1) describing the situation in which they are involved or (2) by describing their stated feelings per se. When a teacher tells a child how she feels about him personally, she affects his feelings of self worth, his self-concept. Her language for better or worse, could have a major influence on the later decisions he makes about himself and his ability. Therefore, according to Ginott, the teacher must describe the child's situation or his feelings, by

restating them, instead of judging his character and personality.
Many clinical psychologists feel that this is the main difference
between effective or ineffective communication in a classroom. The
ability to listen and then rephrase and clarify a voiced problem is
similar to Carl Roger's non-directive counseling technique (Rogers,
1951). The process involved is a skill called non-evaluative, active
listening (Gordon, 1970). When a teacher listens to a child with
passive listening, she is silent. It is much more effective for the
teacher to actively think through what the child has said and restate
it in her own words to see if her interpretation is correct. If the
teacher can consistently use active listening, she will reveal under-
standing and empathy for her students while still allowing them to
retain the major responsibility for their problems. Gordon (1970)
stresses that problem solving is facilitated because even children do
a better job of thinking a problem through to a solution when they get
to talk it out. Active listening is solution oriented, and the child's
self-concept is bolstered because his own ability to solve his problem
is recognized.

Just as active listening conveys the necessary trust to enhance
a child's positive self-concept, other types of messages that offer
logic, advice, or any kind of judgemental labeling or instruction
convey distrust by taking autonomy and problem solving responsibility
away from the child (Ginott, 1972). Negative Verbal Judgement remarks,
as illustrated in this module, stress inadequacies a child may feel and
can shatter his self-confidence. Such remarks, which can cause a child
to distrust himself, or feel guilty or remorseful, only result in

self-defensive behavior. Therefore, the Verbal Description -- Part I
Module attempts to extinguish teacher use of negative Verbal
Judgement and replace such statements with positive Verbal Description
remarks. (See The Method--Program section for a Description of the
Verbal Description -- Part I behaviors.)

The Verbal Description -- Part II Module. This fourth Module
also deals with the concept of Verbal Description verses Verbal
Judgement. Four specific behaviors are introduced to apply the concept
in the classroom. Two of the behaviors are positive methods of
conveying acceptance and understanding to children, the other two are
negative. The two positive behaviors, Appreciative Praise and Inviting
Cooperation involve using verbal description, describing the ongoing
situation instead of evaluating the personalities of the children
involved. In contrast, the two negative behaviors involve verbal
judgment, in this case, positively or negatively evaluating the
personalities of children.

Appreciative Praise is drawn directly from the theory of Ginott
(1972). He believes that in order to be truely productive, praise
must recognize a child's feelings and describe his performance,
efforts, or accomplishments vividly and exactly. It can also
describe teacher feelings about them. Therefore, effective praise
neither evaluates personality, nor judges a child's character.
Ginott's concept of praise as described above is the basis
for his theory. A child must be able to trust his own conclusions
about his ability. By using Appreciative Praise and avoiding the
evaluation of personality and character, the teacher can encourage
children to continue to try.

In contrast, Evaluative Praise always involves verbal judgement of a child's personality or character. Therefore, some definite dangers lurk in using Evaluative Praise with children, (Ginott, 1972). Phony evaluative praise can be detected immediately and only reinforces a child's negative self-concept concerning a negative ability. Furthermore, the teacher who uses Evaluative Praise is setting up a standard which the child may feel he must live up to in the future. Such standards can cause anxiety within the child and make him afraid to try in the classroom. Finally, comparisons are often part of Evaluative Praise whether the teacher realizes it or not. For example, although we, as teachers, can tell when a child is improving in a given skill, it is important for a child's self-concept that he make this comparison of his growing ability himself. Therefore, according to Ginott, if the teacher can describe without evaluating and report with judging, she can leave the evaluation of the child to himself. She can help him build his self-concept positively.

The concept Inviting Cooperation versus Direct Commands is also drawn directly from Ginott (1972) and Gordon (1970). Both agree that commands can be harmful to a child's self-concept and that avoiding Direct Commands in the classroom can help a teacher Invite Cooperation by conveying respect and guarding the self-concepts of her students. Punitive Direct Commands tell the child that the teacher definitely doesn't consider him sensitive enough to help with any problem she may have and implies that she doesn't trust his judgement to solve a problem or behave as a situation demands. Inviting Cooperation can be as simple as describing a situation instead of using a Direct Command to get action from children. Any time the teacher avoids a

Direct Command when she wants fairly immediate action involves an Inviting Cooperation statement. By using Inviting Cooperation statements in the proper kind of situation, the teacher can avoid creating hostility and dependency in her children and provide them with opportunities to be independent at the same time. The more she can allow her students to depend on themselves, the more autonomy she grants them, the less resentment they will feel and the more cooperation the teacher will have won. (See The Method--Program section for a Description of the Verbal Description -- Part II behaviors.)

Trends in Self-Concept Research

One relatively new trend in self-concept research is to relate academic achievement to the student's self-concept. Bloom (1972) argues that students who meet school expectations will develop healthy personalities, while those who fail will exhibit signs of emotional difficulty. Thus, successful students will come to view themselves as competent and capable because they successfully meet school demands. Kifer (1975) designed his study to test Bloom's argument that some specific attitudes could relate to school achievement. Positive relationships were observed between school achievement and affective scores on the characteristics of "self-esteem," self-concept of ability, and internal locus-of-control. Positive "self-esteem," self-concept of ability, and internal locus-of-control were all associated with successful achievement. Therefore, Kifer's work suggests that a good "affective self-view" can be the product of successful mastery of school tasks. Weikart's (1971) longitudinal

research on pre-school children going into elementary school supports Kifer's findings. However, as Good, Biddle and Brophy (1975) point out, there is also reason to believe that a positive self-concept, once it is established, can in turn exert influence upon a child's achievement patterns. They cite the research of Wattenberg and Clifford (1964) who found that self-concept scores of kindergarten children were a better predictor of reading achievement performance (measured two and a half years later) than were intelligence tests. Similarly, a study on EMR children by Richmond and Dalton (1973) shows that self-concept for these children is positively related to teacher rating of academic ability.

A second trend in self-concept research is to relate observable classroom behavior to a child's self-concept. Research by Shiffler, Lynch-Sauer, and Nadelman (1977) demonstrates a relationship between self-concept and observable classroom behavior in two informal elementary classrooms. The Spalding-Copping Analysis Schedule for the educational setting was used to observe the children's classroom behaviors. An altered form of the Davidson and Lang Adjective Check List was used in three forms to measure self-concept. Profile analyses indicated significantly different patterns of classroom behavior for differing self-concept levels (.05 and .01 levels). Specifically, the highest self-concept group showed the greatest percentage of task oriented behaviors, and the lowest self-concept group had the largest percentage of nondirected behaviors. The implication is that children with high self-concepts may be more confident about making learning activity choices than are children

with low self-concepts. Furthermore, high self-concept children may be more likely to persevere at a task. In doing so, they receive academic and social reinforcement from the teacher plus a personal sense of competency. Such a feedback cycle tends to enhance their self-concepts. In contrast, children who spend a large amount of time in nondirected activity, or off-task activity, will not generate a similar positive feedback cycle. Instead, such low self-concept children are caught in a negative feedback cycle which is hard to break. To the knowledge of the experimenter, this is the only recent research study done to support the relationship between self-concept and observable behavior in the classroom.

Summary of the State of the Art

Research Evidence on the USU Pupil Self-Concept Program

Except for the Self-Perception Module, there is very little previous research which directly relates the teacher verbal behaviors taught in the Protocols to changes in pupil self-concept. Marlowe (1962) demonstrated that reinforcement significantly increased the rate at which his subjects made positive self-references. Felker and Thomas (1971) showed that there is an overall positive linear relationship between a child's self-concept and his ability and tendency to voice favorable self-references. Further research by Felker, Stanwyck, and Kay (1973) attempted to improve the self-concept of elementary school children in inter-city schools by encouraging pupil self-rewarding behavior. This research showed some significant pre-post-gains in self-concept, but differences between the pupils in

experimental and control classrooms were not significant. The USU self-concept verbal behavior, Teacher Modeling of Favorable Self-References, is supported by the research of Felker, et al., (1973) as well as by that of Bandura and McDonald (1963) and Bandura (1977). The latter research shows adult modeling to be a very powerful tool in bringing about changes in the behavior of children.

The specific teacher verbal behaviors discussed in the Verbal Description Part I and Part II Modules have some indirect support based on previous research evidence. For example, Talking-to-the-Situation and Restating-The-Situation are descriptive behaviors similar to Nonpossessive Warmth and Accurate Empathy. Stoffer (1970) found a positive correlation between these two forms of verbal communication and positive changes in children's academic and behavioral problems in the classroom. Truax and Tatum (1966) found that pre-school children who received a high level of these two teacher verbal behaviors increased significantly in school-social adjustment. Finally, Aspy (1973) showed that increasing teacher use of Restating-the-Situation also increased student achievement. These three studies at least provide some support for the notion that teacher interaction style (which is highly verbal) will influence children's adjustment in the school setting.

Similarly, there is little direct evidence in the research literature regarding Ginott's (1972) theories on the different effects on the child of Appreciative Praise versus Evaluative Praise (Verbal Description -- Part II). Most of the research, as has been noted, deals with person-orientated praise versus task-orientated praise.

Also, such research deals directly with the effect of praise on achievement rather than on self-concept. Most important, to affect student attitudes such as self-concept the literature supports not the frequency of praise, but the appropriate use of praise (effectively delivered reinforcing teacher behavior applied after students have performed an appropriate behavior) and the absence of excessive or abusive use of criticism (Dunkin & Biddle, 1974). Thus, it is suggested that the moderate and appropriate use of praise as a rein-forcer, not necessarily the type of praise used, could promote affective growth in students.

Direct evaluation of the USU Pupil Self-Concept Program provides the most empirical evidence for the program's effects on both teacher behavior and pupil self-concept. In all three studies cited above, experimental teachers significantly changed their verbal behaviors in the classroom (.05 and .01 levels) as a direct result of training with the program. In the first evaluation and follow-up study (1974-76), experimental pupils did not show self-concept gains significantly above the control pupils as measured by the Piers-Harris Self-Concept Scale. The 1977-79 evaluation studies targeted handicapped children in mainstreaming classrooms. During the first study, the pupil sample was divided into handicapped, normal-nonminority, and minority subsamples. The handicapped children scored lower on both the pre- and post-tests than the other two subgroups. However, the experimental and control handicapped children did not differ significantly in self-concept gains as measured by the Self-Observation Scale. Significant differences

in pupil self-concept in favor of the experimental group handicapped
pupils emerged by the end of the 1978-79 program. The Piers-
Harris and a newly developed scale, the WITS, were used to measure
self-concept in this study. For both measures, experimental handicapped
pupils' post scores no longer differed significantly from scores for
nonhandicapped-nonminority and minority pupils. The program
had positive effects on the identified target sample.

Self-Concept Opinion, Theory and Research Trends

Research on the construct of self-concept is based on an abundance
of varying theories. However, none of these theories seem to be backed
by clearly defined terms and testable postulates, as Wylie (1974)
points out. Instead, a great deal of counseling theory has been
applied to encounters between teacher and child in the classroom.
The basis for this application seems to be a belief that the helping
relationship epitomized by counseling is intended to produce constructive
behavioral and personality changes (Truax and Tatum, 1966). The
teacher is seen as a significant other in the lives of her pupils,
one who can affect their attitudes about themselves. Since much of
the communication in the classroom between the teacher and child is
verbal, the child is assumed to learn from the teacher's words
what kind of person he is.

In particular, there are three qualities of counseling communication
which, if present at a high level, tend to bring about constructive
personality change in the client. Rogers (1951) calls the first
technique Non-Evaluative Listening. Truax and Tatum (1966) have

called the same technique Accurate Empathy. A second quality called Nonpossessive Warmth (Truax and Tatum, 1966) leads to a feeling of acceptance by the client. And a third quality, Genuineness, can be equated with the authenticity of a teacher's behavior. Ginott (1972) and Gordon (1970) put these three theories into specific verbal usages. It is their adaptations of these counseling theories that is the basis for most of the Self-Concept Program teacher verbal behaviors. These three qualities epitomize the Verbal Description versus Verbal Judgement issue. Since this study was conducted, Gordon has extended his work into the classroom (Gordon, 1977) to demonstrate more specifically how to use his verbal strategies in that setting. Neither Gordon nor Ginott offer any particular research backing or evidence for their verbal communication ideas. However, both report observed changes in client behaviors that lead to observed changes in client relationships.

Improving children's self-concepts would especially appear to be a worthy educational goal in light of the significant relationships that have been found between pupil self-concept and both academic achievement (Kifer, 1975; Weikart, 1971; Good, Biddle, and Brophy, 1975; Wattenburg & Clifford, 1974; and Richmond & Dalton, 1973) and classroom behavior (Shiffler, Lunch-Sauer, & Nadelman, 1977). If, as these studies suggest, self-concept is positively related to academic achievement and/or classroom activity choices, teacher behaviors that attempt to improve a child's concept of himself are, indeed, worthwhile teacher training material. Two problems remain for educational researchers dealing with the self-concept: First,

the construct must be clearly if not operationally defined for the learning situation. And, second, as Wylie (1974) suggests, new instruments which have validity for the construct as redefined must be developed.

THE METHOD

Subjects

The seven adult subjects were teachers from the Logan City Elementary Schools. Four of these teachers were experimental subjects used to test Hypothesis #1. They were people who wanted to take the course on the Pupil Self-Concept Behaviors. The other three teachers were control subjects who allowed their classes to be tested for self-concept, but who did not receive any training. The experimental subjects received college credit and pay for their participation which may have prevented their loss through withdrawal before the end of the course. The control teachers were also paid for their participation. The effect of motivation was no doubt operating throughout the study, since the experimental teachers were all volunteers. However, the experimenter feels that this does not reflect on a single subject multiple baseline study because three of the four teachers were simultaneous replications of the study done with the first teacher.

Grade levels one to four were used. The experimental teachers taught three intermediate classes and two primary classes. Teacher A taught a 2nd grade, Teacher B taught a 3rd grade, Teacher C taught one A.M. and one P.M. 4th grade class, and Teacher D taught a 2nd grade class. The control teachers taught two primary classes and one intermediate class. Teacher 1 taught a mixed first and second grade

class, Teacher 2 taught a first grade class, and Teacher 3 a third grade class.

The types of classes taught by the experimental teachers differed considerably. Teacher A, the first experimental teacher, taught in a team-teaching situation. She had a second grade while her team teacher had a third grade. However, since both teachers took responsibility for various subjects, teaching to the entire group of 60 students all at once, the children were exposed to differing teacher behaviors throughout the study. Neither of the teachers in the team situation agreed on the behaviors they were going to use with the children. Experimental Teacher A was taking the course in the Self-Concept behaviors while her team teacher was not taking the course. Furthermore, as well as being exposed to the differing behaviors of the two team teachers, Teacher A's second graders were also exposed to two partially trained sophomores from the Utah State University Sophomore Block and to one student teacher who spent three weeks in the classroom during the study. Therefore, in spite of Teacher A's work with the self-concept behaviors, her second graders were really exposed to several different kinds of verbal messages from the teachers and teacher trainees who spoke to them in their classroom during the two months of the study.

During the training, the second experimental teacher, Teacher B, had two sophomore aides in her classroom and no student teacher. While the study class was taught, the USU Self-Concept behaviors were also being taught in the sophomore block of the Elementary Education Program as one of the pilot field tests for the materials. Therefore,

both of the sophomore aides had been trained to an application level using the same verbal behaviors that Teacher B was being trained to use. This meant that all of the teacher verbal behavior in the classroom was fairly consistent, thus reinforcing any effect on the children's self-concept.

Teacher C, the third experimental teacher, also had a self-contained classroom. She had two classes of fourth graders, a morning class and an afternoon class of different children. Most of her time, about 4 hours a day, was spent with the morning class. This meant that both of her classes had a different teacher for half of the day, every single school day. Their other teacher was not trained to use the USU Self-Concept verbal behaviors. Other direct influences, two sophomore aides and a student teacher, also affected her children. In this case, however, both the sophomore aides were once again trained in the USU self-concept behaviors because they were also part of the USU Elementary Education Sophomore Block Program. The student teacher was also trained in the USU self-concept behaviors. Therefore, teacher behavior in Teacher C's classroom was fairly consistent, except for the alternate teacher who taught each group during half of each day.

Teacher D, the fourth experimental teacher, likewise had a self-contained classroom. There were two sophomore aides who had a direct influence on her students during the time of the study. However, both of these sophomore aides had also studied the use of the self-concept behaviors. Other influences on Teacher D's students were

several high school pupils who had received no training in the USU
Self-Concept behaviors. Teacher D was located in a school next to
a high school. The high school teacher trainee program sent several
students to work in the primary classrooms of the elementary school
where Teacher D was employed. Therefore, the children heard many
different types of conflicting verbal behaviors used at the same time.

The four experimental teachers differed widely in their years
of experience. Teacher A had taught 15 years at the time of the study.
She was, by far, the most experienced. Teacher B was teaching her
fourth year, and Teacher C her seventh. Teacher D had the least
experience, with only one year of internship plus three quarters of
her first year of teaching behind her.

The control teachers were all located in the same school as
Teacher D. All three teachers had self-contained classrooms. However,
their location meant that at least the primary teachers had several
aides from the high school who were not exposed to the USU self-concept
behaviors. A confounding aspect to the study did exist in that the
two primary teachers, who had had more experience than the intermediate
teacher, also had teacher trainees from the USU Sophomore Block who
may have been exposed to the USU self-concept behaviors. Since there
was no observation carried out in their classrooms, there was no way
to tell whether any of the teacher trainees were using any of the
same behaviors that the primary experimental teachers were being
trained to use. The intermediate control teacher had only untrained
high school students helping in her room.

The subjects for testing hypothesis #2 consisted of both an
experimental and control group. The experimental group was all of the

pupils in the classrooms of the four teachers who were exposed to the USU Pupil Self-Concept Program. Teacher A had 28 primary, or second grade pupils; Teacher B had 27 intermediate third grade pupils; Teacher C had two classes (Her A.M. class consisted of 22 intermediate fourth graders and her P.M. class also consisted of 22 intermediate fourth graders); Teacher D had 27 primary second grade students. Altogether there were 133 experimental students in the study. Of the control teachers, Teacher #1 had 21 primary first and second graders; Teacher #2 had 26 primary first graders, and Teacher #3, had 30 intermediate third graders. Therefore, there were 77 control pupils in the study.

The total number of minority pupils by class were as follows for the Experimental Teachers: Teacher A, 0; Teacher B, 0; Teacher C, A.M. class, 2; P.M. class, 2; Teacher D, 2 minority students, 1 Chicano student and one of another race. According to our code, we only identified Negro children, Native American Indian children, Chicano children. All other races were termed "other." The four students deemed to be minority students in Teacher C's two classes were classified as "other." The total number of experimental minority pupils therefore, equaled six. The control group of students for hypothesis #2 existed of comparable subjects from the classrooms of the three control teachers who did not receive the training. In the control classes, Teacher #1 had one Native American child, Teacher #2 had no minority children and Teacher #3 had three Chicano children--a total of four minority children in the control classes.

Since the subjects for both groups did not constitute a randomly selected or assigned sample, but instead, came from intact clusters,

the results of this part of the study must be considered
tentative. Furthermore, the minority children involved
had to be those already available in each classroom, which was too
low a number for separate analysis.

Measures

The basic measuring technique for Hypothesis #1 involved collecting
and graphing multiple baseline data for the teachers who were using
the experimental training. Prior to the training, each teacher was
observed and a multiple baseline graph of her performance on each of
the observed variables (specific teacher verbal behaviors) was plotted.
The procedure for setting up the baseline graph was piloted using
observation data from several hours of observation on two teachers.
It was found that one hour increments were not feasible because teacher
verbal behaviors were not stable over a one hour increment. So the
decision was made to use four hour increments to establish the
baselines. This equaled 12 hours per teacher for three points per
behavior on each teacher's graph. Several factors were involved in
deciding to use four hours of observation to equal one point or
increment on each graph. It was found that the behaviors emitted
depended a great deal on the classroom activity. It was also found
that it takes four hours for a cross section of daily activities to
occur. The result was a stabilizing of teacher verbal behaviors
over a four hour time period. The reason for the stabilization was
that the A.M. activities in the classroom stretching into the P.M.
activities gave about the same number of opportunities per day to use

each of the self-concept verbal behaviors in a normal day's classroom routine. Therefore, the graphs were constructed from total observation tallies of 14 behaviors occurring in four hour increments per behavior per teacher. (Sarcasm (S-) and Why Questions (W-) were collapsed into the general You-Message (Y-) category, while Prompting (P) wasn't graphed since it was introduced after the pre-observations were already finished.)

The tool for collecting this data consisted of an observation form (Appendix A). Use of each behavior was tallied on this form. Tallies were taken separately for each hour of the four observation hours. Normally, the tallies for four consecutive hours were combined into one total per behavior and transferred to a line graph for each teacher's performance. Both positive and negative behaviors were tallied and plotted for each four hour observation.

Data was collected for Hypothesis #2 using two group administerable measures of self-concept--The Piers-Harris Self-Concept Scale and the North York Self-Concept Inventory. The Piers-Harris Self-Concept Scale was chosen to obtain a measure of general or global self-concept. The intermediate form of the Piers-Harris Self-Concept Scale can be administered to children in grades 3 through 6. The authors of the scale report split-half reliability coefficients ranging from .87 to .90 and KR 21 coefficients ranging from .78 to .93 for this measure. It has been shown to have construct validity and to differentiate between subjects with low and high self-concepts. However, this scale had not been used extensively with children below the third grade, and it was found that items had to be carefully

studied for any necessary rewording or omission. The investigator
adapted this measure for use with grades K-2. Two steps were then
taken to pilot the constructed primary form. First an administrative
approach was tried with a first grade classroom in the Logan City
Schools to see if the measure was feasible to use at that level. It
turned out that it seemed to be feasible. The next step was to
actually use the measure in a research study going on at the same time
to evaluate the USU Self-Concept modules. Through administering the
primary form to several classrooms in that study, a split-half
reliability of .82 based on 142 randomly selected cases was obtained.
Therefore, the primary form was used in the experimenter's own study
with the teachers in Logan.

The North York Self-Concept Inventory was chosen to be used as a
measure of self-concept yielding a score focused as directly as
possible on self-concept in a learning situation. The primary form
of the North York Self-Concept Inventory was used in grades K-2 and
the intermediate form in grades 3-4. The developers of this measure
report test/retest reliability of a previous intermediate form to be
.81. Since reliability coefficients were not reported on the primary
form, a random sample of 136 tests--again from tests administered
in the Ogden Research Study on the USU Pupil Self-Concept Program--
were checked and found to have a split-half reliability of .90.
The North York Self-Concept Inventory has construct validity in that
the items were selected from three existing self-concept measures
which had been used successfully: (1) Instructional Objectives
Exchange Self-Appraisal Inventory, (2) Coopersmith's Self-Esteem

Inventory, (3) Comfort's Self-Esteem Scale. The earlier version of
the intermediate test was standardized with a sample of approximately
1000 children between grades 2-6, who attended the North York public
schools. Further construct validity lies in the ability of 23 of
the 25 items on the test to discriminate between high and low self-
concept subjects, at least for the norm sample. No standardization
data was available for the primary form used in this study.

All of the self-concept tests were administered in exactly the
same way to obtain a standardized approach. The items were read
aloud once to pupils at all grade levels. Pupils did put their names
on their tests and minority students were identified later. The North
York Self-Concept Inventory Primary Form administration directions
caused the only problem. It seems that the children had trouble with
the administration directions for this particular form of the test
because there was no writing on the test, only faces. Therefore
changes were made in the administration directions so that they would
be much more clear to the students taking the test. Copies of these
tests and administration directions are contained in Appendix B.

Research Design and Procedures

There were two research designs operating simultaneously in this
study. The first hypothesis was tested with a single subject multiple
baseline design, and the study was directly replicated with three of
the four subjects involved. To carry out this design the following
specific steps were followed:

1.   The experimenter designed an observation form for 14 teacher behaviors (Appendix A). This form was piloted in the Ogden Research Study on the USU Self-Concept Protocol Modules, Spring Quarter, 1975.

2.   The examiner also pretested both the design and the observation form by observing two teachers for four hours each to find the most stable observation time increments to be used on the SS graphs. The observations were carried out hour by hour, and it was found that four hours was the minimum observation time needed to achieve fair stability (Table 1).

3.   After this pretest was run, one observer, other than the E, was thoroughly trained to use the observation form. Tools used to train the observer were tapes made by experimental teachers during the Ogden Research Study on the USU Self-Concept Modules, the observation form, and detailed instructions. Interrater reliability was established between the experimenter and the observer during actual classroom observation practice. Four hours of observation were carried out on two teachers and two hours were carried out on one teacher. This was a total of ten, one hour observations for which reliabilities ranged from .88 to .99 for six of the behaviors tallied (Table 2). The other six teacher verbal behaviors were used too infrequently without training to provide meaningful comparisons. Two negative behaviors seemed to be avoided altogether due to the observers. Four behaviors from the Self-Perception Module, which seemed to have to be learned and practiced because they are not part of our natural speech patterns, were not emitted by any of the three teachers observed before the training. Therefore, no

Table 1

Behavior Stability Across Observations

Four Hour Increments

Behavior	Teacher C Hours					Teacher D Hours				
	1	2	3	4	T[a]	1	2	3	4	T
Appreciative Praise										
Observer #1	16	6	14	5	41	5	5	10	3	23
Observer #2	13	5	13	5	36	4	5	9	3	21
Inviting Cooperation										
Observer #1	9	13	14	9	45	35	23	21	21	100
Observer #2	10	11	11	9	41	35	22	20	19	96
Direct Commands										
Observer #1	23	39	20	26	108	19	31	37	21	108
Observer #2	23	41	18	26	108	22	39	40	19	120
Describing The Situation										
Observer #1	2	4	0	1	7	4	4	7	6	21
Observer #2	2	4	0	3	9	5	2	7	6	20
Verbal Judging and Labeling										
Observer #1	2	3	2	5	12	8	13	10	17	48
Observer #2	2	3	2	4	11	8	13	10	21	52

[a]T = Total use frequency during the 4 hour increment per observer.

data were available to establish reliability on these six behaviors prior to the beginning of the study.

Table 2

Interrater Reliability based on Ten One-Hour

Pre-Observations of Six Behaviors

Behaviors	Spearman r
Appreciative Praise	.97
Evaluative Praise	.94
Inviting Cooperation	.99
Direct Commands	.95
Describing the Situation	.88
Verbal Judging and Labeling	.98

4.   Experimental teachers were observed for the minimum 4-hour observation time to establish a baseline performance point for each self-concept behavior to be taught. Since 3 points on each graph were needed for the baseline, each experimental teacher was observed for 12 hours before training began. Each point consisted of a four hour increment of observation as explained above. The 12 hours of observation were used to establish the baseline rate of teacher emissions on each language skill for each experimental teacher. Tallies were then taken from the observation forms, added and plotted on the multiple baseline graphs. Three baseline points were established on each graph for each behavior observed that applied to that graph.

5.   The four experimental subjects were taught to emit the
specific positive and avoid the negative language behaviors covered
in the four training modules. As can be seen from the Syllabus
(Appendix C), the class met twice a week on Tuesday and Friday for
at least a 75 minute time period. The modules were presented and
taught according to the following schedule. Approximately two weeks
of classroom time plus three class meetings were spent to teach each
set of module behaviors. During that time each teacher progressed
from comprehension through recognition to application of each specific
set of Self-Concept verbal skills. The two weeks per module schedule
allowed ample time for the teachers to practice the accumulated
skills in their classrooms and for a trained observer to evaluate their
practice during and after each set of behaviors was taught.

The first class period in each two-week segment was devoted to
introducing the module for that period. The evaluator thoroughly
discussed the rationale behind the major concept, introduced the
teacher to verbal behaviors to apply the concept, and gave several
examples of situations in which each kind of remark could be used.
Practice audio tapes (Cassettes) made by teachers in the previous
Ogden Research Study were also used to help the four students
recognize each category of teacher remarks in a classroom setting.
After the initial introduction, the instructor and class listened
to a tape and discussed the specific behaviors as they occurred
in the interaction on the tape. The four teachers then progressed
from Task 1 through Task 3B on that module before meeting again.
They were also given a set of cue cards (see example, Appendix C)
to put up in their rooms as they began to practice the behaviors.

The second class meeting on each module involved an in-depth discussion of the behaviors plus exposure to the Protocol Film (Task 4) and the Recognition Test (Task 5). The discussion always took place before the Task 4 and 5 evaluations. It proved to be quite valuable as a teaching strategy, since the exchange of views plus further explanation from the evaluator helped to clarify many questions and served as a review for Tasks 4 and 5. The teachers were then assigned Application Tasks 6A and 6B in their module booklets, and were also asked to practice the behavior with the pupils if they had not already begun. A separate practice assignment was given for each ensuing day including one 30 minute audio tape assignment to aid their practice. The cue cards previously passed out were still to be used as constant reinforcers to remember specific behaviors.

During the third class meeting on each module, Task 7, the Application Test, was administered. Then the entire group of four teachers plus the experimenter listened to, discussed, and evaluated each teacher's tape for that lesson. The behaviors were tallied on an appropriate Listening Guide (also included in Appendix C) each time one occurred. This class period usually lasted two hours. However, since the four teachers involved wanted the E, a trained observer, to be present during the entire tape playback, and since they also wanted to hear all four tapes discussed, we elected to spend the time. This approach did help the four teachers gain new insights into their own use, plus other possible uses of each behavior.

Between the first and third class meetings on each module, each teacher was observed practicing in her classroom for one or two

forty minute periods. This observation gave the experimenter a chance to note particular problems and discuss them with each teacher as well as provide encouragement for practice. The teachers did not know when the E was coming to observe.

Finally, special practice assignments were given between the third class period and the end of each two week time segment. While these assignments were carried out by the teachers in their classrooms, a total of exactly four hours of observation took place for each teacher before a new module was introduced. Each teacher's performance on all 14 variables was tallied and again plotted on her baseline graphs. Changes in performance on any variable were then compared to the original baseline for that variable as each module was completed.

Hypothesis #2 was tested using a quasi-experimental control group design. The following steps occurred:

1. Both the experimental and control student groups were administered two tests of self-concept--the appropriate forms of the Piers-Harris Self-Concept Scale and the North York Self-Concept Inventory.

2. Experimental students receive the treatment (exposure to the USU Pupil Self-Concept Program Teacher Verbal Behaviors) as explained above. The four teachers learned the behaviors described and used them in the classroom cumulatively. Their pupils were increasingly exposed to these verbal behaviors over a period of eight weeks.

3. No treatment was given to the control teacher's students, since these teachers did not receive training at all.

4.   Finally, two post-tests were administered to both the experimental and control student groups. These were the same North York Self-Concept Inventory forms and the Piers-Harris Children's Self-Concept Scale forms as previously used.

