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The development, implementation and evaluation of a program to train supervisors of microteaching.

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THE DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF

A PROGRAM TO TRAIN SUPERVISORS

OF MICROTEACHING

A Dissertation Presented

By

LOUISE A. KANUS

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September   1980

SCHOOL OF EDUCATION

THE DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF

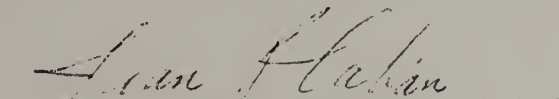A PROGRAM TO TRAIN SUPERVISORS

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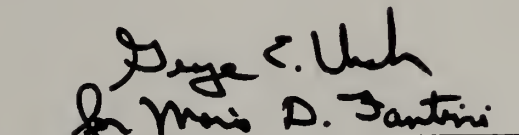
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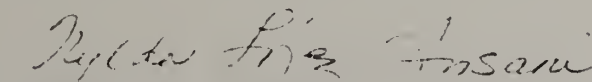

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DEDICATION

To my Father and Mother

ACKNOWLEDGMENTS

My very special thanks go to all those who have surrounded me with encouragement, support and kindness throughout this project. In particular, I am indebted to Bill Fanslow, my major advisor, who rescued the mission and came the last distance with me; Bob Miltz, initial advisor, who helped provide focus and started me on the long journey; Juan Caban, committee member, long-time friend and counselor; and Nylda Ansari, committee member and friend.

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ABSTRACT

THE DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF

A PROGRAM TO TRAIN SUPERVISORS

OF MICROTEACHING

September 1980

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Microteaching is a clinical approach that provides valuable
practice in the development of teaching skills; it can also be used
effectively to develop certain supervisory skills. The success of
the microteaching experience, however, may depend considerably on
the kind and quality of supervision provided during the clinical
experience. Training supervisors to be competent in classroom
observation and lesson critiquing is a task that often gives frustrating
results. The subject of this study was the development, implementation
and evaluation of a self-instructional program for the training of
microteaching supervisors.

A manual was designed to guide trainees through four workshop
sessions. Major areas of program content were 1) introduction to the
microteaching concept, 2) individualizing microteaching, 3) the five-
stage model of microteaching supervision, and 4) supervisor personal

interaction styles.

The study investigated a) how successful the program was as
judged by the trainee group of ten supervising teachers; b) how much
knowledge about microteaching supervision the trainees gained; and
c) whether the program functioned well in a self-instructional mode.

Sessions involved reading the manual, responding to written
exercises, viewing a demonstration film and videotapes, and engaging
in teaching/critiquing exercises and role-playing situations designed
for the program. Videotape recordings were also made of participants'
supervisory critiquing behavior for later analysis.

Data were collected by means of a) pre- and post-tests to assess
trainees' cognitive understanding of the program content; b) four unit
questionnaires, one administered after each session, to elicit
judgments on materials, activities, organization and procedures; and
c) a General Program Evaluation to elicit a retrospective opinion from
trainees on the overall program.

Theory and research drawn from the following contributed to the
development and design of the program: studies on modeling, behavioral
and humanistic psychologies, and the systems approach to learning.

Pre- and post-tests were scored with the help of external
evaluators. Raw scores for individuals and the group means showed
substantial increases from pre- to post-tests. Test items were
analyzed according to gains, losses, and same scores shown by a majority
of the trainees.

Results showed strong gains in knowledge about the structure of the microteaching process, the five stages of supervision, types of questioning skills, the practice of pupils giving feedback on teachers' lessons, and directive/non-directive supervisory approaches. Improved understanding of the salient features of microteaching and increased ability to identify significant helping skills for critiquing were also shown among gains by a majority of the trainees.

Losses in scores from pre- to post-test did occur, but never by more than one or two trainees on the same test item. Perfect scores on some items on both pre- and post-tests indicated that trainees possessed some general knowledge about the program's content prior to training which, in turn, contributed to, or provided a framework for, the overall gain in knowledge.

The questionnaires eliciting opinions and gauging attitudes about the program were analyzed by measuring responses against sets of criteria established for individual units and for the overall program. The results showed trainees thought the teaching/critiquing practice to be the most valuable aspect of the program. They also agreed that a resource person would be useful to assist the group, which somewhat negates the program's self-instructional premise.

Conclusions were drawn that the program effectively communicated the information it was designed to teach, that the manual and accompanying materials were mainly successful, and that the program appeared to have utility and relevance for the participants.

Modifications for both the program and the study itself were suggested. These included some rearrangement of time elements to relieve pressures and fatigue felt by trainees due to the sometimes rapid pace and overfull schedule.

Implications for supervisor training in general and for further research were also discussed.

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INTRODUCTION

Purpose of the Study

This study was designed to develop and evaluate a program to train supervisors of microteaching. The program (a) introduces supervisors to the concept and techniques of microteaching, (b) explores alternative supervisory modes and (c) focuses on the need for positive interpersonal communications skills. This chapter presents the background and rationale for the study with regard to its purpose and significance. It defines and describes microteaching and discusses its effectiveness. The conflicting results of studies on the usefulness of supervisors are examined, followed by a discussion of the need for more adequate supervisor training and knowledge of supervisor roles. Several training programs are reviewed and to conclude, the program which is the subject of the present study is briefly described.

Microteaching: Definition and Description

Although microteaching has been on the educational scene since 1963 when it was originated at Stanford University, it is a method of teacher training that is still very much alive. The fact that a recent issue of Educational Media International (June, 1976) was devoted entirely to the subject of microteaching bears

witness to this. The International Council for Educational Media, publisher of the issue, adopted Microteaching as the theme for its conference in Reading, England, the previous fall, indicating the belief that microteaching is a valuable training procedure whose possibilities have not yet been fully explored or researched.

Briefly described, microteaching is a scaled-down teaching encounter carried out in a low-risk setting. Five- to ten-minute lessons are taught to four or five pupils (or peers) in the presence of a trained supervisor. The session is critiqued by the supervisor who utilizes the written/oral feedback of the pupils, his own observations, and the objective recording of a videotape (see Fig. 1). Following the critique, the teacher makes whatever changes he deems necessary and reteaches the same lesson to a different group of pupils. Fig. 2 shows the microteaching cycle.

Microteaching lessons have a specific focus--teaching skills, such as set induction, effective questioning, stimulus variation, non-verbal reinforcement, and the like. Since teaching is a complex act, the teacher trainee cannot be expected to deal with all aspects of it simultaneously. Therefore, it is broken down into a number of component skills such as those mentioned above. (See Appendix D for descriptions of the skills.) Those skills that are adaptable to microteaching must be observable skills, so that when modifications are made in teaching behavior, they can be readily observed.

The use of recorded videotape playback adds the potent factor of self-confrontation to the analysis of one's teaching behavior.
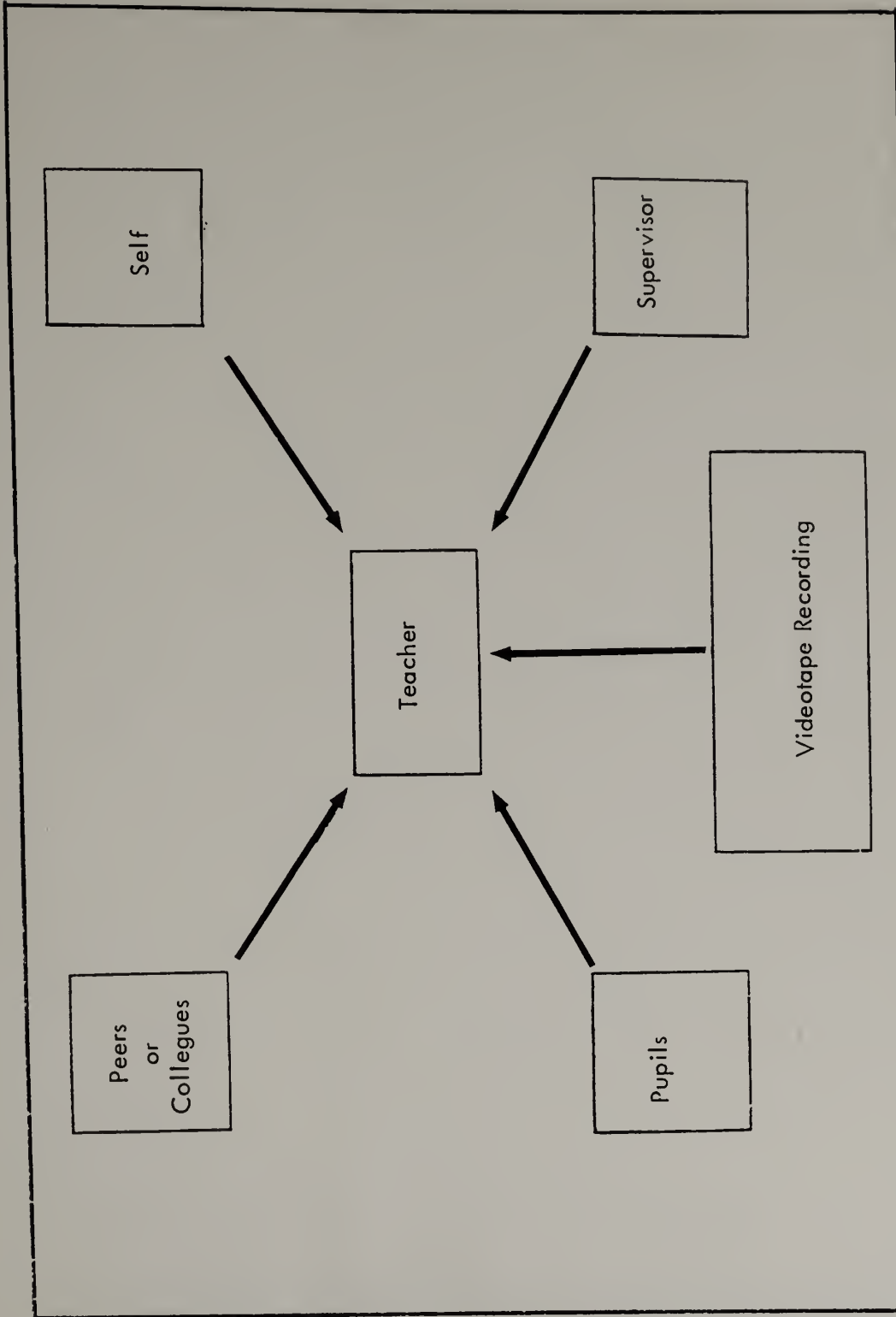
Figure 1. Sources of Feedback in a Microteaching Cycle
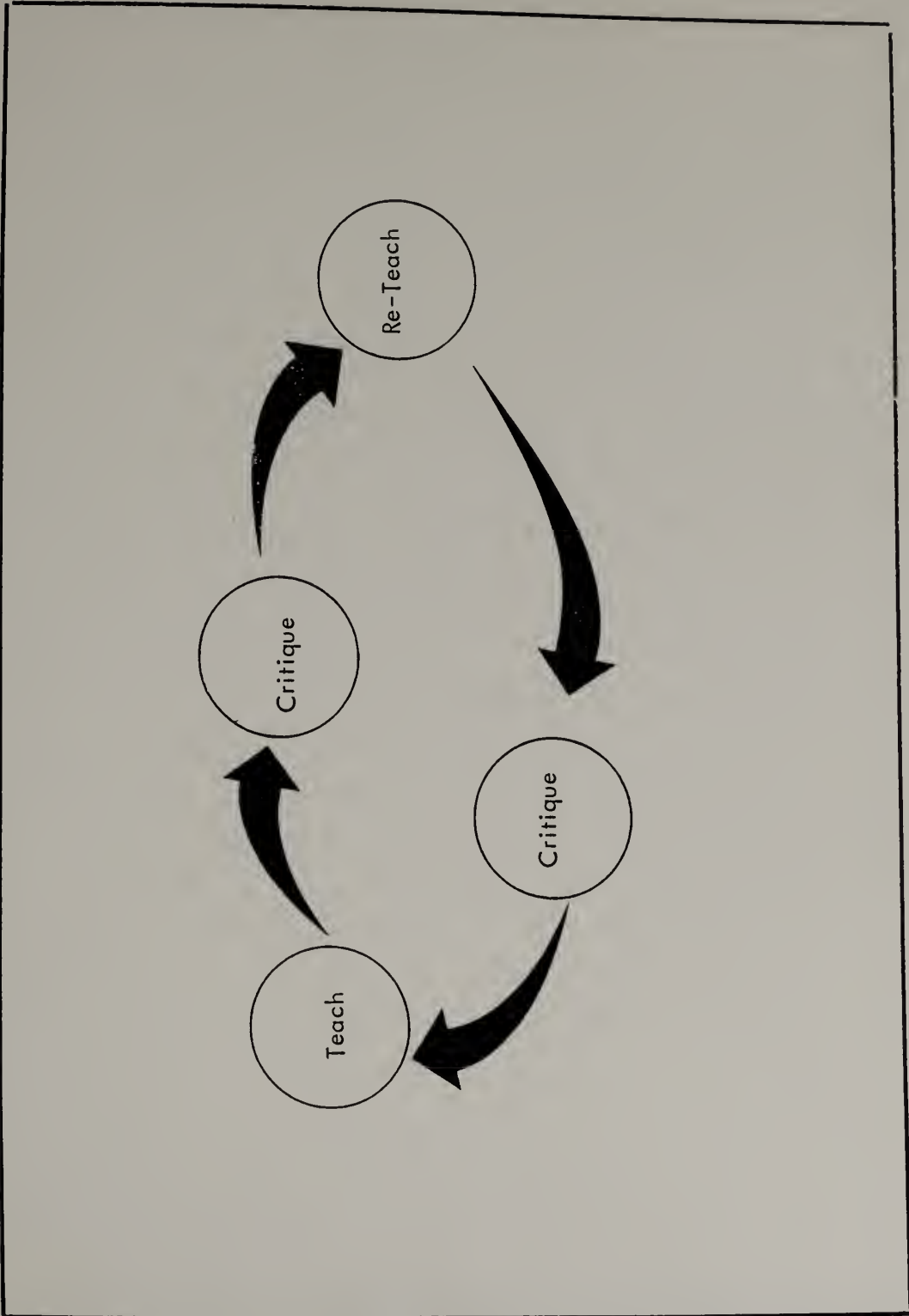
Figure 2. The Microteaching Cycle

