ABSTRACT
            A study examined the effects of one aspect of trainer
behavior on teachers' classroom behavioral change. The trainer
behavior studied was elicitation of trainee public commitment.
Seventeen teachers participated in a series of workshops from the
Stallings' Effective Use of Time program. These workshops were team
led by teacher, principal, and university trainers, who were in the
process of becoming certified workshop trainers for the program.
Relationships of specific teacher commitments to actual behavioral
changes were measured by pre- and post-classroom observations, using
the Stallings' Observation System (involving snapshots and 5-minute
interactions). The focus of observation was on three major elements:
(1) trainer commitment-generating activity; (2) trainee discussion of
commitment; and (3) trainee response to commitment. Comparisons were
made of the behavior and results obtained in the workshops conducted
by teachers, by principals, and by university personnel. Based on
research on public commitment, the study sought to determine if a
relationship exists between teachers' commitment to behavior change
and the effectiveness of a teacher training program. (Author/JD)

THE IMPACT OF DEVELOPING TEACHER

COMMITMENT TO BEHAVIORAL CHANGE

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2

THE IMPACT OF DEVELOPING TEACHER
COMMITMENT TO BEHAVIORAL CHANGE

by

Roberta Devlin-Scherer

ABSTRACT

Measurement of effectiveness of training programs remains a concern in
both business and education fields (Anderson, 1983; Kirkpatrick, 1983;
Smith, 1983). This study examined the effects of one aspect of trainer be-
havior on teacher's classroom behavioral change. In the research reported
here, the trainer behavior studied was elicitation of trainee public commit-
ment. The relationships of specific teacher commitments to actual behav-
ioral changes as measured by pre- and post-classroom observations, using the
Stallings' Observation System, are discussed. Based on research on public
commitment, the author wanted to determine if there existed a relationship
between teachers' commitment to behavior change and the effectiveness of a
teacher training program.

In their seminal book, <u>Belief, Attitude, Intention,</u>
<u>and Behavior</u> (1975), Fishbein and Ajzen discuss the
determinants of, relationships among and potential for
change of these four above-mentioned variables. They
state that "If one wants to know whether or not an
individual will perform a given behavior, perhaps the
simplest and probably most efficient thing that one can
do is ask the individual whether he intends to perform
that behavior" (p. 369). This kind of asking is one
piece of the fabric making up the Effective Use of Time
program.

REVIEW OF LITERATURE

Evaluation of Training Programs

Kirkpatrick (1983) notes there are four <u>stages</u> in the evaluation of
training programs: reaction (client satisfaction), learning
(knowledge/skills/attitudes), behavior (on-the-job performance), results
(level of productivity, reduction in turnover/costs/accidents, and
improvement in morale).

There are limitations associated with the first kind of evaluation,
participant reaction forms. As Smith (1983) indicates such evaluation is
often a "reflection of the personal agenda, preconceived attitudes and
subjective reactions of each student." To counteract this criticism, the
present study looks beyond the immediate opinions of participants by
investigating the verbal behavior of trainers as they generate commitment in
trainees, and the trainees' responses to these attempts to gain commitment.
Further, this study compares pre-post results of each participant's
computerized profile which are derived from direct classroom observation.
These profiles are compared to see if differences in teacher and student
classroom behavior are related to the commitments made by teacher trainees
during the training sessions. In Kirkpatrick's terms, this study examines
the relationship of stated learnings on the behavior of participants.

The Literature of Commitment

Research and evaluation of such diverse areas as smoking reduction
programs, counseling approaches in the elementary school, and energy
conservation suggest that public commitment to a specific change has been
influential in determining altered behavior of participants. The process of

making commitments may relate to teachers' ability to make changes in their behavior.

Principles derived from small group processes have been applied and tested in a corrective group for smoking cessation. In a study conducted by Crosbie in 1972, four interventions were examined: solely experimenter attention; experimenter attention and small group sessions; experimenter attention, small group sessions and public commitment; and last, experimenter attention, small group sessions, public commitment and goal setting and interdependence. Investigators believed that smoking behavior would cease under increasing pressures of conformity and control as evidenced above in the four treatments. Smoking behavior did reduce under conditions of more extensive social pressure (Crosbie, et al., 1972). In a related study at the junior high level, smoking prevention was seen to be an attainable goal through peer and teacher modeling and a curriculum employing roleplaying and public commitment (Perry, et al., 1980).

An elementary school description of a counseling program suggests that public commitment may assist students in altering and maintaining a new behavior. If the selected alternative behavior matches the students' belief of what their attitude should be and brings with it desired results, then the behavior is more likely to become part of a student's repertoire (Rohen and Mayer, 1969).

Public commitment appears to be effective in other educational settings, too. Seventy-four farmers in Central India participated in an investigation of the impact radio listening, group discussion, consensus and public commitment on the willingness to adopt an innovation. Public commitment was useful if combined with the listening and discussion group.

In a study on energy use and conservation, homeowners (n=212) were randomly assigned to one of three treatments: (1) public commitment (names and results publicized), (2) private commitment (anonymity assured), (3) no treatment. Results indicate that homeowners who made public commitments had lower rates of gas and electricity use than the other subjects. Furthermore, this commitment continued after homeowners were informed that the study was completed (Pollak, et al., 1980).

Commitment may be a factor in training programs as well. In seeking to describe effective trainer behaviors, Anderson (1983) analyzed audio tapes of sessions with five different trainers leading workshop sessions adopted from the Stallings Effective Use of Time program. She observes that the trainer who was least effective in terms of obtaining teacher behavior change failed to engage teacher trainees in public commitment. She states that "a public commitment to change is an important incentive to cause people to change" (p. 51).