The USU Self-Concept Program

The USU Pupil Self-Concept Program teacher verbal behaviors are grouped into four modules. They include both positive behaviors designed to enhance pupil self-concept and negative behaviors likely to detract from pupil self-concept, P = positive, N = negative in the descriptions below.

I.   Teacher Anger Module

The concept of TEACHER ANGER is based on the following principle: THE TEACHER MUST LEARN TO EXPRESS ANGER IN WAYS THAT DO NOT DAMAGE THE CHILD'S SELF-CONCEPT AND MUST EXTINGUISH THE USE OF INSULTS AS A MEANS OF EXPRESSING ANGER.

The following behaviors apply this concept to classroom teaching:

A.   (I+) I-Message - P - As a means of expressing anger, the teacher simply tells the student how some unacceptable behavior is affecting her. Her statement usually begins with "I". For example, "I'm appalled to see two boys hitting each other."

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B.   (Y-) You-Message - N - As a means of expressing anger, the teacher uses "you" in the message and condemns the student for some unacceptable behavior. For instance, "You're acting like little beasts!"

C.   (S-) <u>Sarcasm</u> - N - As a means of expressing anger: the teacher speaks sarcastically to the student, insulting him. For example, "Got a ticket to the fight, boys?"

D.   (W-) <u>Why Question</u> - N - As a means of expressing anger: the teacher asks the student <u>why</u> he is behaving unacceptably. For example, "Why can't you two behave?"

II.   <u>Self-Perception Module</u>

The Self-Perception teacher behaviors are based on the following principle drawn both from research stated above and from theory: EXPRESSING FAVORABLE SELF-PERCEPTIONS TENDS TO ENHANCE SELF-CONCEPT WHILE EXPRESSING UNFAVORABLE SELF-PERCEPTIONS TENDS TO WEAKEN SELF-CONCEPT. The protocol introduces four specific behaviors for teachers to use to encourage students to express favorable self-perceptions and help extinguish their expression of unfavorable self-perceptions:

A.   (M) <u>Modeling</u> - P - The teacher makes favorable self-perception statements about herself as a model for her children. For example, "I'm so happy I could make these ideas clear to all of you."

B.   (TR) <u>Teacher Reinforcement</u> - P - After a child makes a favorable self-perception statement about himself, the teacher gives him verbal reinforcement by: (a) <u>using an I- Statement</u> to voice her feelings about his remark; (b) <u>restating</u> his remarks; or (c) <u>agreeing</u> with his perception of himself. For example: the 3rd grades have been learning to work hand puppets for an assembly program. The teacher is now ready to try

volunteers for particular puppet parts in the show, an episode
from Peter Pan. She asks for someone to "work" Captain Hook
and calls on Jimmy who cries, "Me, me. I can make him be a nasty
old pirate, I'm really good with them." She tells him, "I'm
delighted to hear you say that, Jimmy."

C.   (TE) Teacher Extinction - P - After a child makes an
unfavorable self-perception statement, the teacher either ignores
the unfavorable remark or expresses her own feelings about the
remark using an "I-Statement." She avoids direct countering of
children's unfavorable self-perception remarks. For example,
Earl, a 10 year old, is helping to arrange the classroom furniture
for a play after recess. He is hurrying and knocks the teacher's
pretty vase off the corner of the desk. It breaks, and he wails,
"Golly, I'm no help at all! I always break stuff." The teacher
sighs, "Earl, I'm very sorry to hear you talk that way about
yourself."

D.   (P) Prompting - P - The teacher asks the child a question
about himself. She words the question so the child's answer may
be either a positive or negative self-remark. If positive, she
will respond with Teacher Reinforcement; if negative, she will
use Teacher Extinction. For example: A child has been reading
aloud to the teacher in a separate part of the room so that
she is able to talk to him in a one-to-one situation. She
asks him, "how do you feel about your reading today?" The child
can respond either positively or negatively about his ability.

E.   (EP) <u>Elicits Praise</u> - P - The teacher asks the child a question about himself. She words the question so the child's response will be a <u>positive</u> self-remark. Note: Elicits Praise questions are used with Teacher Extinction and Teacher Reinforcement behaviors in a series of behaviors called <u>Teacher Extinction-Elicits Praise--Teacher Reinforcement</u>.

F.   (TE-EP-TR) <u>Teacher Extinction--Teacher Elicits Praise--Teacher Reinforcement</u> - P - The child must begin this sequence of behaviors by voicing an unfavorable self-perception. The teacher can then use a teacher extinction remark following immediately with an eliciting praise remark ("Now tell me something you can do well, Bobby.") If the child complies, she can finally follow up with a Teacher Reinforcement Remark, thus combining the three behaviors. This behavior is useful on a one-to-one basis when other children will not hear.

III.   <u>Verbal Description-- Part I</u>

The basic concept dealt with in this module is Verbal Description versus Verbal Judgement. The basic principle of this concept could be stated: TEACHER REMARKS THAT DESCRIBE THE CHILD'S SITUATION LEAVE SELF-CONCEPT INTACT WHILE TEACHER REMARKS THAT NEGATIVELY JUDGE THE CHILD TEND TO THREATEN SELF-CONCEPT. There are two positive behaviors to use and two negative behaviors to avoid when applying this principle in the classroom:

A.   <u>Verbal Description</u> is describing the ongoing situation instead of negatively describing the personalities of the children

involved. This protocol module deals with two types of positive verbal description.

1. (TS+) <u>Talking to the Situation</u> - P - The teacher simply describes the ongoing situation (A) when one or more children behave unacceptably, (B) when a child may be hurt, either physically or emotionally, or (C) when the child appears to have a problem. The child <u>does not</u> tell the teacher how he feels first. When TS+ is used, there is usually no student remark to alert the teacher to the child's immediate feelings although the children may be talking among themselves, or there may be an exclamation like, "Oh,. . . oh!". For example, children in a fifth grade classroom are listening to a Halloween record of "The Legend of Sleepy Hollow." Unconsciously, Robert is kicking his boot against the desk ahead of him. Students are beginning to be distracted. The teacher says, "We'd like to hear the record, and that thumping noise disturbs our hearing."

2. (RS+) <u>Restating the Situation</u> - P - The teacher restates and describes the child's <u>spoken</u> feelings, problem or complaint. The child <u>does</u> speak first. When restating the situation is used, the teacher first listens to the child tell about himself, then rephrases his remarks to show empathy and understanding. For example: Valarie, a new little girl in the 5th grade, is standing in the doorway watching the other children play at recess. She sees the teacher and goes over to where she is standing.

"I wish I was home where I know everyone in my class."
The teacher answers, "You are feeling lonely since you
don't know anyone here yet."

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B.   Negative Verbal Judgement is negatively describing the
personalities of children instead of describing the ongoing
situations in which they are involved. This protocol module
also deals with two types of negative verbal judgment:

   1.   (VJ-) Verbal judgement and labeling - N - The teacher
   diagnoses a child's spoken or unspoken problem (feelings)
   and makes a remark that judges or labels the child's
   character. Verbal judgement and labeling statements can be
   used in the same situation where the teacher could use
   positive Talking to the Situation or Restating the Situation
   remarks. For example, the VJ- remark, "You're just being
   a poor loser, Davy" could be replaced by RS+ "You're
   unhappy that you've lost, Davy."

   2.   (SC-) "Should" and "Could" Remarks - N - The teacher
   tells the child what he should do and/or tells him what
   he could have done under certain conditions. Should and
   could remarks are used when (a) the teacher wants to prod
   the child into compliance with her goals, or (b) when the
   child has not met her standards. For example, "You should
   all be able to do these problems if you listen."

IV.   Verbal Description -- Part II Module

Verbal Description--Part II deals with the same concept of
Verbal Description versus Verbal Judgement and the same basic principle
as the Verbal Description--Part I module. Four specific behaviors
are introduced to apply the concept in the classroom. Two of the
behaviors are positive methods of conveying acceptance and under-
standing to children, the other two are negative.

A.   (AP+) Appreciative Praise - P - The teacher praises the
act, not the child's character. She uses verbal description
to describe the child's situation, his performance, or accomp-
lishment vividly and exactly and her feelings about it. She may
thank the child for his efforts. For example, (the teacher
says of a horse soap carving), "Oh Mary, the mane and tail seem
to actually flow in a breeze."

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B.   (EP-) Evaluative Praise - N - The teacher praises the
person, not the act. She uses verbal judgement and praises by
evaluating personalities and judging the child's character.
For example, "My, you're a good artist, Mary."

C.   (IC+) Inviting Cooperation - P - The teacher uses verbal
description in choice statements, descriptive statements, and
questions to ask rather than tell children what to do. Fairly
immediate action is expected from the child. For example, "Let's
all remember to raise our hands for a turn to speak in our
discussion."

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D. (DC-) <u>Direct Command</u> - N - The teacher uses verbal judgement
to tell her children what to do instead of inviting cooperation.
For example, "Don't any of you talk until I call on you!"

(See Review of Literature for research evidence and theory
supporting these specific behaviors.)

RESULTS

Hypothesis #1

Hypothesis #1:   Teachers will not exhibit change in their use of any
of the self-concept verbal behaviors when each of
these behaviors is taught.

Hypothesis #1 was devised to answer the major question, "To what
extent does the USU Self-Concept Training Program affect individual
teacher use of the specific verbal behaviors in the classroom?" There-
fore, the major focus in this study was on the individual teacher.
Single subject research yields a principle of behavior applicable to
a particular individual (Bijou & Baer, 1960). When such a principle
holds true for more and more individuals with similar characteristics,
it can be seen how generally that principle applies (Sulzer-Azaroff &
Mayer, 1977). Furthermore, single subject, or intensive, designs
simultaneously provide for experimentally controlled conditions. Such
control reduces the confounding effect of extra-program variables
(Thoresen & Anton, 1974). Thus, a single subject multiple baseline de-
sign across behaviors was chosen to analyze the data collected for
Hypothesis #1. According to Sulzer-Azaroff and Mayer (1977), the mul-
tiple baseline design across behaviors consists of applying one treatment
procedure to different behaviors, one at a time, with the same individual.
In this study, a particular teaching approach, exemplified by the
teaching model in each of the modules was being tested. The only
variation in design is that each module was designed to affect a set of

particular behaviors rather than one single behavior. Use of this design enabled the experimenter to determine: (1) If each of the 4 modules affected the behaviors that it was designed to affect; (2) How well each module worked on a teacher who was markedly low on the positive behaviors and/or markedly high on the negative behaviors during baseline observations; (3) Where one specific positive behavior allowed a teacher to replace an opposite negative behavior in the same situation; (4) Which modules affected behaviors other than those they were designed to affect. (The teaching approach being tested was designed to affect different verbal behaviors. Therefore, all of the behaviors affected come from a similar topography. In fact, some of the behaviors taught were simply different choices to be used in similar situations. See Summary and Discussion for a discussion of this problem.)

According to Edgar and Billingsley (1974) ideographic research handles the question of internal validity with two basic principles. First, an attempt must be made to show a reliable control of the dependent variable by the independent variable in a single instance. The multiple baseline design described above was used to satisfy this requirement, since successive applications of the experimental variable were applied to a number of behaviors measured over time. The experimental variable in each case is assumed reliable if the behaviors it is designed to change, change maximally only upon its application. Second, the critical technique used to establish internal validity is replication. Each successful replication of the experiment decreases the probability that chance (any unaccounted for variance) caused the change in the dependent variable (Sidman, 1960). The experimenter used

direct, or simultaneous, replication in this study. Replication allows generalization from single subjects to groups of similar subjects.

The single subject multiple baseline graphs plotted from data collected on each teacher in the study would, therefore, clearly demonstrate the effect each module had on the behaviors it was designed to change, as well as the effect it had on any of the other behaviors included in the study.

Teacher Anger

Treatment I, the Teacher Anger Module, deals with behaviors which occur in the classroom only when the teacher is angry. It attempts to extinguish three negative behaviors and replace them with the use of one positive behavior. The negative behaviors are the You-Message (Y-), the Why Question (W-), and Sarcasm (S-) used in an anger situation. For the purposes of observation, these three negative behaviors were collapsed into a single category. The positive strategy taught to replace these three behaviors is the I-Message (I+). Only if the teacher was angry, did the observers record any of these behaviors, i.e., the teacher shouted, used a tense, sharp tone of voice, frowned, etc.

Figure 1 reveals teacher use of the three negative behaviors per 4 hours of classroom interaction to be extremely low throughout the experimental period of two months. The range was from 0 - 2 prior to treatment, dropping to a range of 0 - 1 throughout observations 4, 5, and 6; and finally to 0 for all teachers during the last two observation periods. The observable occurrences of such behavior was therefore extinguished. However, in the case of the four teachers

used in the experiment, the behaviors themselves seemed to occur too infrequently to actually be affected by the treatment.

Figure 2 reveals that the I-Message, however, was affected tremendously by training for all but teacher B. All of the teachers began the experiment without using this behavior at all, with the exception of one or two random uses, and then began to use the behavior directly after training. Three of the teachers continued their use of the behavior throughout the rest of the experiment, although it leveled off after reaching a peak for two of the teachers and in-creased directly until the end of the experiment for Teacher A. Teacher B is the only teacher who increased use directly after training and then immediately dropped off again between observation six and seven and ended with only one use during the final observation, right where she had begun before training.

As can be seen from Table 3, the teachers mean use increased from less than one use of the I-Message per teacher per observation before training to approximately seven uses of the I-Message per teacher per observation after training. The individual scores on the final observation, after about eight weeks of practice on the I-Message, ranged from 1 to 13 uses per 4 hours. However it should be remembered that this particular behavior can only be recorded in an anger situation. Mean use of the negative You-Message behaviors remained low both before and after training as was noted earlier. Figure 3 reveals the same trends in mean use frequency of both the positive and negative Teacher Anger behaviors. More detailed

Table 3

Mean Use Frequency of Teacher Anger Behaviors

Observations	Positive I-Message	Negative You-Message
1	.50	.25
2	.25	0
3	.50	.50
Pre-Treatment Average	.42	.25
Treatment I-Teacher Anger Module Taught		
4	5.50	.25
5	9.50	.75
6	5.00	.50
7	5.25	0
8	7.75	0
Post-Treatment Average	6.60	.50

Figure 1. Negative You-Message, Teacher Anger Module.
Treatment I consisted of teaching the Teacher Anger behaviors
between the third and fourth observation sessions.
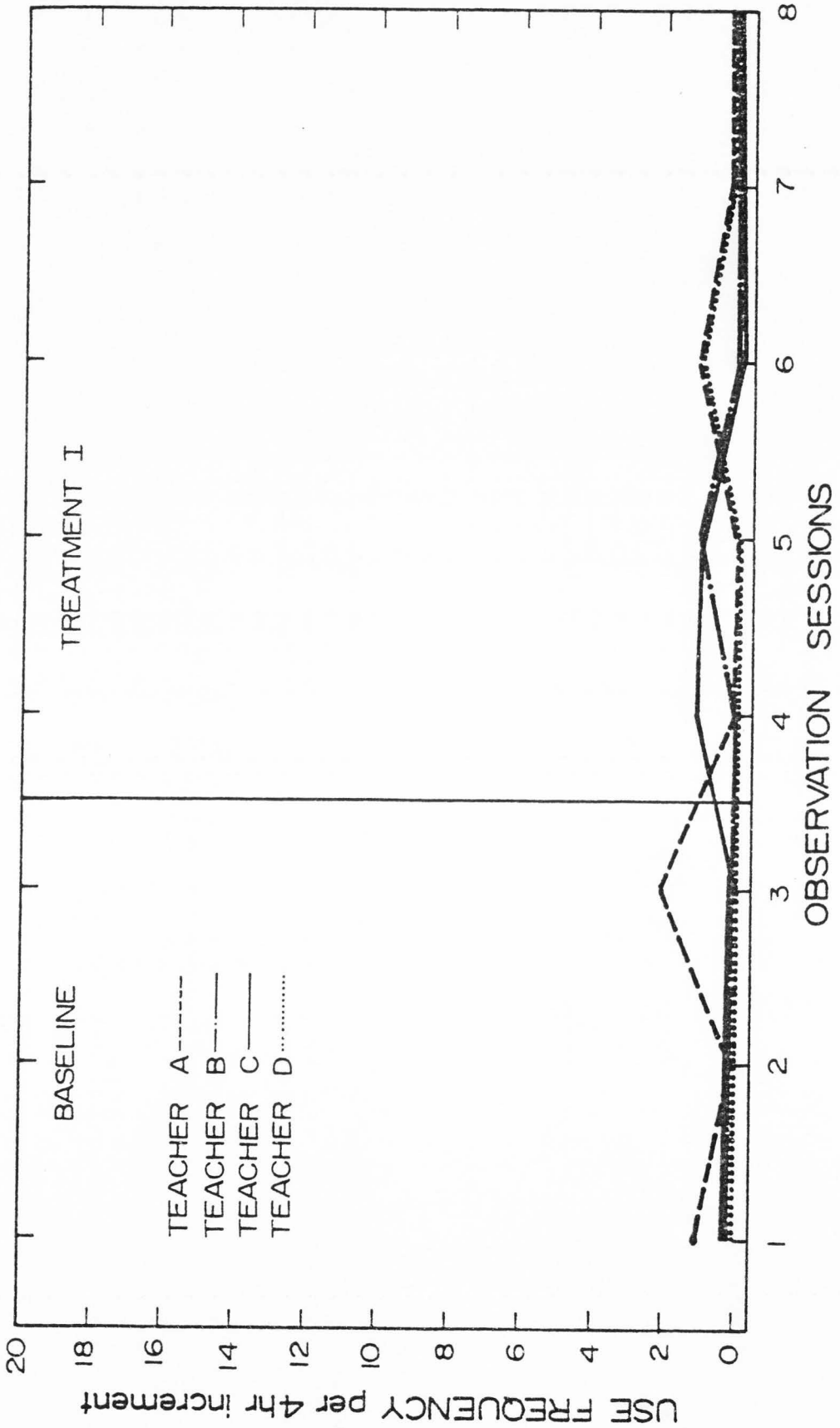
Figure 2. Positive I-Message, Teacher Anger Module.
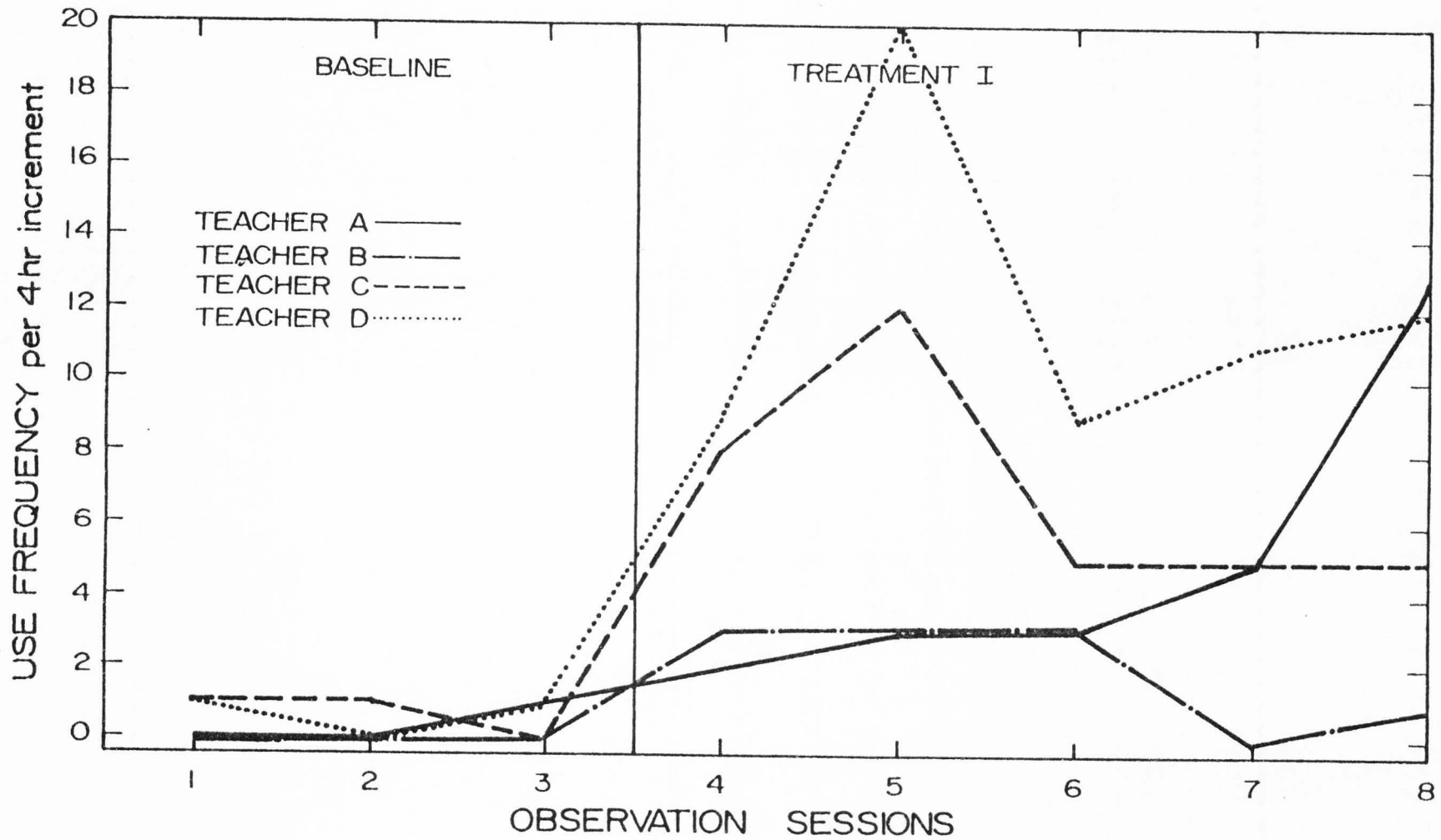
Figure 3. Teacher Anger Module. Mean teacher use
of the negative You-Message (Y-) vs. positive I-Message (I+).
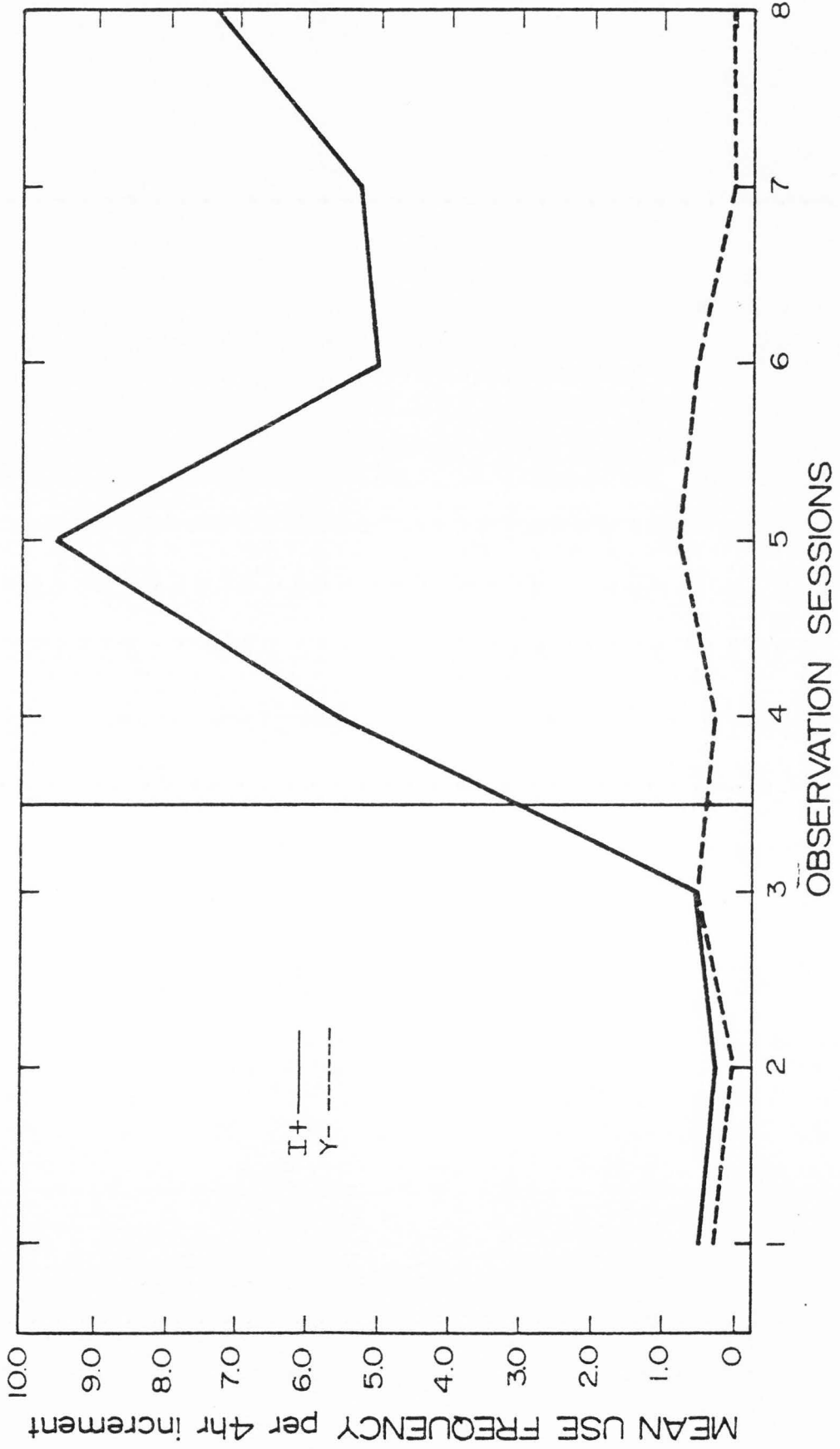
information on use frequency of the individual teachers, is presented in Expanded Table 3, and Figures 1D, 2D, 3D, and 4D in Appendix D.

Self-Perception

All the behaviors emphasized in Treatment II, the Self-Perception Module, are positive behaviors designed to enhance student self-concept. However, some of these behaviors depend upon the child first making either a negative self-remark or a positive self-remark to which the teacher can respond. Furthermore, whenever a child made a negative self-remark, the teachers were trained not to respond aloud to that remark with Teacher Extinction unless the child's peers were not listening. After the baseline data were collected, a new behavior, Prompting, was developed and added to the Self-Perception module. The behavior was taught to the Experimental teachers and tallied during subsequent observations. However, it was not plotted on the figures because it wasn't observed during baseline observations. The effect of teacher use of Prompting will be noted below.

As Figure 4 reveals, the Modeling behavior involving teacher self-praise was virtually never used before training. However, after training all four teachers increased their use of Modeling in the classroom. It will also be noted that as soon as another module was taught between observations 5 and 6, the use of modeling decreased considerably. However, the teachers again began concentrating on its use, and all of them increased their use by the time of the final eighth observation. The mean use of this behavior, also plotted on Figure 4, rose from less than one use of Modeling per teacher, per

Figure 4. Self-Perception Module, individual teacher use of Modeling. Treatment II consisted of teaching the Self-Perception behaviors between the fourth and fifth observation sessions.
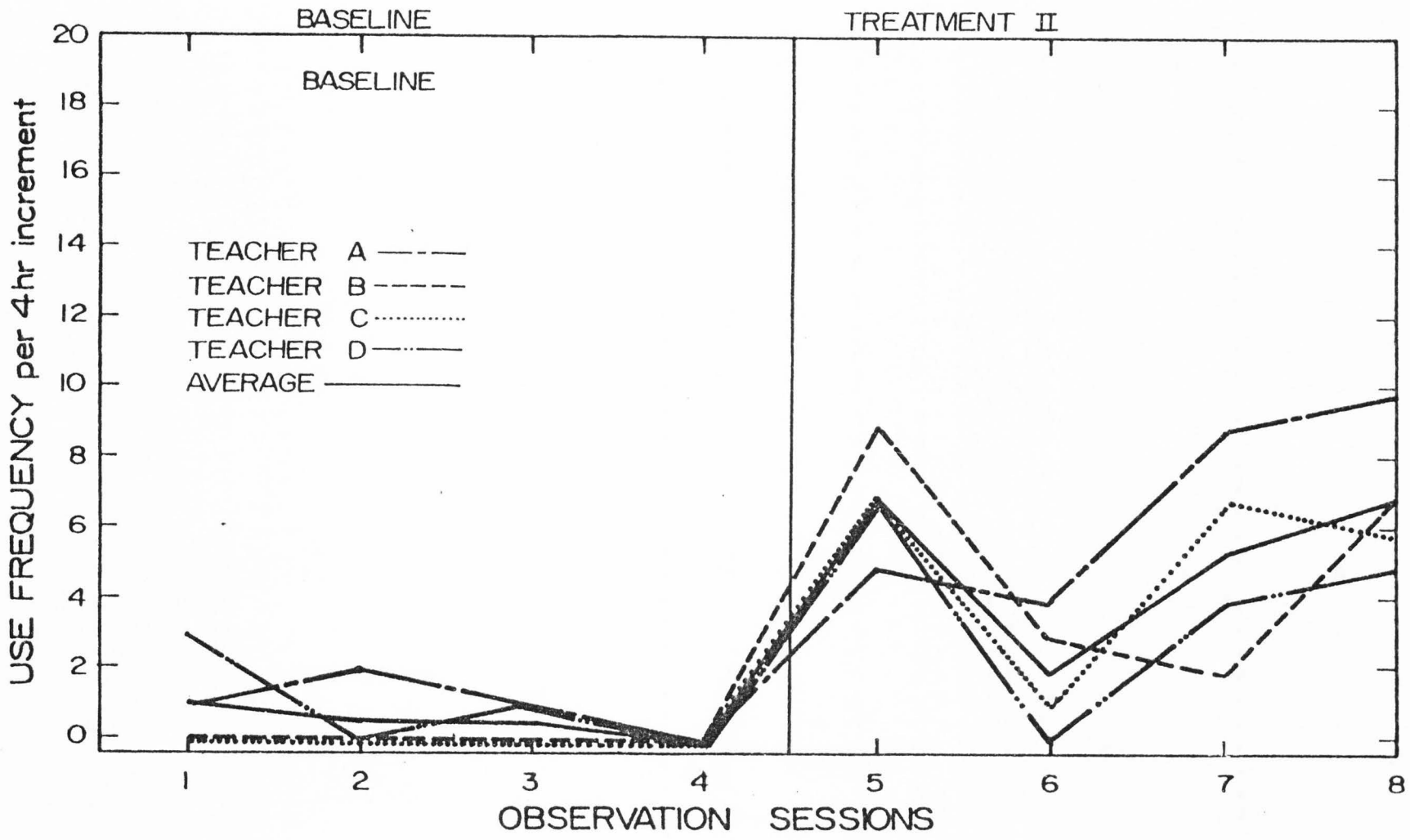
observation after training. Expanded Table 4 in Appendix D presents detailed information on each individual teacher concerning this behavior.