Occasionally such self-confrontation can be harmful. Fuller and Manning (1973) reviewed numerous studies of self-confrontation; they point out the negative effect it can sometimes have. Reactions of stress, anxiety and even fear may result in some instances if self-confrontation is used indiscriminately and without consideration for a stress-reducing agent or method of some kind. Video playback as a technique for more realistic self-perception must therefore be judiciously handled. One way to avoid counterproductive emotional reactions is always to emphasize positive evaluation of teaching strengths over negative criticism. Cohesive group feelings usually emerge quickly among members of peer groups undergoing microteaching training together. The effect is one of helpful encouragement and support for one another's first efforts.

Many research studies have now been done on microteaching (Allen and Fortune, 1966; Allen and Ryan, 1969; Kallenbach and Gall, 1969; Borg et al., 1970; Acheson, 1964; Orme, 1966; Bosley, 1968). In the main, studies assessing attitudes report positive student attitudes toward the technique (Bosley, 1967). Students frequently cite microteaching as the most valuable part of their teacher preparation programs prior to student teaching.

But more than good attitudes is required. Does microteaching actually increase proficiency in teaching skills? The majority of experimenters agree that it does. Studies at Stanford, where micro-teaching was first developed, indicate that after an 8-week training period, ten hours per week, the experimental group performed at higher

levels of teaching competence than a control group who spent up to 25 hours per week receiving traditional instruction with an associated experience as teacher aides (Fortune, Cooper and Allen, 1967). Similar studies with similar results were conducted at Hunter College and Brigham Young University (Bosley, 1967). At the latter institution, some preliminary findings indicated that seniors who split the school term equally between microteaching activities and student teaching "did equally as well on evaluative criteria and performance standards as did students who participated in the full term of student teaching" (Bosley, 1968, p. 5). Where a study occasionally does not replicate such positive results, the conclusion is that microteaching is still a good strategy because it accomplishes essentially the same results as conventional training but with far less cost in time and administrative problems (Travers, 1973; Kallenbach and Gall, 1969).

Thus, considerable research evidence indicates that microteaching is an effective and economical technique for the development and improvement of instructional skills at the pre-service level. Its use is fairly widespread. It is safe to say that at one time or another, a majority of the teacher-training institutions in this country have made an attempt to introduce some form or version of microteaching into their teacher education programs (Ward, 1971; Allen and Ryan, 1969). Varying degrees of success and satisfaction have accompanied these efforts. The reasons for this will be dealt with later in this chapter.

The Importance of the Supervisor: Pro and Con

In coordinating a microteaching laboratory for undergraduate teacher trainees, this author noted differences in attitudes toward microteaching among the trainees which appeared attributable, at least in part, to the different kinds of supervision they had received. Certain kinds of supervision seemed to produce higher levels of enthusiasm and satisfaction than others. A subsequent search of the microteaching literature gave further evidence of the critical nature of the supervisor's role.

A variety of supervisory models have been investigated including self-supervision. One key question in these considerations is whether the presence of a supervisor is necessary at all. We will examine first some of those studies which support the use of a supervisor.

In their "state-of-the-art" report on research in teacher education, Peck and Tucker (1973) reported that the research evidence is quite consistent in confirming that giving objective feedback about specific aspects of teaching behavior is important in changing teacher behavior. This, of course, can be done with the use of a videotape or audiotape recording. They further state, however, that the teacher actually uses this feedback information to make changes only if another person participates in the feedback session. "The presence of another human being adds a potent factor which does induce positive change when that influence is beneficially exercised" (p. 947). Self-confrontation alone, then, apparently does

not yield sufficient insight or provide adequate motivation, the
authors conclude. Some investigators have argued for this personal
feedback to come solely from peers, from the pupils, or from one's
self. Others maintain the need for a supervisor. Griffiths (1976)
supports the latter idea: "It should be made clear at the start that
supervisory involvement is not regarded by all as a necessary component
of this feedback phase. Most notably, Borg et al. (1969) report their
decision that minicourses should rely on self-evaluation through
videotape playback, and they attempt to justify this decision by
reference to some of the evidence on the effect of supervisory feed-
back on the acquisition of teaching skills. However, the available
evidence relating to behavior change is equivocal. . . ." (p. 11).

Griffiths is not satisfied that Borg has proven his case
where pre-service teachers are concerned. Thus, despite the
consensus that objective feedback is a necessary requirement, there
remains a lack of agreement as to how it should be provided. Other
researchers have further explored the question of supervisor impor-
tance.

Morse (1970) experimented with different types of supervisory
feedback ranging from students listening to their audiotaped lessons
with and without written guides, to listening plus having a confer-
ence with a non-directive supervisor. Listening to the tapes with
or without the guides yielded little change in subsequent teaching
behavior. Morse concludes that there is "some empirical support for

combining personal, non-directive supervision with other types of feedback."

McNeil and Popham (1973) found that the microteaching process was ineffective in the case of pre-service teachers when they lacked the input of a supervisor or another trained person.

James (1970) reported that the combination of supervision with self-confrontation via video feedback was superior to traditional supervision in getting student teachers to use more indirect teaching strategies. This is similar to Acheson's (1965) finding that a supervisor's help during video playback of a lesson led to significantly more reduction in teacher monologue than self-viewing alone. D.B. Young (1968) found that video feedback was more effective if accompanied by specific comments about the teaching skills under scrutiny. Although Young applied this idea of contingent focus to a self-instructional program where the focusing comments were added to the videotape, the focusing of the trainee's attention at the same time the significant behavior occurs on the videotape is the important point and is well within the function of a supervisor who might be present during the viewing. Berliner (1969) notes, too, that as trainees watched models (on film or tape) demonstrating teaching skills, the verbal reinforcement and discrimination (verbal identification) by the supervisor of the desired behavior seemed to improve the effectiveness of the model.

McDonald and Allen (1967) found support for the use of a supervisor when they tried to determine the trainee's need for

cue discrimination and reinforcement while watching a videotaped display of his own teaching performance. Among pre-service teachers, the self-feedback group alone was least effective in producing behavior change. Adding the discrimination and reinforcement of a trained observer was the most effective treatment. In a further experiment, these investigators used a filmed model instead of the trainee's own teaching performance. When a trained experimenter was present to point up the significant aspects of the model's behavior, the trainee benefited more: ". . . any condition in which the experimenter was present while the subject viewed a model was always more effective than when the subject viewed the tape alone. The single most effective condition was a combined modeling experience with a feedback condition, both of which had an experimenter present who cued the trainee on the desired behavior . . . a powerful treatment" (p. 151).

Several studies seem to cast into doubt the need for a supervisor. Acheson (1965) found that TV feedback with a supervisory conference was no more effective than TV feedback without a supervisory conference. Also, a supervisory conference without TV feedback did not produce greater behavior changes than occurred with a control group which received neither TV feedback nor a conference. Acheson's final conclusion from all this, however, was that the most effective treatment in causing positive behavior change was the joint use of TV and a conference. It added to both the direct and indirect supervisory styles he was testing and

increased the supervisor's ability to change the teacher's specific behavior: "Audio-visual recordings and feedback are feasible and effective adjuncts to supervisory conferences with novice teachers in helping them to analyze and change their behavior during teaching performances" (p. 3986). Despite the fact, then, that Acheson appears to minimize the importance of the conference and maximize the effects of TV feedback, in the final analysis it is the combination of the two that gives the best result.

The value of a supervisor's feedback is questioned by others. McKnight (1971), in a review of microteaching research, indicates his belief that supervisory conferences have little influence on teaching performance. Tuckman and Oliver (1968) found that supervisor feedback actually resulted in a negative shift in teacher behavior away from the direction suggested by the supervisor. Edwards (1975) concluded, after a study comparing formal supervision with the use of self-instructional materials, that formal supervision was unnecessary in a microteaching experience. "The quality of the training program will not be seriously affected by the lack of supervision as long as appropriate self-instruction materials are used in conjunction with microteaching" (p. 222). There was no indication that supervision adversely affected the development of skills, however.

Carkhuff (1969), on the other hand, states that many helpers, even those professionally trained, can be "noxious," even destructive. Truax and Mitchell (1971) agree and go so far as to say that two out of three persons in the helping role are not helpful and may be

noxious. Carkhuff has defined several levels of functioning on the part of the helper. Helpers operating at the lowest levels are those who clearly do not attend to or who significantly detract from the feeling communications of the one being helped. That is, they are unaware of, or disregard, the affective messages being communicated to them by that person. Thus, they respond inappropriately, inaccurately and/or insensitively to the needs of the person and the relationship is in trouble. The fact that such things occur, however, speaks for the need for better helper training and not for the cause to eliminate helpers.

Johnston (1969) attempted to compare a self-supervised micro-teaching group with a traditionally supervised microteaching group. The former had additionally received training in Interaction Analysis. His conclusion was that self-supervision tended to promote a higher level of indirect teaching behavior and higher attitude scores than was evident among the students being guided by a supervisor. However, the comparison would seem to be a little uneven, since the self-supervised group had obviously undergone some consciousness-raising about the values of indirect teaching influence as part of their Interaction Analysis (IA) training. They would naturally tend to try to utilize what they had learned and be somewhat self-satisfied in having made the attempt. The microteaching group with supervisor had, of course, received no such training. Both groups, incidentally, proved to be "very inaccurate" in estimating the amount of direct and indirect teaching behavior they had used in their individual lessons.

D.A. Young (1970) experimented with colleague supervision as opposed to supervision by one supervisor. Her results indicated that more of the desired behavior change occurred with supervision and feedback coming from the peer team than from the one supervisor. However, in her more successful experimental group, each intern had not only the peer team but also the benefit of a supervisor. In fact, in another study, Young (1970a) reports that the use of university-trained supervising teachers "results in significant differences in teacher behavior and permits the development of a more relevant training program . . ."

Borg (1969, 1970a, 1970) has been perhaps the most notable advocate of the self-instructional model of microteaching. His series of Minicourses rely on the self-evaluative mode. Field tests proved that when used with experienced teachers, this mode produced significant, positive results. With pre-service teachers, however, the self-instructional, self-evaluation model yielded no observable gains. This group appeared less able to analyze their teaching behavior using a videotape and then making the appropriate changes.