Assessment of Trainer Verbal Behavior

A search of the literature in the fields of business and education on the topic of assessment of trainer verbal behavior revealed a few helpful articles. Roland (1983) notes that Cheffer's Adaptation of the Flanders' Interaction Analysis System (CAFIAS) has been used in corporate training programs to study verbal and nonverbal training style. CAFIAS offers feedback on the percentage of trainer and trainee verbal and nonverbal contributions, amount of time devoted to content and learning source (trainer, trainee, environment). Trainer verbal behavior can be further analyzed in these familiar categories: acceptance of feelings, praise, use of student ideas, questions, lectures, criticism. Roland presents a single case study of a trainer whose style altered in the following desirable

directions: increased nonverbal behavior, frequency of questions, and

acceptance of trainee thoughts. Additionally, the trainer expanded his

sources of learning to include more of the environment and trainee as

teacher. Roland recommended that consistent behavior among training staff

can be assessed using the CAFIAS as well as providing an individual trainer

with feedback.

A broader study of trainer verbal behavior, however, comes from the

field of education. Anderson (1983) assessed workshop sessions of five

trainers in a replication of the Effective Use of Time program in

Washington, D.C. Using four different tools and processes (trainer

references to program variables, Flanders' Interaction Analysis, Smith's

Analysis of the Logic of Teaching and a content analysis), she was able to

examine trainer-trainee interactions for relationship to teacher behavior

changes in practicies recommended in the program. Although no conclusive

findings can be drawn from this study because of the small sample, it has

implications for future research efforts in trainer verbal behavior.

SUBJECTS

Teachers

Seventeen teachers (K-6=__; 7-9=__; 10-12=__) from a rural school

district in North Carolina participated in a series of workshops from the

Effective Use of Time program. These workshops were team led by teacher,

principal and university trainers, who were in the process of becoming

certified workshop trainers for the program.

Trainers

As part of their training, the cix workshop trainers had already

observed and discussed demonstration workshop sessions led by a certified

trainer. Each pair of trainers was observed twice by the certified trainer.

Feedback sessions followed each observation. Additionally, audio tapes were made for all sessions and were reviewed.

Development of a Coding System

The investigator transcribed the second workshop conducted by the principal, teacher, and university trainers. The tapes for Workshop 2 totaled nine hours and yielded nearly one hundred pages of transcription. These nine hours of training were analyzed to define a commitment segment and its subcategories. An initial category system was designed and sample commitment segments from Workshop 2 were rechecked with this instrument. Subcategories which were infrequently mentioned or seemed to overlap were dropped from the system. Two independent raters reviewed definitions and examples of each category. Most subcategories were represented twice. An interrater agreement of eighty-six percent was achieved. At this point the investigator analyzed the remaining tapes using the coding system. Commitment segments from Workshop 3 which were conducted by the principal, teacher, and university trainers were transcribed and each commitment segment was analyzed. Workshop 1 and Workshop 4 were coded by listening to the audio tapes and using the Commitment Sequence Descriptor Form. In this study Workshop 5 for all groups was omitted because this session tends to be a wrap-up of all workshops; limited time, if any, is devoted to commitments. Part of the teacher trainers' Workshop 1 was inaudible and therefore was not reviewed.

METHODS

Stallings' Effective Use of Time Program

The components of this National Diffusion Network program include a plan for three different trainings: observers, teacher workshops, training of trainers. This plan makes it possible for a local school district to

9

Table 1

COMMITMENT SEQUENCE DESCRIPTORS

I. Trainer Commitment Generating Activity

   A. Defines/clarified/explains commitment category
   B. Directs question to group
   C. Calls on specific trainee
   D. Offers specific strategies
   E. Cites examples from other teachers/own teaching
   F. Challenges trainee(s)
   G. Praises trainee attempt or success

II. Trainee Discussion of Commitment

   A. Volunteers idea
   B. Offers background/describes situation
   C. Identifies problem
   D. Reports success
   E. Reports partial success
   F. Reports nonsuccess
   G. Asks for help

III. Trainee Response to Commitment

   A. Makes or follows up commitment
   B. Makes tentative/qualified commitment
   C. Questions/doubts value of commitment
   D. Ignores/refuses commitment
   E. Off-task remark

adopt and continue this program. They can have their own personnel certified as trainers and carry on the program in future years.

In this study there were three training groups conducted by principal, teacher, and university trainers. Their sessions from four workshops were audiotaped in order to study the notion of commitment. Initially some of the transcribed tapes served to develop a coding system for defining and analyzing commitment segments.

INSTRUMENTATION

Commitment Sequence Descriptor Form

Three main categories comprise the <u>Commitment Sequence Descriptor Form</u>: Trainer Commitment Generating Activity, Trainee Discussion of Commitment, and Trainee Response to Commitment. The first category, <u>Trainer Commitment Generating Activity</u>, reflects statements trainers make during a commitment. In three of the subcategories, the trainers provide information: defining a category, offering specific strategies, citing examples from other teachers/own teaching. The remaining subcategories capture the trainers' verbal statements designed to elicit responses from trainees. Generally a commitment sequence will be initiated by a trainer directing a question to the group or a specific trainee. The subcategory, challenges trainee, occurs during extended interactions over either particularly difficult situations or situations trainees are choosing to see as insoluble. Praising of trainee efforts most frequently occurs at the close of a commitment sequence; although, from time to time, a trainer may open a commitment sequence by recognizing trainee abilities or accomplishments. Occasionally, a trainer may praise in the middle of a sequence, perhaps with the intention of encouraging a trainee to keep trying.

11

The second main category, _Trainee Discussion of Commitment_, is composed of trainee comments during a commitment interaction. If the trainer solicits trainee assistance, most typically trainees volunteer ideas related to the problem at hand. Initially when a trainer asks a trainee to follow up a commitment made in a previous session, a trainee will frequently offer some background information. A trainee may also identify a problem which has become evident because the situation is being closely observed for patterns of behavior or, perhaps feeling slightly unsuccessful, the trainee may call up problems with performing the commitment. Participants in the training do report success to varying degrees which is reflected in the three different subcategories relation to reporting success. Occasionally trainees also solicit suggestions from their peers.

The third main category, _Trainee Response to Commitment_, offers descriptors for the kinds of commitment trainees may state during a sequence. It is possible for a trainee to respond with more than one kind of commitment within a commitment sequence.