The rest of the behaviors (Teacher Extinction, Teacher Elicits Praise, and Teacher Reinforcement) are more or less interacting behaviors. Teacher Extinction depends upon whether or not the teacher has heard the negative pupil remark to which she can respond. Having heard the negative pupil remark, she first had to decide whether or not this was an appropriate situation to notice that remark. If the student's peers were listening, she was supposed to ignore the remark. If the student's peers were not listening, she could go ahead and respond, and her response could be in the form of Teacher Extinction or Teacher Elicits Praise or both, leading into the combined behavior Teacher-Extinction-plus-Teacher-Reinforcement described in The Method.

Analysis of the data on these behaviors, shows that all teachers tended to notice negative pupil remarks much more after training. Before training there were several negative pupil remarks to which teachers could have responded, but to which they simply did not have a way to respond. As can be seen from the following Table 4a, the percent of correct teacher responses to pupil negative remarks per 4 hours before training was only 38%. However, after training, teachers were responding correctly in 67% of the incidents in which pupils made negative self-remarks. It will be noted in Table 4a that pupil negative remarks increased greatly directly after the teachers were trained to use Teacher Extinction. A possible reason

Table 4a

Mean Use Frequency Self-Perception Behaviors

Observation	Negative Pupil Self-Remarks[a]	Teacher Extinction	Percent Correct Teacher Response[b]
1	2.25	0	25%
2	1.00	0	0
3	2.25	0	50%
4	.25	0	75%
Pre-Treatment Average	1.44	0	38%

Treatment II - Self-Perception Module Taught

Observation	Negative Pupil Self-Remarks	Teacher Extinction	Percent Correct Teacher Response
5[c]	6.00	5.00	50%
6	2.25	1.25	50%
7	1.00	.50	67%
8	1.25	1.00	88%
Post-Treatment Average	2.62	1.94	67%

[a]Pupil negative self-remarks were tallied only if the teacher could have heard the remark and responded.

[b]Percent correct Teacher Response refers to the percent of responses that were correct given the pupil negative self-remarks that occurred during that observation session.

[c]The increase in occurrence of Negative Pupil self-remarks can be partially attributed to teacher use of the Prompting behavior, which was taught but not tallied per se during observations because no baseline data was collected on Prompting.

for this was that they were also using the Prompting behavior designed to elicit either a negative or a positive remark from a student. Figure 5 reveals this pattern graphically.

Teacher use of the Teacher Reinforcement behavior depends upon a student first making a pupil positive remark. However, the teachers were taught to respond to the pupil positive remark whether or not student peers were listening, since this was a positive situation for the student involved. It will be noted in the following Table 4b that mean teacher response to occurring pupil positive remarks per 4 hours before training was 76%. However, there are several methods of responding to a positive pupil remark which were all tallied as Teacher Reinforcement. One of these remarks was a simple, general praise statement such as "good." Teachers were using general praise to respond to pupil positive remarks whenever they heard them before training. After training, it can be seen that the mean positive pupil remarks occurring increased greatly due to the use of Prompting and remained higher throughout the rest of the experiment. Correct teacher response increased to 86% and became more specialized after training. Figure 6 illustrates these trends.

Included in Appendix D is an Expanded Table 4 showing the information from this module on all of the individual teachers. Also included in Appendix D are two illustrative figures for Teacher C. Teacher C was chosen because she was the teacher who used Prompting with the greatest effect. It is interesting to note increased pupil response to the Prompting behavior on her figures.

Figure 5. Self-Perception Module, mean teacher use of
Teacher Extinction in direct response to Pupil Negative Remarks.
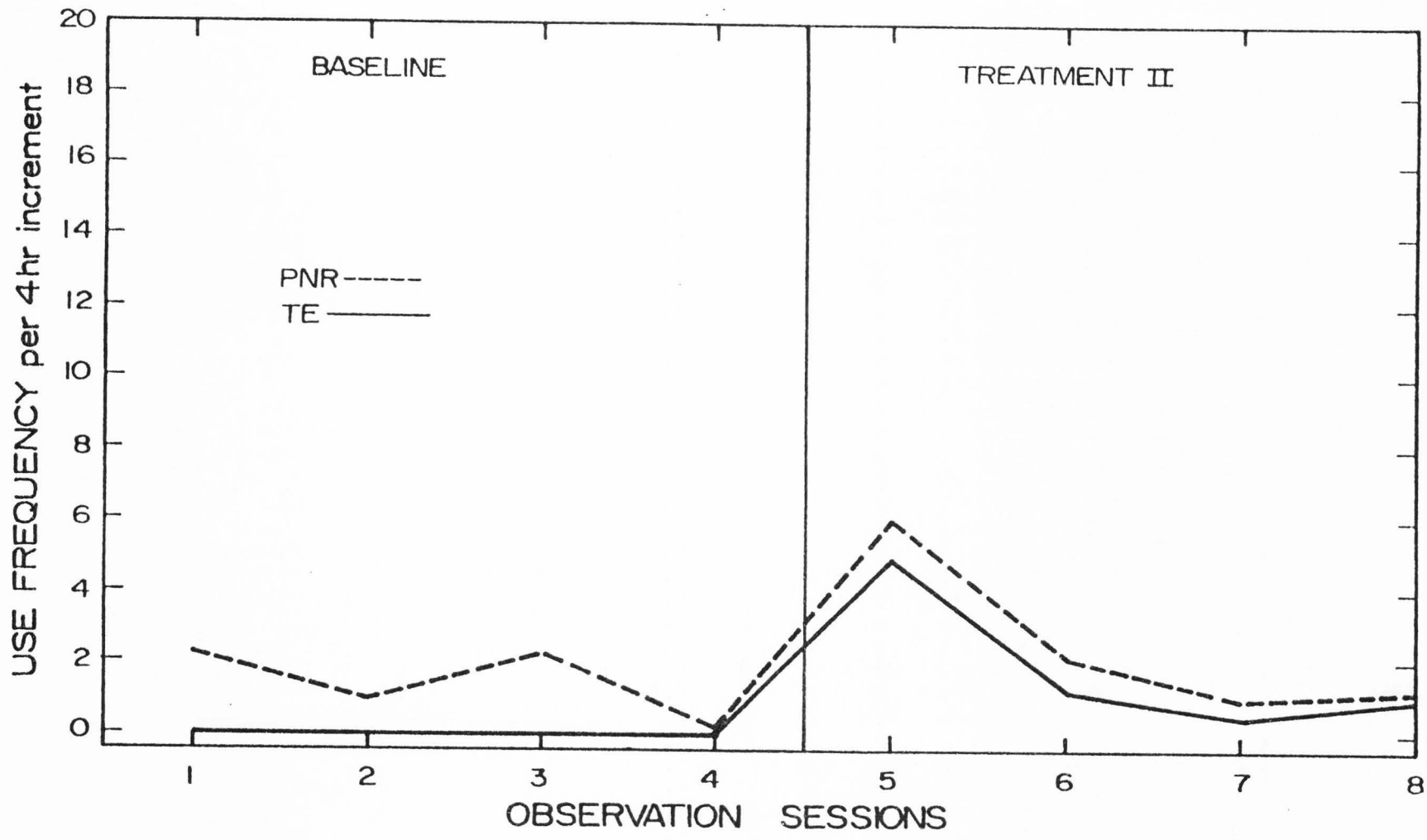
Figure 6. Self-Perception Module. Mean teacher use of
Teacher Reinforcement in direct response to Pupil Positive Remarks.
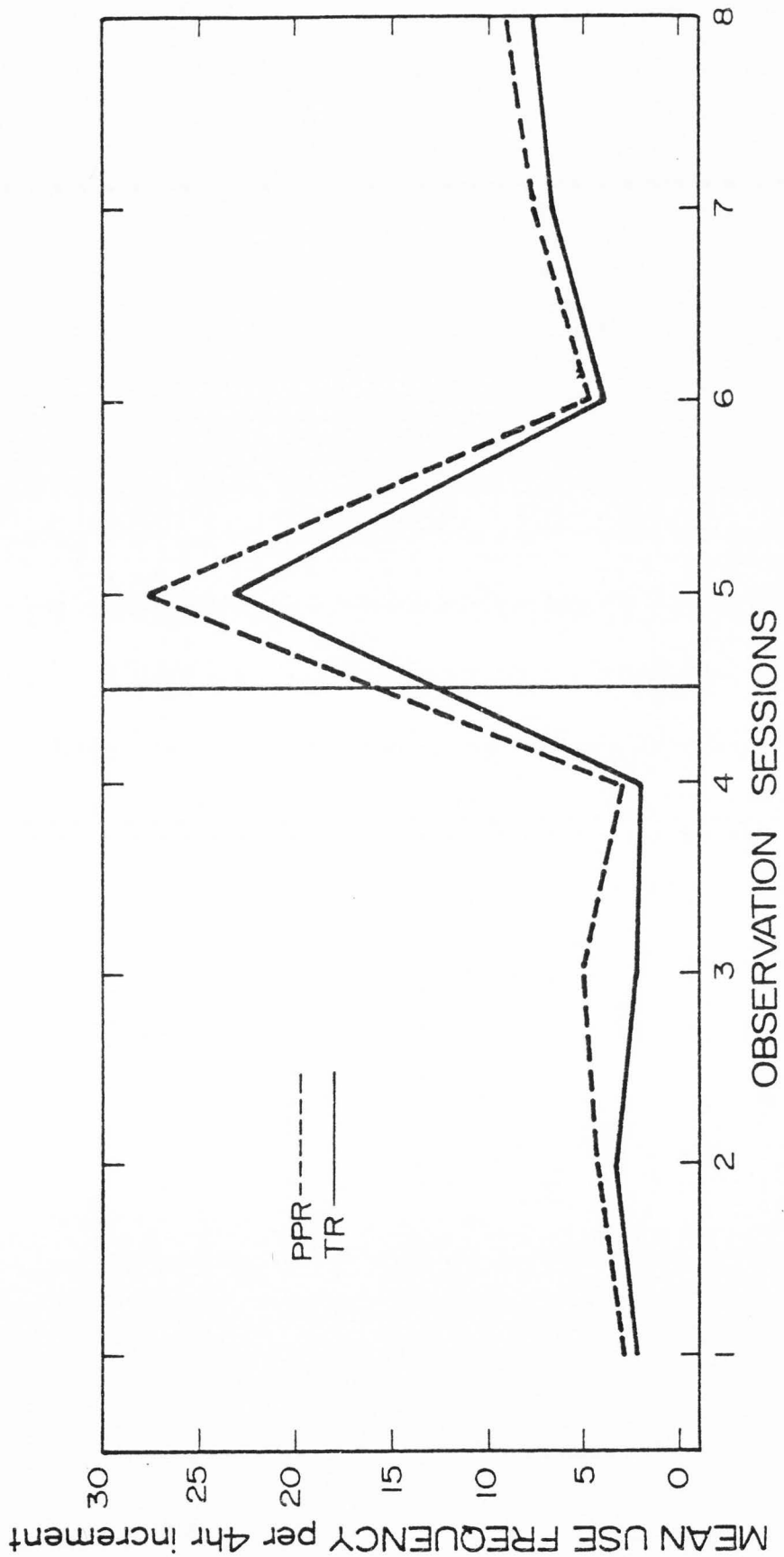
Table 4b

Mean Use Frequency Self-Perception Behaviors

Observations	Positive Pupil Self-Remarks[a]	Teacher Reinforcement	Percent Correct Teacher Response[b]
1	3.00	2.25	89%
2	4.25	3.25	86%
3	5.00	2.25	46%
4	3.25	2.00	82%
Pre-Treatment Average	3.88	2.44	76%

Treatment II - Self-Perception Module Taught

Observations	Positive Pupil Self-Remarks	Teacher Reinforcement	Percent Correct Teacher Response
5[c]	27.75	23.25	80%
6	4.75	4.00	83%
7	7.75	6.75	90%
8	9.00	7.75	90%
Post-Treatment Average	12.31	10.44	86%

[a]Pupil positive self-remarks were tallied only if the teacher could have heard the remark and responded.

[b]Percent correct Teacher response refers to the percent of responses that were correct given the pupil positive self-remarks that occurred during the observation sessions.

[c]The increase in occurrance of Positive Pupil Self-Remarks can be partially attributed to teacher use of the Prompting behavior, which was taught but not tallied per se during observations because no baseline data was collected on Prompting.

Verbal Description -- Part I

Treatment III, the Verbal Description -- Part I Module, has two main purposes. The first purpose is to extinguish various types of negative Verbal Judgement and labeling behavior (see The Method). The second major purpose is to replace that behavior with two types of positive verbal description -- Talking to the Situation and Restating the Situation. Both of these positive behaviors occur only in special instances. Restating the Situation can occur only as a teacher response to a child's remark. Therefore, its occurrence is quite limited and specialized. The two positive behaviors from the module were combined for observation purposes into a behavior called Describing the Situation or DS+. The key to using these behaviors lay in the teachers' learning to recognize the instance in which it was appropriate to use each behavior.

Figure 7 reveals a remarkably stable pattern among all four teachers regarding their use of the Describing the Situation behaviors before training. All teachers were using the behaviors moderately with only a range of approximately ten uses per 4 hour increment between any two of them on any one observation. However, directly after training, all four teachers markedly increased their use of this type of Describing the Situation behavior. It is also interesting to note that two of the teachers, A and B, decreased their use of DS+ between observation 6 and 7, and then again increased slightly by the end of the experiment. The other two teachers, C and D, continued to increase their use, possibly through more concentrated practice of the behaviors. Also it can be noted that the fourth and final

Figure 7. Verbal Description -- Part I Module. Individual
teacher use of positive Describing the Situation (DS+).
Treatment III consisted of teaching the Verbal Description --
Part I behaviors between the fifth and sixth observation sessions.
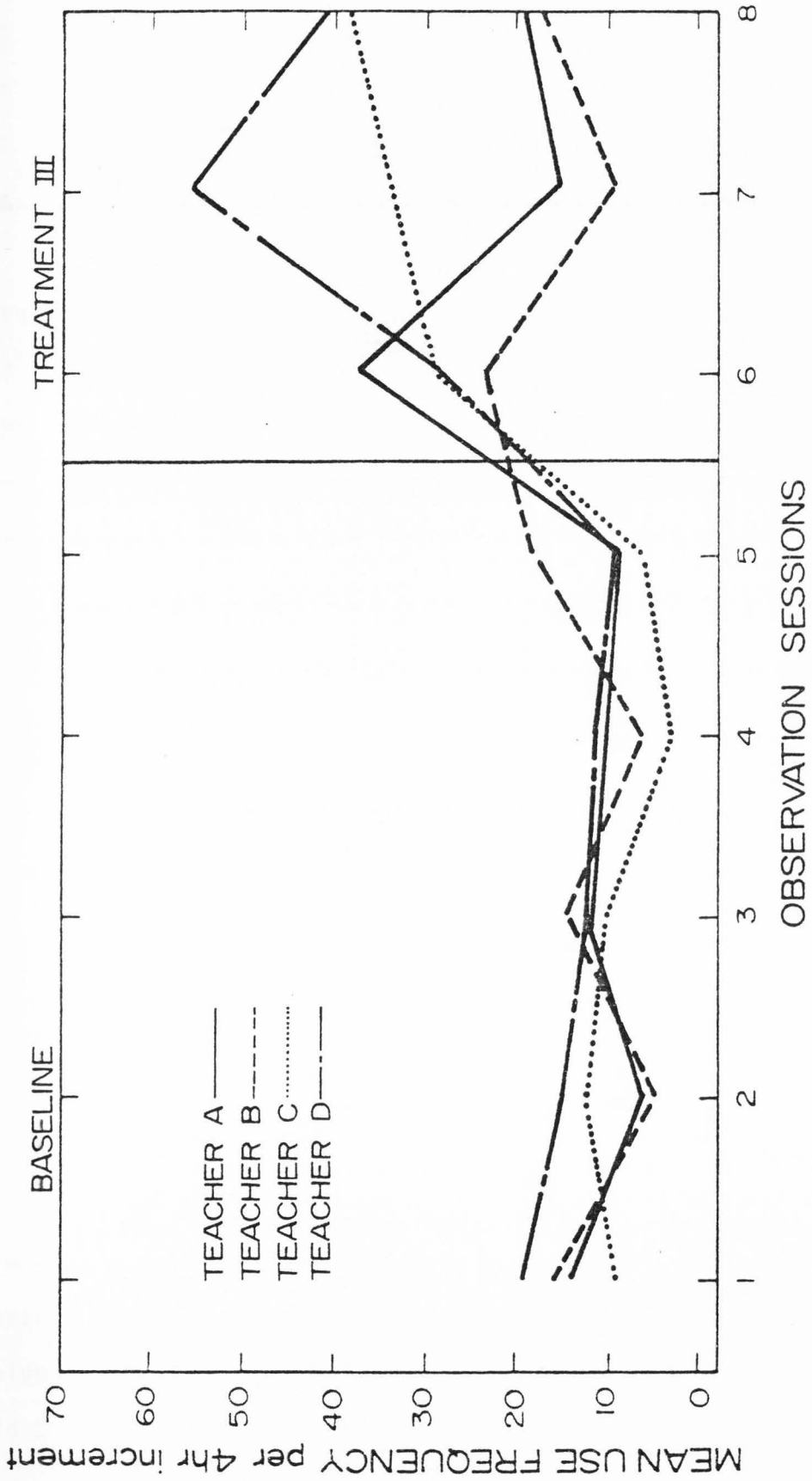
module behaviors were taught between Observation 6 and 7, shifting teacher use emphasis to the new behaviors. Overall, the data show a moderate effect on the use of Describing the Situation in the classroom by the four subjects.

A dramatic decrease in teacher use of Verbal Judgement, however, is revealed in Figure 8. Some variance can be seen between the teachers in their use of Verbal Judgement before training. During the first three observations, Teacher D is remarkably higher than any of the other teachers in her use of Verbal Judgement in the classroom. However, between observations 3 and 4 the Teacher Anger Module was taught. Teachers then had the I-Message as a tool to use in place of certain verbal judgement behaviors in anger situations. Therefore, all of the teachers dropped or decreased their use of verbal judgement somewhat, with teacher D decreasing hers dramatically. From that point, teacher D continued to decrease while the other teachers remained stable until the training took place for Verbal Description -- Part I between observations 5 and 6. DS+ was now a new and more specific tool to be used in place of Verbal Judgement, which continued to decrease in use until the end of the experiment. Figure 9 reveals the mean overall effect of the module on both DS+ and Verbal Judgement.

Teachers were expected to use DS+ in at least 80% of the situations in which they could have used Verbal Judgement during 4 hours of classroom interaction by the end of the experiment. All the teachers achieved this percentage directly after training and continued to hold the percentage until the end of the two month period.

Figure 8. Verbal Description -- Part I Module. Individual
teacher use of negative Verbal Judgement (VJ-). The use of
this behavior was affected by Treatment I in anger situations
and Treatment III in nonanger situations.
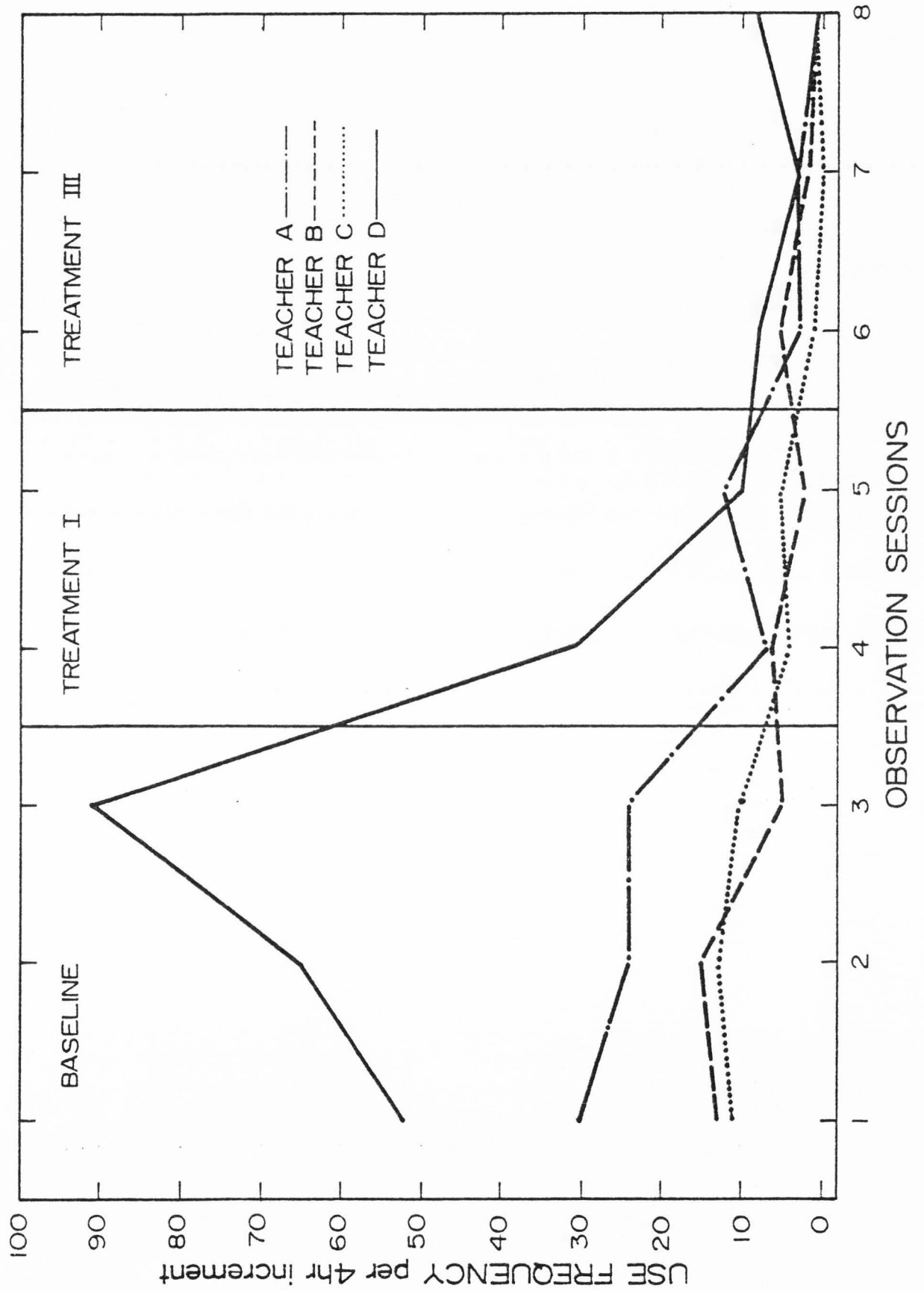
Figure 9. Verbal Description -- Part I. Mean teacher use
of Positive Describing the Situation (DS+) vs. Negative Verbal
Judgement (VJ-).
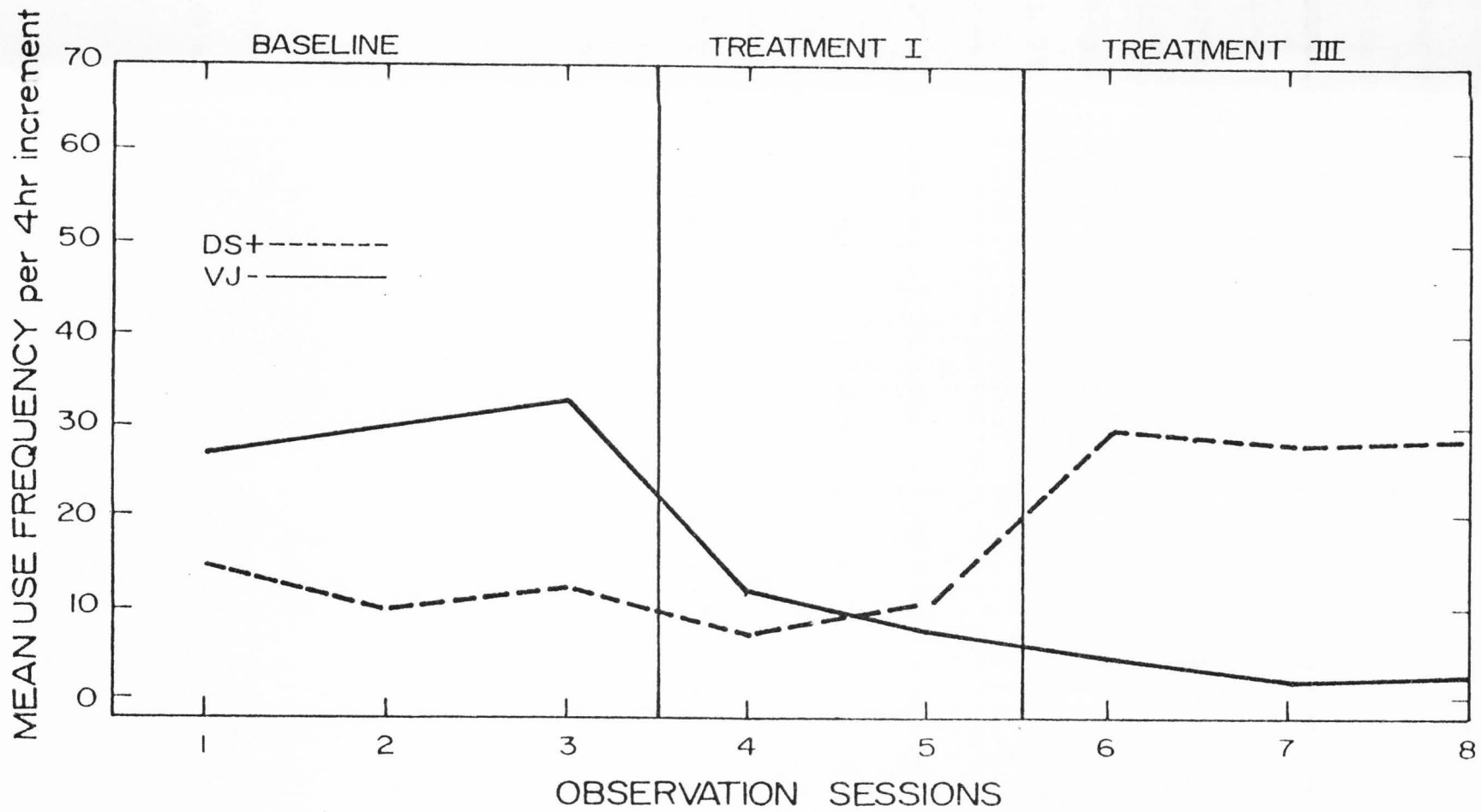
Table 5 below, shows their mean performance rates and percentages per 4 hour observation. It is interesting to divide this table into three sections. Observations 1 through 3 occurred as baseline observations. Observations 4 and 5 occurred after the I-Message was given to the teachers as a tool to replace Verbal Judgement in anger situations, and Observations 6 through 8 occurred following training with the Verbal Description -- Part I Module. Before any training took place during the baseline observations, teachers were using verbal description (DS+) only 29% of the time in situations in which it could have been used during any given 4 hours. After Treatment I, training with the Teacher Anger module, teachers were alerted to their use of the negative You-Message both in anger and nonanger situations. As can be seen in Table 5, they increased their use of Verbal Description (DS+) in some situations where they had been using verbal judgement behaviors. They were now using descriptive statements in 48% of the situations (per 4 hours of interaction) in which they could have used verbal judgement statements. However, after receiving Treatment III, the Verbal Description -- Part I Module, teachers were able to recognize all of the situations in which they were using Verbal Judgement and had more tools with which to replace this behavior. The percentage of replace-ment rose to an average of 91% per 4 hours of interaction for the last three observation periods for all four teachers. A detailed table of individual performance scores is also included for this Module in Appendix D -- Expanded Table 5.

Table 5

Mean Use Frequency of Verbal Description--

Part I Behaviors

Observations	Positive Describing the Situation	Negative Verbal Judgement	Percent Describing the Situation
1	14.50	26.50	35%
2	9.50	29.25	10%
3	12.00	32.50	27%
Pre-Treatment I Average	12.00	29.42	29%
Treatment I - Teacher Anger Module Taught			
4	7.50	12.00	38%
5	10.50	7.25	59%
Post-Treatment I Average	9.00	9.63	48%
Treatment III - Verbal Description Part I Module Taught			
6	29.25	4.25	87%
7	28.00	2.00	93%
8	28.25	2.50	92%
Post-Treatment III Average	28.50	2.92	91%

Verbal Description -- Part II

Treatment IV, the Verbal Description -- Part II Module, attempts to increase two specific uses of Verbal Description and extinguish two very specific uses of Verbal Judgement. Section I deals with a positive behavior called Appreciative Praise and points out the possible dangers of using Evaluative Praise, a positive type of verbal judgement. Some Evaluative Praise, however, will always be used by certain teachers with certain children as is pointed out in the module. Section II advocates replacing Direct Commands whenever possible with an Inviting Cooperation statement. There are three types of Inviting Cooperation statements a teacher may use as explained in The Method.