In an incisive examination of microteaching research, Manis (1973) finds Borg's research at the Far West Laboratory the best example of microteaching research. He faults other researchers who advocate supervisor feedback. "Supervisor feedback, as conceived in microteaching models, has little empirical support. Pupil feedback, audiotape and videotape self-evaluation, and peer feedback appear to result in significant changes in teachers' performance"

(p. 20). However, he is critical of much microteaching research in general, partly because he disagrees philosophically with its basic assumptions and partly because of what he views as inconsistencies, gaps, inadequate measuring instruments, and in-conclusiveness in the studies. One of his key criticisms with regard to supervisory feedback is this: "The kind of supervision varies from one supervisor to the next and from one program to the next" (p. 18). Further, Manis states that "when a supervisor is used, his primary function in the feedback phase is to praise or reinforce the trainee in some way when his performance approximated that of the model. That requires considerable skill on the part of the supervisor. One can safely assume many supervisors fall short and probably render other kinds of feedback as well" (p. 7).

Joyce's (1967) findings support this idea. He found that supervisors tended to become too involved in hypothetical dis-cussions rather than sticking to discussions of student teachers' filmed or taped teaching performances.

Both Manis and Joyce have keyed in on one probable and very important reason why so much supervisor feedback has been found insignificant, unhelpful and at times even destructive. The important variable is the supervisor himself. The role he plays in the supervision process, what he does, what his characteristics are, and what training he has received in preparation for his role are clearly the crucial questions to examine. The lack of agreement as to whether or not sufficient empirical evidence exists to warrant

the presence of a supervisor in microteaching prompts attention to the many variables to be considered in the examination of the studies. When certain key variables are present in some studies and not in others, making strict comparisons of outcomes becomes somewhat untenable. The kinds of teaching skills being measured is a case in point. In some studies, varied technical skills of teaching are being practiced; in others, interaction skills are the focus. Cognitive teaching behavior is measured in some investigations while affective behavior is looked at in others. Measuring instruments for appraisal and/or self-appraisal vary, some being too general to measure the specific teaching behaviors while others are very specific but perhaps lacking in quality or real significance.

There is yet another dimension against which the efficacy of a supervisor is to be measured and that is in the attitudes of the trainees towards supervision in microteaching. Among pre-service teachers, there seems to be a consensus that the supervisor is needed. Griffiths (1976) says it is common for students to report a preference for supervisor involvement in microteaching. Perrott's (1976) research "has shown that undergraduates express a preference for working with supervisors, even when there is no evidence of differences in performance between students who have worked in groups with supervisors, and those who worked in groups without" (p. 16). Edwards (1975), whose study favored the use of self-instructional materials, admitted that some students were distressed and dissatisfied with just the materials. They also felt the need of

expert advisory feedback to learn the skills. And student teachers
having their lessons videotaped in classroom situations, reports
Winn (1974), stressed the value of feedback from their supervisors.
In viewing tapes with their supervisors, students said they saw
things they had missed when viewing alone.

If there does not seem to be a significant difference in
the improvement of teaching behaviors where the use of supervisors
is concerned, it may well be for two reasons: 1) the lack of reali-
zation on the part of supervisors that they play several different
roles as they interact with their trainees and 2) the lack of adequate
supervisor training. Where there is lack of agreement among the
studies cited above as to the effectiveness of a supervisor, it should
be noted that there has not usually been an attempt by these
investigators to specify the role (or roles) the supervisor is
playing. Some supervisors may excel in one role while failing in
another. To generalize from these studies, therefore, whether or not
supervisors are necessary, without first having defined, matched and
fairly compared the roles in which these supervisors have served, is
to draw untenable conclusions. One might as easily and fairly conclude
that the problem is not that supervisors are unnecessary, but that
they are inadequate.

Roles of Supervisors

As these inconsistencies have become apparent, microteaching
research in the 'Seventies has increasingly swung in the direction

of analyzing what the supervisor does in the whole supervisory process and how his role changes during its successive stages. Thus, one might analyze the roles according to the functions and tasks of supervision.

Fuller and Manning (1973), in their comprehensive review of self-confrontation _via_ video playback, discuss the supervisor-helper as a "focuser." They describe the behaviors of this focuser in the self-confrontration experience as being very much like those of a counselor. In the supervisory task, two separate roles must be differentiated, that of non-judgmental observer and that of goal-negotiator. In the first, the supervisor helps the other person by providing objective, descriptive information on what he sees. He also helps the individual to see the discrepancies between the ideal (or modeled) performance and the actual videotaped performance. He is careful to modify discrepancies that are too great. In the second role, the supervisor goes beyond mere identification and acknowledgment of problem areas and negotiates with the individual the desired changes in goals and behavior for the next performance. In order to do so effectively, an evaluative aspect must enter into the process as the supervisor attempts to help the person recognize the discrepancies between ideal and actual performance of which the latter may not be aware. Both these roles require some delicacy on the part of the focuser. Sensitivity as to just how much less-than-ideal behavior the other person must be forced to acknowledge and how much change he must be persuaded to implement should be foremost in the supervisor's mind. Lack of sensitivity in approach and failure to weigh carefully the degree and

kind of change that can reasonably be expected of each individual could result in a futile supervisory effort as well as a weakening of the helper-helpee relationship.

An essential ingredient for success in these supervisory fuctions appears to be certain personal characteristics of the focuser. As Fuller and Manning (1973) put it: "Helping persons have CARE: Communicated Authenticity, Regard for the other person which is positive, and Empathy. Their communications are concrete and 'immediate,' that is, addressed to the subject's present psychological state. They have persuasive potency, enthusiasm, genuineness . . . The few studies on helpful characteristics of supervisors of teachers are consistent with this description" (p. 499). While it may not be useful to be diverted to studies searching for a list of the personal qualities of the "ideal supervisor," it is important to recognize that certain demonstrated behaviors such as empathy and acknowledgment of teachers' feelings do contribute to a better helping relationship and presumably, therefore, to more effective helping.

Griffiths (1976) surveyed the efforts of others who have also attempted to define supervisors' roles more closely. He cited St. John-Brooks and Spelman's conceptualization of a behaviorist role, that of a "shaper" by means of positive reinforcement; MacLeod's idea of the supervisor as a facilitator of concept learning; and the summary of varying perceptions of a supervisor as seen by McAleese and Unwin:

        -- a resource for information on curriculum and method
        -- an advisor on approaches to the re-teach lesson
        -- an interpreter of pupil feedback
        -- an evaluator of performance
        -- a general morale booster reinforcing the student's
               strengths
        -- a controller of the videotape replay
        -- a focuser on specific behaviors
        -- a person sensitive to differences among trainees.

Thus, it seems obvious that the supervisory role is a dynamic one, changing with the different stages of the supervisory process. Certain roles are more appropriate before, during, or after observation of the trainee's microteaching lesson. Moreover, as supervision progresses over a period of weeks, or months, certain roles may be minimized or even dropped while others take on added importance.

The studies cited above suggest that the supervisor must "wear several hats." The supervisor must recognize, too, that the same "hat," or role, may not be appropriate at all stages of the supervisory process. It is quite likely that in the early stages, for instance, the supervisor may be required to exercise more control, to offer more evaluative comment, to advise and to provide information. As the teacher acquires confidence and competence in self-evaluation, however, the supervisor may need to assume less directive roles, those of a more facilitative nature. It is altogether possible that the judgment against supervisors that deems them unnecessary or "noxious" results in part from supervisor behavior that ignores the subtle transitions of roles and overlooks the importance of an empathic style of communication.

Need for Improved Supervisor Training

As mentioned earlier, supervisors do not always provide appropriate feedback on lessons (Joyce, 1967; Manis, 1973). It is likely, too, that they are not always playing appropriate roles at the appropriate moments as they supervise microteaching sequences. Too often, those in the supervisory position have only their own teaching experience and possibly college courses in theories of administration and supervision to rely on as background. This is true of both college supervisors and cooperating teacher supervisors. Some graduate students preparing to become supervisors may not even have professional classroom teaching experience.

Studies show that if cooperating teachers have received some specific preparation to become supervising teachers of student interns, then those interns improve in professional attitudes and exhibit more learner-centered values (Travers, 1973). Joyce (1967) discovered that to be effective, supervisors must have extensive training for feedback roles. Both college supervisors and cooperating teachers were included in his study. He determined that they needed training in analyzing teaching, setting goals and monitoring teacher progress.

D.A. Young (1970a) reported that there was a significant difference in student teacher behavior when her university-trained supervising teachers practiced individual intern diagnosis, used training prescriptions and planned a graduated induction into teaching. Aubertine (1967) also found a well-trained supervising teacher to be a key figure in the training process of interns. The training in supervision

served to promote professional growth not only of the interns but also of the supervisors themselves. Rockhill's (1965) studies concluded that the careful training of supervisors is necessary to achieve commitment to change on the part of teachers. Particular attention must be given to the structuring of the supervisory conference to elicit maximum commitment, she found.

One of the most significant arguments for improved supervisor training where microteaching is concerned comes from Fuller and Manning (1973). Since video feedback is a common feature of microteaching and a very potent practice that can lead to stress, anxiety-arousal and negative self-criticism, the supervisor-helper must be skilled in dealing with situations of self-confrontation. Without some amelioration of a potentially distressing experience, self-confrontation could be damaging. Experiments have shown that positive self-concept can be decreased, increased or unaffected by such self-confrontation (p. 475). Even in relatively undramatic circumstances, the helper must be skilled in manipulating what Fuller and Manning call the "depth of focus--a complex task." He must help the teacher become aware of discrepancies between the ideal (the model) and the actual (the videotaped lesson). But where discrepancies are great, he must take care to modify the discrepancies by his emphases and his attitudes. "Where several matters can be focused on, he can choose one which is moderately discrepant" (p. 500). Thus, the helper maintains his constructive influence and minimizes the chance for anxiety-arousal which might

decrease the effectiveness of self-confrontation. Obviously, the skill of the helper has to be considerable where video feedback is used.

Finally, Griffiths (1976), in discussing the preparation of microteaching supervisors, affirms the lack of resource materials available for training: ". . . one would ideally have at one's disposal a range of training modules covering the appropriate supervisory tasks as related to the different role conceptualisations. Unfortunately, such resource materials are not available. . . ." (p. 13).

If the studies described in this section are carefully considered, it becomes clear that certain kinds of systematic supervisor training can make a positive difference in the resultant teacher behavior. The studies further suggest that special skill is required when video feedback is used with teachers. This calls for a somewhat different kind of role than might be used at another stage of supervision, one where training prescriptions are being suggested, for example. Cognizance of these varying roles, coupled with the present lack of training resource materials, underscores the need for developing new supervisor training models and programs.

Movement toward Teacher Competency Requirements

In recent years, there has been a spreading emphasis, or more to the point, a demand for teachers to demonstrate competency in the various professional skills of teaching. This came about, in part,

with the cry for accountability. It also occurred, however, simultaneously with, or soon after, a new trend in educational research. Forsaking the fruitless search for "ideal" teacher characteristics, researchers turned instead to a careful scrutiny of teacher behaviors. Taken to its logical conclusions, this kind of research demands that effective and important teacher behaviors not only be identified and taught in teacher education programs, but also be successfully performed and demonstrated as proof of competency in the field.

Many states have now revised their teacher certification regulations toward this end by replacing lists of required professional courses with lists of required professional competencies. In order for performance skills to be learned, however, they must first be observed and practiced. Microteaching and similar clinical experiences have, in part, helped to make some of these performance skills clear and have given teachers at both pre-service and in-service levels the opportunity to develop and refine the technical, observable skills. As we have seen, however, the value of the microteaching experience can hinge on the adequacy and training of the supervisor. For the benefit of teachers entering the field and for those already in it who must meet the performance demands required by competency-based programs, both local and statewide, improved training in microteaching supervision must be considered a priority.

Review of Supervisor Training Programs

Several training programs for supervisors, or studies which point to the need for them, have already been alluded to (Joyce, 1967; D.A. Young, 1970, 1970a; Aubertine, 1967; Rockhill, 1965). These programs recognized early the crucial part a supervisor can play in the acquisition of the technical skills of teaching by interns and teachers. Of the considerable experimental research involving microteaching, rather little of it deals with a concerted effort to develop and evaluate procedures for the training of microteaching supervisors. In the main, changes in the behaviors and attitudes of interns/teachers are scrutinized rather than changes in supervisors. A few studies, however, have attempted to develop programs where supervisors are taught to analyze systematically their interactional behaviors. For example, Douglas and Pfeiffer (1971) used a microteaching approach to teach graduate students who were experienced teachers to become supervisors. They, in turn, supervised undergraduates in microteaching and had their supervisory conferences videotaped. The study predicted and, indeed, measured a significant difference in the three kinds of "influence" practices: direct, indirect, and non-direct. (Non-direct influence is differentiated here from indirect to the degree that the amount of "controlling" by the supervisor is far less, or non-existent. Indirect influence may be controlling because of leading questions the supervisor might ask.) These influences were based on Blumberg's category system (see Table 1 below) which, in

TABLE 1

BLUMBERG'S CATEGORIES FOR OBSERVATION
OF SUPERVISOR-SUPERVISEE INTERACTION

I. <u>SUPERVISOR BEHAVIOR</u>

1. Support-Inducing Communication Behavior

   Includes all statements (except praise) whose effect is to
   help build a "healthy" climate between him and teacher.
   Behavior releases tension and conveys acceptance of feel-
   ings. Encouragement.