Stallings' Observation System

The Stallings Observation System has two main parts: the Snapshot and the Five Minute Interaction. The Snapshot captures the kind of materials, size of groups, activities, and participants. Fifteen snapshots are completed on one class over a three day period. The Five Minute Interaction records teacher student interactions, including questioning style, student response, and teacher feedback. Over a three day period fifteen different Five Minute Interactions are done for each teacher. These observations are translated into teacher behavioral profiles indicating teacher and student allocation of classroom time by activity.

ANALYSIS OF DATA

The Coding System

Each subcategory of the <u>Commitment Sequence Desr... ptor Form</u> received a single mark when the specified verbal statement occurred during a commitment segment. The total number of commitment segments were recorded for each workshop by role group. Verbal statements occurring outside of a commitment segment were not recorded. However, the subcategories of calls on specific trainee(s) and challenges trainee(s) were marked slightly differently. A mark was not made in the subcategory of "calls on specific trainee" when the trainer and trainee had a brief exchange that was a continuation of the previous conversation. A mark was made in the subcategory challenges trainee when the trainer asked the trainee or group for the third time to offer possible solutions to the identified problem. Within each of the three major categories, Trainer Commitment Generating Activity, Trainee Discussion of Commitment, Trainee Response to Commitment, marks were totaled by workshop. Proportions within subcategories under these three headings were calculated using the total score for a main category as the denominator. Thus, in Workshop 2, principal trainers had a total of 46 different commitment generating activity statements. Within the subcategory of "defines, explains or clarifies," they had a total of 11 statements. This number was divided by 46 to arrive at a proportion of defining activity accomplished by trainers in relation to other Commitment Generating Activities. These data were gathered for each workshop session and for each role group and depicted through the use of line graphs. In addition, mean proportions for each subcategory were computed across all workshop sessions.

To determine discrepancies in verbal behavior among role groups an arbitrary difference of .10 served as a decision rule. In assessing

congruent behavior among role groups, a .05 proportional difference among role groups was used as a decision rule. Tables 5 and 6 serve as the data source for making discrepant and congruent comparisons in verbal behavior among workshop sessions and rol groups. Finally, the investigator categorized samples of trainer and trainee verbal behavior which a teacher trainer could use to infuse the concept of commitment to changed behavior in a training program.

Teacher Behavioral Profile

Verbal commitments made by teachers to specific profile variables were recorded. Pre- and post-profiles of each teacher participant were analyzed to determine if changes in teacher and student behavior had occurred in directions recommended in the workshops.

In the Effective Use of Time program each teacher/trainee receives individualized computerized printouts. These printouts reveal ways the teacher has allocated his/her time over a three-day period. It also reflects student engagement in various academic activities, group sizes, and amount of social interaction and classroom management. The profile printout indicates the amount of time a teacher is spending on interactive instruction, noninteractive instruction, organizing behavior and off-task behavior of students. Profiles are generated before and after the workshop series. Thus, participants can compare their profile printouts and see their improvements after the training.

RESULTS

Number of Commitment Segments

Table 4 reflects the number of commitment sesgments by role group and workshops.

14

Table 2

BASIC SKILLS TEACHER PROFILE

VARIABLES	CRITERION	YOUR CLASS
001 All academic statements - 0	80.00	81.30
002 Teacher instructs/explains - M	25.00	20.10
003 Teacher asks direct questions - M	8.00	5.70
004 Teacher asks clarifying questions - M	3.00	.10
005 Teacher calls upon different students - M	6.00	1.70
006 Students respond - 0	8.00	9.30
007 Teacher praises or supports - M	4.00	2.80
008 Teacher corrects - M	4.00	4.10
009 Teacher corrects and guides - M	2.00	2.60
010 Students read aloud - M	12.00	.00
011 Teacher reads aloud - M	10.00	1.10
012 All organizing or managing statements - 0	12.00	10.00
013 Teacher working alone - 0	5.00	3.90
014 Teacher monitoring written work - 0	15.00	.00
015 All behavior statements - L	3.00	8.10
016 All social statements - 0	2.00	.50
017 Intrusions - L	.00	2.00
018 Positive interactions - M	2.00	.00
019 Negative interactions - L	.00	1.10
020 Praising interactions - 0	2.00	3.00

M = a little more
0 = okay
L = a little less

15

Table 3

BASIC SKILLS TEACHER PROFILE
SNAPSHOT

SUMMARY REPORT 4
ADULT INVOLVEMENT IN TASKS

		YOUR CLASS
TEACHER INVOVEMENT WITH		
	Reading silently - noninteractive	.00
M	Reading aloud - interactive	.00
	Making assignments - organizing	.00
	Instruction/explanation - interactive	13.30
	Discussion/review assignments - interactive	33.30
M	Practice drill - interactive	.00
	Written assignments - noninteractive	6.60
M	Taking test/quiz	.00
	Social interaction - off task	.00
L	Student uninvolved - off task	6.60
	Being disciplined - off task	.00
L	Classroom management - organizing	26.60

M = try these
L = do less

Interactive instruction (reading aloud, instruction, discussion, practice drill) - 46%

Noninteractive instruction (reading silently, written assignments) - 6%

Organizing (making assignments, classroom management) - 26%

Off task (social interaction, student uninvolved, being disciplined) - 6.6%

Table 4

NUMBER OF COMMITMENT SEGMENTS
BY WORKSHOP AND ROLE GROUP

WORKSHOPS	ROLE GROUPS		
	PRINCIPAL	UNIVERSITY	TEACHER
1	9	6	—
2	15	12	3
3	13	4	6
4	24	15	7
Total number of commitment segments	61	37	16
Mean	15.3	9.3	5.3

Overall, principal trainers had the largest number of commitment segments, while teacher trainers had the lowest. In fact, principal trainers offered more frequent opportunities for public commitment for their trainees—three times more than the teacher trainers and nearly twice the number of university trainers.

Comparisons of Commitment Sequences

Discrepant Verbal Behavior. Tables 5 and 6 display the proportional frequency of verbal statement sucategories by workshops and by role group. In this section, noteworthy differences in frequencies within categories of the Commitment Sequence Descriptor Form are reported.