Appreciative Praise vs. Evaluative Praise. For either of these behaviors to occur in the classroom, there must be something going on that the teacher wishes to praise. Therefore, both behaviors are determined by the ongoing classroom situation. As can be seen on Figures 10 and 11, much fluctuation occurs in each individual's use of the behaviors before training. Figure 10 reveals that teachers A and C both used praise and, therefore, used some descriptive Appreciative Praise statements before training. However, Teacher B and D needed training in the use of praise and remained consistently below the other two teachers throughout the pre-training observations, 1 through 6. The average range between the use frequency of each pair of teachers per pre-training observation is approximately 24 uses of this particular type of praise per 4 hours of classroom interaction. After training, however, a dramatic increase occurred

for all teachers, except Teacher B. By observation 8, the
final observation, Teacher B also increased sharply in her use of
this behavior. In contrast, Teacher C increased to 125 uses per one
4 hour observation directly after training. High use of Appreciative
Praise was maintained for all four teachers during the last observation.
Figure 11 reveals Evaluative Praise as a highly variable behavior.
This type of praise is used only under certain conditions and is
therefore very sensitive to the ongoing situation. The reader may
want to compare Figures 10 and 11 at this point, looking at them both
at the same time. As Figure 10 reveals, Teacher A used a lot of
praise and possibly needed to recognize the difference between
Appreciative Praise vs. Evaluative Praise more than any of the other
subjects. Training affected her favorably in that she was able to
increase her use of Appreciative Praise and at the same time decrease
her use of Evaluative Praise. The same observations could also apply
to Teacher C. Teachers B and D who were low on the use of praise,
also benefited from training in distinguishing Evaluative Praise
and were both able to increase their use of Appreciative Praise to
take the place of Evaluative Praise. All the teachers decreased their
initial use of Evaluative Praise after training. Treatment IV not
only reduced the behavior frequency of Evaluative Praise, but also
cut the variability of use for each subject. Figure 12 reveals a
dramatic mean increase of Appreciative Praise after training and the
tendency to remain high through the next observation. The use of
Evaluative Praise which was low to begin with, decreased and remained

Figure 10. Verbal Description -- Part II. Individual teacher use of positive Appreciative Praise (AP+). Treatment IV consisted of teaching the Verbal Description -- Part II behaviors between the sixth and seventh observation sessions.
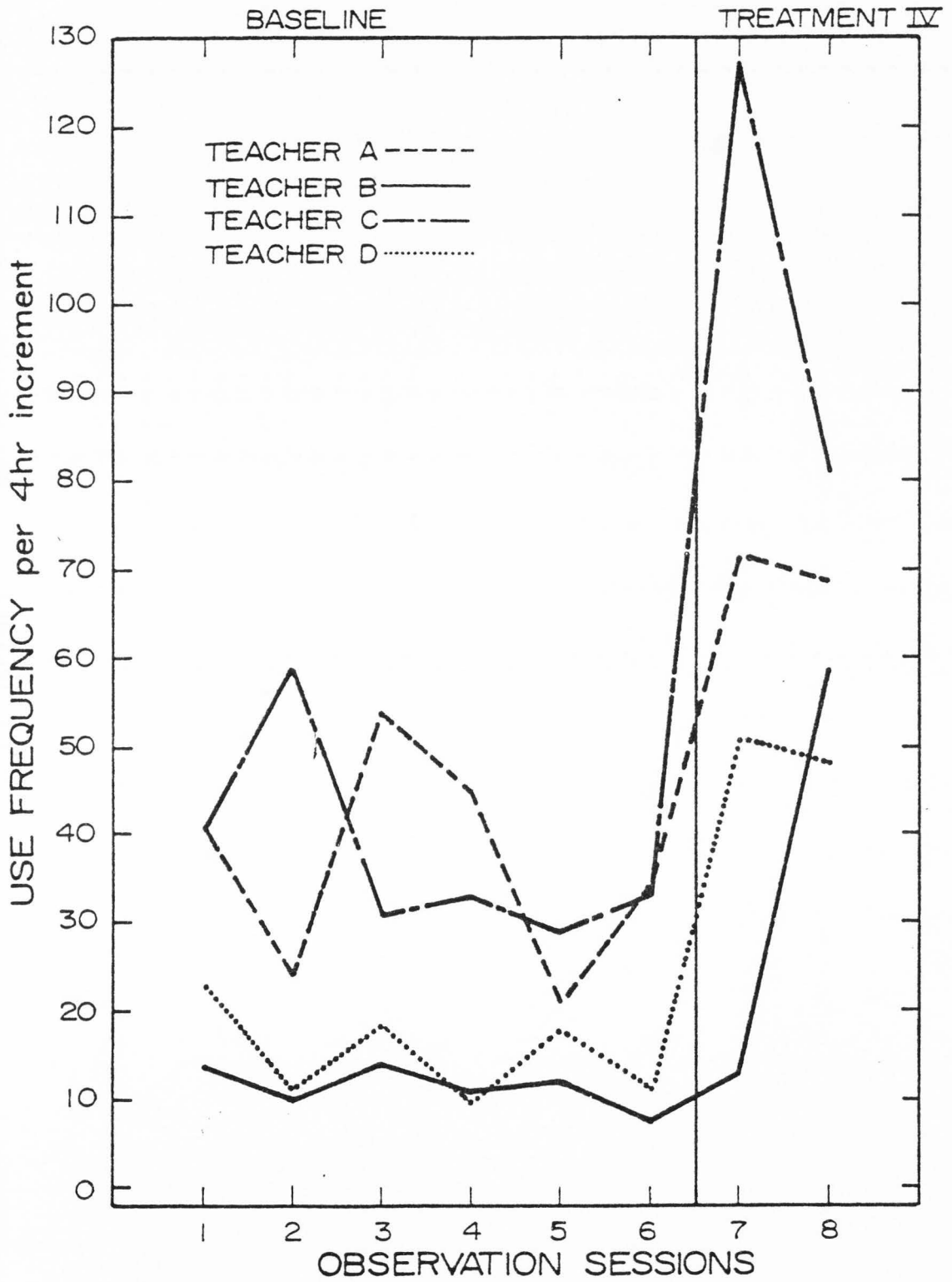
Figure 11. Verbal Description -- Part II Module. Individual
teacher use of negative Evaluative Praise (EP-).
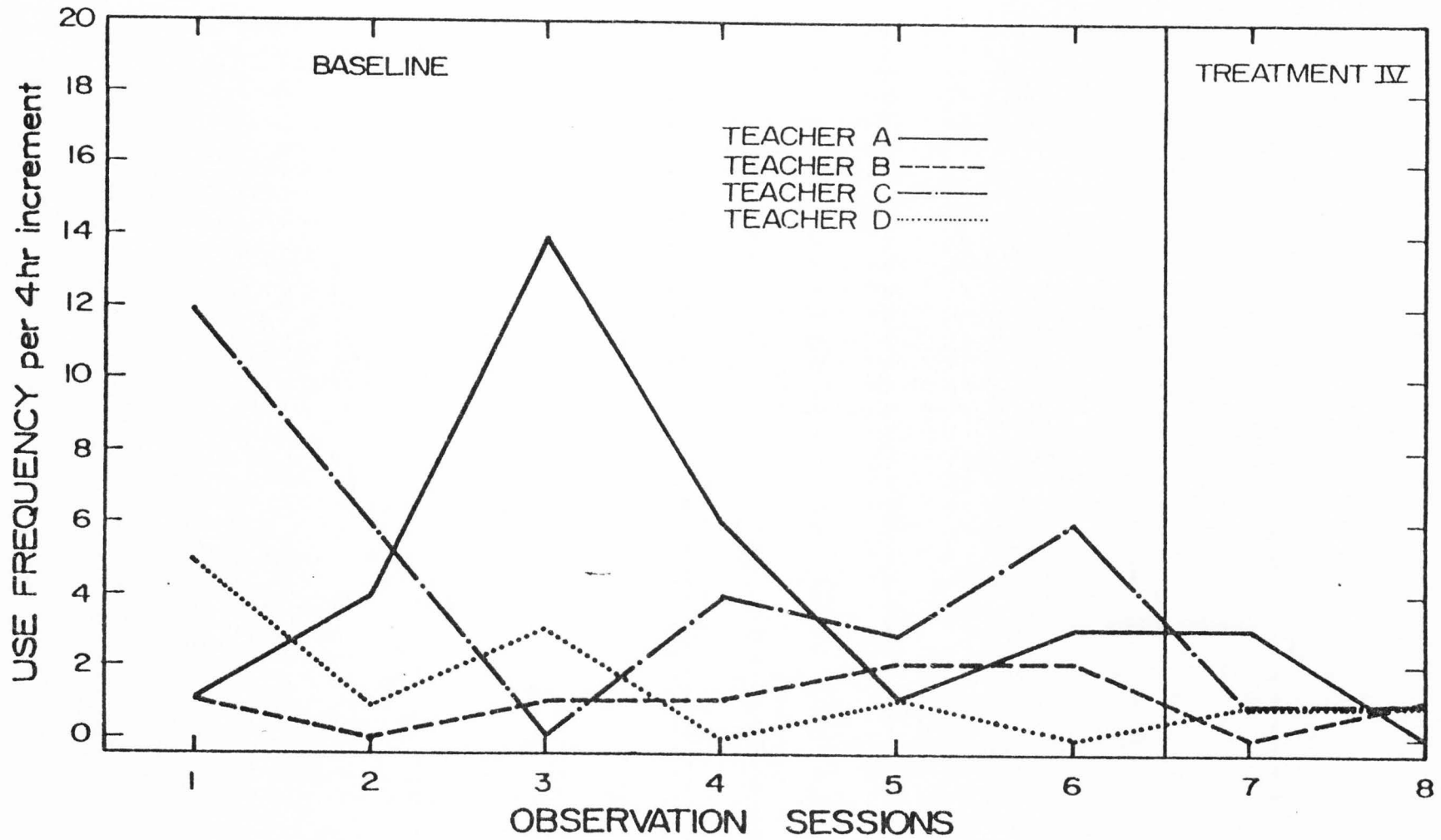
Figure 12. Verbal Description -- Part II. Mean teacher use of positive Appreciative Praise (AP+) vs. negative Evaluative Praise (EP-).
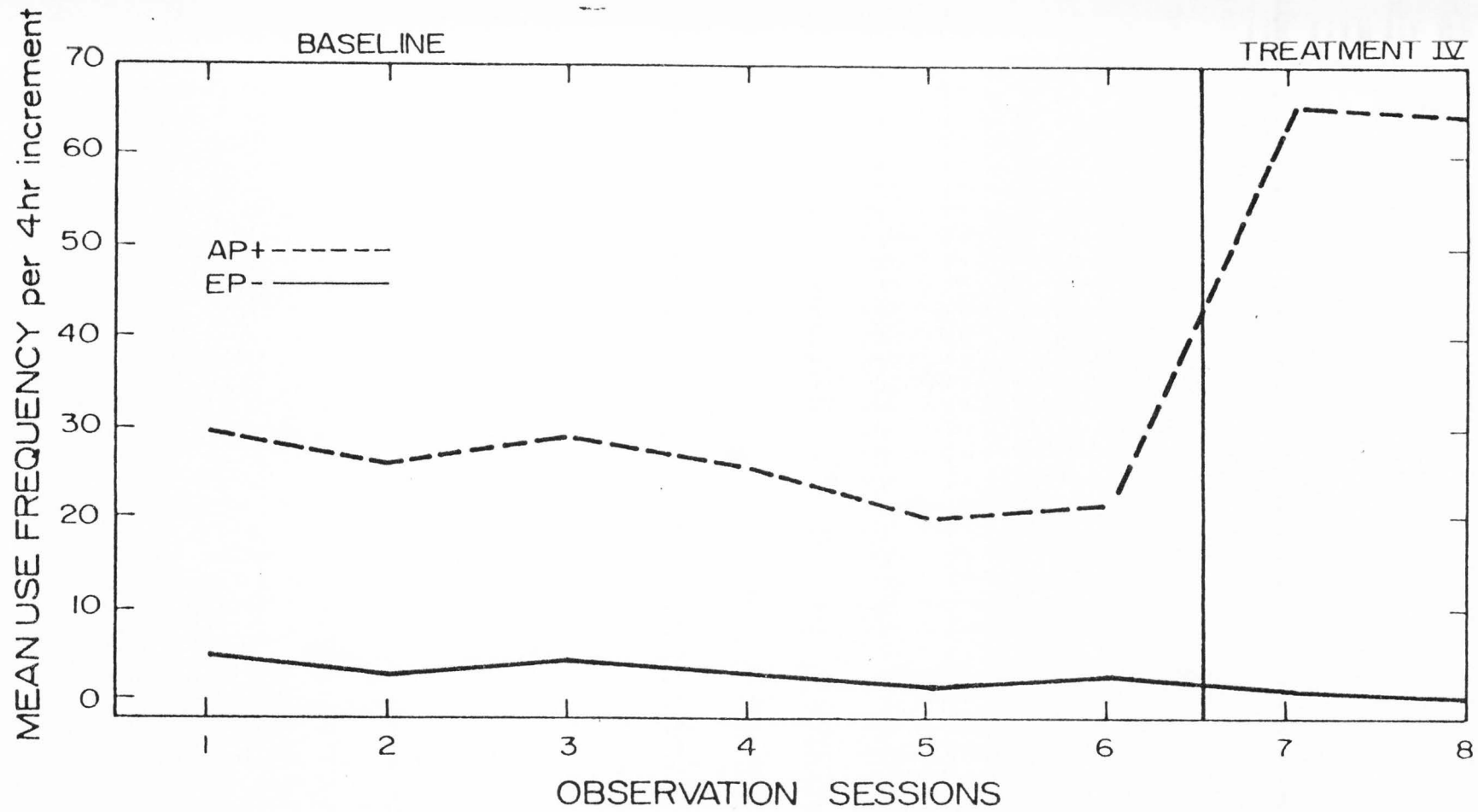
extremely low by the end of the training for all four teachers on the average.

Table 6, below, which presents mean performances per observation before and after training, reveals that the teachers averaged 25.16 uses of Appreciative Praise per 4 hours of classroom interaction before training and 64.75 uses after training. This means that they increased an average of 40 uses each. Evaluative Praise, conversely, decreased an average of between two and three uses per teacher. By the end of training, 99% of the Teachers' combined praise remarks of these two categories were AP+ statements.

Inviting Cooperation vs. Direct Commands. The positive behavior, Inviting Cooperation has three distinct uses. All three uses depend on the ongoing situation. All occurred with great variance between teachers and between observations of a given teacher. Direct Commands will always be used to some degree in the classroom. They can be replaced only in part by Inviting Cooperation statements in real situations. Direct Commands also are heavily influenced by the ongoing situation. Figures showing individual teacher performance are included in Appendix D. Due to the great use variability shown by these data, a reliable, clear picture of individual teacher performance does not seem possible over any four hour observation. To show such a picture of individual performance on these behaviors for each teacher, one would have to observe over a much longer time period for each point on the multiple baseline graph.

Figure 13, showing the mean use frequency per 4 hours, is a much clearer presentation. It is obvious that Inviting Cooperation was

Table 6

Mean Use Frequency of Verbal Description

Part II Behaviors

Observations	Appreciative Praise	Evaluative Praise
1	29.50	4.75
2	26.00	2.75
3	29.25	4.50
4	24.75	2.75
5	20.00	1.75
6	21.50	2.75
Pre-Treatment Average	25.16	3.21
Treatment IV - Verbal Description Part II Module Taught		
7	65.25	1.25
8	64.25	.75
Post-Treatment Average	64.75	1.0

Figure 13. Verbal Description -- Part II. Mean teacher use
of positive Inviting Cooperation (IC+) vs. negative Direct
Commands (DC-).
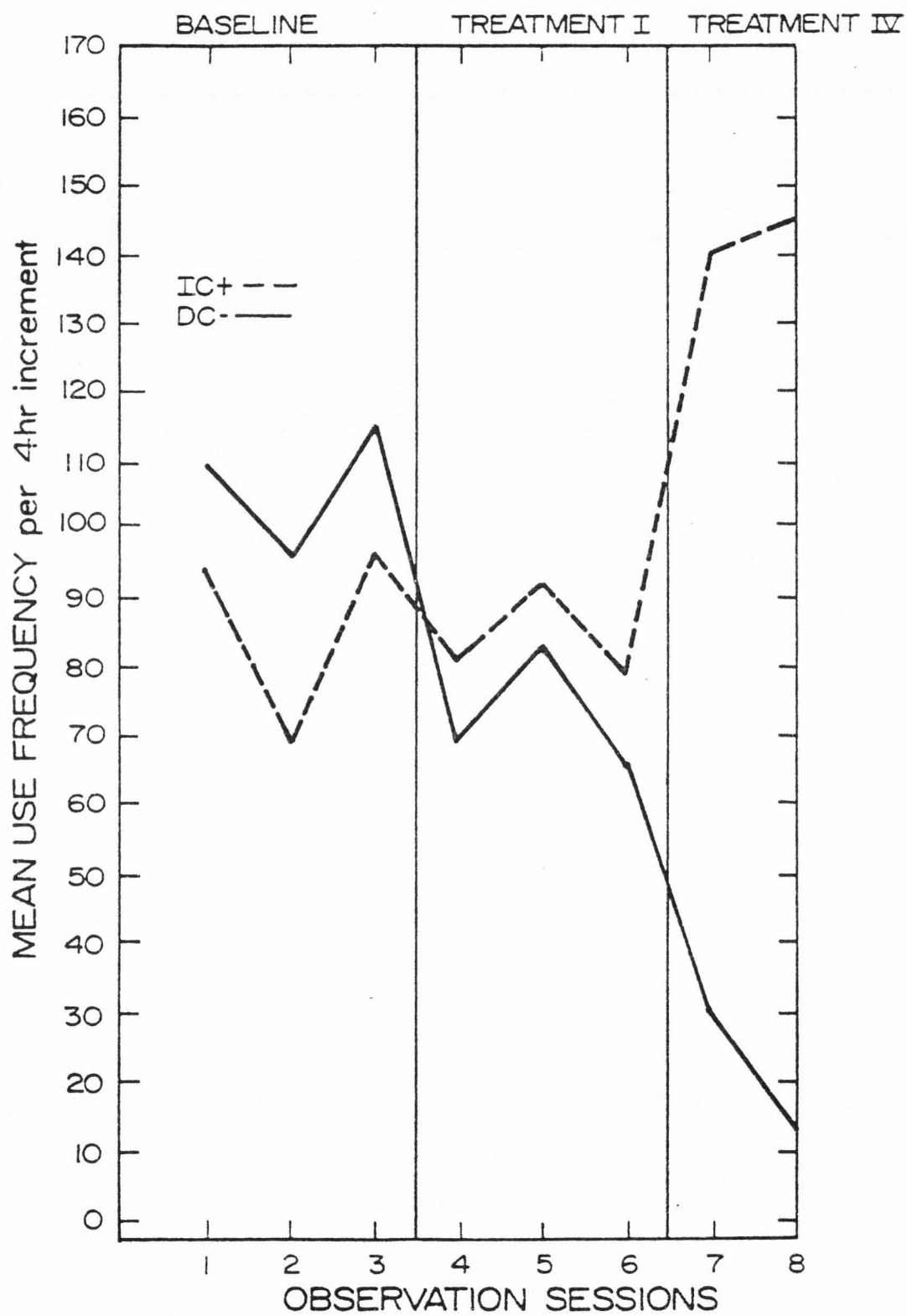
used in at least the Question form before training. However, as a direct result of training, between Observations 6 and 7, use per teacher rose about 66 uses per 4 hour increment. Training gave each teacher two new uses of Inviting Cooperation, the Choice Statement and the Descriptive Statement, to replace more Direct Commands. From Observation 7, the use by all four teachers continues to increase to the end of the experiment, ranging 76 uses per 4 hours from the lowest mean use of 68 in Observation 2 to the end of the experiment when the teachers were averaging 144 Inviting Cooperation Statements per teacher. Direct Commands began at a mean frequency of 15 uses per teacher per 4 hours above the Inviting Cooperation frequency. However, when training began, between Observations 3 and 4, with the Teacher Anger Module, Direct Commands decreased as a result of being replaced by the I-Message, in anger situations. All teachers' use of Direct Commands varied over Observations 5 and 6 before training to recognize them occurred and decreased sharply after the training. The figure shows a difference of 36 uses less per teacher between the pre-treatment 4 hour observation 6 and the post-treatment observation 7. The teachers were averaging only about 15 Direct Commands per teacher by the final 4 hour observation. The range, therefore, between the highest use point before any training occurred -- 115 uses during Observation 3 -- and the lowest use point after training -- 14.75 uses during Observation 8 -- differs almost exactly 100 uses per 4 hours of classroom interaction.

Teachers were expected to replace 80% of their Direct Commands with Inviting Cooperation statements by the end of the experiment.

Expanded Table 7 in Appendix D on the individual scores shows that
all four teachers reached this percentage after training. Furthermore,
as can be seen from the mean figures in Table 7, below, teachers were
averaging 49 percent use of Inviting Cooperation statements over
Direct Commands before training. However, after training, the average
use over all Post-Training Observations rose to 87% Inviting
Cooperation Statements in situations where Direct Commands could have
been used per any 4 hours of interaction.

Hypothesis #2

Hypothesis #2: There will be no significant difference (.05 level)
in the effect on self-concept scores of pupils whose
teachers were trained to emit specific language skills
and pupils of teachers without such training.

In order to reject the hypothesis, the mean self-concept gain
made by the experimental pupils would need to have significantly
exceeded that made by the control pupils at the .05 level on at
least one of the measures employed. The mean data alone indicated
no such total group differences existed. It should be noted
that regardless of the level of test sensitivity for this sample,
the only pupils for whom the dependent variable was not affected
by other interaction styles than that of their trained (Experimental
classes) or untrained teacher (control classes) were
the pupils in Experimental teacher B's intermediate classroom and the
pupils in Control teacher 3's intermediate classroom.

Table 7

Mean Use Frequency of Verbal Description

Part II Behaviors

Observation	Positive Inviting Cooperation	Negative Direct Commands	Percent Inviting Cooperation
1	93.75	108.50	46%
2	68.00	95.00	42%
3	96.50	115.00	46%
4	81.00	69.00	54%
5	91.75	82.75	52%
6	78.75	62.00	56%
Pre-Treatment Average	84.96	88.70	49%
Treatment IV - Verbal Description Part II Module Taught			
7	139.75	26.50	84%
8	144.25	14.75	91%
Post-Treatment Average	142.00	20.62	87%

Table 8

Primary North-York Pre-Post Means

Grade	Teacher	Group	PRE	POST	Change	N
2	A	Experimental	30.1	27.9	-2.2	27
1+2	D	Experimental	32.3	31.5	- .8	23
1+2	#1	Control	32.4	34.3	+1.9	21
1	#2	Control	34.3	32.6	-1.7	26

Table 9

Primary Piers-Harris Pre-Post Means

Grade	Teacher	Group	PRE	POST	Change	N
2	A	Experimental	24.6	23.8	- .8	28
1+2	D	Experimental	21.4	20.6	- .8	27
1+2	#1	Control	23.4	22.5	- .9	19
1	#2	Control	21.6	20.2	-1.4	26

Table 8 shows that pupils in both the experimental and control primary groups scored consistently high (near or above the 80th percentile) on both the Pre and Post Primary North York test. The

total possible score on this form was 40. The only partially comparable norm mean score is 16.2 for second graders on an earlier version of the test. Obviously, pupils in this sample exceeded the norm mean self-concept by at least 13.9 points on the Pre test and 11.7 points on the post test.

Similarly, data from the primary Piers-Harris Scale revealed no measurable differences in self-concept between the experimental and control groups either before or after treatment. This was a self-constructed test explained in Chapter 3. As can be seen from Table 9, all of the four classes scored approximately at the same level on the pretest and decreased about 1 point on the posttest. Total possible score on this test form was 29. Therefore, all mean scores were quite high on the pre test, near or above the 80th percentile.

The norm means for the earlier version of the intermediate North York form were 14.7 points for the third grade and 15 points for the fourth grade. The data in Table 10 reveal that intermediate pupils for the study sample also exceeded the norm sample self-concept scores on the Pre and Post tests. There were 30 possible points on the intermediate test. Both the intermediate experimental classes and the control class showed slight increases on the post test (Table 10). The two most comparable classes due to less interference from extraneous variables as explained above, are those of Experimental Teacher B and Control Teacher 3, both 3rd grades. Experimental Teacher B's class scored slightly below the 80th percentile and gained 1.7 points in self-concept over 2 months with treatment. Control

teacher 3's class scored below the 80th percentile, at the 63rd

percentile and only gained .3 points in self-concept over two months

without treatment. Interestingly, there is an 18% difference between

the two gain scores for these classes. This compares exactly with

the difference in gain scores between the same classes revealed by

the Piers-Harris Intermediate Self-Concept Scale discussed below.

Table 10

Intermediate North York Pre-Post Means

Grade	Teacher	Group	PRE	POST	Change	N
3	B	Experimental	22.9	24.6	+1.7	28
4	C a.m.	Experimental	23.3	23.7	+ .4	26
4	C p.m.	Experimental	17.7	19.1	+1.4	24
3	#3	Control	19.0	19.3	+ .3	28

Table 11

Intermediate Piers-Harris Pre-Post Means

Grade	Teacher	Group	PRE	POST	Change	N
3	B	Experimental	59.4	65.1	+5.7	27
4	C a.m.	Experimental	64.8	64.8	0	22
4	C p.m.	Experimental	62.0	59.4	-2.6	22
3	#3	Control	51.0	52.0	-1	30

The only mean self-concept gain difference worth noting for the study sample was between experimental Teacher B's class and control teacher 3's class. The dependent variable for these two third grades was measured with the Piers-Harris Intermediate Self-Concept Scale. Experimental teacher C's A.M. and P.M. classes were also measured using this test. However, as can be seen from Table 11, the mean pretest scores for these two intermediate classes were 64.8 and 62.0, respectively. These scores are at the 80th percentile, too high to truly show an increase after two months of treatment. Actually, her P.M. class decreased in self-concept when measured by this test as compared to a slight increase revealed by the North York self-concept measure. Furthermore, Experimental Teacher C's students were adversely affected by several other interaction styles than that of their trained teacher (see The Method). In contrast, Experimental Teacher B's students were not subjected to any interaction styles different from their trained teacher. Their mean self-concept increased 5.7 points between the pre and post tests. Furthermore, their mean score of 59.4 on the pretest, although also above the norm mean of 51.84, was several points closer than experimental teacher C's high class means. Control teacher 3, the only intermediate control teacher, was also the only control teacher who had no one in her classroom who could have been using the treatment behaviors (see The Method). As Table 11 reveals, her pupils scored at the norm mean on the pretest and increased exactly 1 point in self-concept over two months without treatment.

Based on the data in Table 11, it was decided to test a null hypothesis applicable only to classrooms <u>without</u> interference from other interaction styles than that of a trained <u>or</u> untrained teacher: There will be no significant difference (.05 level) in the effect on self-concept scores of pupils whose teachers are trained to emit specific language skills and pupils of teachers without such training when there are no different interaction styles used in the classroom. The pupil data already collected on experimental Teacher B's class and Control Teacher 3's class with the Piers-Harris Intermediate Self-Concept Scale was used to test this hypothesis (see Table 11).

In order to determine if an ANCOVA was appropriate, a dependent means t test was run on teacher B's results, to test the sub null hypothesis that <u>her</u> use of the USU self-concept teacher behaviors made no difference in her pupil's self-concept. The results of this test showed that the obtained mean of the differences was significantly different from 0, as can be seen from Table 12 below. Rho was less than .01, or a difference in self-concept as measured by the Piers-Harris test before and after children were exposed to the USU self-concept teacher verbal behaviors would only be as large as 3.33 points one time out of 100 by chance alone.

Table 12

Difference Between PRE and POST Means on Intermediate

Piers-Harris SC Test for Exp. Teacher B

Pre-Course SC Mean	Post-Course SC Mean	df	Obtained Dependent t	Two-Tailed Test Table Values		P
				.05	.01	
59.4	65.1	26	3.33	2.06	2.78	p < .01

A single classification analysis of covariance was, therefore, run to analyze the difference between pupil self-concept change for experimental teacher B and control teacher 3. This analysis was chosen for the following reasons: (1) Experimental teacher B's students obtained a pre self-concept mean score of 59.4. As a group they were, therefore, 6.7 points above control teacher 3's class who obtained a pre mean of 51. This initial difference in self-concept warrants the use of analysis of covariance to test the difference in post self-concept scores. (2) A correlation of .73 was obtained between the total pre and post test scores for the Intermediate Piers-Harris Self-Concept Scale. Therefore, 53% of the children's performance on the post test could be accounted for by their performance on the pretest. Similarly, the adjusted F of 137.29 showed the source of variance due to the regression effect between the two tests to be significant. This is also a reason for the use of analysis of covariance. The results of this analysis are presented in Table 13 below. It should be noted that these results apply only to the 2 teachers classes being compared, not to the entire Intermediate sample. Teacher C was excluded for reasons discussed above.

The Piers-Harris test yields a total score which is the most important score used in the analysis. Six item cluster scores are also obtained based on six different factors that were shown to be related to self-concept. The higher the score on the total or on any item cluster score, the more positive the attribute of self-concept for the child. Twelve items do not load on any of the 6 identified factors, but do count in the total score, which yields a measure of global self-concept.

Table 13

Intermediate Experimental and Control Pupil SC Differences

for Experimental Teacher B and Control Teacher #3

as Measured by the Piers-Harris SC Test

Variable	Pre-Course			Post-Course			Adjusted		
	Exp $\overline{X}$	Cont $\overline{X}$	F	Exp $\overline{X}$	Cont $\overline{X}$	F	Exp $\overline{X}$	Cont $\overline{X}$	F
Total Score	59.4	51.0	3.71	65.1	52.0	11.94**	61.8	54.8	10.75**
Cluster 1	15.2	13.2	2.84	16.0	13.9	3.78	15.3	14.5	1.01
Cluster 2	13.2	11.2	3.13	14.6	10.8	12.54**	13.8	11.5	12.16**
Cluster 3	7.7	5.9	4.36*	8.8	6.2	10.95**	8.1	6.8	7.31**
Cluster 4	8.7	7.3	2.65	10.2	7.8	8.52**	9.6	8.3	6.56*
Cluster 5	7.8	5.9	4.96*	8.7	6.1	10.97**	8.0	6.8	5.63*
Cluster 6	7.5	6.7	1.78	8.0	6.7	6.28*	7.7	6.9	4.64*

*F of 4.00 for df 1/55 is significant at .05 level.

**F of 7.12 for df 1/55 is significant at .01 level.

The adjusted F obtained for the total score difference between the experimental and control classes was 10.75, an F significant above the .01 level. The following list shows a few representative items from each of the six interpretable item clusters:

(1) Behavior (19 items): I am well behaved in school; It is usually my fault when something goes wrong; I am obedient at home.

(2) Intellectual and School Status Self-Concept (18 items): I am smart; I am slow in finishing my school work; my classmates in school think I have good ideas.

(3) Physical Appearance and Attributes Self-Concept (12 items): My looks bother me; I am strong; I have lots of pep.

(4) Anxiety Self-Concept (12 items): I am shy; I get nervous when the teacher calls on me; I get worried when we have tests in school.

(5) Popularity Self-Concept (11 items): My classmates make fun of me; It is hard for me to make friends; I have many friends.

(6) Happiness and Satisfaction Self-Concept (9 items): I am a happy person; I am lucky; My parents expect too much of me.

Eleven items load on two or three factors (Piers and Harris, 1964).

For these six cluster scores as well as for the Total score, as stated above, the higher the score the more positive is the attribute. For example, a high score on Cluster 1 (behavior) indicates a positive self-concept with respect to behavior. Similarly, a high score on Cluster 4 (anxiety) indicates that the student describes himself as low in anxiety. These item cluster scores are not factor scores, since factor scores would require complicated weighting according to

the loading on each factor. However, a good estimate can be obtained from these scores. Cluster 1, as can be seen from Table 13, did not show a significant difference between the experimental and control group. This is the only cluster made up of items relating to a factor (behavior) that seems to be totally unrelated to the treatment, exposure to the USU self-concept teacher verbal behaviors. The other five cluster scores do show a significant difference in self-concept change in favor of the experimental group. As will be seen in the discussion, these attributes of self-concept all are related in some way to the treatment.

Tables 14, 15 and 16 below present mean comparisons of the 5 lowest self-concept children taken as a group per teacher. Table 14 shows the differences between the 5 lowest self-concept children of the primary sample on the Piers-Harris Primary test. The experimental teachers' low groups both show an increase in self-concept while the low group for control teacher 1 shows a slight decrease, and the low group for control teacher 2 shows a 3 point increase. Table 15 shows the differences between the five lowest self-concept children taken as a group per teacher in the intermediate sample on the Piers-Harris Intermediate test. Probably due to regression, the low group for control teacher number 3 shows an increase in self-concept on the post test of 7.2 points. Experimental teacher C's low group for the A.M. class started out at the 44th percentile rather than the 80th percentile, as did the rest of her morning class, and fell 3 points. Her afternoon low group started out very low at the 20th percentile

Table 14

Differences Between 5 Lowest SC Children

in the Primary Sample on the

Piers-Harris Primary Test

Teacher	Group	Pre $\overline{X}$	Post $\overline{X}$	Difference
A	Experimental	18.6	22.2	+3.6
D	Experimental	14.8	20.6	+5.8
#1	Control	18.4	17.8	- .6
#2	Control	16.2	19.2	+3.0

Table 15

Differences Between 5 Lowest SC Children

in the Intermediate Sample on the

Piers-Harris Intermediate Test

Teacher	Group	Pre $\overline{X}$	Post $\overline{X}$	Difference
B	Experimental	34.4	52.4	+18.0
C a.m.	Experimental	51.8	48.8	- 3.0
C p.m.	Experimental	40.8	56.2	+15.4
#3	Control	28.4	35.6	+ 7.2

on the Piers-Harris Intermediate scale and increased 15.4 points in self-concept on the post test. The low group for experimental teacher B started out with the Piers-Harris raw mean score of 34, which was at the 12th percentile, and increased 18 points up to the 46th percentile. Table 16 shows the differences between the five lowest self-concept children taken as a group in the two most comparable intermediate classes on which the analysis of covariance was eventually run. Experimental teacher B's low group increased approximately twice as much as the low control group.