2. Praise

   Connotes value judgment of "good" in connection with
   teacher's idea, plan of action, past behavior, feelings,
   etc.

3. Accepts or Uses Teacher's Ideas

   Includes statements that clarify, build on or develop
   suggestions by teacher.

4. Asks for Information

   Aimed at asking for clarification or orientation about a
   problem or situation being considered. Factually oriented
   and not concerned with opinions or ways of doing things.

5. Giving Information

   Supervisor gives objective information to teacher--
   orienting, summarizing.

6. Asks for Opinions

   Behavior whose aim it is to ask teacher to analyze or
   evaluate something that has occurred, is occurring or may
   occur in the classroom or in the interaction taking place.

7. Asks for Suggestions

   Statements that ask teacher to think about ways of doing
   things, how they might have been done differently. Action
   orientation: past, present, future. Asking for ways
   teacher and supervisor might work together.

TABLE 1--<u>Continued</u>

8. Gives Opinions

    Opposite of category #6.

9. Gives Suggestions

    Opposite of #7.

10. Criticism

    All negative value judgments about teacher, his behavior
    in classroom, methods, competency, etc. Also supervisor
    behavior that can be interpreted as defensive, aggressive,
    or tension-producing.

II. <u>TEACHER BEHAVIOR</u>

    11. Teacher asks for Information, Opinions or Suggestions

        Task-oriented behavior.

    12. Gives Information, Opinions or Suggestions

    13. Positive Social-Emotional Behavior

        Like category #1. Not task-oriented and helps build
        supervisory relationship. Statements that convey agree-
        ment by choice though not compliance in the face of
        supervisor power.

    14. Negative Social-Emotional Behavior

        Anything disruptive of supervisory relationship.
        Defensive, tension-producing. Compliance with supervisor
        power.

    15. Silence or Confusion

        (Or both talking simultaneously--cannot be categorized.)

SOURCE: Simon and Boyer, 1970.

turn, derives from Flanders Interaction Analysis system.

The taped conferences in the Douglas and Pfeiffer study were rated by peers and confirmed that on certain supervisory behaviors, namely, using teacher ideas, becoming more indirect, and giving less direct suggestions, the supervisors had modified their own styles. There was more teacher participation and the supervisors offered negative criticism less often. Yet on other supervisory behaviors being considered there was no significant difference.

Evans (1972) trained sixteen college supervisors in self-analysis also using Blumberg's categories. Four two-hour sessions analyzing their own supervisory verbal behaviors were given to the experimental group while the control group received no special training. Six weekly conferences were taped and self-analyzed thereafter. A final, post-training supervisory conference was measured against an intitial pre-training conference. No significant difference was found on six criterion measures dealing with direct and indirect verbal supervisory behaviors. The six measures represented Blumberg's categories 1 through 10 (see Table 1) arranged in clusters. The experimenter suggested there was some lack of conviction among the supervisors that indirect behavior is better in a conference. In addition, the subjects showed more concern with cognitive than with affective aspects of the conference despite the training.

Microteaching techniques were used by Chase, Doty and Cottrell (1971) in preparing vocational teacher educators for supervision. The teacher educators used rating scales to measure

their own achievement in certain supervisory conference skills.
They conducted five microteaching sequences with pre-service teachers
and had their supervisory conferences videotaped. Each teacher
educator was then assigned to meet with a master teacher educator
either individually or as part of a trio of fellow teacher educators
for what was, in effect, a supervisory conference to supervise the
supervisors. They observed their supervisory behavior on the video-
tape and did the self-rating at this time. Of the two treatments,
individuals or trios, neither yielded a significant difference in
effectiveness on the teacher educators' supervisory performances or
in their expressed satisfaction. The teacher educators did, however,
show a significant gain on composites of rating made of them by their
students (the pre-service teachers), a master teacher educator and
themselves. Although this program did not provide strong evidence
of the best way to provide supervision of supervisors-in-training, it
does describe a significant effort to use the microteaching concept
itself in the training of those who will supervise microteaching
programs.

If these three studies, which yielded rather inconclusive
results, are among the best examples available of supervision
training for microteaching, then one cannot help but agree with
Griffiths' conclusion that thus far there is "meagre evidence on
the effectiveness of supervisor training procedures" (p. 15). Too,
these programs take into account mainly the personal or social
interaction skills of supervision as identified by Blumberg and

direct and indirect styles as described by Flanders. This is understandable since these behaviors are quite observable and therefore appropriate to a microteaching mode of training. There is no question, either, of the importance of their affective character in supervision. Nevertheless, there remains the need for emphasis on the cognitive aspects of training, chiefly on skills of analyzing lesson data and planning conference strategies so that after supervisory conferences, teachers come away with something more concrete than just good feelings.

One program for supervisors which did provide that emphasis without neglecting the affective dimension was the Instructional Supervision Training Program (ISTP) conducted by Boyan and Copeland (1973 and 1974) at the University of California at Santa Barbara. Experienced supervising teachers attempted to achieve a type of supervision that was less supervisor-dominated. The goal of this supervision was to enable the student interns with whom they worked to become autonomous in analyzing and modifying their own teaching behavior.

Table 2 below shows the evolution of ISTP over a two-year period toward greater intern independence. The model of the second year (1972-73) emphasizes the intern's assumption of responsibility for raising his own concerns, identifying problems as he perceives them and planning strategies for change. The supervisor, in turn, relinquishes much of the more authoritarian approach shown in the first-year model (1971-72) and takes on instead the role of guide,

TABLE 2

A SUMMARY OF CHANGES MADE IN THE CONCEPTUALIZATION OF INSTRUCTIONAL SUPERVISION

Supervision Process Model (1971-1972)	Instructional Supervision Process (1972-1973)
1. Process initiated by supervisor identification of teaching problem perceived in the student teacher.	1. Process initiated by supervisee or supervisor identification of perceived teaching problem.
2. Supervisor concerns emphasized in all steps of the process.	2. Supervisee concerns emphasized in all steps of the process.
3. Observational data presented to student teacher by supervisor, with supervisor's analysis of the data.	3. Data display of observation presented to supervisee by supervisor, and supervisee guided in his own analysis of the data.
4. Supervisor suggests hypotheses and change strategies to deal with instructional problem of student teacher.	4. With supervisory guidance, the supervisee formulates hypotheses and change strategies to deal with instructional problems.
5. Supervisor serves as the authority in identification and solution of problem.	5. Supervisor guides the supervisee in the development of skills relevant to the identification and analysis of instructional problems and to proposing possible solutions.
6. Method of interaction between supervisor and supervisee dependent on abilities acquired in other settings (e.g., special training in counseling or interpersonal relations in extrasupervisory situations).	6. Supervisor employs techniques of communication and interaction specifically selected for their ability to facilitate supervisee growth in confidence and efficacy in the supervising relationship.

SOURCE: Boyan and Copeland (1973).

focuser and even colleague. Interaction style is not left to natural inclination or past experience. Rather, the supervisor is trained in specific techniques usesful to his supervisory purpose. This partial list of process skills shown in Table 3 below, for example, is written into the program to ensure accomplishment of the affective component of the training.

An 8-step process was followed within a four-stage format (Figure 3) in the ISTP program. The eight steps are outlined in Table 4 below.

In the ISTP program, the supervising teachers received systematic training in four skill areas: observing, analyzing, prescribing, and counseling. They were guided through the program, which was conducted in workshop fashion, by a training coordinator. Trios were formed and maintained throughout in order to encourage personal interaction and provide opportunities for immediate feedback on role-playing exercises and on the result of audiotaped practicum experiences. The latter involved actual implementation of supervisory conference techniques in the field as the supervisors worked with interns in classrooms. The workshops also provided for information acquisition by means of readings, audiotapes, videotapes and transparencies. The same media were utilized to serve as stimuli and examples for simulations and role-playing.

The results of the training indicated that supervisors became better at reporting observations in behavioral terms and in basing their opinions on supportive data from observations. They could

TABLE 3

AFFECTIVE SKILLS IN THE INSTRUCTIONAL SUPERVISION
TRAINING PROGRAM

1. Insuring clear communication, e.g.,

    -- paraphrasing

    -- checking perceptions

    -- asking clarifying questions

    -- offering information

    -- listening actively and attentively

2. Establishing healthy interpersonal relationships, e.g.,

    -- using "freeing" and "binding" statements appropriately

    -- guiding growth in intern's autonomous problem-solving
       behavior

SOURCE: Boyan and Copeland, 1973, p. 13.

THE INSTRUCTIONAL SUPERVISION PROCESS
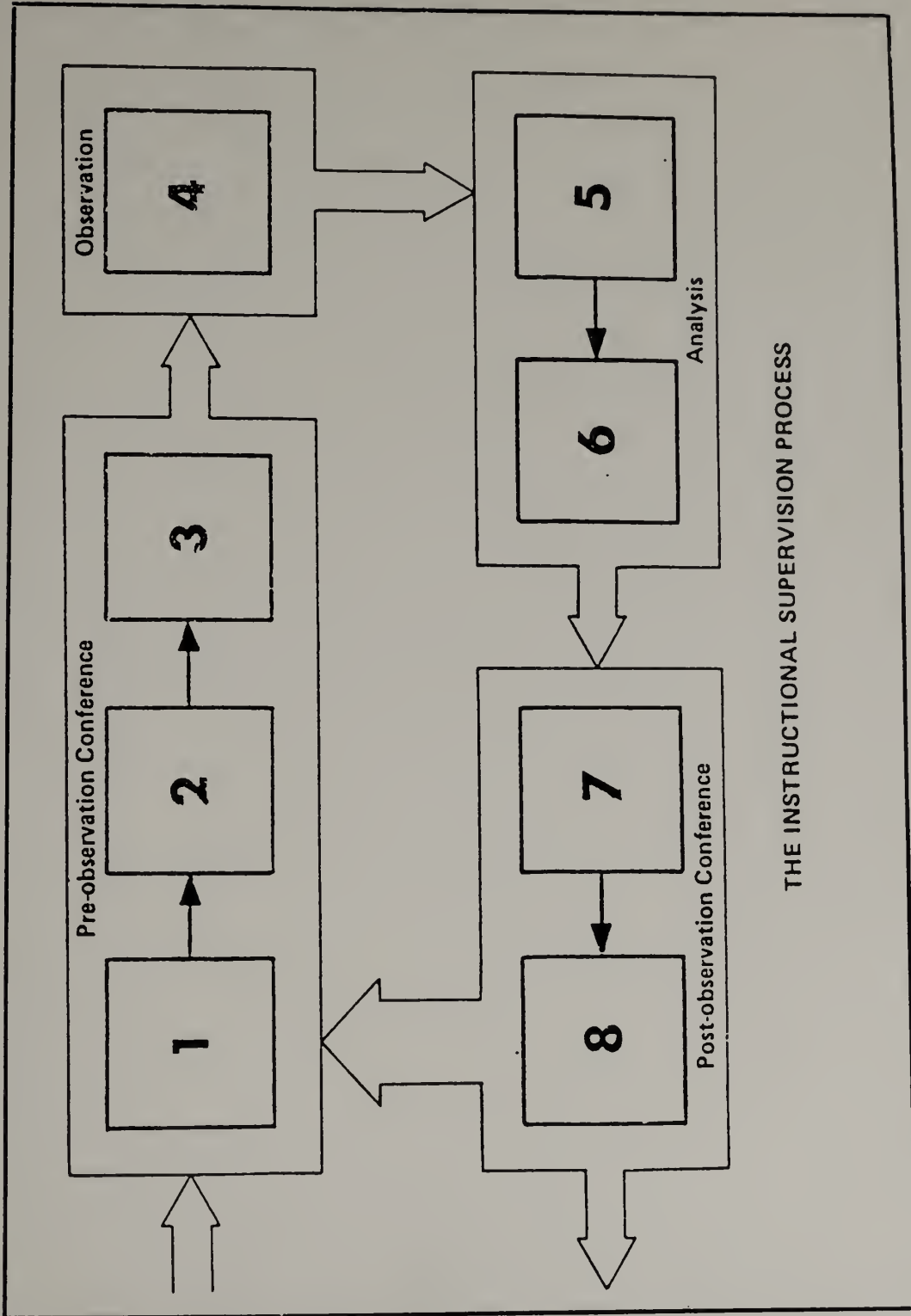
Figure 3   (From Boyan and Copeland, 1973)

TABLE 4

EIGHT-STEP PROCESS OF THE INSTRUCTIONAL
SUPERVISION PROGRAM

1. Identification of an area of concern

2. Identification of a criterion of desired performance, when
   appropriate

3. Selection of a measuring or observation instrument

4. Observation of the selected area of interest/behavior

5. Analysis of data

6. Identification of needed changes and alternative procedures

7. Feedback to or with student teacher

8. Selection of instructional strategies for bringing about the
   needed changes

SOURCE: Boyan and Copeland, 1974, p. 100.

identify patterns in the data and perform more of the desirable counseling behaviors themselves. Finally, they were better able to specify more techniques for achieving behavior change on the part of the interns.