Trainee Commitment Generating Activity. As one might expect, as the workshop series progressed, all trainers spent less time defining terms. All trainers followed through on calling on specific trainees, an expectation in the training program. However, similar to most classrooms, some trainees were called on more frequently. The subcategory, cites examples from other teachers/own teaching, is worthy of notice in the teacher led sessions. The proportional frequency increased with each of their workshops from .063 to .133 to .292. University and principal trainers rarely used this verbal behavior to exemplify their ideas.

Table 6 displays verbal behavior statements by role group. Teacher trainers did little directing of questions to the group and calling on specific trainees when compared to university and principal trainers. Offering specific strategies and citing examples from actual teaching practices were their strengths. University trainers exhibited the highest proportional frequency of praise of trainees.

Trainee Discussion of Commitment. Table 5 shows that in Workshop 3, all three training groups devoted discussion to identifying problems. Since

the topic of this session is behavior management, attention to identifying

problems seems appropriate. In Workshops 3 and 4, grou, were similarly

active in volunteering ideas. Trainees reported success or partial success

in most sessions following Workshop 1. Reports of nonsuccess and asking for

help were infrequent incidents.

As indicated in Table 6, trainees offered ideas in all three groups;

however, they did so more frequently in the university trainer group where a

higher percentage of questions were directed to the group and least in the

teacher trainer group where infrequently trainees had questions directed to

the group. Trainees in the teacher led group tended to offer background

information and identify problems more often than in other groups.

Trainee Response to Commitment. Data analyzed by workshops revealed

that trainees made public commitments to changed behavior throughout the

workshop series with the strongest frequency of statements occurring in

Workshops 2, 3, and 4 for principal trainers, and Workshops 3 and 4 for

teacher trainers. Workshops 1 and 2 yielded the greater proportion of

clearly made commitments in the university led training. In Workshops 2 and

4, trainees tended to qualify or make tentataive commitments more

frequently; while Workshop 3 seemed to draw more questioning of commitments

on the part of trainees.

The trainees in the teacher led group made commitments much less often

than in principal and university led groups, nearly a 40% difference. Over

20% of trainee response to commitments were of a qualified nature in the

university and teacher led groups, whereas less than 7% of trainee response

to commitment appeared in the qualified commitment subcategory for the

principal led groups.

Table 5

COMMITMENT SEQUENCE DESCRIPTORS

FREQUENCY OF STATEMENTS – WITHIN CELL PERCENTAGES

(Comparison by Workshop)

		WORKSHOP #1		WORKSHOP #2			WORKSHOP #3			WORKSHOP #4		
		Principals	University Personnel	Principals	University Personnel	Teachers	Principals	University Personnel	Teachers	Principals	University Personnel	Teachers
TRAINER COMMITMENT GENERATING ACTIVITY	Defines/clarifies/explains commitment category.	.217	.166	.238	.040	.188	.074	.016	.133	.054	—	.042
	Directs question to group	.130	.166	.095	.280	—	.074	.148	.133	.054	.153	.042
	Calls on specific trainee	.326	.333	.429	.120	.313	.708	.262	.233	.589	.361	.375
	Offers specific strategies.	.196	—	.071	.040	.250	—	.246	.233	.036	.194	.083
	Cites examples from other teachers/own teaching	.022	—	—	—	.063	—	.016	.133	—	.014	.292
	Challenges trainee(s)	.065	—	.095	.160	.063	.111	.295	.066	.107	.097	.125
	Praises trainee attempt or success.	.043	.333	.071	.360	.125	.111	.016	.166	.161	.181	.042
TRAINEE DISCUSSION OF COMMITMENT	Volunteers idea	.532	.800	.372	.353	.077	.379	.385	.250	.318	.426	.316
	Offers background/describes situation	.255	.200	.186	.294	.462	.414	.410	.360	.250	.262	.342
	Identifies problem.	.064	—	.163	—	.308	.034	.205	.286	.068	.082	.211
	Reports success	—	—	.023	.353	—	.103	—	.071	.295	.164	—
	Reports partial success	—	—	.023	—	.154	.034	—	.036	.068	.033	.026
	Reports nonsuccess.	—	—	.047	—	—	—	—	—	—	.016	—
	Asks for help	.149	—	.186	—	—	—	—	.036	—	.016	.105
TRAINEE RESPONSE TO COMMITMENT	Makes commitment.	.400	1.000	.500	.833	.125	.733	.125	.182	.742	.421	.333
	Makes qualified/tentative commitment.	—	—	.111	.083	.375	—	.625	.090	.161	.263	.166
	Questions/doubts value of commitment.	.067	—	.111	—	.375	.133	.250	.364	—	.053	.166
	Ignores/refuses	.267	—	.277	.083	.125	.133	—	.272	.032	.211	.500
	Off-task remark	.267	—	—	—	—	—	—	.090	.063	.053	—

Table 6

COMMITMENT SEQUENCE DESCRIPTORS
FREQUENCY OF STATEMENTS – WITHIN CELL PERCENTAGES
(Comparison by Role Group)