Table 16

Differences Between the 5 Lowest SC

Children in the Two Most Comparable

Intermediate Classes

Teacher	Group	Pre $\overline{X}$	Post $\overline{X}$	Difference
B	Experimental	34.4	52.4	+18.0
#3	Control	28.4	35.6	+ 7.2

SUMMARY AND DISCUSSION

Summary of Research Problem, Methods and Findings

Purpose of Research

This research was conducted to determine the effects of the USU Pupil Self-Concept Program on the performance of in-service elementary school teachers and self-concepts of the pupils in their classrooms. Possible answers to two major questions concerning the behaviors taught in these modules were sought: (1) To what extent does the Training Program affect individual teacher use of the specific behaviors in the classroom? (2) Does teacher use of these behaviors over a short time period affect pupil self-concept? Two null hypotheses were tested to answer these major questions: (1) Teachers will not exhibit change in their use of any of the self-concept verbal behaviors when each of these behaviors is taught. (2) There will be no significant difference (.05 level) in the effect on self-concept scores of pupils whose teachers were trained to emit specific language skills and pupils of teachers without such training.

Summary of Method

Subjects. All of the adult subjects in the study were volunteer subjects. Four elementary teachers from the Logan City Elementary

Schools were the experimental subjects used to test hypothesis 1.
These experimental teachers taught three intermediate classes and
two primary classes. Teacher A team-taught a second grade class,
Teacher B taught a third grade class in a self-contained classroom,
Teacher C taught two fourth grade classes, one in the a.m. and one
in the p.m., and Teacher D taught a second grade class in a self-
contained classroom.

The subjects for testing hypothesis 2 consisted of both a Primary
and an Intermediate experimental and control group. 133 students
in the two experimental groups were all of the pupils in the classrooms
of the four teachers exposed to the protocol training, 55 in the Primary
group and 78 in the Intermediate group. The 77 students who made
up the two control groups were the pupils in the classrooms of three
control teachers who were not exposed to the protocol training, 47
in the Primary group and 30 in the Intermediate group. The three
control teachers all taught in self-contained classrooms. It will
be recalled that the students in all but experimental teacher B's
and control teacher 3's classrooms were exposed to other verbal
strategies than those used by the teacher of that classroom (see
Results). Thus, each classroom, constituted a cluster sample
instead of a random sample of pupils. Furthermore, the small total
of 6 minority children in the experimental group and 4 minority
children in the control group was not enough to create a subgroup
for analysis.

Research design and procedures. There were two distinct research
designs operating simultaneously in the study. Hypothesis 1 was

tested with a single subject multiple baseline design. Teacher A
could be considered the first subject, and the study was then directly
replicated with Teacher B, C, and D. Use frequency data was collected
through direct observation of each teacher in order to establish the
individual baseline for the fourteen teacher behaviors to be taught
in the treatment. The four experimental subjects were then taught
to emit or avoid the specific positive and negative language behaviors
covered in the four training modules. After a module was completed
each teacher's performance on all fourteen variables was again
tallied and plotted on her baseline graphs. Thus, changes in per-
formance on any variable could be compared to the original baseline
for that variable following treatment with each module. The analysis
for hypothesis 1 was all drawn from the multiple baseline graphs
constructed on each experimental teacher.

Hypothesis 2 was tested with a quasi-experimental control group
design. Both the Primary and Intermediate experimental and control
groups were administered the correct form of two tests of self-concept,
the Piers-Harris Self-Concept Scale and the North-York Self-Concept
Inventory. One pretest, the scores from the more inclusive Piers-
Harris Self-Concept Scale, was used to establish initial self-concept
and control for that variable. Experimental students then were
increasingly exposed to the USU Self-Concept Program teacher behaviors
over a period of eight weeks. No such treatment was given to the
control students. Finally, a post-test was administered to the two
experimental and control groups. Due to problems discussed below,

data from the North-York Self-Concept Inventory and the self-constructed primary Piers-Harris Self-Concept Scale were not used in any analysis past a calculation of means. The analysis was, therefore, limited to comparing the self-concept changes between the pre- and post-tests of the two most comparable experimental and control intermediate classes (see Results). Scores for this analysis came from the Piers-Harris Intermediate Self-Concept Scale. A dependent means t-test was run on self-concept gains made by the pupils in experimental Teacher B's classroom. The positive results from this test warranted running a single classification analysis of covariance to analyze the difference between pupil self-concept change for experimental Teacher B and intermediate control Teacher 3. This analysis yielded a comparison of changes in global self-concept scores plus changes in six cluster self-concept scores for the intermediate experimental and control groups involved. Finally, descriptive means were computed on the five lowest self-concept children taken as a group per teacher. These means were then used to compare self-concept change between both the primary and intermediate experimental and control classes. Due to the small N of each group (5) these mean differences were not analyzed further.

Findings

Analysis of the data resulted in the following findings:
Hypothesis 1:

1) Teacher anger treatment findings: (a) Negative teacher verbal behaviors, although initially low, were virtually extinguished.

(b) All four experimental teachers increased their use of the positive I-Message in an anger situation directly after training. (c) They continued to use the I message to deal with anger in the classroom throughout the rest of the 8 week period.

2)   Self-Perception treatment findings: (a) All teachers learned to use the modeling behavior in their classrooms after training. They also continued to use this behavior throughout the rest of the study. (b) Teachers learned to elicit both pupil negative and positive self-remarks as a result of this treatment. Therefore, the incidence of both kinds of pupil self-remarks increased after training. (c) Teachers increased their correct responses to pupil negative self-remarks directly after training. (d) Correct teacher responses to positive pupil self-remarks also increased directly after training.

3)   Verbal Description -- Part I findings: (a) Directly after training all four teachers markedly increased their use of the Describing the Situation behaviors. (b) All four teachers also decreased their use of the Verbal Judgement behavior directly after training with the Verbal Description -- Part I module. However, some confounding exists between this module and the Teacher Anger module in terms of the Verbal Judgement behaviors (see discussion). (c) Directly after training all teachers used the DS+ behavior in at least 80% of the situations in which they could have used Verbal Judgements. They continued this percentage of use throughout the rest of the study.

4)   Verbal Description - Part II treatment findings: (a) The

experimental teachers' use of Evaluative Praise, although initially low, decreased as a result of training. (b) Teachers replaced Evaluative Praise with Appreciative Praise in 99% of the appropriate occurring situations by the end of the study. (c) Directly after training all four teachers greatly increased their use of Inviting Cooperation statements. (d) Overall, teacher use of Direct Commands decreased somewhat as a result of the Teacher Anger treatment and then dropped sharply after training with the appropriate treatment. (e) All teachers had replaced 80% of their Direct Commands with Inviting Cooperation statements by the end of the treatment.

Hypothesis 2:

1) No difference in self-concept could be distinguished between the experimental and control primary groups.

2) The self-concept in experimental Teacher B's classroom increased significantly between the pre- and post-tests on the Piers-Harris Intermediate Self-Concept Scale.

3) Global self-concept of intermediate students in experimental Teacher B's classroom increased significantly more than the self-concepts of the intermediate students in control Teacher 3's classroom between the pre- and post-testing, as measured by the Piers-Harris.

4) There is no significant difference in behavior self-concept, as measured by the Piers-Harris, between the two intermediate experimental and control classes analyzed.

5)   There is a significant difference between the two inter-mediate experimental and control classes analyzed in intellectual and school status self-concept, physical appearance and attributes self-concept, anxiety self-concept, popularity self-concept, and happiness and satisfaction self-concept as measured by the Piers-Harris. These differences are all positive in favor of the experimental class.

6)   The lowest self-concept group for experimental Teacher B increased approximately twice as many points on the post self-concept Piers-Harris test as did control Teacher 3's lowest self-concept group (5 students each).

Conclusions

Teacher Behaviors

The following conclusions were drawn based on the findings as applied to similar subjects in similar teaching situations:

1)   Reject major hypothesis 1--teachers will indeed exhibit changes in their use frequency of the self-concept verbal behaviors when each of these behaviors is taught. For the four teachers included in the study these changes were often dramatic. The use of negative behaviors decreased in frequency as opposed to the use of positive behaviors which increased in frequency.

2)   Teachers, for the most part do have to learn the particular verbal behaviors taught by the USU Pupil Self-Concept Program in order to use them in the classroom. Only behaviors that exhibited

a very high use frequency such as Inviting Cooperation and Direct Commands appeared with much regularity during the baseline observations.

3) Each of the four modules mainly affects the behaviors that it is designed to affect. There are some instances of behavior topography confounding described below in the discussion.

4) Teachers who are markedly low on the use of positive behaviors and/or markedly high on the use of negative behaviors during baseline observations are most affected by the particular module treatment. Possible cross-treatment effects also show up more markedly for such teachers.

5) Any specific positive behavior designed to replace a specific negative behavior was used by the subjects for that purpose. For example, in situations where Direct Commands could be used the subjects learned to use Inviting Cooperation statements, and in situations where Verbal Judgment could be used the subjects learned to use Describing the Situation statements instead.

Pupil Effects

The following conclusions were drawn from the investigation analysis as applied to similar students in similar learning situations:

1) Partially reject hypothesis 2--there are significant differences in the effects on self-concept scores of pupils whose teachers are trained to emit specific language skills and pupils of teachers without such training--IF THERE ARE NO OTHER INTERACTION STYLES USED IN THE CLASSROOM THAN THAT OF THE TRAINED OR UNTRAINED TEACHER. There was

only one intermediate control class, that of control Teacher 3. Therefore, the only useful self-concept change data collected for the control sample applied directly to her class. There were three intermediate experimental classes, two classes under Teacher C and one class under Teacher B. However, the a.m. and p.m. classes taught by Teacher C were affected by other influences than the trained teacher (see discussion below). Therefore, the most comparable intermediate class was that of Teacher B, since all of the influences on her students involved training to some extent with the USU Pupil Self-Concept Program. Only these two experimental and control classes were subsequently compared on the data collected from the Piers-Harris Intermediate Self-Concept Scale.

2) Experimental Teacher B's use of the USU self-concept teacher verbal behaviors over the eight week period did improve her pupil's self-concepts. As stated above, all of the people who had an effect on the learning atmosphere of her pupils were trained to some extent to use the USU Self-Concept verbal behaviors. Thus, no contrasting verbal strategies tended to detract from the effect her use of these behaviors had on her students' self-concepts.

Discussion

Single Subject Design--External and Internal Validity

Generalizing results from data collected using the single subject multiple baseline design has certain limitations. First, any subject to which conclusions are inferred must be comparable to the subjects on which the data was collected. All of the experimental teachers

were volunteers. Therefore, they were subject to volunteer
characteristics such as high motivation. Second, there are no
inferential statistics involved in collecting observable data from
which generalizations can be made. However, as Borg and Gall (1979)
point out, the most satisfactory method for increasing the external
validity of single subject experiments is to conduct replication
studies. A careful description of baseline and treatment conditions,
subject's characteristics, and measurement procedures is essential
to any replication. The Method provided a detailed description of
these three aspects for the three teachers who were used to replicate
the original single subject study for this experiment. Subjects and
classroom settings varied for these direct, simultaneous replications
while the investigator and the procedures were the same. Systematic
replication (Sidman, 1960) is replication that varies the procedures
and often the experimenter but still attempts to verify identical
relationships. According to Edgar and Billingsley (1974) systematic
replication is stronger than direct replication for establishing
the external validity of a single subject design experiment. There
are three variables for which systematic replication accounts in order
to do this: (1) In a single subject design N=1 also applies to the
experimenter. In this case the experimenter was the same throughout
all three replications. (2) The demand situations of the experiment
are controlled by systematic replication (Orne, 1962). When direct
replication is used the demand characteristics are much the same for
each of the subjects. Therefore, it is impossible to tell whether
any of these characteristics have a certain effect on the outcome of

the study that would not occur if systematic replication were used. In this case, persuading each subject to practice a behavior until it was mastered was actually a repeatable part of the treatment rather than a cue intrinsic only to these experimental conditions. (3) Systematic replication also controls the variable of time. The direct replication used in this experiment subjected all of the subjects to the same procedures at the same time. Again, it is impossible to tell whether subjecting a replication subject to the same or different procedures at a different time would have made a difference in the results. However, each successful replication of the experiment decreases the probability that chance (any unaccounted for variance) effected the change (Sidman, 1960). This experiment was replicated successfully three times.

Experimenter bias or contamination was another factor operating in the single subject design. Since the experimenter was also the instructor for each one of the module treatments, it is inevitable that at least one of the observers definitely expected to see a change in teacher behavior after a given treatment. Therefore, although each behavior was carefully operationally defined, the subjective influence of listening for a new behavior to occur in the teacher's repertoire probably affected the data collection to a certain extent.

Experimental and Control Group Design--
External and Internal Validity

An ecological validity factor definitely affected the external validity of this design. This factor was measurement of the dependent variable. The measurement of the dependent variable, self-concept, depended upon three different self-report tests. The first test was

the North-York Self-Concept Inventory. Both forms of this test seemed
to be less than sensitive to self-concept differences in this sample
since all classes achieved a mean score approximately at or above the
80th percentile. Therefore, only the descriptive data collected
with this test was used in this design. A second measure, the Primary
Piers-Harris Test was a self-constructed test based on the Intermediate
Piers-Harris form. Problems also developed with this measure.
Again, all control and experimental primary classes scores at
approximately the same distance above the norm mean on the pre-test,
all at about the 80th percentile. By the time the post-test was
delivered each class seemed to regress toward the mean approximately
one point. Thus, statistical regression, a threat to internal validity,
could have been operating on this measure. In any event, only
descriptive data from this measure was used in this design. The
test data left to be used inferrentially was from the Intermediate
Piers-Harris Childrens' Self-Concept Scale. The norms for this
test were established using an inner city sample. Realistically,
a ceiling effect occurred in at least one of the experimental classes
used in this study. Both Experimental Teacher C's morning and
afternoon classes scored at the 80th percentile on the pre-test.
Therefore, no reliable results could be obtained on self-concept change
using the same test as a post-test. The intermediate students in
experimental Teacher B's class as well as the intermediate students
in control Teacher 3's class scored considerably lower on the pre-test
for the Piers-Harris Intermediate form. Therefore, data from post-tests

delivered in those two rooms turned out to be useable for this design.
It will be recalled that the students in each of these classrooms
constituted an intact cluster. Random assignment to each classroom
was simply not possible.

Internal validity of this design was not only affected somewhat
by statistical regression on one of the measurements of self-concept,
but also probably by testing. Although a self-report self-concept
measure does not involve an actual learning experience, the factor of
social desirability operates each time such a test is taken. The
subjects who were exposed to the questions during the pre-test may have
developed a social desirability mind set for answering certain
questions that operated when the post-test was given. Since there was
only eight weeks between the administration of the pre-test and
post-test of this study, it is quite possible that students could
have remembered some of the questions and responded the same way.
One of the major problems with using a self-report examination of this
type is convincing the students to answer the questions according to
how they honestly feel inside and not according to how they think
they should feel.

Other important extraneous variables which detracted from the
internal validity of the group design revolved around the number of
people interacting with each group of children. Both experimental
and control primary teachers had several other people affecting the
learning environment besides themselves in their classrooms. This
meant that trained primary teachers had untrained people talking to
their classes and vice versa. Certainly trained or partially trained

aides interacting with pupils in primary control classrooms confounded the treatment effects for this part of the sample, as did untrained personnel interacting with experimental pupils. In contrast, all of the teacher verbal behavior in Intermediate Teacher B's classroom was fairly consistent, thus reinforcing any effect she had on her children's self-concepts. Intermediate Teacher C, it will be recalled, had a morning and afternoon class each of which experienced a teacher using different interaction styles for the other half of the day. Neither of these teachers were trained to use the USU self-concept verbal behaviors, another source of confounding. The only intermediate control teacher, Teacher 3, fortunately did not have any USU sophomore block students contributing to the verbal language in her classroom. Therefore, her classroom was the most comparable to Teacher B's experimental classroom. Obviously, inspite of 3 of the experimental teacher's work with the self-concept behaviors, their pupils were really exposed to several different kinds of verbal messages from the teachers and teacher trainees who interacted with them during the two months of the study. Similarly, the two primary control teachers' classes were subjected to at least a mild treatment effect. Thus, only one intermediate experimental class and the only intermediate control class were free from such treatment effect interference.

Teacher Behavior

In all of the behavior treatments in which negative behaviors were extinguished, it should be pointed out that classical extinction of respondent behavior was not the method. The negative behaviors

were simply replaced by a positive behavior to be used in the same
situation. Also, there was some mild aversion therapy because the
subjects became aware of negative verbal behaviors that they were
using and were verbally conditioned to feel badly about using them
each time they heard themselves. All subjects reported that a feeling
of discomfort or guilt accompanied their use. It could also be pointed
out that the tone of voice is very important in the effect of any of
the USU self-concept behaviors, especially those that are used in a
tense situation. Some behaviors can be used in the same situations
as other behaviors that were taught in different modules. Therefore,
teachers often had an alternative choice. Teacher behavior in terms
of each module taught is discussed below.

Teacher anger. The purpose of this module was to teach teachers
an acceptable way of dealing with anger in the classroom as well as
point out the unacceptable methods of dealing with classroom anger.
According to the data, teachers often do get angry at their students.
However, the negative behaviors in this module do not show up in the
data and were simply not consistently used when there was an observer
in the room. This could be for several reasons. Probably the most
important is that teachers were exerting more self-control as long as
someone was observing them. It is obvious from the individual
teacher data figures in Appendix D that each teacher did learn
and have a use for the safe I-Message to reveal true feelings during
an anger situation. Teacher B did not immediately begin to use
the I-Message. She did not like this particular behavior and main-
tained that she couldn't reveal this kind of feelings in class very

well. As far as could be observed she also exerted a great deal of self-control and perhaps consistently did not need an anger release.

Self-perception. The purpose of this module was to teach teachers methods of fostering positive self-perception statements from their students. One of the most powerful of these behaviors is the modeling strategy. Due to the conditioning of our society, it is sometimes hard to get teachers to see that there is a difference between the modeling behavior and actual bragging. However, a true modeling statement is a reflection of a well-balanced self-concept. The teachers in general learned to use the modeling behavior; but as soon as another set of behaviors were taught, the use of this behavior decreased. It seemed that most of the teachers had an aversion to hearing themselves praise themselves. By the end of the study, however, all four experimental teachers were using modeling at a much higher and more consistent rate. Furthermore, students in their classes definitely tended to copy this behavior.

No data were plotted on the use of the Prompting behavior. However, its use, which was going on after the module was taught, affected the opportunities for teachers to use both Teacher Extinction and Teacher Reinforcement. By using the Prompting behavior, teachers set up situations in which they encouraged students to make positive or negative self-remarks. Once a pupil had made a self-remark the teacher could then respond appropriately. The self-perception use frequency figures for Teacher C in Appendix D definitely show the effect of the Prompting behavior she used when the observers were in her classroom. Prompting, as well as the Elicits Praise

behavior, probably played a large role in encouraging students to make these kinds of statements which the teachers could then, either extinguish or reward.

Although the purpose of the self-perception module was to encourage students to make positive self-perception remarks, the students in the experimental teachers' classrooms also began to model all of the teacher behaviors from this module. It was not unusual during an observation period to hear Reinforcement, or Extinction, or an actual Modeling behavior emitted by a student.

Verbal Description - Part I. The third module treatment stressed listening skills and nonjudgmental messages. Teachers exhibited only a very low use of Describing the Situation remarks before training. It is probably safe to assume that their use of these behaviors prior to treatment occurred only by chance. Furthermore, observers trained to listen for the two behaviors could possibly have heard teacher verbal behaviors that almost, but not quite, fit the descriptions in the module. Teachers A and B both decreased their use of Describing the Situation remarks when the final module treatment was given. Teachers C and D continued to increase their use. It may be that the first two teachers were spending more time practicing the new behaviors. Or, another possibility is that they simply did not learn to recognize the situations in which DS+ behaviors could be used to the extent that the other two teachers did.

It should be pointed out that the Negative You-Message, Why Question, and Sarcasm remarks teachers were taught to avoid during

the first module treatment also qualify as Verbal Judgement behaviors.
These three behaviors were not to be tallied during an observation
unless the teacher was angry. It was very hard for observers to
recognize teacher anger, however, unless the teacher was very angry.
Therefore, much mild teacher anger negative behavior was probably
tallied as Verbal Judging and Labelling. Some Verbal Judgement is
always going to be used in interpersonal interactions. The classroom
is no exception. It is interesting to note that although Verbal
Judgement behaviors remained at a low level throughout the rest of the
study after treatment, DS+ behaviors all increased markedly for all
four teachers. This is partially the result of the teachers recognizing
situations in which to use a new behavior, rather than the replacement
of a negative behavior with a positive behavior.

Verbal Description -- Part II. One of the purposes of this module
treatment was to increase the use of a behavior called Appreciative
Praise and, at the same time, decrease the use of Evaluative Praise.
Some teachers tend to use praise in the classroom, and some teachers
simply don't use any at all. Teacher A used the most praise during
the baseline observations. Teacher C also used a great deal of praise
during the baseline observations. Both of these teachers used more
praise statements than Teacher B or Teacher D. Because Teacher A
and C did use praise during the baseline observations, they, of
course, tended to use some descriptive Appreciative Praise statements
before training. Teachers B and D needed the training simply to
learn how to use praise; and, throughout the rest of the study, they
remained consistently below the other two teachers in their use

of praise in the classroom. Teacher B was also the only teacher whose use of Appreciative Praise did not immediately increase after training. However, Teacher B seemed to have trouble speaking in very specific terms to her students. With a little practice, she also steadily increased her use of the behavior until the last observation. Teacher C tended to overuse the behavior once she learned it. However, this is the same approach that Teacher C used in applying other behaviors, for example, the Prompting behavior. Teacher A's greater use of praise during baseline observation also included a large number of Evaluative Praise statements. Therefore, she probably benefitted more than any of the other teachers from learning to distinguish Appreciative Praise from Evaluative Praise and increase the use of one behavior while decreasing the use of the other. Teacher C started out in the first observation using a high number of Evaluative Praise statements. However, during other pre-training observations she seemed to decrease her use. Possibly observer error accounted for her first high use-frequency prior to training.

The second purpose of the Verbal Description -- Part II treatment was to train teachers to replace Direct Commands whenever possible with an Inviting Cooperation statement. Both of these statements require fairly immediate action from children. It turned out that there was a high variability of usage per teacher per four hour observation on both Direct Commands and Inviting Cooperation. It seems that certain activities, which may or may not have been going on during any one observation, provided more opportunity to ask

students to perform some behavior. In any such given situation, either Inviting Cooperation or a Direct Command could be used. It is possible that, in order for either of these behaviors to stabilize, a longer increment would have to be used for any one observation. Interestly, it seems that the Teacher Anger Treatment had some effect on decreasing the number of Direct Commands used in these classrooms. Possibly, some of these teachers were using punitive Direct Commands when they were irritated, rather than seeming to be very, very angry; and these usages were being tallied by the observers not as negative anger statements, but as Direct Commands, which they actually were. It is also interesting to note that all of the teachers, no matter where they began with the use of Direct Commands, lowered that use dramatically and continually after the Teacher Anger module was taught. When the Verbal Description -- Part II treatment was given, they continued to lower their use of Direct Commands directly after training with the appropriate module. It is obvious that both DC- and IC+ are high frequency behaviors for untrained teachers who seem to use them indiscriminately. Trained teachers obviously replaced part of their Direct Commands with the Teacher Anger I-Message and the rest with the Inviting Cooperation choices, including the Choice Statements and Descriptive Statements as well as Questions.

An observation of all of the single subject design data reveals that some of these behaviors discussed above occur much more often than others. This is to be expected. For example, there are many more situations in a classroom which require some type of instruction from the teacher than situations that produce anger. High frequency

behaviors had much more chance to be recorded during baseline than low frequency behaviors. However, for the most part, all of these behaviors needed to be learned to be used in the correct situation with the expected results. Furthermore, although individual teachers resisted learning certain behaviors such as Modeling or Appreciative Praise, due to its specificity, all teachers were able to learn to perform all of the behaviors at the expected criterion levels of performance.

Pupil Effects

Uncontrollable extraneous variables (discussed above) confounded the treatment effects in 5 out of the 7 teachers' classrooms. Therefore, only the data collected from one experimental and one control intermediate teacher was comparable to analyze pupil effects, that of Teacher B and Teacher 3. These uncontrollable variables were a weak part of the study's group design. In order to get Experimental and Control teachers to test the first hypothesis, it was impossible to control for all of the verbal influences on their pupils, even in terms of their own classrooms. A replication of this part of the study should attempt to use teachers who are the only effect on their students during class time.

It is interesting to note that experimental Teacher C's afternoon class decreased slightly in self-concept on the Piers-Harris post-test. This was an intermediate class and, therefore, was measured with the same tool as Teacher B's class. However, there were many variables operating to affect the self-concepts of Teacher C's morning and afternoon classes, which could in no way be accounted for. The mere

fact that these students spent half the day with a totally different teacher who used what was probably an entirely different set of verbal behaviors could account to some extent for the afternoon class's decrease in self-concept. The decrease could be a function of other variables also, such as afternoon fatigue or the students' attitudes on the day the test was given, or statistical regression.

The Piers-Harris Self-Concept Scale yields six interpretable item-cluster scores. Since these scores were analyzed for the two comparable intermediate classes their relation to the Treatment will be discussed here. However, it is important to note that to this date there is no evidence of a division of the construct of self-concept into individual factors. Therefore, much caution must be exercised in examining scores supposedly pertaining to individual facets of self-concept (Winne, Marx, and Taylor, 1977). Cluster score 1 refers to behavior self-concept. The USU self-concept teacher verbal behaviors do not seem at all related to this area of pupil self-concept, and it remained comparatively unaffected. Only the Inviting Cooperation Choice Statement is directly applied toward affecting children's choices of behavior in the classroom. Cluster score 2 is related to intellectual and school status self-concept. It seems that several of the USU self-concept teacher verbal behaviors, i.e., the entire treatment, should affect this variable. It follows that the experimental class analyzed for this variable achieved a significantly higher mean score than the control class. Obviously, such individual behaviors as rewarding children's positive self-remarks in a learning

situation, using Appreciative Praise to tell children exactly what they have done correctly, plus Inviting Cooperation and Describing the Situation, which tend to favorably improve the learning atmosphere, affected this difference. Conversely, limiting the use of negative behaviors such as Verbal Judgement and Direct Commands, which tend to create an unfavorable atmosphere, would also favorably affect this type of self-concept. Cluster 3 relates to physical appearance and attributes self-concept. With the exception of Appreciative Praise and possibly children's learning to make Modeling statements about their own physical appearance or ability, this cluster does not seem directly related to the treatment. However, the experimental group analyzed was significantly higher than the control group in this kind of self-concept. Cluster 4 refers to anxiety self-concept. Ideally, if the treatment raises the self-concepts of pupils, their anxiety levels should decrease. The experimental group was also favorably and significantly different from the control group on this aspect. Cluster 5 relates to popularity self-concept. Once again, the experimental group differed favorably from the control group for this type of self-concept. Popularity could well be related to the treatment effects. Students with favorable self-concepts simply seem to be more popular. Thus, a rise in self-concept could show a change in how students see themselves in terms of popularity. The last cluster score 6 refers to happiness and satisfaction self-concept. Again this should ideally be related to the treatment, however indirectly. If a child's general self-concept increases it is probably safe to assume that his view of himself as happy and

satisfied with himself as he is also increases. Again, the experimental group was significantly different in a positive direction from the control group on this aspect.

Although it is interesting to observe these differences, as the above authors have pointed out, there is no real evidence for these clusters being divisible parts of the self-concept. They suggest that such individual facets of self-concept may be more or less relevant when the self-concept is related to other constructs like achievement in the learning situation. For the most part however, the self-concept is probably made up of parts equally sharing in the construct and relatively undifferentiable.

Finally, it must be noted that factors other than the teachers' use of the USU self-concept verbal behaviors were also operating to change the children's self-concepts over this eight-week period. For example, there are many activities conducted in classrooms that have been shown to favorably affect students' self-concepts. Since no observation was done to assess the use of such activities, no comments can be made about their effect on the outcome of the study. Furthermore, each student is a product of his own home environment plus all of the other learning environments he encounters during the school day -- for example, the music class, or the P.E. class, or what happens to him on the playground or walking to and from school. All of these factors have a tendency to affect his answers on a self-report self-concept measure. The day, and the time of day, that a test was delivered to a sample student, in terms of all of these factors, determined his choice of answers and, therefore, his score on the measure of self-concept used in this study. Unfortunately,

educational research is virtually always subject to the above types of extraneous variables.

Implications

Teacher Behaviors

The USU protocol modules were all designed to be used without the developer as individualized teaching packages. The teaching model developed by Dr. Walter Borg (1977) has been tested with large and small samples many times. The data in this single subject design has further shown that teachers exposed to this type of learning model do change specific behaviors, for the most part, only when the specific module is taught. The fact that in this study, also, each of the four modules affected the behaviors that it was designed to affect suggests that the model employed is a very strong teaching model, one from which in-service teachers could learn even without an instructor.

Only a few positive behaviors were used by the teachers prior to exposure to the treatment. These behaviors tended to be high frequency behaviors. Negative behaviors were used at a much greater frequency before training. Given the study data on behavior usage prior to training, it is clear that important positive behaviors are not used unless they are taught, and harmful negative behaviors <u>are</u> used until they are recognized. If the teachers' learning to use or avoid these behaviors affects her students' self-concept favorably at all, it is worth employing these modules in in-service training classes for elementary teachers. Furthermore, as the study obviously shows,

students' self-concepts can be favorably affected by the consistent use of these module behaviors in the classroom.