There are similarities to the microteaching process in this program. For example, the four-stage sequence for supervisors and supervisees as shown in Figure 3 is the same basic procedure that is typically followed in a microteaching sequence. The eight steps within those stages, as listed on p. 34 also describe the general method of microteaching. Despite the similarities, however, this model of supervision training was not designed specifically for microteaching supervisors. The idea of the scaled-down, low-risk teaching situation for interns is not present. Neither is that situation present for the supervisor since the audiotape of his supervisory conference which will be critiqued by his peers in the trio is made in a live, field setting, not a simulated one. Also, the provision for feedback from the supervisees is not included. Moreover, the delimiting of target behaviors and the idea of re-teaching are not given any particular emphasis. And although systematic objective recording of lesson data is advocated, videotape is not necessarily recommended as a means to get it. Neither is video used at all to record supervisory conferences. Instead, audiotape is used. Useful for noting verbal behavior, this does ignore the subtle effects of non-verbal communication. Nevertheless, the basic approach of ISTP and the fairly comprehensive coverage of both cognitive and affective

supervisory skills make it one of the better developed programs of
supervision training and quite useful, with suitable adaptations, for
microteaching supervision.

It should be noted, however, that the program is a lengthy one
covering sixteen instructional units and requiring about 45 hours
for a group to complete, at least the equivalent of a college
semester course.

<u>A Self-Instructional Program for
Microteaching Supervisors</u>

The topic of the present study is a training program for super-
visors of microteaching. As stated earlier, research has shown
varying degrees of success and satisfaction with efforts to introduce
microteaching into teacher education or in-service programs. One
reason for the variance is that supervisor training has often been
inadequate or absent. Other possible reasons, of course, are inadequate
facilities or insufficient resources. But the lack of a competent
supervisor can certainly account for weaknesses in a Microteaching
program.

The well-trained supervisor sets the tone for constructive
critiquing, particularly where the teacher's peers join in that
critique. Without such guidance and example, critiques can become
negative, albeit unintentionally, or can remain on a superficial
level that never gets into an honest in-depth examination or even
recognition of the teacher's problems. Peer critics will tend to

critique at the level of their own skill development which is not
likely to be much more than the teacher's. They will bring a certain
amount of their own subjective concerns, possibly self-comparisons,
into the discussions and therefore view the teacher's instructional
behavior within the limited context of what is relevant to them.
The group minus a supervisor, therefore, may lack the sense of perspec-
tive and the more detached objectivity that an experienced professional
can provide. The supervisor can offer a more integrated view of the
teaching act that rises above the level of the technical and keys the
discussion to what is most important. Ready-made print and non-
print materials, exercises and guides are certainly valuable
resources, but they cannot do a supervisor's job of detecting nuances,
interpreting immediate events and giving meaning to the live situations
in which microteaching takes place. In sum, it is the good super-
visor who helps the novice catch a glimpse of what makes teaching
an art rather than just a set of technical skills to be mechanically
mastered.

Microteaching, conducted clinically and according to the
original Stanford model, can be a very time-consuming training method,
requiring a great deal of organization, logistical planning and
training of supervisory personnel. Therefore, one often finds
modifications of the original clinical model that permit the use of
the microteaching concept in more convenient and adaptable forms.
Also, there has been a need to disseminate the training procedures
more widely and make them more accessible to those institutions

without microteaching expertise. To meet this need, "packages" for the development of selected teaching skills have been introduced. These instructional kits are aimed directly at classroom teachers and usually incorporate a strong microteaching element. Their purpose is to provide training materials (manuals, guide sheets, media aids, exercises, readings) and protocols for a skills development program. They may or may not require the presence of trained supervisors to administer the program. On the in-service level particularly, they may be entirely self-instructional.

Two examples of published packages for teachers now in use are the Far West Regional Laboratory's Minicourses and General Learning Corporation's microteaching package. The University of California's (Santa Barbara) ISTP is an example of such a package especially for supervisors, the only one available, to this author's knowledge.

The question of where supervisors receive their training for microteaching bears serious attention. For the most part, they either study microteaching procedures in a university course, attend a "one-shot" workshop or conference, or read some articles about it.

The first method is desirable, but not always feasible in terms of time and money expended. The remaining two usually result in sketchy knowledge and little or no careful, evaluated practice in microteaching supervisory techniques. Moreover, introductory micro-teaching workshops concentrate mostly on the general process and the technical teaching skills with little time left to devote to examining

the variety of supervisory techniques.

It is imperative that the microteaching process be used by supervisors in the most efficient ways possible. The present emphasis on competency-based teacher education and evaluation, and the budget constraints which preclude the support of lengthy and expensive programs add to the urgency. Appropriately-adapted microteaching as a training tool for developing competencies, therefore, has a vital role to play and must be utilized as expertly as possible for the benefit of students and teachers who must meet performance demands.

Successful teaching and successful supervision demand at least as much competency in the affective domain as in the cognitive domain. The work already done in micro-counseling and in training teachers and supervisors by combining techniques of microteaching and interaction analysis attests to the effectiveness of the microteaching process in training people to improve skills in both domains (Ivey, 1971, 1972 and 1972a; Fiedler, 1979; Bosley, 1967; Aubertine, 1967; Wragg, 1971; Douglas and Pfeiffer, 1971; Johnston, 1969 and 1969a; Birch, 1969; Kise, 1972). Thus, despite the fact that the orientation of the traditional microteaching model has been mostly cognitive, it is clear that there is ample room within the microteaching concept for the development of interpersonal skills.

The present study will develop, test and evaluate an instructional package designed to equip teacher educators to cope with specific aspects of supervision in a microteaching setting. It provides them with needed training that is comprehensive yet can be accomplished

with an economy of time and resources. Teacher educators are defined
here as those who are in any way responsible for training or re-
training teachers, either at the pre-service or in-service levels.
Users of these materials could include faculty and graduate assistants
in teacher-training institutions, cooperating teachers, school
administrators and supervisors responsible for the improvement of
instruction, and any other educational leaders with similar instruc-
tional leadership responsibilities.

An important feature of this package is its self-instructional
aspect. The presence of a microteaching expert to conduct training
sessions is not necessary. Borg's (1969) research has shown that
the self-instructional mode works well with in-service professionals.
The target population for this program will consist of people who
are assumed to have some degree of teaching expertise. Finally, the
self-instructional nature of the materials, especially those in non-
print form, should make possible wide dissemination of the training,
thereby contributing significantly to the improvement of microteaching
supervision.

Program content. The program is divided into four units that
explain and provide practice in the following broad topics:

1. Introduction to the microteaching concept

2. Individualizing microteaching

3. Five stages of microteaching supervision

4. Observation, analysis and critique

5. Supervising styles and helping behaviors

6.   Alternative structures and settings

Program materials. Basic to the set of materials in the package
is a manual for program participants. It includes information,
exercises and directions and is integrally related to the other media
materials. Exercises emphasize practice and feedback; they involve
teaching, supervising and role-playing experiences. Other media
accompanying the manual include videotapes which serve as demon-
stration models and as a means of giving further instructions.
Videotape will also be used to record and play back the exercises
performed by the trainees. In addition, a film is used for the
purpose of providing introductory information and background on
microteaching.

     The materials also include relevant readings that will describe
certain teaching skills, clinical supervision models, and supervisory
styles. Some sample lesson excerpts are included.

     Finally, a set of instructions for a program "coordinator"
is provided so that materials are presented in proper sequence and
with appropriate resources and facilities available.

Method and evaluation. Briefly, the self-instructional program for
microteaching supervisors will be pilot-tested on a sample population
drawn from School of Education graduate students at the University of
Massachusetts. They will be students who have been, or already are,
in-service professionals and/or students pursuing advanced degrees in
education.

The group will meet four times for two-and-a-half-hour sessions. The unit sequences will be presented via the manual and worked through at each meeting, utilizing the appropriate media and print materials. Between meetings, the trainees will be required to complete accompanying readings and plan lessons and lesson-critique strategies as preparation for the subsequent sessions.

Two kinds of evaluation will be conducted during the study. The first consists of feedback forms (questionnaires) utilized with each unit at each session to determine the effectiveness and utility of each unit sequence as judged by the trainees themselves. This evaluation will provide the basis, in part, for any future revisions of unit sequences. A summative evaluation will be made at the conclusion of the program by means of a similar but more comprehensive questionnaire administered to the trainees. Again, this instrument will solicit the opinions of the participants as to the usefulness of the overall program, its materials and procedures, and whether or not it succeeded in meeting the professional needs of the trainees as supervisors or potential supervisors. The second type of evaluation consists of a pre-test and post-test. These differ from the first type in that they will not assess the trainees' opinions of the program. Rather, they will seek to determine whether the program increases trainees' theoretical knowledge of the program content, i.e., the microteaching concept and the styles and models of supervision presented.

Significance of the Study

An examination of the literature has indicated that the range of
training resource materials and well-developed and evaluated training
programs for microteaching supervisors are scarce or non-existent.
This study will develop and test a packaged, self-instructional program
of such training to be used with experienced professionals. The
responses and reactions of the subjects should provide valuable data
on whether the program can be effective in increasing knowledge about
supervision and in modifying ideas about supervisory behavior in
positive directions. Further, the feedback will provide concrete
information for revision and refinement of the program. This is a
first step in the program's testing and evaluation; it will serve as
a base for further study and development of the program package.
No attempt is made at this point to field test the materials in order
to determine the actual, demonstrated changes in supervisory behavior.
(See "Limitations of the Study" below.)

If the program is judged successful, then it is potentially useful
with groups other than the sample population on which it was tested.
School faculties could utilize it for in-service programs for department
chairmen or curriculum coordinators as well as for cooperating teachers.
Minor adaptations might be made as required. For example, curriculum
coordinators using it might want to concentrate on how to encourage
teachers to develop inquiry skills in pupils. University faculty
might use it to train college supervisors of interns. It could also
be employed in supervision courses as a segment of clinical supervisory

experience. The economy of both time and financial resources
should be attractive features to all such groups.

Intensive in the short term, yet relatively comprehensive in
scope, the program incorporates and puts into practice theory and
research findings derived from psychology and from studies of teaching
and learning. Perhaps its most important contribution is the fact
that it bridges the gap between scholars and practitioners that so
often stands in the way of change. It has been said of education that
twenty years may elapse before the findings of research are finally
put into practical use. However, Flanders (in Allen, 1969) has said
of microteaching, "In less than ten years microteaching has been
created, refined, and applied in the field. This is despite the alleged
gap between theory and practice, between university thinking and the
reality of the classroom." This microteaching supervision program is
a further extension of the effort to close that gap.

Limitations of the Study

The present study should be regarded only as a first stage
in the development and evaluation of the program for microteaching
supervision. As with any educational product, there is a long
series of steps to be followed in development and ultimate validation.
This is a pilot-testing of the program and does not attempt to do
more than a) develop an initial set of materials, b) assess the
trainees' theoretical knowledge of the program's subject matter before
and after training, and c) seek the trainees' experienced, professional

judgment on the materials, processes and procedures used in the implementation. It is left to a future study to take the next logical step that would test whether, in fact, the program does modify trainees' actual supervisory behavior.

Just as the technical skills and other observable behaviors are the content of microteaching but not the entire repertoire of a teacher's professional skills, so the supervisory behaviors practiced in this program do not represent all of the tasks and functions of educational supervision. Only those skills centering on lesson observation, analysis and critique are considered here.