| | | PRINCIPALS | | | | | UNIVERSITY PERSONNEL | | | | | TEACHERS | | | |
| | | Workshop | | | | Mean | Workshop | | | | Mean | Workshop | | | Mean |
		#1	#2	#3	#4		#1	#2	#3	#4		#1	#2	#3	
TRAINER COMMITMENT GENERATING ACTIVITY	Defines/clarifies/explains commitment category.	.217	.238	.074	.054	.146	.166	.040	.016	-	.056	.188	.133	.042	.121
	Directs question to group	.130	.095	.074	.054	.088	.166	.280	.148	.153	.187	-	.133	.042	.044
	Calls on specific trainee	.326	.429	.708	.589	.513	.333	.120	.262	.361	.269	.313	.233	.375	.307
	Offers specific strategies.	.196	.071	-	.036	.076	-	.040	.246	.194	.120	.250	.233	.083	.189
	Cites examples from other teachers/own teaching	.022	-	-	-	.001	-	-	.016	.014	.007	.063	.133	.292	.163
	Challenges trainee(s)	.065	.095	.111	.107	.095	-	.160	.295	.097	.138	.063	.066	.125	.085
	Praises trainee attempt or success.	.043	.071	.111	.161	.097	.333	.360	.016	.181	.223	.125	.166	.042	.111
TRAINEE DISCUSSION OF COMMITMENT	Volunteers idea	.532	.372	.379	.318	.400	.800	.353	.385	.426	.491	.077	.250	.316	.214
	Offers background/describes situation	.255	.186	.414	.250	.276	.200	.294	.410	.262	.292	.462	.360	.342	.388
	Identifies problem.	.064	.163	.034	.068	.082	-	-	.205	.082	.072	.308	.286	.211	.268
	Reports success	-	.023	.103	.295	.105	-	.353	-	.164	.129	-	.071	-	.024
	Reports partial success	-	.023	.034	.068	.031	-	-	-	.033	.008	.154	.036	.026	.054
	Reports nonsuccess.	-	.047	-	-	.012	-	-	-	.016	.004	-	-	-	-
	Asks for help	.149	.186	-	-	.084	-	-	-	.016	.004	-	.036	.105	.047
TRAINEE RESPONSE TO COMMITMENT	Makes commitment.	.400	.500	.733	.742	.594	1.000	.833	.125	.421	.595	.125	.182	.333	.213
	Makes qualified/tentative commitment.	-	.111	-	.161	.068	-	.083	.625	.263	.243	.375	.090	.166	.210
	Questions/doubts value of commitment.	.067	.111	.133	-	.078	-	-	.250	.053	.076	.375	.364	.166	.302
	Ignores/refuses	.267	.277	.133	.032	.177	-	.083	-	.211	.074	.125	.272	.500	.299
	Off-task remark	.267	-	-	.063	.083	-	-	-	.053	.013	-	.090	-	.030

22

Participants in teacher led groups exhibited 22% more doubting or questioning verbal statement behaviors in response to commitment. Nearly 30% of the verbal statements made by teachers in teacher led groups involved ignoring or refusing opportunities to commit to recommended changes. Thus, trainees in teacher led sessions were least likely to state a commitment after a discussion and most likely to question the value of a commitment.

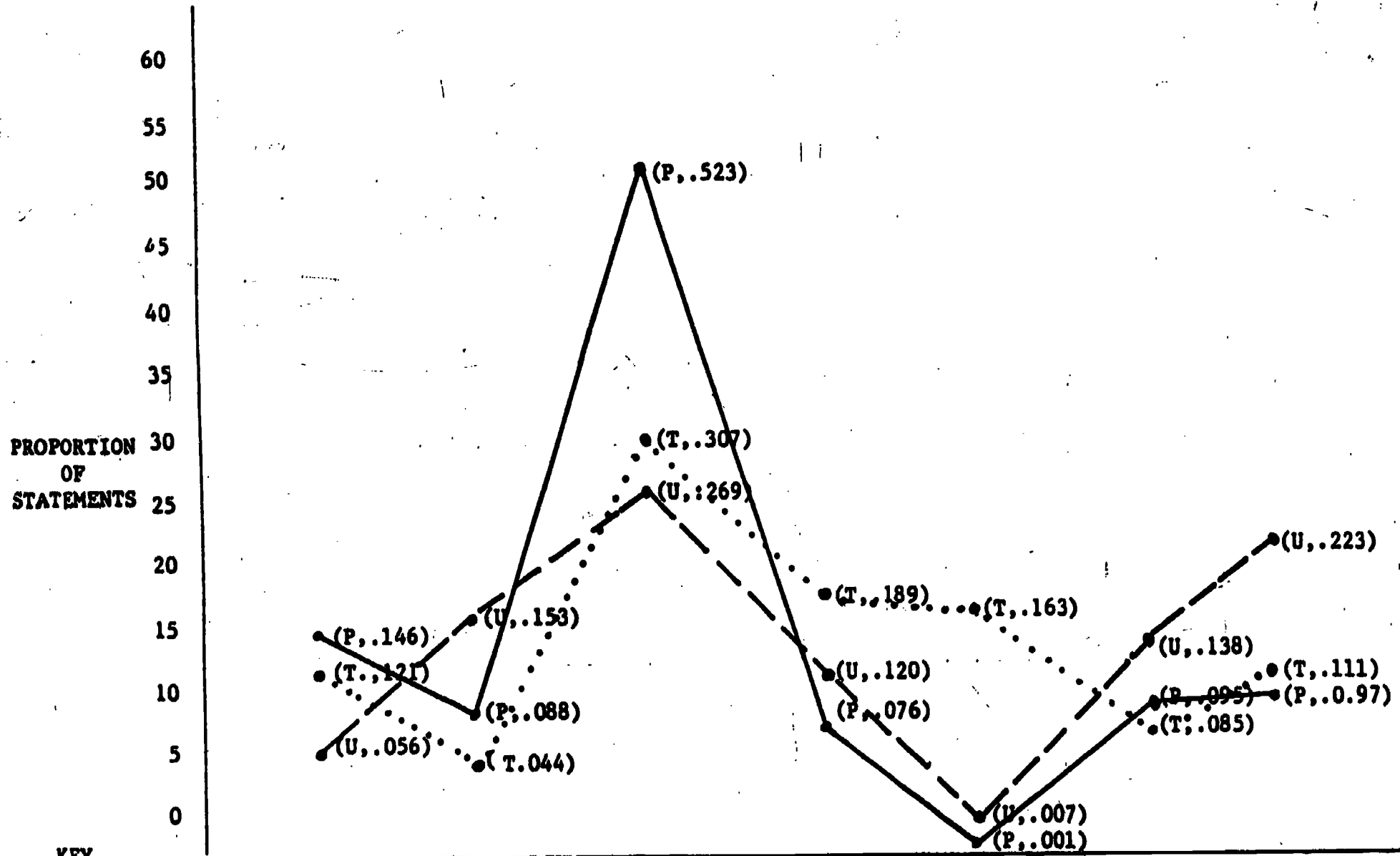Table 5

Congruent Verbal Behavior Among Role Groups

Trainer Commitment Generating Activity. Teacher and principal trainers defined recommended behaviors in the Effective Use of Time program more often than university trainers and were also similar in their frequency of use of directing questions to the group. University and teacher leaders were closely aligned in the frequency with which they called on a specific participant, and both did so considerably less often than the principal leaders. All three role groups challenged trainees with similar frequency. However, principal and teacher workshop leaders praised their trainees at a similar rate which was less than university leaders.