Pupil Effects

The significant pre-post gain in self-concept for Teacher B's students implies that such a gain can be the result of the teacher's use of specific verbal behaviors aimed at enhancing students' self concepts. It should be noted that most of the extraneous variables mentioned above were not operating in Teacher B's classroom. Therefore, the results imply that under more controllable conditions the teacher's use of these self-concept behaviors would probably have a favorable effect on her students' self-concepts. Furthermore, given all of the uncontrollable extraneous variables that operate constantly on students' self-concepts during a day at school, the teacher's intentional use of verbal behaviors designed to enhance students' self-concepts would probably have a favorable effect on raising those self-concepts even though the change might not be measureable. It seems that a favorable increase in self-concept for even a few low self-concept children would be enough to warrant training teachers to use these behaviors.

Finally, there is one more very important implication that can be seen in the favorable results of this study. The Utah State University Pupil Self-Concept Program is a type of competency-based teacher education material now on the market. Obviously, such teacher education modules dramatically affect teacher behavior in the classroom where it needs to be affected. Not only do these

teacher education materials change teacher behavior, but they change it in such a way that student effects are not only probable, but observable. The teachers' use of the USU self-concept verbal behaviors, used as the treatment in this study, obviously can have a favorable effect on students' self-concepts. Therefore, such teacher education material should be made highly available as in-service training material for elementary school teachers.

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APPENDIXES

Appendix A

SELF-CONCEPT
OBSERVATION RATING FORM

Teacher's Name	School	Grade	Date	Observer

Observation Time Recorded:

Start	Finish	Non-Interaction Time	NET. Obs. Time

BEHAVIOR TALLY

		Tally	Total
1.	Modeling		
2.	Pupil negative self-remark		
3.	Teacher Extinction		
4.	Teacher Elicits Praise		
5.	Pupil positive self-remark		
6.	Teacher Reinforcement		
7.	Appreciative Praise		
8.	Evaluative Praise		
9.	Inviting Cooperation		
10.	Direct Command		
11.	Describing the Situation		
12.	Verbal Judgement		
13.	I-message		
14.	Negative You-Message		

Appendix B

Administrative Instructions
North York <u>Primary</u> Self-Concept Inventory
(For grades 1 and 2)

NOTE: While you give the test, ask the teacher to write her full name
and the grade of her class on a full sheet of paper. When you
have collected the tests, put a rubber band around them all with
this sheet on top.

1. <u>READ</u> the following paragraph before distributing the inventory
answer sheets:

I AM GOING TO READ YOU SOME STATEMENTS TODAY TO FIND OUT HOW YOU

FEEL ABOUT YOURSELVES. SOMETIMES IT'S VERY IMPORTANT TO FIND OUT HOW

PEOPLE REALLY FEEL ABOUT THEMSELVES IN ORDER TO HELP THEM IN SOME WAY.

THEREFORE, PLEASE ANSWER EACH ITEM AS YOU REALLY FEEL YOU ARE, NOT AS

YOU THINK YOU OUGHT TO BE. SINCE THIS IS <u>NOT</u> A TEST, THERE ARE NO

RIGHT OR WRONG ANSWERS. YOUR NAME WON'T EVEN BE ON YOUR ANSWER SHEET.

2. Pass out the answer sheets and say:

I'M GOING TO ASK YOU SOME QUESTIONS TODAY TO FIND OUT HOW YOU FEEL

ABOUT SCHOOL. YOU KNOW THAT BOYS AND GIRLS SOMETIMES PUT ON MASKS TO

LOOK LIKE OTHER PEOPLE. SOMETIMES CLOWNS PAINT THEIR FACES TO LOOK

HAPPY OR SAD. YOU CHANGE YOUR FACE A FEW TIMES EVERY DAY. I WANT YOU

TO THINK OF THE FACES THAT YOU FEEL LIKE WEARING WHEN THINGS HAPPEN TO

YOU. (Draw a smiling and frowning face on the board). THERE ARE TWO

FACES ON THE FRONT PAGE OF YOUR BOOKLET JUST LIKE THESE. ONE OF THE

FACES HAS A BIG SMILE. PUT YOUR FINGER ON THE SMILING FACE. (Point

to the smiling face.) THIS IS HOW YOU'D FEEL IF YOU HAD A BIG ICE

CREAM CONE. FINE. BUT, IF YOU FELL OFF YOUR BICYCLE YOU MIGHT WEAR

A SAD FACE. (Point to the sad face.) CAN YOU FIND THE SAD FACE?

PUT YOUR FINGER ON THE SAD FACE. WE WILL GO ACROSS THE PAGE FROM THE

SMILING FACE TO THE SAD FACE EACH TIME. (Point from the 😊 across

the board to the ☹ face as you say this).

TO PICK THE FACE THAT YOU WOULD WEAR, YOU PUT AN "X" ACROSS THAT FACE. NOW, I WANT YOU TO ANSWER THIS QUESTION, "HOW DO YOU FEEL ABOUT GOING SHOPPING WITH YOUR MOTHER?" WHAT FACE WOULD YOU WEAR? PUT AN "X" ACROSS IT. IF YOU LIKE GOING SHOPPING MOST OF THE TIME, YOU MIGHT PICK THE FACE WITH A SMILE. (Put an X across the smiling face). IF YOU DON'T LIKE GOING SHOPPING, YOU MIGHT PICK THE SAD FACE. (Erase the smiling face and redraw it. Put an X across the sad face). WHATEVER FACE YOU PICK IS ALL RIGHT. BUT YOU CAN ONLY PUT AN "X" ON ONE OF THE TWO FACES EACH TIME. ON THE NEXT PAGE YOU HAVE MORE SETS OF FACES LIKE THIS. (Draw 2 more sets on the board and number them 1, 2, 3.) FOR EACH STATEMENT WE WILL LOOK ACROSS THE PAGE AND PUT AN "X" ON ONE OF THE TWO FACES. (Again, point from the smiling face to the sad face across each example.) NOW TURN THE PAGE AND LET'S START.

PUT YOUR FINGER ON #1 AT THE TOP OF THE PAGE AND LISTEN TO THE QUESTION _____. (Read each question slowly, twice if necessary) NOW MOVE DOWN TO #2.

Periodically repeat the meaning of the 2 faces as a reminder.

NORTH YORK PRIMARY SELF CONCEPT INVENTORY

September, 1974

EXAMPLE: HOW DO YOU FEEL ABOUT GOING SHOPPING WITH YOUR MOTHER?

_____

1.   HOW DO YOU FEEL ABOUT SCHOOL?

2.   HOW DO YOU FEEL WHEN YOU FALL DOWN AND HURT YOURSELF?

3.   HOW DO YOU FEEL ABOUT SHOWING YOUR SCHOOL WORK TO YOUR FRIENDS?

4.   HOW DO YOU FEEL WHEN YOU DON"T HAVE TO GO TO SCHOOL?

5.   HOW DO YOU FEEL WHEN THE TEACHER TELLS YOU TO DO SOMETHING?

6.   HOW DO YOU FEEL WHEN YOU THINK OF ALL THE CHILDREN IN THE
      CLASS WHO LIKE YOU?

7.   HOW DO YOU FEEL ABOUT SHARING YOUR FAVORITE TOY WITH OTHER
      CHILDREN?

8.   HOW WOULD YOU FEEL IF YOU NEVER HAD ANYONE TO PLAY WITH?

9.   HOW DO YOU FEEL ABOUT SCHOOL WORK?

10.   HOW DO YOU FEEL ABOUT THE WAY YOU GET ALONG WITH THE CHILDREN
      IN YOUR CLASS?

11.   HOW WOULD YOU FEEL IF YOU HAD TO MOVE TO ANOTHER SCHOOL?

12.   HOW DO YOU FEEL ABOUT TRYING NEW THINGS AT SCHOOL?

13.   HOW WOULD YOU FEEL IF ONE OF YOUR FRIENDS MOVED AWAY?

14. HOW DO YOU FEEL WHEN YOU WORK WITH NUMBERS?

15. HOW WOULD YOU FEEL IF YOU WERE A DIFFERENT PERSON?

16. HOW DO YOU FEEL WHEN GROWN-UPS TALK TO YOU?

17. HOW WOULD YOU FEEL IF YOU LOST YOUR FAVORITE TOY?

18. HOW DO YOU FEEL ABOUT STANDING UP IN FRONT OF OTHER CHILDREN TO TELL ABOUT SOMETHING?

19. HOW DO YOU FEEL WHEN THE TEACHER ASKS YOU A QUESTION IN FRONT OF THE OTHER CHILDREN?

20. HOW DO YOU FEEL ABOUT OTHER CHILDREN IN YOUR CLASS?

21. HOW WOULD YOU LIKE TO STAY HOME AND NOT GO TO SCHOOL?

22. HOW DO YOU FEEL WHEN THE TEACHER IS ANGRY?

23. HOW DO YOU FEEL ABOUT THE WAY OTHER PEOPLE LISTEN TO YOU?

24. HOW DO YOU FEEL WHEN IT IS TIME TO GET READY TO GO TO SCHOOL?

ANSWER SHEET

EXAMPLE
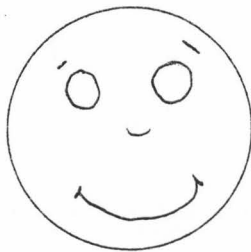
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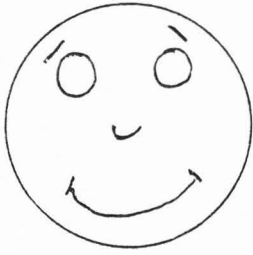
2.

3.

4.
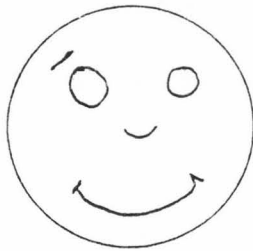
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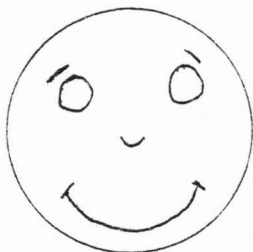
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8.
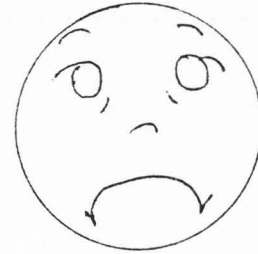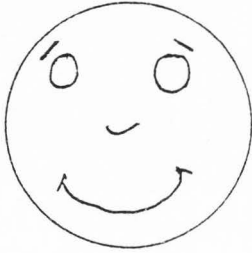
9.

10.
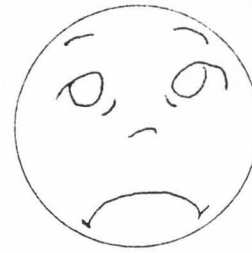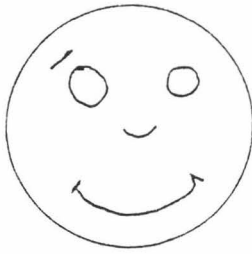
11.
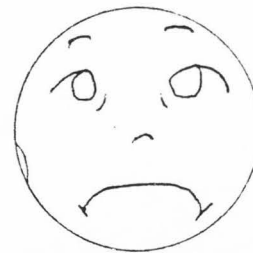
12.

13.

14.

15.

16.
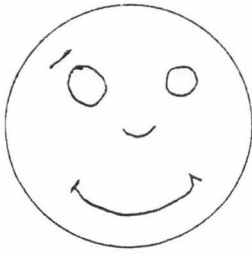
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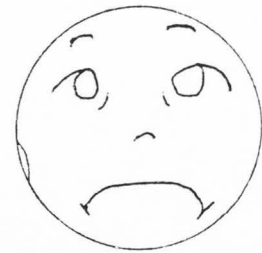
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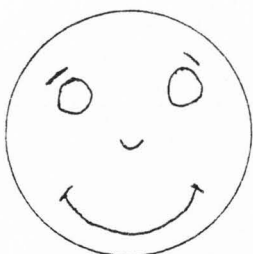
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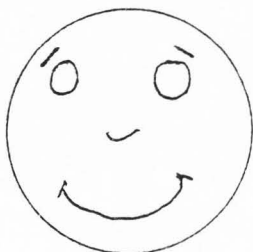
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22.

23.

24.
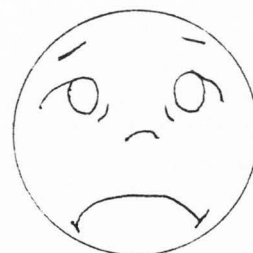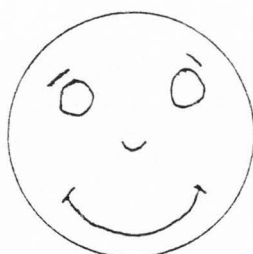
Administrative Instructions
North York Intermediate Self-Concept Inventory
(For Grades 3-6)

1.   Read the following paragraph before distrubing the
inventory booklets:

I AM GOING TO READ YOU SOME STATEMENTS TODAY TO FIND OUT HOW YOU
FEEL ABOUT YOURSELVES. SOMETIMES IT'S VERY IMPORTANT TO FIND OUT
HOW PEOPLE REALLY FEEL ABOUT THEMSELVES IN ORDER TO HELP THEM IN
SOME WAY. THEREFORE, PLEASE ANSWER EACH ITEM AS YOU REALLY FEEL YOU
ARE, NOT AS YOU THINK YOU OUGHT TO BE. SINCE THIS IS NOT A TEST,
THERE ARE NO RIGHT OR WRONG ANSWERS. YOUR NAMES WILL NOT EVEN BE
ON THE ANSWER SHEET.

2.   Hand out the booklets and be sure everyone has a pencil. Have
the identifying items and blanks on the first page drawn on the board
and filled out. Say:

FIRST, I'D LIKE YOU TO FIND THE BLANKS AT THE TOP OF THE 1ST PAGE
OF YOUR BOOKLET THAT LOOK LIKE THESE (point to board). PLEASE FILL IN
THE BLANKS FOR SCHOOL, TEACHER, GRADE, AND DATE EXACTLY AS I HAVE ON
THE BOARD. WE'LL TAKE A FEW MINUTES TO DO THIS. (Wait until everyone
is finished.) PLEASE COUNT YOUR PAGES: YOU NEED 3 ALTOGETHER. (Pause)

3.   Say: NOW, LET'S ALL READ THE DIRECTIONS ON THIS PAGE.
PLEASE READ THEM SILENTLY WHILE I READ THEM ALOUD. (Read the directions
that follow)

Examiner's Copy

SCHOOL:_____   TEACHER:_____

GRADE:_____   DATE:_____

DIRECTIONS:

    ON THE FOLLOWING PAGES ARE A SERIES OF STATE-
MENTS PEOPLE SOMETIMES USE TO DESCRIBE THEMSELVES.
I WILL READ EACH STATEMENT ONCE WHILE YOU READ IT
SILENTLY AND DECIDE WHETHER OR NOT IT IS TRUE FOR
YOU. EACH STATEMENT IS FOLLOWED BY A SQUARE MARKED
TRUE AND A SQUARE MARKED NOT TRUE.
IF YOU THINK A STATEMENT IS TRUE FOR YOU OR DESCRIBES
HOW YOU FEEL MOST OF THE TIME, CHECK THE TRUE
SQUARE. IF YOU THINK A STATEMENT IS NOT TRUE FOR
YOU OR DOES NOT DESCRIBE HOW YOU FEEL MOST OF THE
TIME, CHECK THE NOT TRUE SQUARE.

THERE ARE NO RIGHT OR WRONG ANSWERS, ONLY YOU CAN
TELL US HOW YOU FEEL. DOES ANYONE HAVE ANY
QUESTIONS? PLEASE ASK THEM NOW BECAUSE I AM NOT
SUPPOSED TO ANSWER QUESTIONS AFTER WE START.

The Board of Education for the Borough of North York

Department of Educational Research Services

September, 1973

		TRUE	NOT TRUE
1.	OTHER CHILDREN ARE HAPPIER THAN I AM	——	——
2.	PEOPLE ARE ALWAYS TELLING ME WHAT TO DO	——	——
3.	I FIND IT HARD TO TALK IN FRONT OF THE CLASS	——	——
4.	MOST CHILDREN HAVE MORE FRIENDS THAN I DO	——	——
5.	I AM VERY GOOD IN MY SCHOOL WORK	——	——
6.	MY CLASSMATES THINK I AM A GOOD STUDENT	——	——
7.	MY TEACHER DOESN'T THINK I AM VERY GOOD IN MY SCHOOL WORK	——	——
8.	MOST PEOPLE ARE BETTER LIKED THAN I AM	——	——
9.	THERE ARE LOTS OF THINGS ABOUT MYSELF I'D CHANGE IF I COULD	——	——
10.	I THINK I'D BE HAPPIER IN ANOTHER CLASS	——	——
11.	SCHOOL WORK IS FAIRLY EASY FOR ME	——	——
12.	I AM NOT DOING AS WELL IN SCHOOL AS I WOULD LIKE TO	——	——
13.	PEOPLE SEEM TO LIKE MY IDEAS	——	——
14.	SCHOOL WORK IS FAIRLY DIFFICULT FOR ME	——	——
15.	I GET UPSET EASILY IN SCHOOL	——	——

		TRUE	NOT TRUE
16.	I FORGET MOST OF WHAT I LEARN	——	——
17.	MOST PEOPLE SEEM TO LIKE ME	——	——
18.	IT TAKES ME A LONG TIME TO GET USED TO ANYTHING NEW	——	——
19.	I CAN GIVE A GOOD REPORT IN FRONT OF THE CLASS	——	——
20.	TEACHERS ALWAYS WANT ME TO DO MORE THAN I CAN	——	——
21.	I USUALLY DON'T WORRY ABOUT WHAT HAPPENS AT SCHOOL	——	——
22.	IT'S PRETTY TOUGH TO BE ME	——	——
23.	I FIND IT HARD TO STICK TO ONE PROJECT FOR VERY LONG	——	——
24.	I AM SLOW IN FINISHING MY SCHOOL WORK	——	——
25.	NO ONE PAYS MUCH ATTENTION TO ME	——	——
26.	I OFTEN GET DISCOURAGED	——	——
27.	IT IS HARD FOR ME TO MAKE FRIENDS	——	——
28.	IT IS USUALLY MY FAULT WHEN SOMETHING GOES WRONG	——	——
29.	I SEEM TO GET INTO TROUBLE AT SCHOOL	——	——
30.	I LIKE ME THE WAY I AM	——	——

Administrative Instructions
Piers-Harris Children's Self-Concept Scale
Primary Form

Primary Form - Grades 1 and 2

NOTE: While you give test to class ask the teacher to write her
full name and the grade on a full sheet of paper. When
you have collected the tests put a rubber band around them
all with this sheet on top.

1. READ the following paragraph before distributing the inventory
answer sheets:

I AM GOING TO READ YOU SOME STATEMENTS TODAY TO FIND OUT HOW YOU

FEEL ABOUT YOURSELVES. SOMETIMES IT'S VERY IMPORTANT TO FIND OUT HOW

PEOPLE REALLY FEEL ABOUT THEMSELVES IN ORDER TO HELP THEM IN SOME WAY.

THEREFORE, PLEASE ANSWER EACH ITEM AS YOU REALLY FEEL YOU ARE, NOT AS

YOU THINK YOU OUGHT TO BE. SINCE THIS IS NOT A TEST, THERE ARE NO RIGHT

OR WRONG ANSWERS. YOUR NAMES WILL NOT EVEN BE ON THE ANSWER SHEET.

2. Hand out the answer sheets, be sure everyone has a pencil
and say:

NOW, LET'S FIND THE ANSWER BOX ON THE PINK PAGE FOR QUESTION

NUMBER 1. IT HAS A STAR BESIDE THE NUMBER AND THE WORD YES AND THE

WORD NO FOLLOWING THE NUMBER--LIKE THIS. (Draw Answer box #1 on the

board) THE FIRST WORD IS YES. (Point to the yes) WHAT IS THIS

WORD? - - - - (wait for answer from class, ask a few individual

students also to be sure they know).

THE SECOND WORD IS NO. (Point to the no) WHAT IS THIS WORD? -

- - - (wait for class answer and ask separate children)

THE ANSWER BOXES FOR ALL THE STATEMENTS I WILL READ YOU HAVE

BOTH A YES (point) AND A NO (point) AFTER THE NUMBER. IF YOU THINK

A STATEMENT IS TRUE FOR YOU OR DESCRIBES HOW YOU FEEL <u>MOST OF THE TIME</u>, YOU WILL CIRCLE THE <u>YES</u>. IF YOU THINK A STATEMENT IS <u>NOT</u> TRUE FOR YOU OR DOES <u>NOT</u> DESCRIBE HOW YOU FEEL <u>MOST OF THE TIME</u>, YOU WILL CIRCLE THE <u>NO</u>. PLEASE ANSWER EVERY QUESTION EVEN IF SOME ARE HARD TO DECIDE, BUT DO <u>NOT</u> CIRCLE BOTH <u>YES</u> AND <u>NO</u> FOR THE SAME QUESTION. REMEMBER, YOU WILL DRAW A CIRCLE AROUND THE <u>YES</u> IF THE STATEMENT IS USUALLY LIKE YOU, OR AROUND THE <u>NO</u> IF THE STATEMENT IS USUALLY NOT LIKE YOU. THERE ARE NO RIGHT OR WRONG ANSWERS. ONLY YOU CAN TELL US HOW YOU FEEL ABOUT YOURSELF, SO WE HOPE YOU WILL MARK THE WAY YOU REALLY FEEL INSIDE. DOES ANYONE HAVE ANY QUESTIONS? PLEASE ASK THEM NOW BECAUSE ONCE I START TO READ THE STATEMENTS, I AM NOT SUPPOSED TO ANSWER QUESTIONS.

NOW WE'RE READY TO START. PUT YOUR FINGER ON THE STAR BESIDE #1 IN THE FIRST ANSWER BOX AND LISTEN TO THE STATEMENT. (Read the statement #1 from your examiner's copy <u>twice</u>, clear and slowly, but not so slowly that second thoughts or distractions will occur). CIRCLE EITHER THE YES OR THE <u>NO</u>.

NOW MOVE DOWN TO #2. (Read #2 clearly, twice)

    Note: (Continue in this way. If there is a definition written into the test read it immediately after the statement, see #7.)

(When you come to #6, ask) "IS EVERYONE ON THE BOX WITH THE SQUARE BESIDE THE NUMBER? LISTEN TO THE STATEMENT." (other observers should check)

(When you come to #11, say) "NOW MOVE BACK TO THE TOP OF THE PAGE AND FIND THE BOX IN THE SECOND COLUMN WITH THE CIRCLE BESIDE THE NUMBER. PUT YOUR FINGER ON THE #11 AND LISTEN TO THE STATEMENT."

"When you come to #15, ask) "IS EVERYONE ON THE BOX WITH THE
FISH BESIDE THE NUMBER? LISTEN TO THE STATEMENT."

(When you have read #20, say) "NOW FOLD BACK THE PINK PAGE.
YOU ARE ON THE GREEN OR SECOND PAGE. PLEASE PUT YOUR FINGER ON THE
STAR BESIDE #1 IN THE FIRST ANSWER BOX AND LISTEN TO THE STATEMENT.
(Read this statement) CIRCLE EITHER THE YES OR THE NO." (Remind
students of what this means from time to time) (Proceed to the
bottom of this page just as you did through the first one.)

Piers-Harris Children's Self-Concept Scale
Examiner's Copy, Primary Form

Page #1 (pink)

1.   I AM SMART

2.   I AM SHY (SHY MEANS YOU FEEL A LITTLE AFRAID WITH OTHER PEOPLE)

3.   I GET NERVOUS WHEN THE TEACHER CALLS ON ME (NERVOUS MEANS EXCITED)

4.   MY LOOKS BOTHER ME

5.   WHEN I GROW UP, I WILL BE AN IMPORTANT PERSON

6.   I GET WORRIED WHEN WE HAVE TESTS IN SCHOOL

7.   I AM UNPOPULAR (UNPOPULAR MEANS OTHERS DON'T LIKE YOU)

8.   I AM WELL BEHAVED IN SCHOOL

9.   I HAVE GOOD IDEAS

10. I AM AN IMPORTANT MEMBER OF MY FAMILY

11. I GIVE UP EASILY

12. I AM GOOD IN MY SCHOOL WORK

13. I AM SLOW IN FINISHING MY SCHOOL WORK

14. I AM AN IMPORTANT MEMBER OF MY CLASS

15. I AM NERVOUS (NERVOUS MEANS EASILY EXCITED)

16. I CAN GIVE A GOOD REPORT IN FRONT OF THE CLASS (REPORT MEANS A TALK LIKE SHOW AND TELL)

17. MY FRIENDS LIKE MY IDEAS

18. I WORRY A LOT

19. I FEEL LEFT OUT OF THINGS

20. MANY TIMES I VOLUNTEER IN SCHOOL (VOLUNTEER MEANS OFFER TO DO SOMETHING LIKE CLEAN THE BLACKBOARD)

Page #2 (green)

☆ 1.   I SLEEP WELL AT NIGHT

2.   MY CLASSMATES IN SCHOOL THINK I HAVE GOOD IDEAS.

3.   I AM DUMB ABOUT MOST THINGS

4.   I HAVE LOTS OF PEP (PEP MEANS ENERGY)

5.   I AM POPULAR WITH BOYS (POPULAR MEANS BOYS LIKE YOU)

▱ 6.   I FORGET WHAT I LEARN

7.   I AM A GOOD READER

8.   I AM OFTEN AFRAID (OFTEN MEANS MANY TIMES)

9.   I CRY EASILY

PIERS-HARRIS PRIMARY ANSWER SHEET

☆	1.	YES	NO	○	11.	YES	NO
	2.	YES	NO		12.	YES	NO
	3.	YES	NO		13.	YES	NO
	4.	YES	NO		14.	YES	NO
	5.	YES	NO		15.	YES	NO
▢	6.	YES	NO	⋈	16.	YES	NO
	7.	YES	NO		17.	YES	NO
	8.	YES	NO		18.	YES	NO
	9.	YES	NO		19.	YES	NO
	10.	YES	NO		20.	YES	NO

 1.   YES   NO

2.   YES   NO

3.   YES   NO

4.   YES   NO

5.   YES   NO

 6.   YES   NO

7.   YES   NO

8.   YES   NO

9.   YES   NO

Administrative Instructions
Piers-Harris Children's Self-Concept Scale
Intermediate Form

Intermediate Form - Grades 3-6

1. READ the following paragraph before distributing the inventory answer sheets:

I AM GOING TO READ YOU SOME STATEMENTS TODAY TO FIND OUT HOW YOU

FEEL ABOUT YOURSELVES. SOMETIMES IT'S VERY IMPORTANT TO FIND OUT HOW

PEOPLE REALLY FEEL ABOUT THEMSELVES IN ORDER TO HELP THEM IN SOME WAY.

THEREFORE, PLEASE ANSWER EACH ITEM AS YOU REALLY FEEL YOU ARE, NOT AS

YOU THINK YOU OUGHT TO BE. SINCE THIS IS NOT A TEST, THERE ARE NO

RIGHT OR WRONG ANSWERS. YOUR NAMES WILL NOT EVEN BE ON THE ANSWER

SHEET.

2. Hand out the scale and be sure every child has a pencil. (Write the items and blanks for the identifying data on the board. Fill in the blanks for Teacher, Grade, School, and Date, say:) PLEASE COUNT YOUR PAGES: YOU NEED 6 ALTOGETHER. (Pause)

FIRST, I'D LIKE YOU TO OPEN YOUR BOOKLETS TO THE PAGE THAT LOOKS

LIKE THIS (point to board). PLEASE FILL IN THE BLANKS EXACTLY AS I

HAVE ON THE BOARD. WE'LL TAKE A FEW MINUTES TO DO THIS. (Wait until

everone is finished.) Say: NOW LET'S ALL READ THE INSTRUCTIONS AT

THE TOP OF THE NEXT PAGE. PLEASE READ THEM SILENTLY WHILE I READ THEM

ALOUD. HERE ARE A SET OF STATEMENTS. SOME OF THEM ARE TRUE OF YOU

AND SO YOU WILL CIRCLE THE YES. SOME ARE NOT TRUE OF YOU AND SO YOU

WILL CIRCLE THE NO. ANSWER EVERY QUESTION EVEN IF SOME ARE HARD TO

DECIDE, BUT DO NOT CIRCLE BOTH YES AND NO FOR THE SAME QUESTION.

REMEMBER, CIRCLE THE YES IF THE STATEMENT IS GENERALLY LIKE YOU,

OR CIRCLE THE NO IF THE STATEMENT IS GENERALLY NOT LIKE YOU. THERE

ARE NO RIGHT OR WRONG ANSWERS. ONLY YOU CAN TELL US HOW YOU FEEL

ABOUT YOURSELF, SO WE HOPE YOU WILL MARK THE WAY YOU REALLY FEEL

INSIDE. DOES ANYONE HAVE A QUESTION? PLEASE ASK ME NOW BECAUSE I

AM NOT SUPPOSED TO ANSWER QUESTIONS AFTER WE BEGIN. WE ARE NOW READY

TO BEGIN. I WILL READ EACH ITEM ALOUD ONCE WHILE YOU READ IT SILENTLY.

NUMBER 1 . . .