Summary

Microteaching is a flexible and adaptable concept used to assist teachers in developing teaching techniques that are observable and useful in lesson presentation. As part of the basic process, a supervisor confers with the teacher, observes, analyzes and critiques lessons to help the teacher modify his behavior in desirable ways, when necessary. Some microteaching research denies the usefulness of the supervisor while other studies support it. The position taken here submits that the help supervisors give may often be insignificant because of supervisors' lack of adequate training for their roles. Therefore, training programs are needed that will develop skills in methods of systematic observation and analysis of lessons and in the skills of effective interpersonal communication.

A survey of the literature reveals few comprehensive, well-developed training programs or modules of resource materials widely

available for the purposes of improved training. To answer this need,
a self-instructional package was designed to be used independently by
groups of experienced educators who seek activity-based practice in
supervisory leadership in microteaching. The program utilizes the
microteaching approach itself. This study proposes to implement and
evaluate the program/package in terms of a) the trainees' knowledge
of the subject matter and b) their judgment as to its effectiveness for
supervisors of microteaching.

Chapter 2 examines theories and empirical research that
have guided the development and design of the program and its
materials. Succeeding chapters will detail the specific development,
design, and implementation; describe procedures and methods used
in the conduct of the study; and present the results of the study.

CHAPTER   II

RESEARCH AND THEORY: FOUNDATIONS FOR
PROGRAM DEVELOPMENT AND DESIGN

An examination of the empirical literature reveals a paucity
of research on supervisor education generally; few programs appear
to be in existence for producing well-grounded supervisors of micro-
teaching.   The background and rationale for a program of training in
microteaching supervision was presented in the previous chapter.   This
chapter presents the research and the theoretical bases used in devel-
oping the form and content of the self-instructional package
described briefly in chapter 1.   The Microteaching Supervision Program
(hereinafter referred to as M-TSP) bears the stamp of an eclectic
approach to training in that it borrows ideas and methods from a
variety of sources, even some that are usually presumed to be in
conflict with each other, such as humanistic psychology and
behavioral psychology.   The guiding notion is this: whatever is
most workable and most reasonable of the various approaches, in terms
of both methods and values, can be sifted out and blended into a
program that will then reflect the best contributions of each.

Behavior Modification

Microteaching draws substantially from behavioral psychology
for its method, particularly upon that set of procedures known as

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behavior modification. From this, a number of workable techniques are derived that can be utilized for developing certain skills of teaching. Similarly, the microteaching supervision program finds a basis in behavior modification. The following sections explain how it works in theory, how it is put into practice, and what its specific applications are to the microteaching supervision program and the manual.

Operant conditioning. The theoretical underpinnings of microteaching are rooted in that aspect of Skinnerian psychology known as "operant conditioning." In operant conditioning, desired behavior change is brought about, or shaped, by a system of rewards, or rein-forcers. This "contingency management system," as it is termed, operates as follows: each time the learner's behavior approximates the desired standard, he is reinforced in some way and encouraged to make further efforts to come even closer to the standard. Behavior that is ignored, or not reinforced, tends to die out (Charles, 1972). Reinforcement is a powerful factor in learning and the reinforcers may range from very basic rewards, such as food or money, to rewards more associated with human learning, such as praise, belonging or a desire to understand.

Programmed learning. An outgrowth of operant conditoning, programmed learning features the division of the material to be learned into small, discrete, sequential steps. Each step is easily understandable and readily accomplished. Correctly completed, that step is reinforced

by means of cueing and by immediate knowledge of results (feedback). The learner then moves on to the next step until, with each successive approximation (and consequent reinforcement), the overall desired behavior is attained and learning has taken place. That is, a change in behavior has occurred.

In the microteaching supervision program, the four-unit manual is not an example of print programmed material. However, it does contain the following elements of programming style:

1. Active participation of the learner.
   Throughout the manual there are written exercises to which the reader is asked to respond, and there are group exercises in which every participant has a role.

2. Knowledge of results.
   Immediate feedback and reinforcement follow each written exercise. The "correct" answers, or acceptable alternatives, are given. Another method of feedback used twice is to ask the learner to form pairs or trios to compare and discuss exercise responses with other trainees.

3. Planned repetition.
   Each key concept is emphasized visually on the manual pages and repeated at least once. In addition, the ideas are presented elsewhere than in the manual.

4. Use of cues and hints to provide reinforcement.
   A first step is given in an exercise or a suggestion made of what to watch for in a videotape or film.

5. Immediate application of new information.
   As new bits of information are incorporated into successive frames of programmed learning materials, so each new concept or behavioral skill introduced in the M-TSP manual is put into immediate practice by means of written or group exercises. Each exercise, that is, each practice of the skill, then receives immediate feedback.

Applications of Behavior Modification to M-TSP

A program of behavior modification, applied to any learning situation, typically includes most of the following steps: specifying the behavioral goal, selecting a criterion level of performance, deciding on contingencies, providing a favorable environment, carrying out the procedure, recording the results and communicating the results to the learner (Sulzer and Mayer, 1972).

Specifically applied to microteaching, the principles and practices of behavior modification are evident. The complex teaching act is broken down into separate, manageable skills which are then actively practiced in a "safe," low-risk environment. A model of some kind is provided so that a standard, or criterion level, may be set. Immediate knowledge of results, or feedback, is provided _via_ the responses of pupils, supervisor, peers and the objective recordings of videotape. The supervisor provides reinforcement of those behaviors which approximate those of the model and of the teaching strengths which should be maintained (based on their beneficial effects on pupils). Specific goals are agreed upon by teacher and supervisor before the lesson, and opportunities for improving the skill and making further attempts to reach the criterion level are provided for in the re-teach of the lesson. Figure 4 illustrates the physical setting within which microteaching activity takes place. (For a more detailed description of microteaching see pp. 2-4 in chapter 1 and "Microteaching: a Description" in Appendix D.)
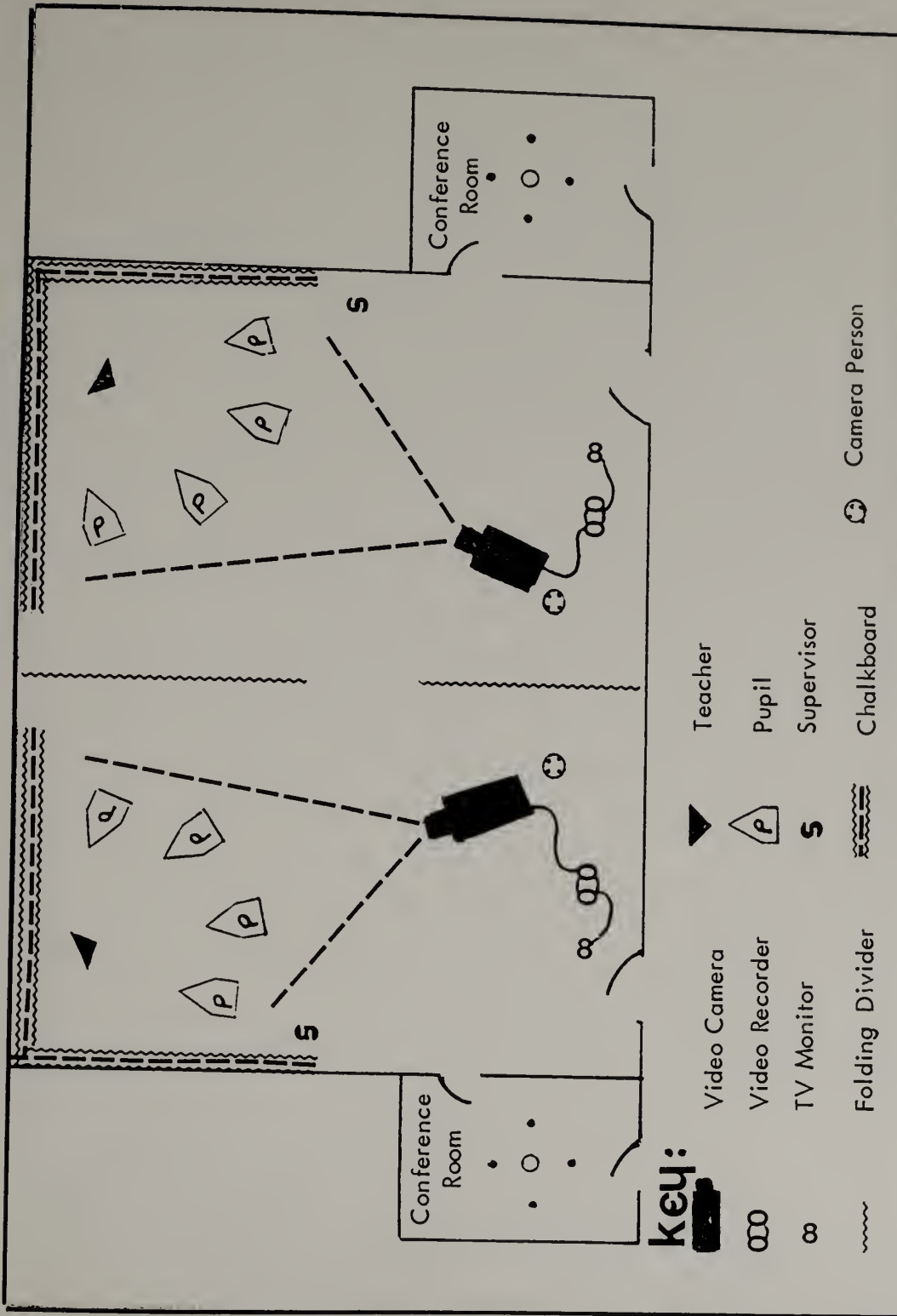
Figure 4. Microteaching Facility for Two Small Groups

The Microteaching Supervision Program (M-TSP) utilizes the microteaching concept itself; that is, it does not merely teach about microteaching and microteaching supervision, it puts the trainees through a microteaching cycle in the roles of both teacher and supervisor. Thus, some of M-TSP activities, too, are based on the behavior modification principles described above. The fact that supervisors will experience similar conditions that will be used to train the teachers they supervise is considered very important. Both Fuller (1973) and Griffiths (1976) emphasize the value of the supervisor experiencing the feelings and concerns teachers must face when confronted with a critique and video feedback.

Still another method inspired by behavioral psychology is included in the M-TSP program, i.e., the demonstration of how data may be reliably recorded for the analysis of critical incidents in teaching. Bijou, Peterson and Ault (1968) devised a recording system in which a pupil's behavioral response is looked at in terms of its antecedent stimulus event and its consequent social event (see Appendix C, p. 240). The point is that the teacher should be made aware that he can have some control over the behavioral response if he manipulates, or manages, the antecedent stimulus event so as to cause a predictable, and more desirable, response.

The idea of manipulating, or controlling, behavior is, of course, central to behavior modification. No doubt it gives rise to visions of 1984 or Walden II in the minds of its opponents. Naturally, there are extremes to which it can be carried. However,

on the question of manipulation, even so gently humanistic an

educator as Combs (1971) has reminded us that manipulation is not

synonymous with evil.

> As we have seen, there is no such thing as a
> good or right method of helping. The principle
> applies to manipulation of itself, it is neither
> good nor bad. . . . All helpers manipulate some-
> thing--the environment, the client, or them-
> selves--to create a helping relationship. Like
> any other method, it may be used appropriately
> or inappropriately, positively or negatively,
> depending upon the skill and understanding of the
> helper (Combs, Avila and Purkey, 1971, p. 274).

The question of the individual's freedom in the face of the

technology of behavior control raises philosophical hackles that

will not be easily soothed. Baer's (1972) interpretation, however,

has particular application to the microteaching process:

> . . . freedom in this sense requires not only an
> appreciation of behavioral laws and technology; it
> also requires the range of behavioral skills that
> make self-defence and self-development possible.
> It may even seem a paradox, but it is not: the
> deliberate development of many diverse skills in
> a person, through deliberate control of learning
> behaviors in school and elsewhere, in fact may
> maximize that person's freedom. It is capability
> that means freedom, in this sense; and capability
> is a collection of skills. Skills are exactly the
> targets of behavioral technology. Thus, freedom
> through behavior technology (p. ix).

The techniques of behavioral psychology described in the

preceding pages are all interrelated and all useful toward the end

of developing selected teaching and supervisory skills. The

ultimate result of their use in the M-TSP program is to make super-

visors aware of the variety of supervisory behaviors and helping

skills which they may learn and practice and make part of their own

repertoire if they so choose. With practice comes competency, and the greater the repertoire, the more choices that are open, and therefore, the greater the degree of competency that can be developed.