Trainee Discussion of Commitment. Trainees offered background information, identified problems and reported success at a similar low rate in principal and university led workshops. Reporting partial successes was similar in all three groups, but an uncommon occurrence.

Trainee Response to Commitment. Principal and university trainers obtained a similarly high rate of commitment across the workshops, while teachers were less productive in this area. Trainees in teacher and university led sessions had a similar rate of tentative or qualified commitment behavior. Off task remarks were of little consequence in any of the trainings.

24

FIGURE 1

MEAN PROPORTION OF COMMITMENT SEQUENCE DESCRIPTORS BY ROLE
GROUP FOR ALL WORKSHOPS — TRAINER COMMITMENT GENERATING
ACTIVITY

PROPORTION OF STATEMENTS

(P,.523)
(T,.307)
(U,.269)
(U,.223)
(P,.146)
(T,.121)
(U,.153)
(T,.189)
(T,.163)
(U,.138)
(U,.120)
(T,.111)
(P,.076)
(P,.095)
(P,.0.97)
(T,.085)
(P,.088)
(U,.056)
(T.044)
(U,.007)
(P,.001)

KEY

Principals ____

University ----

Teachers . . . .

Defines/clarifies/explains commitment category

Directs question to group

Calls on specific trainee

Offers specific strategies

Cites examples from other own teaching

Challenges trainee(s)

Praises trainee attempt or success

25

TRAINER COMMITMENT GENERATING ACTIVITY CATEGORIES

26

FIGURE 2
MEAN PROPORTION OF COMMITMENT SEQUENCE DESCRIPTORS BY ROLE GROUP FOR
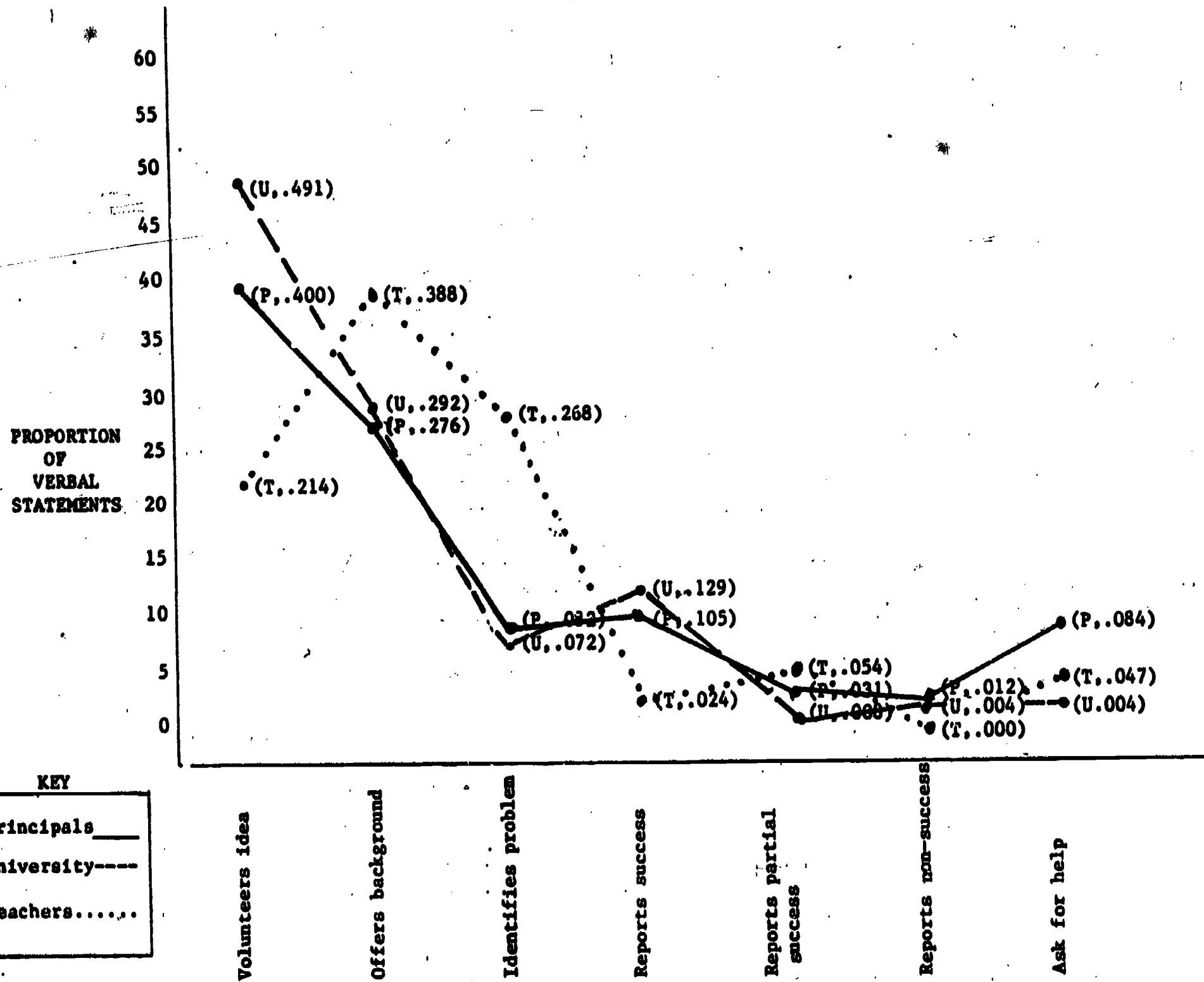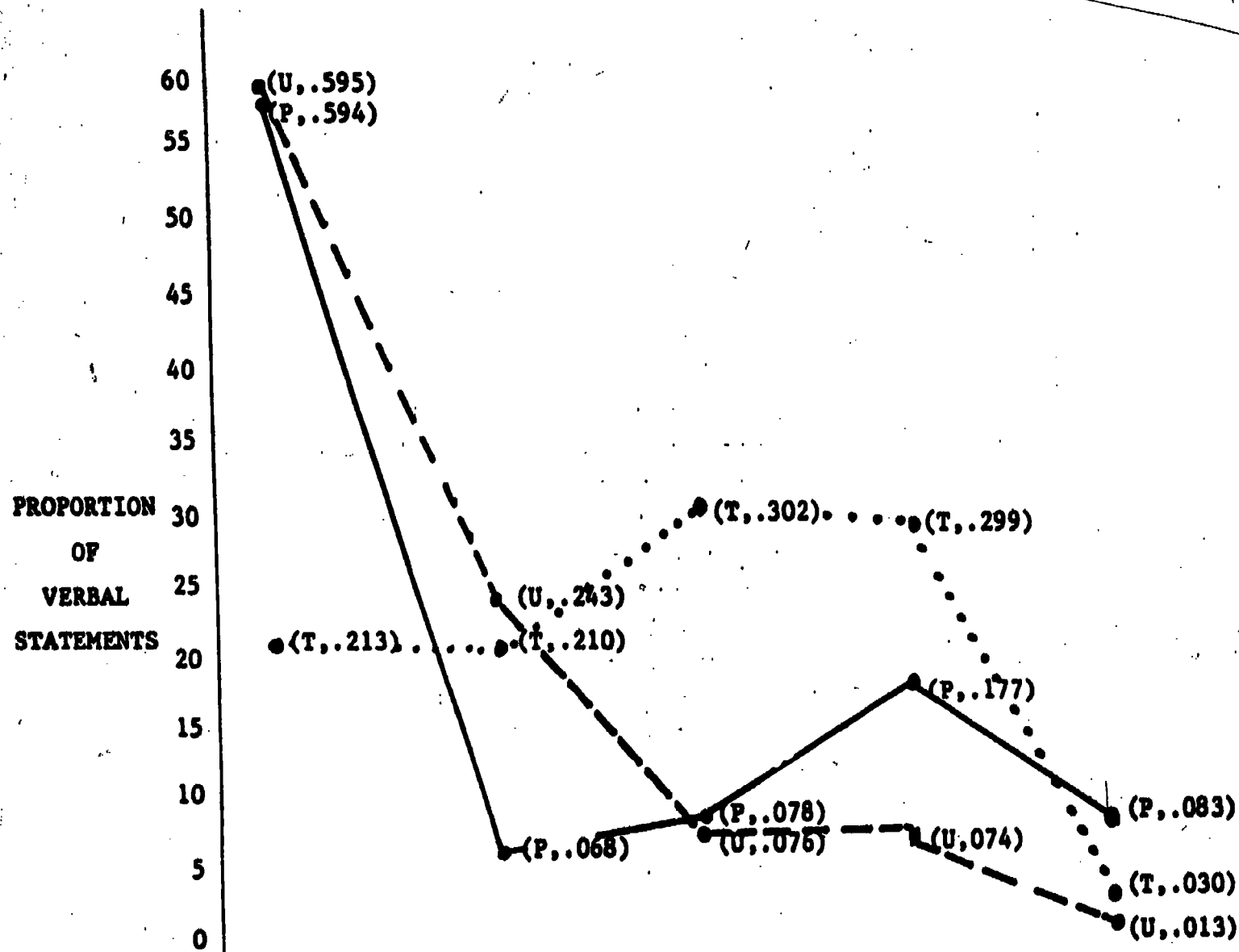## ALL WORKSHOPS — TRAINEE DISCUSSION OF COMMITMENT