1.   MY CLASSMATES MAKE FUN OF ME . . . . YES   NO

2.   I AM A HAPPY PERSON

3.   IT IS HARD FOR ME TO MAKE FRIENDS

4.   I AM OFTEN SAD (OFTEN MEANS MANY TIMES)

5.   I AM SMART

6.   I AM SHY (SHY MEANS YOU FEEL A LITTLE AFRAID WITH OTHER PEOPLE)

7.   I GET NERVOUS WHEN THE TEACHER CALLS ON ME (NERVOUS MEANS EXCITED)

8.   MY LOOKS BOTHER ME

9.   WHEN I GROW UP, I WILL BE AN IMPORTANT PERSON

10.   I GET WORRIED WHEN WE HAVE TESTS IN SCHOOL

11.   I AM UNPOPULAR (UNPOPULAR MEANS OTHERS DON'T LIKE YOU)

12.   I AM WELL BEHAVED IN SCHOOL

13.   IT IS USUALLY MY FAULT WHEN SOMETHING GOES WRONG

14.   I CAUSE TROUBLE TO MY FAMILY

15.   I AM STRONG

16.   I HAVE GOOD IDEAS

17.   I AM AN IMPORTANT MEMBER OF MY FAMILY

18.   I USUALLY WANT MY OWN WAY

19.   I AM GOOD AT MAKING THINGS WITH MY HANDS

20.   I GIVE UP EASILY

21. I AM GOOD IN MY SCHOOL WORK

22. I DO MANY BAD THINGS

23. I CAN DRAW WELL

24. I AM GOOD IN MUSIC

25. I BEHAVE BADLY AT HOME

26. I AM SLOW IN FINISHING MY SCHOOL WORK

27. I AM AN IMPORTANT MEMBER OF MY CLASS

28. I AM NERVOUS (NERVOUS MEANS EASILY EXCITED)

29. I HAVE PRETTY EYES

30. I CAN GIVE A GOOD REPORT IN FRONT OF THE CLASS (REPORT MEANS A TALK)

31. IN SCHOOL I AM A DREAMER (DREAMER MEANS NOT PAYING ATTENTION TO WHAT'S GOING ON)

32. I PICK ON MY BROTHER(S) AND SISTER(S)

33. MY FRIENDS LIKE MY IDEAS

34. I OFTEN GET INTO TROUBLE (OFTEN MEANS MANY TIMES)

35. I AM OBEDIENT AT HOME (OBEDIENT MEANS THAT YOU DO WHAT OTHERS WANT YOU TO DO)

36. I AM LUCKY

37. I WORRY A LOT

38. MY PARENTS EXPECT TOO MUCH OF ME

39. I LIKE BEING THE WAY I AM

40. I FEEL LEFT OUT OF THINGS

41. I HAVE NICE HAIR

42. I OFTEN VOLUNTEER IN SCHOOL (VOLUNTEER MEANS OFFER TO DO SOMETHING LIKE CLEAN THE BLACKBOARD)

43. I WISH I WERE DIFFERENT

44. I SLEEP WELL AT NIGHT

45. I HATE SCHOOL

46. I AM AMONG THE LAST TO BE CHOSEN FOR GAMES (AMONG THE LAST MEANS YOU ARE ONE OF THE LAST PEOPLE CHOSEN)

47. I AM SICK A LOT

48. I AM OFTEN MEAN TO OTHER PEOPLE (OFTEN MEANS MANY TIMES)

49. MY CLASSMATES IN SCHOOL THINK I HAVE GOOD IDEAS

50. I AM UNHAPPY

51. I HAVE MANY FRIENDS

52. I AM CHEERFUL (CHEERFUL MEANS GLAD OR HAPPY)

53. I AM DUMB ABOUT MOST THINGS

54. I AM GOOD LOOKING

55. I HAVE LOTS OF PEP (PEP MEANS ENERGY)

56. I GET INTO A LOT OF FIGHTS

57. I AM POPULAR WITH BOYS (POPULAR MEANS BOYS LIKE ME)

58. PEOPLE PICK ON ME

59. MY FAMILY IS DISAPPOINTED IN ME (DISAPPOINTED MEANS IN SOME WAY I'M NOT AS GOOD AS MY FAMILY WANTS ME TO BE)

60. I HAVE A PLEASANT FACE (PLEASANT MEANS NICE, NOT UGLY)

61. WHEN I TRY TO MAKE SOMETHING, EVERYTHING SEEMS TO GO WRONG

62. I AM PICKED ON AT HOME

63. I AM A LEADER IN GAMES AND SPORTS (BEING A LEADER MEANS YOU DECIDE WHAT TO DO)

64. I AM CLUMSY (CLUMSY MEANS AWKWARD)

65. IN GAMES, I WATCH INSTEAD OF PLAY

66. I FORGET WHAT I LEARN

67. I AM EASY TO GET ALONG WITH

68. I LOSE MY TEMPER EASILY (TO LOSE YOUR TEMPER MEANS TO GET MAD OR ANGRY)

69. I AM POPULAR WITH GIRLS

70. I AM A GOOD READER

71. I WOULD RATHER WORK ALONE THAN WITH A GROUP (ALONE MEANS BY YOURSELF)

72. I LIKE MY BROTHER (SISTER)

73. I HAVE A GOOD FIGURE (FIGURE MEANS THE SHAPE OF YOUR BODY)

74. I AM OFTEN AFRAID (OFTEN MEANS MANY TIMES)

75. I AM ALWAYS DROPPING OR BREAKING THINGS

76. I CAN BE TRUSTED (TRUSTED MEANS PEOPLE CAN COUNT ON YOU)

77. I AM DIFFERENT FROM OTHER PEOPLE

78. I THINK BAD THOUGHTS

79. I CRY EASILY

80. I AM A GOOD PERSON

THE PIERS-HARRIS

CHILDREN'S SELF CONCEPT SCALE

(The Way I Feel About Myself)

by

Ellen V. Piers, Ph.D.

and

Dale B. Harris, Ph.D.

THE WAY I FEEL ABOUT MYSELF

TEACHER . . . .

GRADE . . . . SCHOOL . . . .

DATE . . . .

Ellen V. Piers and Dale B. Harris, 1969

Here are a set of statements. Some of them are true of you and so you will circle the yes. Some are not true and so you will circle the no. Answer every question even if some are hard to decide, but do not circle both yes and no. Remember, circle the yes if the statement is generally like you, or circle the no if the statement is is generally not like you. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

1.   My classmates make fun of me . . . . yes   no

2.   I am a happy person . . . . yes   no

3.   It is hard for me to make friends . . . . yes   no

4.   I am often sad . . . . yes   no

5.   I am smart . . . . yes   no

6.   I am shy . . . . yes   no

7.   I get nervous when the teacher calls on me . . . . . . yes   no

8.   My looks bother me . . . . yes   no

9.   When I grow up, I will be an important person . . . . yes   no

10. I get worried when we have tests in school . . . . . . yes   no

11. I am unpopular . . . . yes   no

12. I am well behaved in school . . . . yes   no

13. It is usually my fault when something goes wrong . . . yes   no

14. I cause trouble to my family . . . . yes   no

15. I am strong . . . . yes   no

16. I have good ideas . . . . yes   no

17. I am an important member of my family . . . . yes   no

18. I usually want my own way . . . . yes   no

19. I am good at making things with my hands . . . . yes   no

20. I give up easily . . . . yes   no

21. I am good in my school work . . . . yes   no

22. I do many bad things . . . . yes   no

23. I can draw well . . . . yes   no

24. I am good in music . . . . yes   no

25. I behave badly at home . . . . yes   no

26. I am slow in finishing my school work . . . . yes   no

27. I am an important member of my class . . . . yes   no

28. I am nervous . . . . yes   no

29. I have pretty eyes . . . . yes   no

30. I can give a good report in front of the class . . . . yes   no

31. In school I am a dreamer . . . . yes   no

32. I pick on my brother(s) and sister(s) . . . . yes   no

33. My friends like my ideas . . . . yes   no

34. I often get into trouble . . . . yes   no

35. I am obedient at home . . . . yes   no

36. I am lucky . . . . yes   no

37. I worry a lot . . . . yes   no

38. My parents expect too much of me . . . . yes   no

39. I like being the way I am . . . . yes   no

40. I feel left out of things . . . . yes   no

41. I have nice hair . . . . yes   no

42. I often volunteer in school . . . . yes   no

43. I wish I were different . . . . yes   no

44. I sleep well at night . . . . yes   no

45. I hate school . . . . yes   no

46. I am among the last to be chosen for games . . . . yes no

47. I am sick a lot . . . . yes no

48. I am often mean to other people . . . . yes no

49. My classmates in school think I have good ideas . . . . yes no

50. I am unhappy . . . . yes no

51. I have many friends . . . . yes no

52. I am cheerful . . . . yes no

53. I am dumb about most things . . . . yes no

54. I am good looking . . . . yes no

55. I have lots of pep . . . . yes no

56. I get into a lot of fights . . . . yes no

57. I am popular with boys . . . . yes no

58. People pick on me . . . . yes no

59. My family is disappointed in me . . . . yes no

60. I have a pleasant face . . . . yes no

61. When I try to make something, everything seems to
go wrong . . . . yes no

62. I am picked on at home . . . . yes no

63. I am a leader in games and sports . . . . yes no

64. I am clumsy . . . . yes no

65. In games and sports, I watch instead of play . . . . . yes no

66. I forget what I learn . . . . yes no

67. I am easy to get along with . . . . yes no

68. I lose my temper easily . . . . yes no

69. I am popular with girls . . . . yes no

70. I am a good reader . . . . yes no

71. I would rather work alone than with a group . . . . yes no

72. I like my brother (sister) . . . . yes no

73. I have a good figure . . . . yes no

74. I am often afraid . . . . yes no

75. I am always dropping or breaking things . . . . yes no

76. I can be trusted . . . . yes no

77. I am different from other people . . . . yes no

78. I think bad thoughts . . . . yes no

79. I cry easily . . . . yes no

80. I am a good person . . . . yes no

Score: _____

Appendix C

Lesson Sequence - Elementary Education 656

Improving Pupil Self-Concept
Kathleen L. Van Horn

March 18

1. Call role and hand out USU registration form

2. Discuss grading system
    a. For "B" grade
        (1) Complete all practice lessons in Student Guide
        (2) Reach criterion on all Recognition Tests, Application
             Tests and Film Observations (grades below criterion
             can be made up)
        (3) Absent not more than twice. Make up work missed.
        (4) Complete all practice audio tapes and review them
             in class.
    b. For "A", you must meet all "B" requirements and reach
        criterion on certain Self-Concept behaviors on post-course
        observation. These will be the behaviors that you can
        manipulate.

3. Discuss learning sequence
    a. Discuss importance of classroom practice
    b. Importance of systematic self-cueing and feedback.

4. Briefly discuss the purpose of the four modules

5. Pass out Teacher Anger booklet and discuss behavioral indicators

6. Assignment for March 21:
    a. Complete Student Guide for Teacher Anger through Step 3B
        (pp. 1-49)
    b. Practice the teacher anger behaviors in your own classroom
        when appropriate but do not record.
    c. Write I+ versus Y-, W-, S- on a poster or on the blackboard
        and refer to cues throughout day for the days of March
        19, 20, 21.

March 21

1. Discuss Teacher Anger behaviors

2. Take Recognition Test

3. View Teacher Anger Film

4. Assignment for March 25:
    a. Complete Application Practice Lessons

    b.   Record a 30-minute audio tape in your own classroom in which you use "I-messages" and avoid use of "You-messages", "Why questions" and Sarcasm.

    c.   Bring your audio tape <u>and a recorder</u> to next class meeting.

5.   Special assignment on Teacher Anger behaviors for Monday or Tuesday the 24 or 25: Have a collection of coins--transfer one to a jar for yourself whenever you use I+ instead of Y-, S-, or W- in an irritating situation.

March 25

1.   Take Teacher Anger Application Test

2.   Pair off and replay your audio tapes. Turn in completed Listening Guide #1.

3.   Each class member will be observed by one observer on either Wednesday <u>March 26</u> or Tuesday, <u>April 1</u> for <u>4 hours</u>.
    March 26: 1. _____
                2. _____
    April 1   1. _____
                2. _____

4.   Special Assignment on Teacher Anger behavior for either March 26 or April 1, whichever day you are not being observed:
    Try to use an I+ statement each time you are irritated or angry all day long. Say to yourself, "I knew I could!" whenever you use I+ rather than Y-, S- or W-. Mentally reprimand yourself when you do make a Y-, S-, or W- remark during an anger situation.

(March 27-31 Easter Vacation--no class)

April 1

1.   Pass out Student Guides on <u>Self-Perception</u> and discuss teacher behaviors.

2.   Assignment for April 4:
    a.   Complete Self-Perception Student Guide through Step 3B, (pp. 12-54) (Do not repeat Task 1)
    b.   Write cues M, TE, EP, TR
    c.   Practice Self-Perception behaviors in your own classroom.

April 4

1.   Discuss Self-Perception Modules

2.   Take Recognition Test

3.   View Self-Perception Film

4.   Assignment for April 8:
     a.   Complete Application Practice lessons
     b.   Record a 30-minute audio tape in your classroom in which
          you model favorable self-perception remarks five times
          and use Teacher Reinforcement, Teacher Extinction and
          TE + TR in all cases where these are appropriate. (Try
          to use the prompting behavior discussed in class to create
          occasions for TE or TR to be used)

5.   Special Assignment on Self-Perception behaviors for either
     April 7 or 8: Concentrate on 2 or 3 low self-concept children
     as identified by our tests. Put their initials on the board
     and try to use TE, EP, Prompting, and TR to help them all day.

April 8

1.   Take Self-Perception Application Test

2.   Pair off and replay your audio tapes. Turn in completed
     Listening Guide #2.

3.   Each class member will be observed by one observer on Wed.
     April 9, or Thurs. April 10 or Fri. April 11 for 4 hours.
     April 9: 1. _____
               2. _____
     April 10: 1. _____
               2. _____
     April 11: 1. _____
               2. _____

4.   Two special assignments on Self-Perception behaviors for 2 of
     the 3 above days--whichever 2 you are not being observed:
     a.   Each time you make an M statement reward yourself with
          a coin placed in your jar.
     b.   Listen carefully for children who make negative or positive
          remarks about themselves all day. Try to use TE or TR
          whenever possible.

April 11

1.   Pass out Student Guide on Verbal Description -- Part I and discuss
     the teacher behaviors

2.   Assignment for April 15:
     a.   Complete Verbal Description I Student Guide through Step 3B
          (pp. 11-60)
     b.   Post cues: "TS+, RS+ versus VJ-, SC-"
     c.   Practice the Verbal Description I behaviors in your class.
          Try to avoid using VJ- and SC-. Make a mental note
          whenever you accidentally use one of the negative behaviors.

April 15

1.   Discuss Verbal Description I behaviors

2.   Take Recognition Test

3.   View Verbal Description I Film

4.   Assignment for April 18:
      a.   Complete Application Practice Lessons
      b.   Record a 30-minute audio tape in your classroom in which
            you:
            (1)   Use TS+ at least 3 times
            (2)   Use RE+ when appropriate
            (3)   Avoid VJ- and SC-
            (4)   Use I-message, TR and TE when appropriate
            (5)   Use M three times
            (6)   Avoid Y-, W-, and S-

5.   Two special assignments on Verbal Description I behaviors for
      April 16, 17 and/or 18:
      a.   Focus Active Listening and RS+ behavior on 1 or 2 children
            who always seem to have lots of personal problems during
            each day at school.
      b.   Reward yourself with a coin in your jar whenever you use
            TS+ instead of VJ- behavior in a touchy situation.

April 22

1.   Take Verbal Description I Application Test

2.   Pair off and replay your audio tapes. Turn in completed
      Listening Guide #3.

3.   Each class member will be observed by one observer either on
      Wed. April 23 or Thurs. April 24 or Friday April 25 for 4 hours.

      April 23: _____   April 25: _____

      April 24: _____
                _____
                _____

4.   Special Assignment on Verbal Description I behaviors for a day
      you are not observed. Each time you hear yourself make any
      of the several types of verbal judging remarks we've discussed,
      mentally tell yourself, "I shouldn't have used that VJ- remark."
      Concentrate on using TS+ or RS+ instead.

April 25

1.   Pass out Student Guides on Verbal Description II and discuss
      behaviors.

2.   Assignment for April 29:
     a.   Complete Verbal Description II Student Guide through
          Step 3B (pp. 13-53)
     b.   Post cues "AP+ and IC+ versus EP- and DC-"
     c.   Practice AP+ and IC+ in your class. Be especially careful
          to avoid DC-.

April 29

1.   Discuss Verbal Description II teacher behaviors

2.   Take Verbal Description II Recognition Test

3.   View Verbal Description II Film

4.   Assignment for May 2:
     a.   Complete Application Practice Lessons
     b.   Record a 30-minute audio tape in your classroom in which
          you:
          (1) Use AP+ at least 10 times
          (2) Use IC+ at least 5 times
          (3) Avoid EP- and DC-
          (4) Use TS+, RS+, I+ messages when appropriate
          (5) Use M two times
          (6) Avoid VJ-, SC-, Y-, W-, and S-

5.   Special Assignment on Verbal Description II behaviors. Whenever
     a child or your whole class performs a task for you, try to
     use AP+ to encourage that child. Reward yourself mentally or
     with a coin each time you succeed in using an AP+ statement.

May 2

1.   Take Verbal Description II Application Test

2.   Pair off and replay your audio tapes. Turn in completed
     Listening Guide #4.

3.   Assignments for May 9:
     a.   Make audio tape in your own classroom in which you practice
          the following Self-Concept teacher behaviors: AP+, IC+,
          TS+, RS+, I+, and M.
     b.   Make 30-minute audio tape in which you try to practice all
          of the positive Self-Concept teacher behaviors and avoid
          all of the negative behaviors.

4.   Special Assignment for the day you are not observed and aren't
     making your tape: Listen for EP- remarks and try to follow
     them with AP+ remarks which might have been used instead.

5.   Each class member will be observed for at least 8 hours on two
     of the following days, May 5, 6, 7, 8 or 9. This is the final
     observation.

     May 5: _____   May 8: _____
                   _____   _____
     May 6: _____   May 9: _____
                   _____   _____
     May 7: _____
                   _____

6.   Pass out A-grade criterion sheet.

7.   Three other assignments you can use if you like:
     a.   Identify 5 pupils with low SC and practice SC skills on
          them all day
     b.   Concentrate on avoiding all negative self-concept behaviors.
     c.   Concentrate on using M, IC+, and AP+ whenever possible
          throughout the day. Use I+, TS+, RS+, TE, EP, Prompting
          Behavior, and TR whenever the situation arises.

May 9

1.   Pair off and replay your audio tapes. Turn in completed Listening
     Guides #5 and #6. (#6 is actually Guide #8, included.)

2.   Discuss entire course

M

TE

TE

TR

<div align="right">

_____
Date

_____
Your Name

_____
Teammate's Name

</div>

SELF-CONCEPT PROTOCOLS

Listening Guide

Practice Tape 3

<u>Instructions</u>: As you and your teammate listen to your audiotapes, tally the listed behaviors on the following form.

Tally each time the following behaviors were used:

		Your tape	Teammate's tape
1.	Talking to the situation (TS+)	_____	_____
2.	Restating the situation (RS+)	_____	_____
3.	Verbal judgement and labeling (VJ-)	_____	_____
4.	Should-Could remarks (SC-)	_____	_____
5.	Modeling (M)	_____	_____
6.	Teacher Reinforcement (TR)	_____	_____
7.	I-message (I+)	_____	_____
8.	You-message (Y-)	_____	_____

What was the length of your tape?_____minutes. How skillful were you in avoiding the negative behaviors? Did you have any opportunities to use TS+ and RS+? Were they used at appropriate times? Did you sound natural? Did pupils respond in satisfactory manner? Rate yourself and your teammate on the following scale:

yourself

_____   _____ very good

_____   _____ satisfactory

_____   _____ need more practice

Appendix D

Expanded Table 3

Individual Teacher Use Frequency of Teacher Anger Behaviors

	Positive I-Message				Negative You-Message			
	Teachers				Teachers			
Observations	A	B	C	D	A	B	C	D
1	0	0	1	1	0	0	0	1
2	0	0	1	0	0	0	0	0
3	1	0	0	1	0	0	0	2
Treatment I -- Teacher Anger Module Taught								
4	2	3	8	9	0	0	1	0
5	3	3	12	20	0	1	1	1
6	3	3	5	9	1	0	0	1
7	5	0	5	11	0	0	0	0
8	13	1	5	12	0	0	0	0

Figure D1. Teacher Anger Module. Use of Positive I-Message versus use of Negative You-Message for Teacher A.
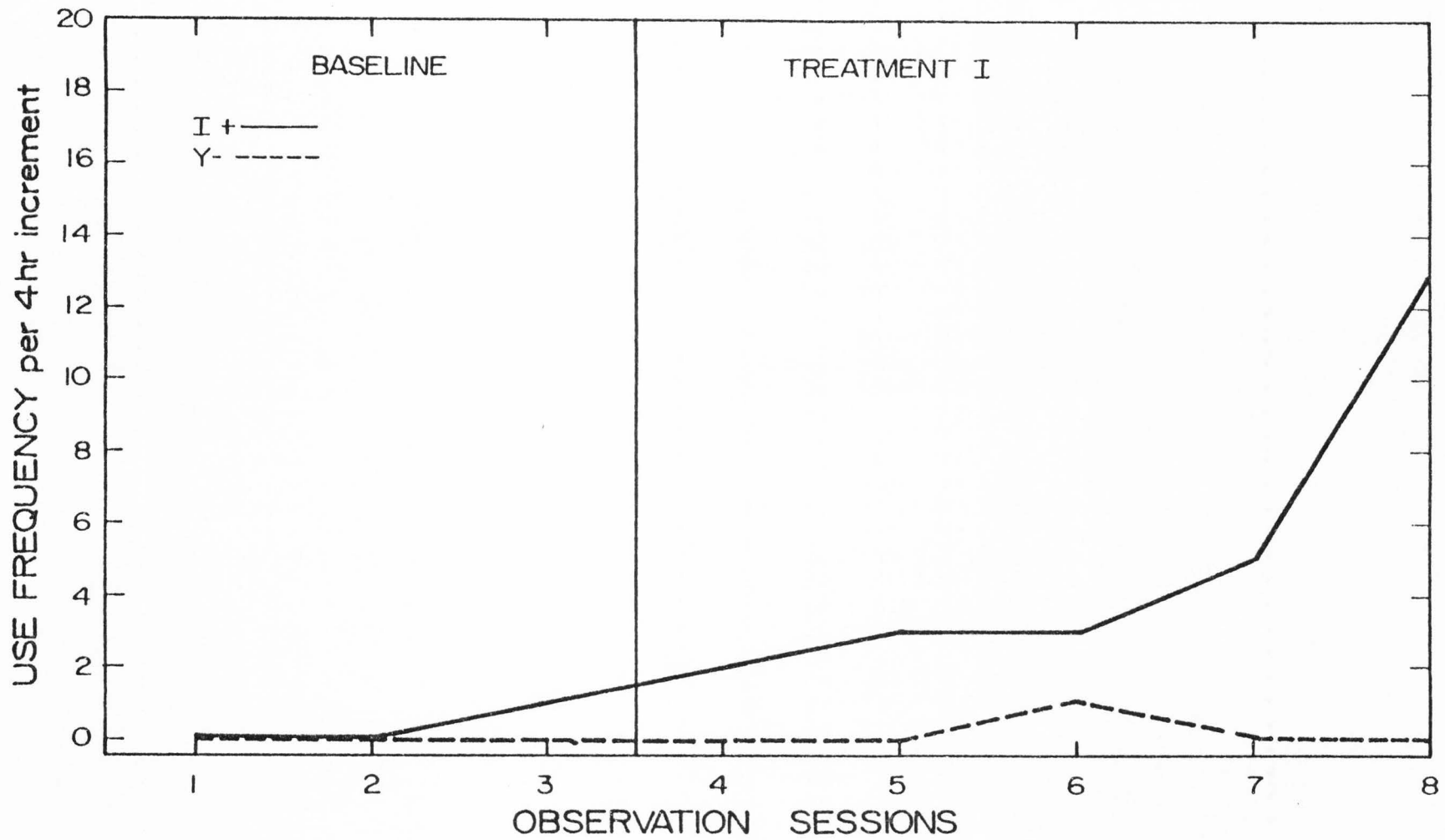
Figure D2. Teacher Anger Module. Use of Positive I-Message versus use of Negative You-Message for Teacher B.
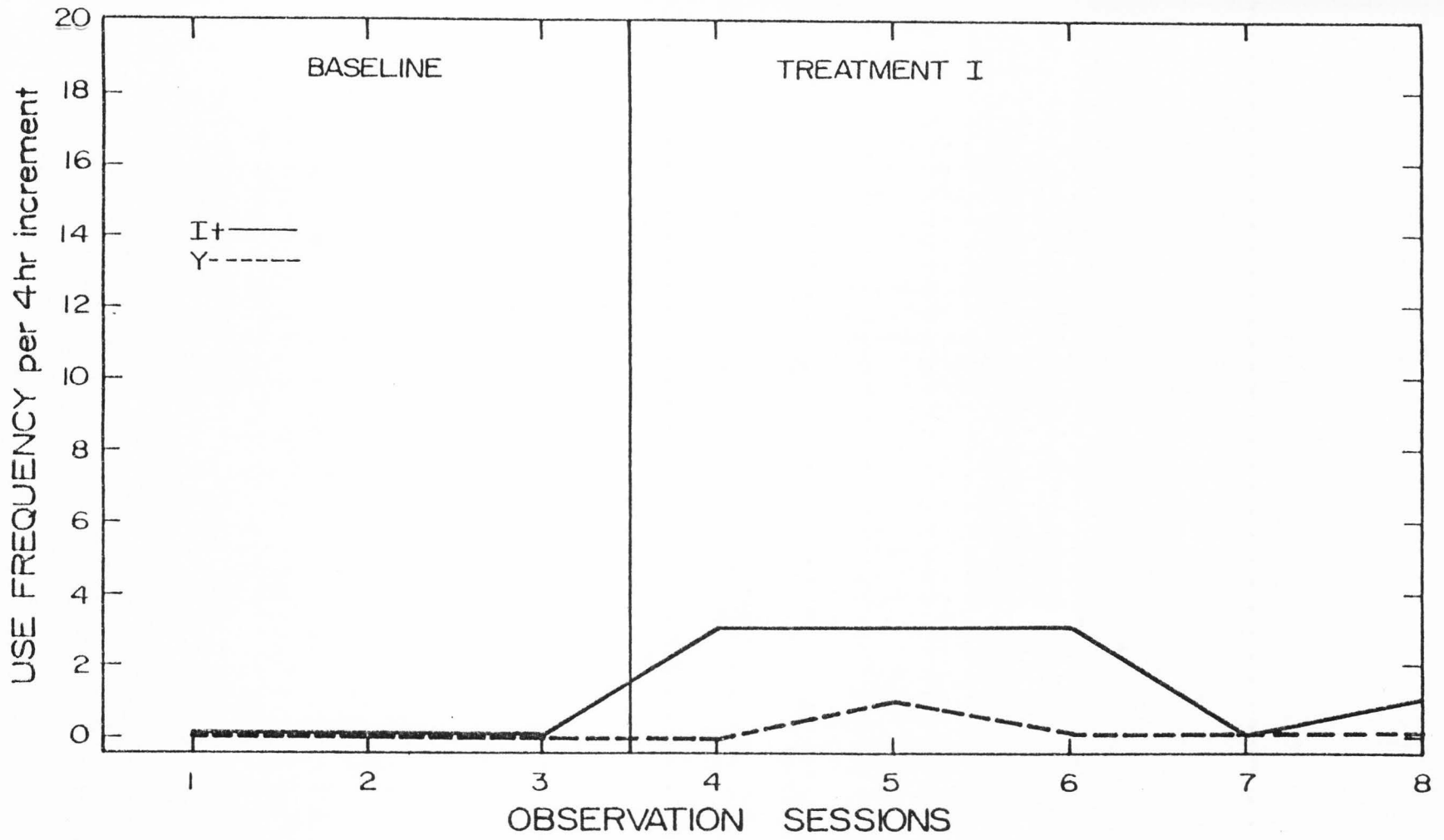
Figure D3. Teacher Anger Module. Use of Positive I-Message versus use of Negative You-Message for Teacher C.
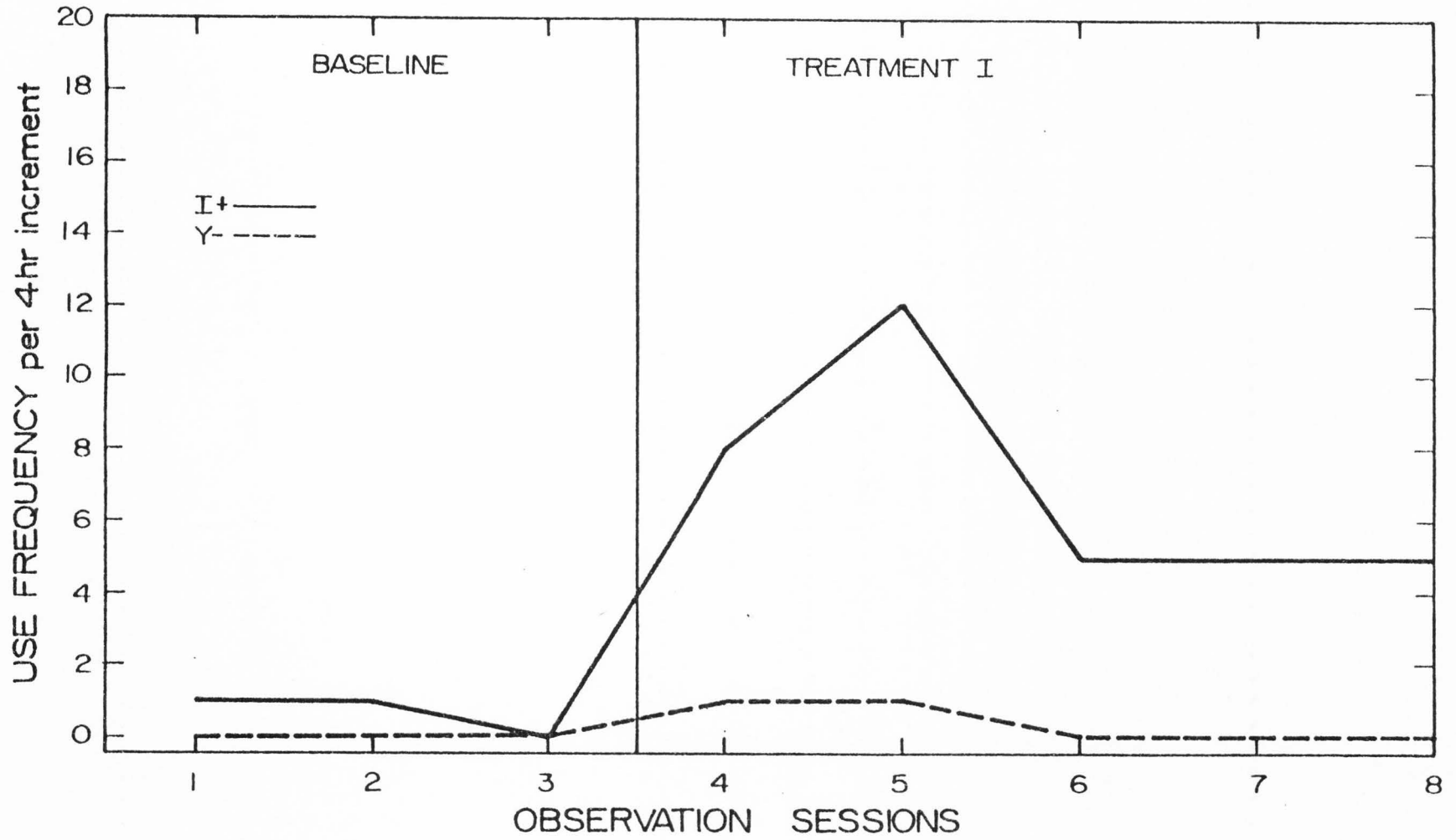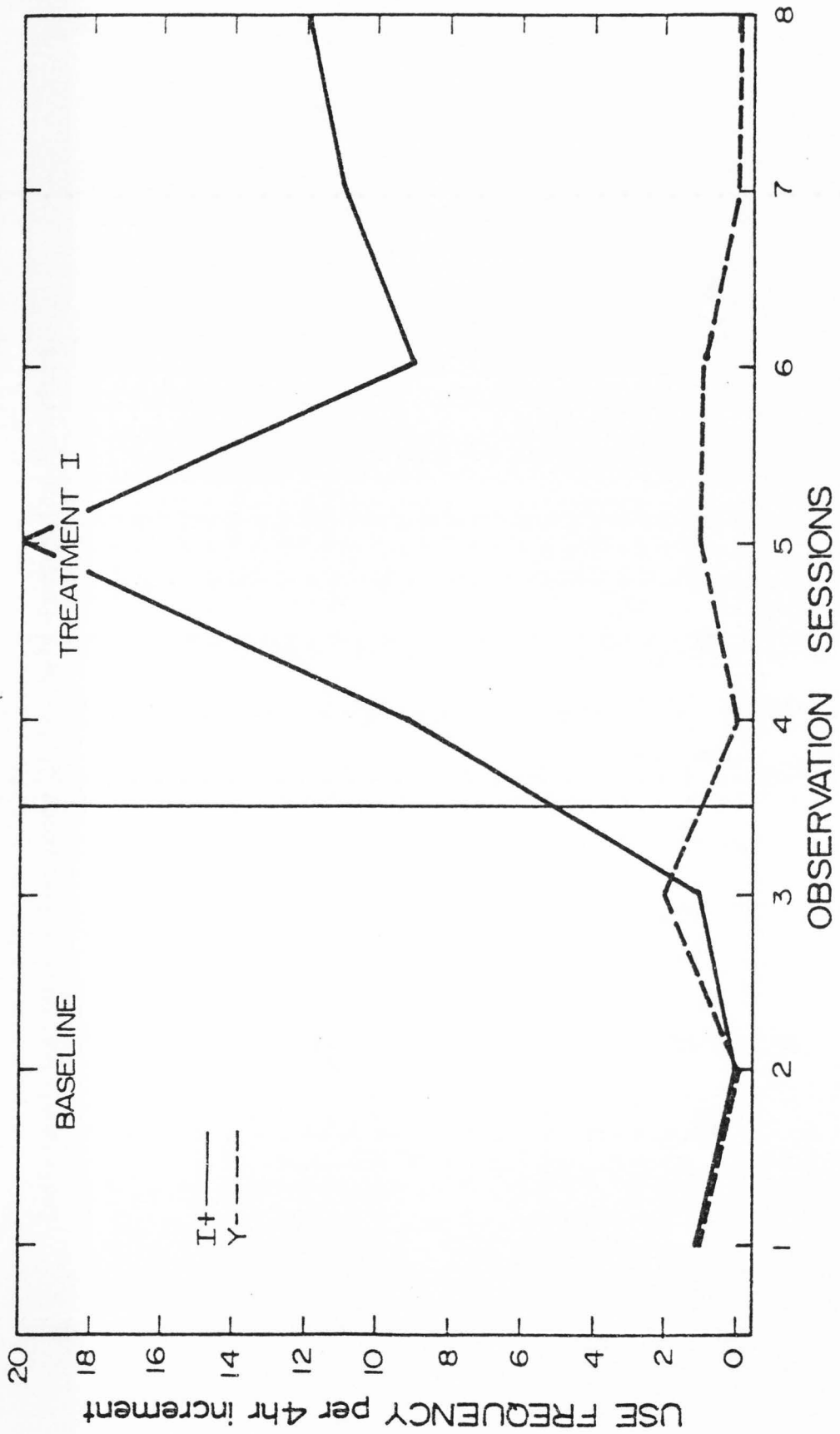
Figure D4. Teacher Anger Module. Use of Positive I-Message versus use of Negative You-Message for Teacher D.