Modeling

Modeling is the presentation of a desired standard of performance. It could be subsumed under behavior modification since it does put forth a criterion level of behavior which the learner is expected to approximate. However, the use of models for educational purposes is age-old, preceding behavioral psychology by millennia; it therefore earns the right to stand independently.

Both in microteaching and microteaching supervision, objectives relative to the behaviors/skills to be practiced are agreed upon prior to the practice. One of the most effective training strategies that can be used to teach that skill is modeling. Travers (1973) summed up the results of studies that reveal the effect of self-viewing of one's own teaching performance when no model is available:

> When no model of "good teaching" was presented,
> satisfaction with one's own performance determined
> what was noticed on the screen, how it was evaluated,
> and any attitudinal change. The investigators
> concluded that self-viewing will not produce any
> desirable attitudinal and behavioral change unless
> it provides information about the amount of
> departure from a desired standard which has been
> accepted as a standard by the viewer (p. 232).

Thus, even the impact of video feedback, potentially one of the most effective elements in the microteaching process, can be

diminished without the use of models. Eder (1971) confirmed this in a study that found videotape combined with use of a model was significantly more effective than videotape alone in producing desired changes in teacher behavior.

Woolman (1969) used videotaped single concept demonstrations with in-service teachers to investigate their effects on teaching practices and viewpoints. They had a "positive effect on quality of teaching, the greatest change occurring in those noted as needing the greatest improvement and among the highly motivated."

Two kinds of models, perceptual and symbolic, have been tested as to their relative effectiveness. Perceptual models are those perceived face-to-face (live) or vicariously through videotape or film. Examples of symbolic models are written instructions or descriptions of a desired skill or transcripts demonstrating its actual use. Perceptual models were found to be better by some (Bandura and Walters, 1963; MacDonald and Allen, 1967) because the model teacher could be trained until the display of the criterion behavior was clear-cut and unambiguous and because both verbal and non-verbal behavior could be viewed. Further, an actual performance is more likely to provide greater clarity and more relevant cues than a verbal description, according to Bandura. Griffiths (1976), however, disagrees, saying that written transcript models can be as effective as perceptual models in the acquisition of a skill though perhaps not as motivating. Berliner (1969) found that perceptual models were not more efficient than symbolic models. Finally, both

Griffiths and Orme (1967) concluded that the combination of symbolic and perceptual models was better than either one alone. Bandura would likely agree that this may be especially true if the criterion behavior were of a more complex nature.

The matter of focus, or cue discrimination, with models has also been investigated. Some perceptual models, for instance, have audible remarks dubbed in on the film or tape, or written cues such as sub-titles, to identify the skill behavior at the moment it is being practiced. This is called contingent focus. Non-contingent focus is a similar cueing to the behavior, but it does not occur simultaneously with the showing of the skill. It occurs before or after the demonstration. Both MacDonald and Allen (1967) and D.B. Young (1968) agreed that modeling was enhanced by the use of con- tingent focus, or "contiguous cueing," as it has been alternately termed.

Both perceptual and symbolic models have been combined for use in M-TSP. Included in the readings accompanying the manual are written descriptions of the technical skills of teaching, transcripts of microlessons demonstrating and cueing the teacher's use of skills, and a detailed description of a non-directive supervisory approach. Further, on a series of videotapes, several supervisors model directive and non-directive supervisory styles, and a method of individualizing microteaching. One tape demonstrates the five-stage sequence of micro- teaching supervision. An introductory film models several of the teaching skills described in the readings. The manual provides

non-contingent focus for the supervisory skills by suggesting what the reader might watch for on the tape or by directing his attention, immediately after viewing, to specific aspects of the skill shown on the tape.

Systems Approach

The systems approach to educational efforts has been adapted from the business world's view of production management in order to increase effectiveness and efficiency and achieve quality control. An instructional design pattern, cyclical in nature, has evolved which works well and has been substantiated through research, according to Peck and Tucker (1973). Some of that research is also part of the microteaching literature examined in the previous chapter. Simply, the steps are the following:

1. Specification of behavior via performance objectives

2. Planned training procedures

3. Measurement of results of training in terms of the objectives

4. Feedback of results observed

5. Re-entry into training and practice

6. Measurement again.

Clearly, the microteaching process fits into the systems view. Specific behaviors are identified as teacher needs, training is given, the teacher practices the skills in a microlesson, results are objectively recorded and analyzed, feedback from several sources is given to the teacher, and from that feedback analysis, new

strategies are planned, practiced and once again measured.

M-TSP incorporates most of the six steps into its supervisory process though in a looser, less rigorous fashion. One of the typical features, too, of a systems approach is the availability of alternative materials for learning during step 2. Thus M-TSP provides information not only _via_ the text of the manual but also through outside readings, and audio-visually, through videotapes and film. The use of technology and the packaging of learning units into modules are also typical systems features of which M-TSP makes use.

Clinical Supervision

Yet another theoretical base for M-TSP is the concept of clinical supervision as conceived by Goldhammer (1969) and Cogan (1963). While the microteaching cycle is basically a three-step model, teach-critique-reteach, the M-TSP model is a five-stage process. Figure 5 illustrates the direction of this process.

1. Pre-observation conference
2. Observation
3. Analysis and Strategy
4. Critique and Training
5. Re-teach

The Goldhammer five-stage model of clinical supervision very closely approximates the one above in its structure, purposes and rationales. However, since it is not strictly a microteaching supervision model but rather one for general instructional supervision,
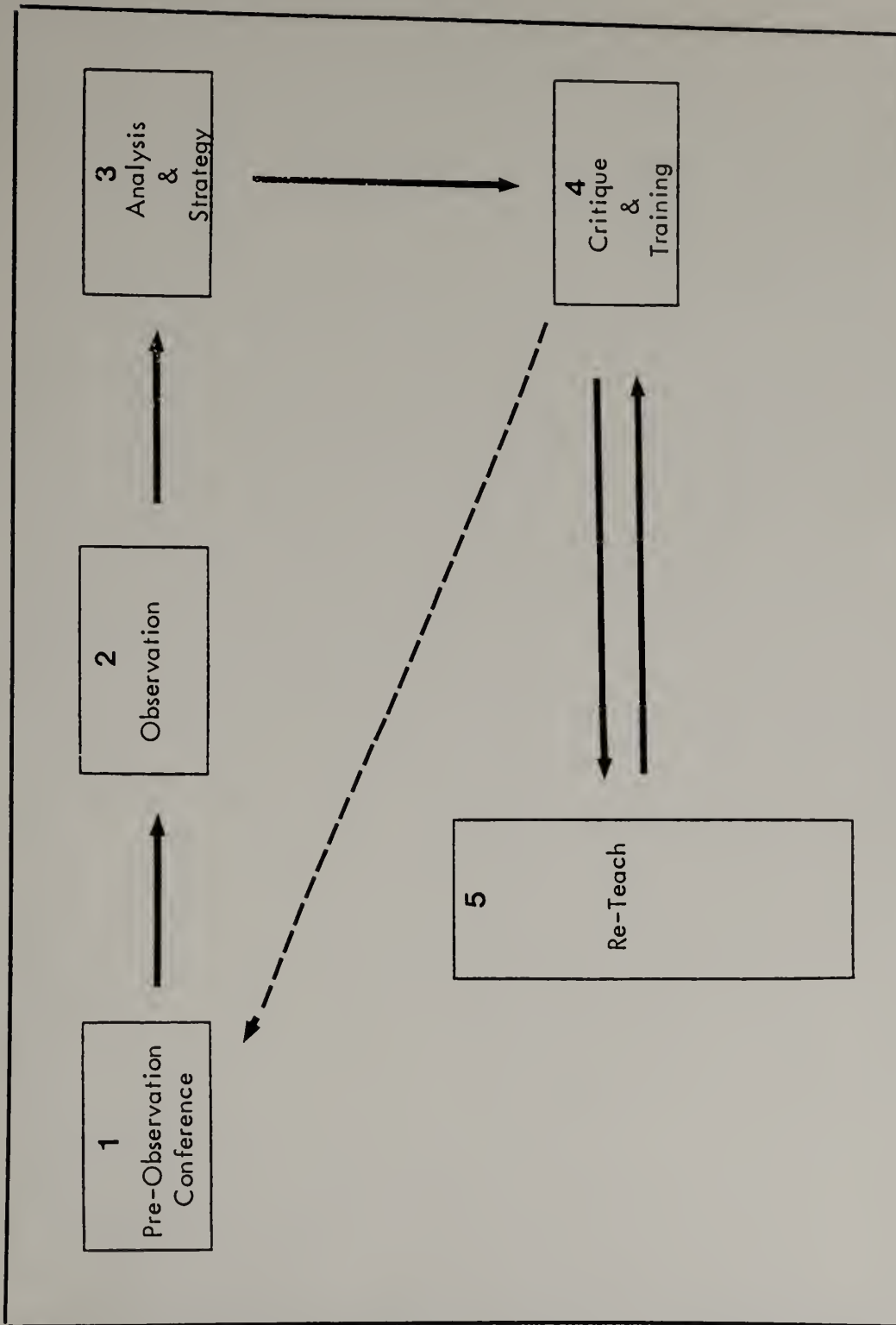
Figure 5. Five Stage Model of Microteaching Supervision

it does not have a re-teach phase. Instead, there is a post-conference

(or "post-mortem") wherein the supervisor's professional behavior is

analyzed either with peer supervisors, with the teacher, or by the

supervisor alone with a recording of his critique. Although this stage

is not included in the supervision sequence taught in M-TSP, it is

included in the manual exercises. Each supervisor's critique is itself

critiqued by the members of the small groups. (See Exercises B, D, F

and G of the manual in Appendix C.)

Given that supervision is a process that has the improvement

of instruction as its ultimate goal, the question arises--why

"clinical" supervision? And why is the concept of clinical supervision

appropriate for training microteaching supervisors? An examination

of the identifying features of clinical supervision as provided by

Goldhammer will help answer this question: a) it is face-to-face

interaction between teacher and supervisor, b) it is supervision of

actual professional practice, that is, of practitional behavior,

c) it is the collection of detailed observational data as the focus

of analysis, and d) it calls for an intensity of focus, one that

binds teacher and supervisor together in an intimate professional re-

lationship.

Clinical supervision is a systematic process in that it takes

place regularly, that is, it is not characterized by unplanned,

occasional or random classroom visits. The framework within which the

observation and analysis of lessons occurs is also systematic. A

structure is followed in the overall process and also within the five

stages.

Some of the psychological theory underlying clinical super-
vision holds to the belief that human behavior is patterned and that
systematic observation and analysis will reveal those patterns in a
teacher's or supervisor's behavior. A number of systems have been
designed for recording and analyzing the interactional behaviors, and
subsequently the patterns, of teachers, supervisors, counselors and
students. Flanders, Blumberg, Bales, Hughes, and Galloway are just
a few of the authors of such systems (Simon and Boyer, 1970).

Flanders Interaction Analysis has been included in the M-TSP
manual as an example of a simple instrument that supervisors might
use informally in the observation stage of supervision (see Appendix C,
p. 234). It provides insight into the kinds of affective influences a
teacher exerts in the classroom and becomes a useful tool for looking
at the behavior objectively and anticipating its possible effects on
the students. The manual seeks only to make the supervisor trainees
aware of the availability of such objective instuments and to focus
some attention on the importance of affective teacher behaviors
during interaction. It does not, in the interests of time, attempt
to provide training in the coding, rating and matrix design usually
associated with the Flanders instrument.

Trainees are asked in the manual to consider patterns but only
if they can be demonstrated on the basis of objective recorded data.
The significance of a pattern is determined on the basis of its po-
tential effect on students' learning or behavior. Some microlessons

are so brief, the M-TSP manual recommends that the appearance of patterns be watched for over the period of several microlessons.

Cogan (1963) stresses the systematic aspect of observation and analysis when he recommends integrating critical incidents and classroom events into a sequential series of related observations which, in turn, reveal patterns of events and patterns of teacher behavior. A frequent mistake of supervisors, he says, is recording critical incidents but failing to record the events leading up to the critical incident. "Even more serious is the common failure to show the interrelatedness of the incidents themselves" (p. 350).