FIGURE 3

MEAN PROPORTION OF COMMITMENT SEQUENCE DESCRIPTORS BY ROLE GROUP FOR ALL WORKSHOPS -- TRAINEE RESPONSE TO COMMITMENT

Table 7

CHANGES IN TEACHER BEHAVIOR BASED ON COMMITMENTS TO SPECIFIC VARIABLES

Variables / Teacher Number	Calling on Different Students	Clarifying Questions	Correction/ Guide	Discussion/ Review	Grouping	Instruction FMI	Instruction Snapshot S	Instruction Snapshot T	Practice Drill	Praise/ Support	Positive Interactions	Reading Aloud FMI S	Reading Aloud Snapshot S	Short Quizzes S	Short Quizzes T	Behavior Statements	Classroom Mgmt Teacher Alone	Classroom Mgmt S	Classroom Mgmt T	Organizing Statements	Social Interaction	Students Uninvolved	Written Work
049991												7.50	-.28										
049992																						-13.13	
049993						3.40	16.40	6.70														-26.23	
049995												4.80	2.75										
049996	6.70											.30	-.44										
043161					26,40(E)				0							-1.70							
043142						9.50	27.93									-1.70							
043363				-3.14								1.10	6.82				-13.30						+11.00
043361												6.30	2.09				-13.30	-5.90	-6.60	-13.40	-13.90		
043203			.90																				
043362			-1.00						0			.50	17.21	7.12	6.67								
043202			-1.00									3.00	7.14				-26.63						
043041	1.80											0	10.18									.72	
043043		0	-.10									2.50	7.25										
043044		.30										1.00	6.98										
043045											1.00	4.00	6.55										
043047										4.00		9.00	0										
Mean	4.25	.15	-.30		26.40	6.45	22.17	3.35	0	4.00	1.00	3.14	6.00	7.12	6.67	-1.70	-17.74	-5.90	-6.60	-13.40	-13.90	-12.88	+11.00
Number of variables in desired direction	2	1	1		1	2	2	1		1	1	11	9	1	1	2	3	1	1	1	1	2	
Number of variables in undesired direction		1	3	1			1	2				1	3									1	1

Changes in Teacher Behavior Profile Based Upon Stated Commitments

Table 7 indicates variables teachers made commitments to increase or decrease certain behaviors in their classrooms. Under each variable is listed the percentage of change, a figure arrived at by comparing each teacher's pre- and post-profile data. A mean change for each variable is shown. The number of changes in the desired directions are displayed as are the number of changes in undesirable directions. Of 59 commitments made, 76% were in the directions recommended in the Effective Use of Time program.