Expanded Table 4

Individual Teacher Use Frequency of the Self-Perception Behaviors

Observations	Modeling				Negative Pupil Self-Remarks[b]				Teacher Extinction				Percent Correct Teacher Response[e]				Teacher Elicits Praise				Pupil Positive Self-Remarks				Teacher Reinforcement				Percent Correct Teacher Response			
	A	B	C	D[a]	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1	1	3	0	0	2	1	0	6	0	0	0	0	0	0	0[d]	0	1	0	0	0	0	0	5	7	0	0	5	4	0	0	100	57
2	2	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	7	7	1	2	6	4	100	100	86	57
3	1	0	1	0	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	7	4	8	0	4	4	2	0	57	100	25
4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	7	0	5	0	3	0	83	0	43

Treatment II -- Self-Perception Module Taught

Observations	Modeling				Negative Pupil Self-Remarks				Teacher Extinction				Percent Correct Teacher Response				Teacher Elicits Praise				Pupil Positive Self-Remarks				Teacher Reinforcement				Percent Correct Teacher Response			
5[c]	5	9	7	7	3	1	19	1	0	0	19	1	0	0	100	100	2	0	19	2	0	21	67	23	0	12	66	15	0	57	99	65
6	4	3	1	0	2	2	5	0	0	0	5	0	0	0	100	0	0	1	6	0	1	3	12	3	1	1	11	3	100	33	92	100
7	9	2	7	4	1	0	0	3	0	0	0	2	0	0	0	66	1	0	2	0	0	6	12	13	0	5	11	11	0	83	92	84
8	10	7	6	5	2	1	0	2	2	1	0	1	100	100	0	50	2	0	'0	1	1	12	7	16	1	11	6	13	100	92	86	81

[a] ABCD are the respective Teachers as discussed in text

[b] Pupil Negative and Positive Self-Remarks were tallied only if the teacher could have heard them and responded.

[c] The increase in occurrence of Negative Pupil Self-Remarks, Positive Pupil Self-Remarks and Teacher Elicits Praise can be attributed to teacher use of the Prompting behavior which was taught but not tallied per se during observations since no baseline data was collected on Prompting.

[d] Underlined 0's should be zero teacher response because there was no pupil remark to which to respond.

[e] Percept correct teacher responses means the percent of the responses that were correct given the pupil negative or positive Pupil Self-Remarks that occurred during that observation session.

Figure D5. Self-Perception Module. Occurrence of Pupil
Negative Remarks elicited by Prompting and followed directly
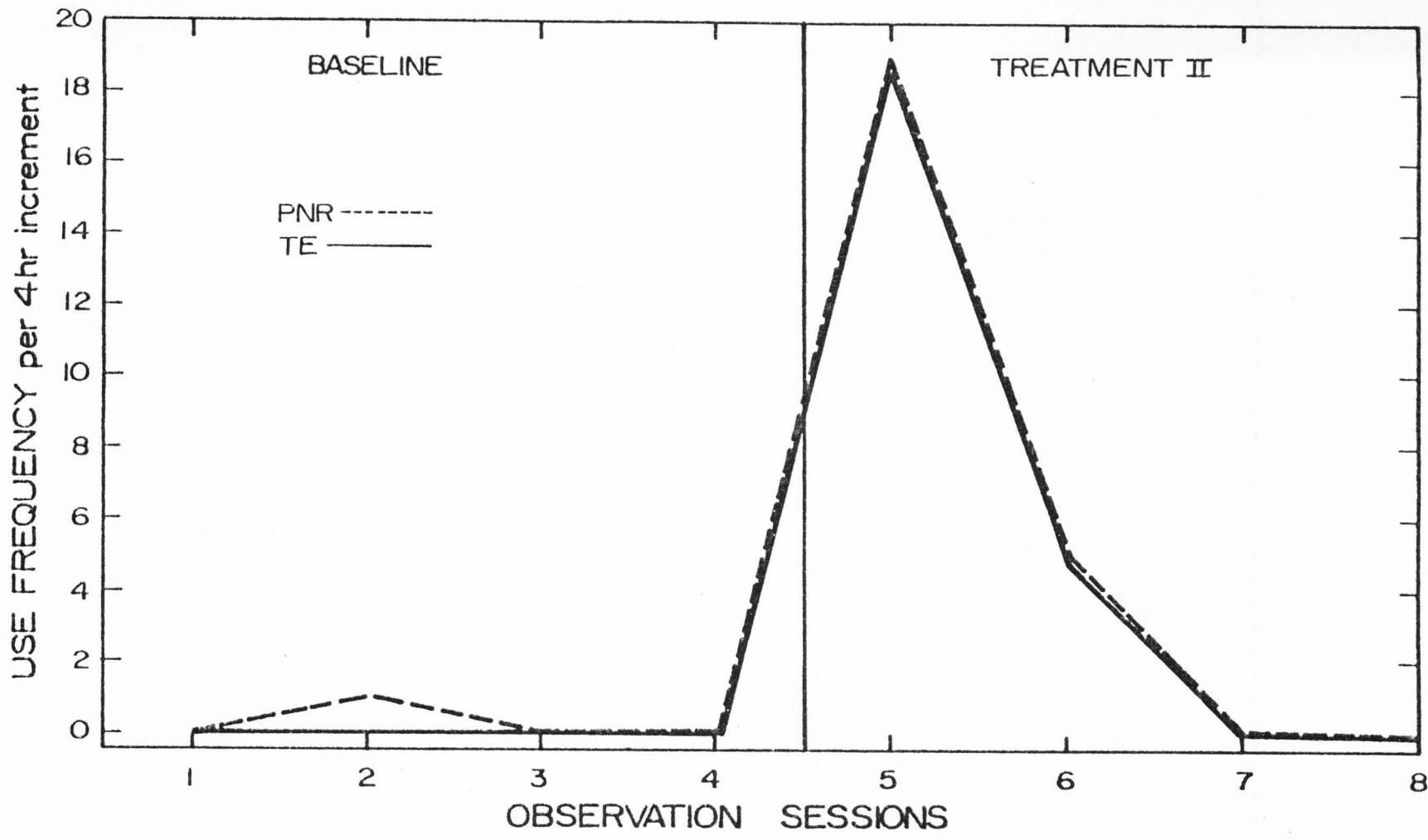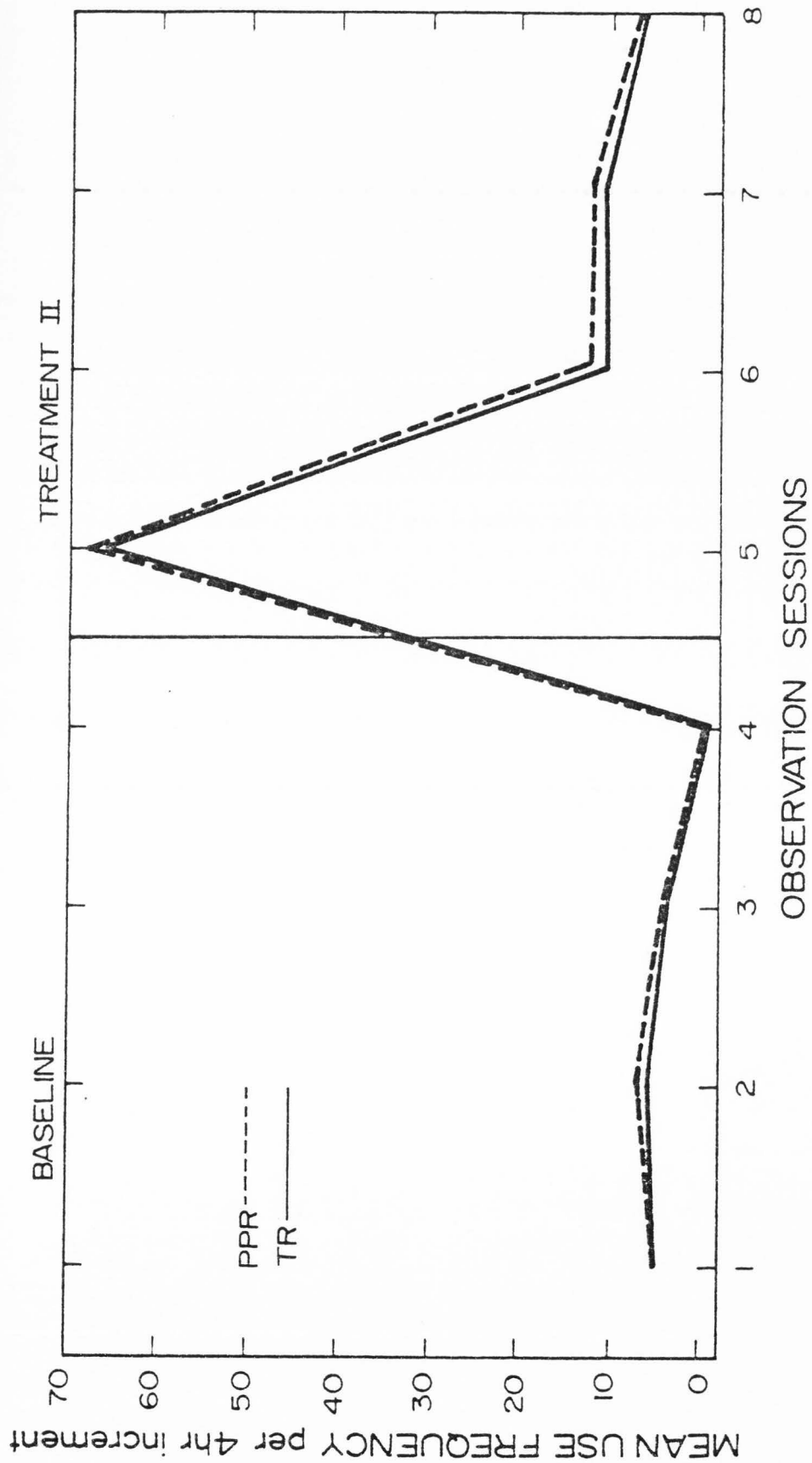by Teacher Extinction for Teacher C.

Figure D6. Self-Perception Module. Occurrence of Pupil Positive Remarks elicited by Prompting and followed directly by Teacher Reinforcement for Teacher C.

Expanded Table 5

Individual Teacher Use Frequency of Verbal

Description -- Part I Behaviors

Observations	Positive Describing the Situation				Negative Verbal Judgement				Percent Describing the Situation			
	Teachers				Teachers				Teachers			
	A	B	C	D	A	B	C	D	A	B	C	D
1	14	16	9	19	30	13	11	52	32	55	11	27
2	6	5	12	15	24	15	13	65	20	25	48	19
3	12	14	10	12	24	5	10	91	33	74	50	12
Treatment I -- Teacher Anger Module Taught												
4	10	6	3	11	7	6	4	31	59	50	43	26
5	9	18	6	9	12	2	5	10	43	90	55	47
Treatment III -- Verbal Description Part I Taught												
6	37	23	29	28	3	5	1	8	93	82	97	78
7	15	9	33	55	3	2	0	3	83	82	100	95
8	19	17	38	39	1	0	1	8	95	100	97	83

Expanded Table 6

Individual Teacher Use of the Verbal

Description Part II Behaviors

	Appreciative Praise				Evaluative Praise			
	Teachers				Teachers			
Observations	A	B	C	D	A	B	C	D
1	41	14	40	23	1	1	12	5
2	24	10	59	11	4	0	6	1
3	54	14	31	18	14	1	0	3
4	45	11	33	10	6	1	4	0
5	21	12	29	18	1	2	3	1
6	34	8	33	11	3	2	6	0
Treatment IV -- Verbal Description Part II Module Taught								
7	72	13	125	51	3	0	1	1
8	69	59	81	48	0	1	1	1

Figure D7. Verbal Description -- Part II. Use of Positive
Inviting Cooperation (IC+) versus use of Negative Direct Commands
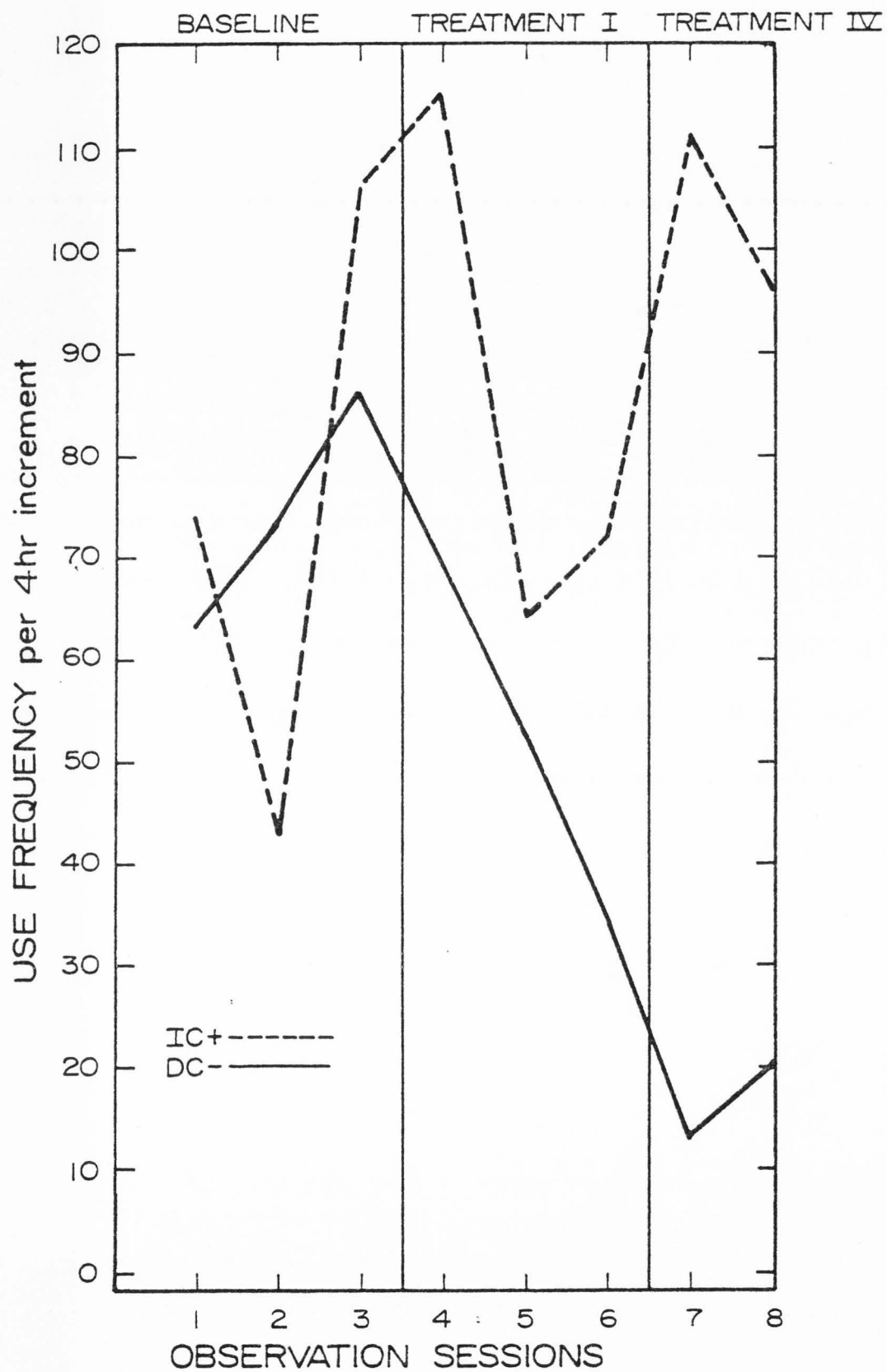(DC-) for Teacher A.

Figure D8. Verbal Description -- Part II. Use of Positive
Inviting Cooperation (IC+) versus use of Negative Direct Commands (DC-)
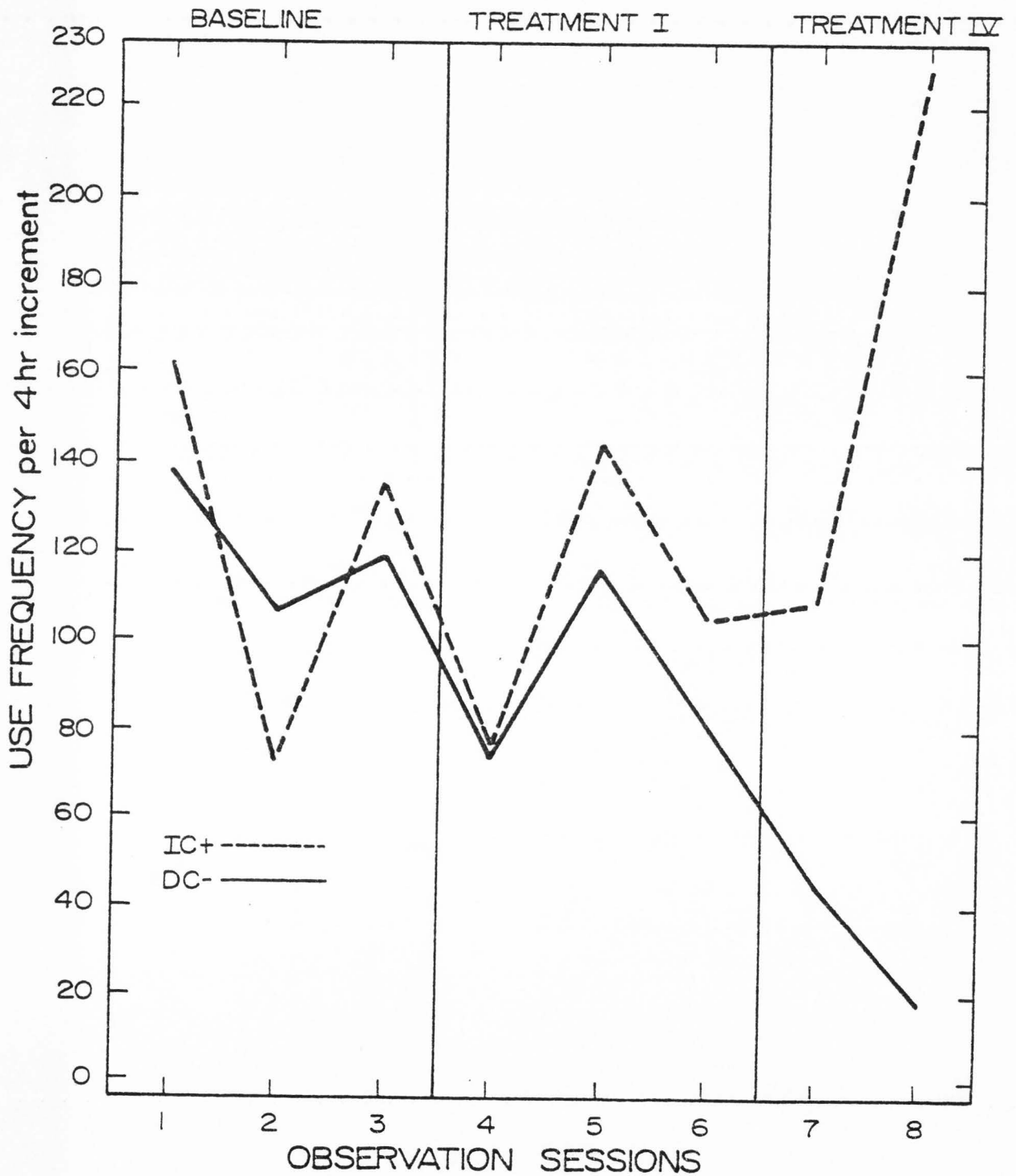for Teacher B.

Figure D9. Verbal Description - Part II. Use of Positive Inviting Cooperation (IC+) versus use of negative Direct Commands (DC-) for Teacher C.
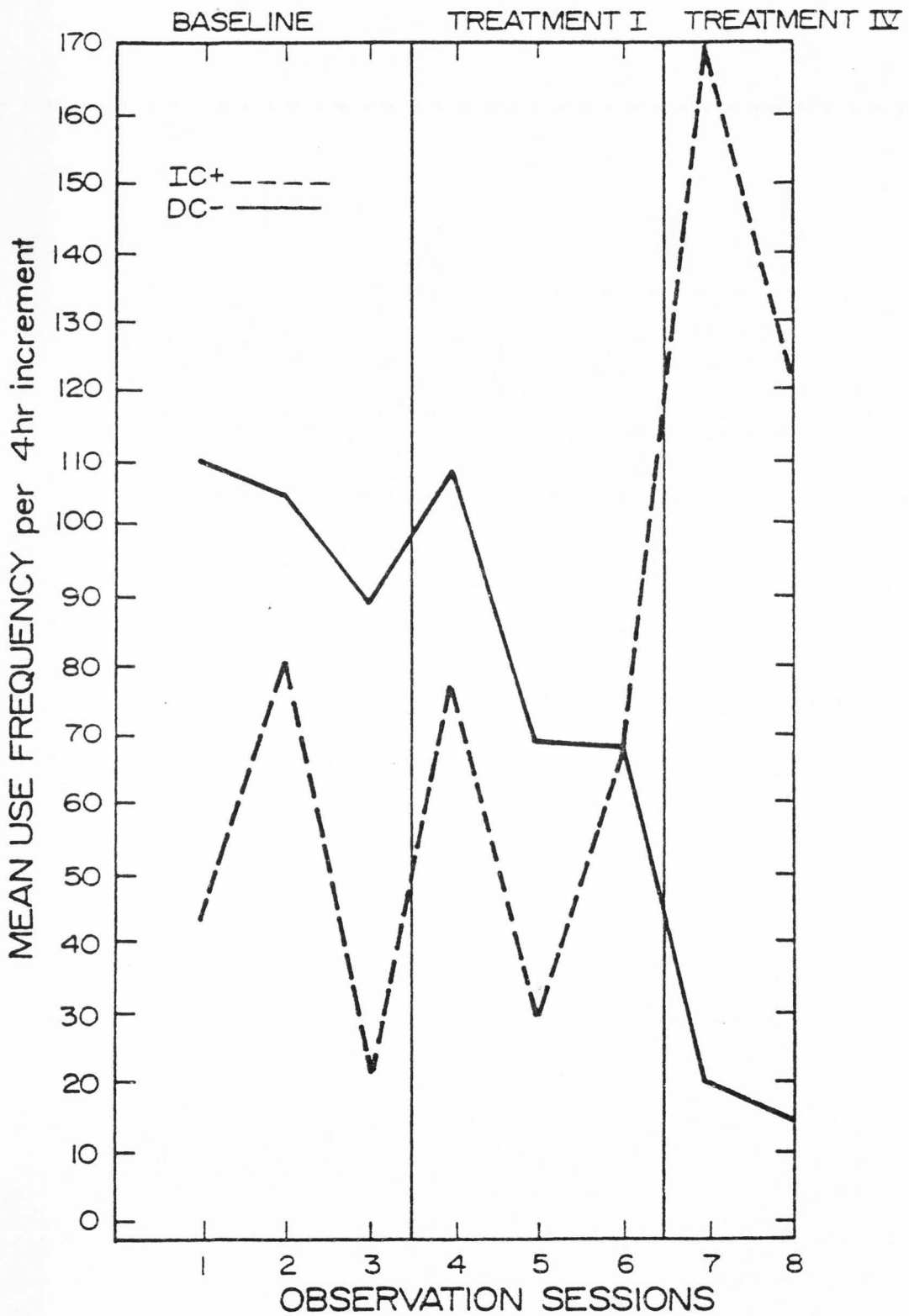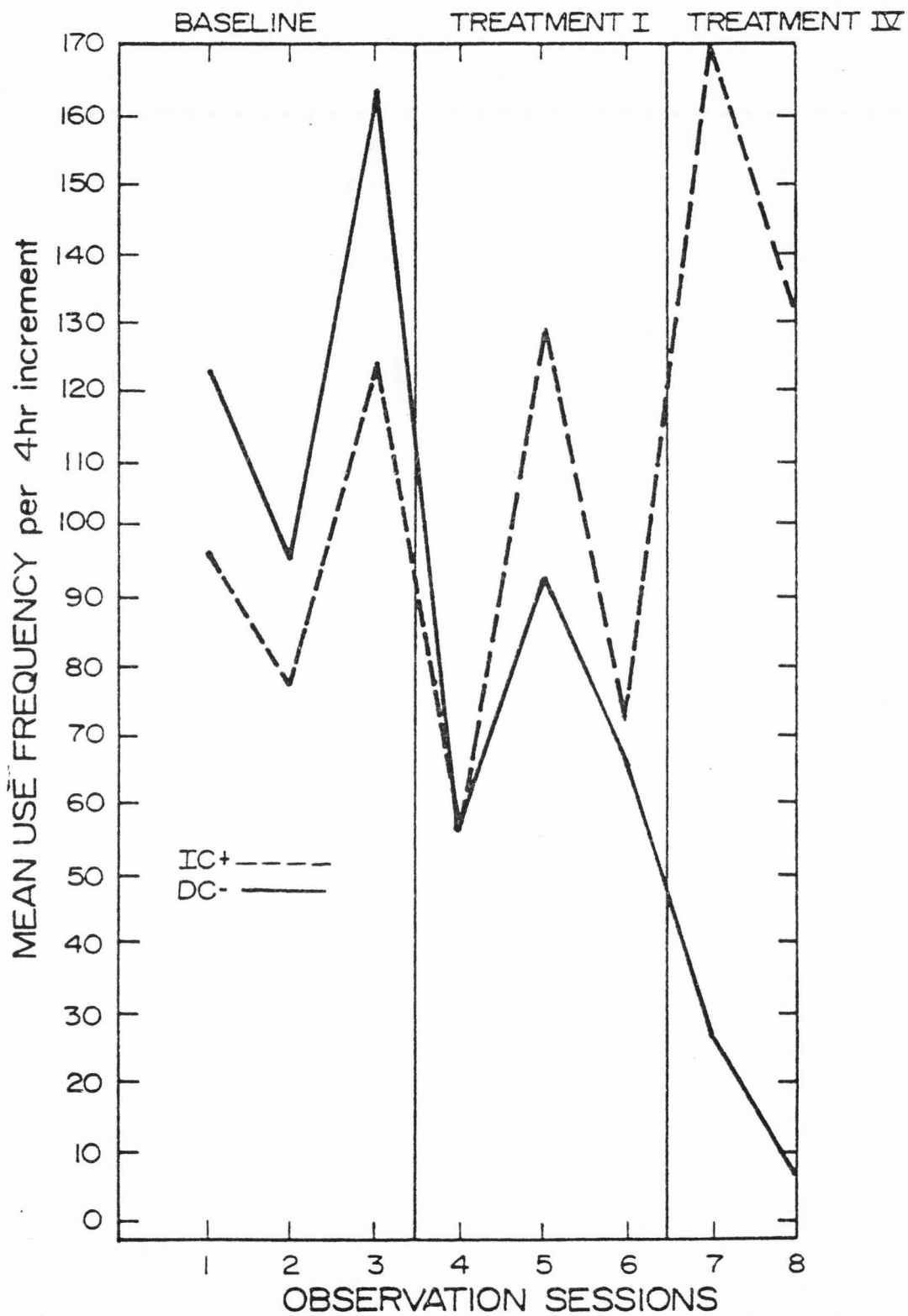
Figure D10. Verbal Description -- Part II. Use of Positive
Inviting Cooperation (IC+) versus use of Negative Direct
Commands (DC-) for Teacher D.

Expanded Table 7

Individual Use Frequency of Verbal Description --

Part II Behaviors

| Observations | Positive Inviting Cooperation | | | | Negative Direct Commands | | | | Percent Inviting Cooperation | | | |
| | Teachers | | | | Teachers | | | | Teachers | | | |
	A	B	C	D	A	B	C	D	A	B	C	D
1	74	161	43	97	63	138	110	123	54	54	28	44
2	42	72	81	77	73	107	105	95	37	50	44	45
3	106	135	21	124	86	119	89	166	55	53	19	43
4	115	76	77	56	38	74	108	56	75	51	42	50
5	64	145	29	129	53	116	69	93	55	56	30	58
6	72	105	66	72	34	80	68	66	68	57	49	52
Treatment IV -- Verbal Description -- Part II Module Taught												
7	113	109	168	169	13	46	20	27	87	70	89	86
8	95	229	124	129	20	18	14	7	33	93	90	95