The most interesting behaviors are those teachers committed to most frequently and those they committed to but failed to achieve. Analysis of the Five Minute Interaction data indicates eleven of twelve teachers who publicly stated that they would work to increase students reading aloud in their classrooms did so. Similarly, nine of twelve teachers reflected some increase in reading aloud as measured on the snapshot section of the Stallings Observation System. On three variables (correction/guide, discussion/review and practice drill) that teacher committed to, few changes occurred.

In examining the teacher trainees' follow through on commitments, the principal led group made successful commitments for 79% of the commitments made. Perhaps the relationship of the two principals with their teachers positively enhanced their ability to gain commitment and follow through. Teacher trainers were able to obtain 66% follow through on commitments stated by their teacher trainees. Trainees in the university led group attained 64% of their commitments made.

DISCUSSION

Commitment Sequences by Role Group

In terms of number of commitment sequences, principal trainers attempted to engage their trainees in commitments more often than teacher or university trainers. They were able to obtain firm commitments at the same rate as university trainers, but had fewer qualified or tentative commitments while university trainers had considerably more. Teacher led trainees were even more likely to have reservations about commitments. In discussions with the certified trainer who observed their sessions, the teacher trainers expressed discomfort with being direct with their tra. One teacher trainer said "two of these teachers are in <u>my</u> school and just not comfortable asking them much about their teaching."

An initial reaction to this last comment might be that the romantic vision that some of us have held about teacher participation in research and training progrtams may need some refinement and may encounter some difficulties in implementation.

Consistently, teacher trainers were discrepant from principal and university trainers in the subcategories on the <u>Commitment Sequence Descriptor Form</u>. Only in the areas of cites examples from teaching and offers specific strategies in Trainer Commitment Generating Activity did they excel over the other groups. Trainees in teacher led groups tended to offer background and identify problems more frequently. Perhaps these trainees may have been more comfortable in a training led by perceived colleagues than by outsiders--administrators or professors. Another way to look at the situation is that teacher trainers were less directive in limiting individual teacher discussion. While the group was almost always on task, sometimes their discussions were less focused and less oriented to

problem solving. The teacher trainers appear to have adopted a strategy of asking specific "How do you do ____?" questions of their trainees and permitting their participants to respond with descriptions of what they did well. This strategy seems to have served their purposes in lieu of commitment generation. Thus, they concretely discussed the topics of the training focusing on eliciting examples from their trainees with little checking on trainee accomplishments. Perhaps the data in Figure 3 appear to support their strategy; teacher trainers obtained considerably more tentative, questioning and ignoring of commitments than the other two groups. They also did little to alter these reactions. One response to this descriptive finding might be that the training of trainers' component needs additional examples (hence this paper) or that teacher trainers should work with trainees from schools other than their own. Another view might hold that by virtue of their roles, teachers can do less commitment generation whereas outside roles need to invite public commitment from their trainees. Perhaps having different role groups emphasize different aspects within the training process is acceptable.

Regarding the subcategory, reports success, trainees from the teacher led group reported success less often probably because they focused less often on accomplishments as well. The variable of praise and its impact in a training setting with adults is worth further investigation.

Trainees in principal and university led groups reported success more regularly. In the second workshop, trainees in the university led session returned after trying reading aloud and finding it useful to add to the repertoire. The tape reveals they were pleased with their results. In Workshop 3, the principal leaders had smoothed their delivery and

questioning style and their trainees reported a high degree of success in Workshop 4.

Why was there no or little movement on several variables? In one case, rereading the commitment segment where the commitment was made proved to be a useful exercise. The one teacher who indicated she wanted to increase Discussion/Review only mentioned this category. No discussion or planning took place. Her statement was added to a string of other commitments she wished to make. A second variable, Practice Drill, a commitment of two teachers, was discussed in the training group and examples were shared by trainees. However, these topics are left to trainer discretion and are not fully developed in the training materials. Thus, teachers are less likely to select these categories for improvements. When they do, there needs to be more support of their choice.

Another factor to consider is the dependence some variables have on specific occurrences in the classroom. For example, correction/guide is dependent upon a student arriving at a wrong answer and also on careful observation. The category 9G on the observation system tends to be difficult for observers to learn. In addition, certain broad variables, inclusive of other variables, will naturally be occurring more often. Thus, the category academic statements which includes correct/guides will be recorded much more frequently than the subcategory it includes.

Conclusion

The concept of public commitment by teachers to attempt to change their teaching practices has implications for teacher training programs and pro-grams that train trainers of teachers. First, for teacher training pro-grams, this study seems to support the notion that teacher commitment to alter behavior may produce greater shifts in classroom practice than a

program that does not solicit such commitment. The concept of coaching (Showers, 1982) may induce the reported changes in teachers because a personal commitment is being invited from individual teachers by the coach.

Training programs like Stallings (1979) that provide teaching skills of a specific nature to teacher participants lend themselves quite nicely to use of commitment in a training setting. Teachers are able to make public commitments to specific teaching strategies (e.g., increase time allotted to reading aloud with low ability students). Other training programs that ask teachers to try out new materials or practices in their classrooms often do not require specific commitment to changed teacher behavior. Frequently these programs impart knowledge only, require little classroom application and thus produce little or no behavioral changes in classrooms (Joyce, et al., 1983).

In applying the concept of commitment in teacher training, this study suggests the training environments which provide time for teachers to offer enough background information for analysis of problems by the group and allow teachers to volunteer ideas regarding the teaching behavior under discussion.

In addition to implications for teacher training programs trainers may profit from the use of commitment generating activity. For example, trainers who call on specific trainees, can assist teachers in making desired changes in their classrooms, draw on the group for ideas and pursue trainees for commitments to try are likely to influence trainee behavior.

Studies which use commitment as a dependent variable and control for the level of its use may find that trainer role group also makes a difference in the effectiveness of the teacher training program. Continuing

research on the eliciting of commitment may help improve the quality and

results of teacher training programs which Jouce and Clift (1984) have

indicated is an essential responsibility for teacher education personnel.

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