In the M-TSP manual, critical incidents are introduced in the context of a recording system (Bijou, Peterson and Ault, 1968) that requires the consideration of stimulus events preceding the incident or the behavioral event. A critical incident is defined as a single or occasional act of the teacher, one likely to have a strong effect, either positive or negative, on one or more students. Relationships, attitudes and behavior can all be affected. As explained on p. 52, it is an important part of systematic observation and data analysis to encourage teachers and supervisors to look at events that precede the incident as well as events that occur in response to it. Data gleaned from such an examination can suggest ways of altering teacher behavior to get more favorable pupil responses.

Humanistic Psychology

In recent years, educators have become convinced that in order for the best teaching and learning to take place a humanistic environment must exist. Weigand (1971) quotes from the Articles of Association of the American Association for Humanistic Psychology:

> Humanistic psychology is primarily an orientation
> toward the whole of psychology rather than a distinct
> area or school. It stands for respect for the worth
> of persons, respect for differences of approach, open-
> mindedness as to acceptable methods, and interests
> in exploration of new aspects of human behavior (p. 247).

Key tenets of humanistic psychology are included in the microteaching supervision program. They relate to the kind of interaction that takes place between teacher and supervisor and to the interpersonal relationship that exists between them. The premise of the following sections is that successful supervision is dependent in large part upon the establishment of an open and humanistic climate within which both teacher and supervisor can work cooperatively and productively.

The interpersonal relationship. Ultimate among the supervisor's objectives is that of seeing the teacher arrive at a degree of autonomy where instructional improvement is self-generated, where goal-setting, lesson analysis and evaluation are felt responsibilities of the teacher and not merely supervisor-imposed exercises. The collaborative relationship of the supervisor and teacher is the ideal, the supervisor serving perhaps as the catalyst in the professional self-actualizing of the teacher. Goldhammer (1969), Cogan (1963), Harris

(1963) and others, including those advocating helping rather than collaborative relationships, all seem to agree that this would be an ideal level of attainment. Whether or not a collaborative relation- ship can exist at the outset of supervision is probably dependent upon the individuals involved. Teachers who are not highly motivated, teachers who are lacking experience in self-direction, or teachers who are overwhelmed initially by many problems may require or prefer a supervisor who is less a fellow collaborator and more a helper or guide. It is reasonable to assume that the relationship is a dynamic one; that is, during an extended course of supervision the relationship may vary. For any number of reasons, teachers may be more dependent on the supervisor at certain times and quite capable of operating on a collegial basis at other times.

The keynote of the humanistic theme in instructional supervision is stuck by Carl Rogers (1969) when he says:

> . . . we possess a very considerable knowledge of the conditons which encourage self-initiated, significant, experiential, "gut-level" learning by the whole person. . . . We know . . . that the initiation of such learning rests not upon the teaching skills of the leader, not upon his scholarly knowledge of the field, not upon his curricular planning, not upon his use of audio-visual aids, not upon the programmed learning he utilizes, not upon his lectures and presentations, not upon an abundance of books, though each of these at one time or another be utilized as an important resource. No, the facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal relationship between the facilitator and the learner (p. 105).

This puts the case rather strongly for the importance of the relationship between supervisor and teacher, but it also puts the

whole process of supervision into a perspective, the understanding of which may spell the difference between success and failure.

Research studies about supervisors are not as prolific as studies about teachers. However, those that do attempt to find out what makes supervisors effective with teachers echo the same theme: human relations skills. Saunders (1955) reported that teachers who were asked about supervisor characteristics ranked "Respects you as an individual" at the top of the list. Rugg and Norris (1975) polled student interns and found that students rated their supervisors highest on: openness to student input, help in clarifying goals and objectives, setting high expectations for student output and generally guiding within the student's framework of interests and needs. Heald (1969) reviewed some studies and concluded that supervisors rated as most effective were also perceived as democratic, encouraging a reciprocity of communication and good group interactions, and displaying a willingness to listen. Finally, Blumberg's (1968) study of teacher morale as a function of perceived supervisor behavioral style "lent support to the notion that one's supervisory style is largely responsible for the nature of the work and interpersonal environment that is developed in supervision" (p. 113). He found that teachers who saw their supervisors as high in indirect behavior and low in direct behavior (i.e., doing little telling, opinion-giving and criticizing but much question-asking, clarifying, accepting, praising and reflecting of feelings) had the highest morale and found supervision to be productive. They felt freer about communicating with the supervisor and expressed a positive

sense of the interpersonal relationship with the supervisor.

Directive and non-directive styles. As a result of the high marks
teachers give supervisors who establish a comfortable, non-threatening
climate, much attention has been given to supervisory styles. Combs,
Avila and Purkey (1971) emphasize the effect of threat on the "helpee"
thus:

> . . . the greater the degree of threat to which he is
> exposed, the more tenacious he holds to the percep-
> tions, ideas or practices he already has. Under the
> experience of threat, people find it almost impossible
> to change" (p. 107).

Two supervisory styles that appear to carry low threat are
indirect and non-directive. Indirect behaviors have already been
listed in Flanders Interaction Analysis system and Blumberg's
system (see p. 25). Indirect influence, according to Flanders (1974)
consists of verbal statements that expand the helpee's freedom of
action by encouraging his verbal participation and initiative.   .
Direct influence, conversely, consists of verbal behaviors that
restrict freedom of action by focusing attention on a problem,
interjecting authority or both.

Batten and Batten (1967) also define group leader behavior
styles as directive and non-directive. Directive corresponds to
Flanders' direct influence; that is, the leader decides what is
needed, and how persons ought to behave for their own good in order
to accomplish goals decided upon by the leader. The leader takes a
major part in planning, organizing and evaluating how things go. The
non-directive leader does not try to guide or persuade. He stimulates

people to think about their own ideas and make their own decisions.
He provides information and ecnouragement where necessary, his
belief being that "people are far more likely to act on what they
themselves have freely decided to do than on what a worker has
tried to convince them they ought to do" (p. 2).

It would seem rather obvious, then, that an indirect, or non-
directive supervisory approach is the appropriate style to adopt.
Neither Flanders nor the Battens actually advocate this, however.
Both indicate that there are situations and occasions when a direct
style is more appropriate than its opposite. Flanders (1974)
expresses it thus:

> Most teachers who hear these ideas expressed
> immediately conclude that indirect is superior
> to direct influence. We believe that the basis
> of this value judgment lies less in the ideas
> just expressed than in the social pressures that
> affect teachers' self-concepts. Most teachers
> apparently want to believe that they are "indirect
> teachers," even before they hear how these con-
> cepts are defined or are told about any research
> findings. If being an indirect teacher means
> consistently using indirect influence, we can
> state categorically that no such teacher exists,
> because no teacher employs a pure pattern of
> influence. All teachers establish some kind
> of balance based on a combination of direct and
> indirect influence (p. 115).

Flanders notes that there are different types of activities in
the classroom and some distinctly call for a direct style. The Battens
examine both the advantages and the limitations of each style. With
regard to directive, for example, they state that although "it is by
no means an effective way of getting them to change or modify any
of their strongly established ideas, attitudes or patterns of

behavior, it is a good way of giving people whatever kind of help and services they already know they want" (p. 8). It is also effective in helping people meet their short-term needs but creates the effect in the long term of making them dependent.

The non-directive approach may be difficult for a leader because he is never really "in control" and must resist the urge to direct people toward the course or goal he may see as best. People may decide to act in ways that produce nothing. The leader may even be rejected as a "do-nothing." The Battens warn of over-zealous use of a non-directive style:

> . . . be careful to avoid imposing on dependent groups
> of young, immature, or inexperienced people responsi-
> bilities for autonomous decision-making in excess of
> what they are really willing and able to bear.
> . . . There can be no question, therefore, of
> condemning one approach and supporting only the
> other. Neither can be judged good or bad except
> in terms of the worker's purpose, the relevance
> of this purpose to the needs and circumstances of
> the people, and the appropriateness of his choice
> to the achievement of that purpose (p. 22).

In the final analysis, it is most important to be clear about the purposes in selecting a style and to remember that either style, or mixes of them, is appropriate at one time or another.

Helping skills. Drawing on the psychological counseling work and theories of Rogers (1969) and Carkhuff (1969) and the microcounseling work of Ivey (1972), the themes of leader or helper styles and inter-personal relationships can be translated into practical helping skills for use in instructional supervision. The rationale from which these skills have evolved pinpoints a phenomenological view that

says each person's perception of reality is unique. In order for the helper to be truly useful, he must be able to get inside the helpee's frame of reference and try to perceive things the way the helpee does, both on a thinking and feeling level. When a helper can do this, he is displaying empathy. According to Carkhuff (1969),

> empathy is the key ingredient of helping. Its explicit communication, particularly during early phases of communication, is critical. Without an empathic understanding of the helpee's world and his difficult- ies as he sees them, there is no basis for helping (p. 173)

A second important requirement for successful interactions is also identified by Carkhuff. It is that of communicating respect. When the helpee knows and feels that the helper holds him in positive regard as a person of worth and competence, then the climate is such that effective helping can take place.

Training protocols have been devised by Ivey (1972), Brammer (1973), Weigand (1971) and others that make it possible for those in helping relationships to experience and practice the skills of empathy and respect.

Applications. The themes of humanistic psychology are widely recognized as essential to effective learning. The manual developed for the M-TSP takes this into account in Unit Four where directive and non-directive supervisory styles are treated. Each style is explained but neither is advocated, in keeping with the belief that the supervisor's own natural inclination toward style must also be respected. Reading G, "A Non-Directive Approach to Supervision,"

is devoted to a non-directive method while no readings are assigned
on directive supervision. It was assumed here that the former
approach, being the non-traditional one, would require the most
description and modeling.

Also in Unit Four, a series of five helping skills are
covered. These skills are derived from the training protocols
mentioned above; they are aimed at raising supervisors' awareness
of the importance of a) empathic listening, b) communicating
respect, and c) developing open communication. In particular, the
skills described and practiced are

1. attending behavior

2. leading: focusing, questioning, clarifying

3. reflecting feeling

4. respecting

5. summarizing.

As in microteaching, where the repertoire of teaching skills is
expanded by trying out and practicing a variety of diverse techniques,
so in microteaching supervision, a variety of useful helping skills can
be tried and rehearsed in a safe situation to see which work best
for the individual supervisor.

Throughout the M-TSP, both in the manual and on the tapes,
there is an emphasis on the humanistic philosophy of respecting the
individual. Unit Two deals with how to individualize microteaching
so that instead of supervisor-selection of objectives and teaching

skills to be practiced, the process of decision-making is mutually shared by teacher and supervisor. The importance of the pre-observation conference as a time for establishing a comfortable interpersonal relationship is underscored in Unit Three. So, too, is the critique stage emphasized as a time of critical importance whereby the teacher comes away from the session with his self-respect intact and a sense of his strengths and not only his weaknesses. (See page 212 for an outline of the contents of each unit. Chapter 3 will describe in further detail the contents and procedures of each unit. A complete copy of the manual may be found in Appendix C.)

Self-Instructional Program Mode

The Microteaching Supervision Program package utilizes the self-instructional mode. In chapter 1 a number of studies were reviewed which dealt with the usefulness of self-instruction in micro-teaching, that is, the utilization of self-appraisal forms; written guides; feedback from peers, audio or videotape--but no supervisor. Mixed results were found. Self-instruction and self-evaluation sometimes produced results that yielded no significant difference between these two approaches. At other times they pro-duced evidence of positive change in teaching behavior. In almost all cases the subjects of these experiments were inexperienced, pre-service teachers. When self-instructional methods are used with in-service teachers, however, the results are generally positive. Borg's (1969) work on the self-instructional Minicourses which teach skills using

the microteaching model has been very successful when used with experienced teachers. The same materials, which emphasize self-analysis, when used with pre-service teachers did not produce observable gains.

Perrott (1976) conducted studies similar to Borg's and came up with remarkably similar results. She concluded that the self-instructional mode in a microteaching course was indeed a particularly valuable one for experienced teachers. "As in-service teachers are largely responsible for their own learning and without many of the insecurities characteristic of pre-service trainees, they should find it less necessary to rely on a supervisor for authoritative guidance, morale boosting or as a resource person" (p. 17).

Other findings bear out the differences one may expect between pre- and in-service teachers. In examining the concerns of inexperienced teachers and student teachers, it was noted that the anxieties of these groups are mainly related to self rather than to pupil learning (Thompson, 1963; Fuller, 1969). Experienced, mature teachers, on the other hand, focus their concerns on the progress of their pupils and on self-evaluation as opposed to evaluation by others (Gabriel, 1957). Woolman (1969) found, too, that older, more experienced teachers adapted what they learned in an in-service program more effectively to the classroom situation. Finally, the well-researched Instructional Supervision Training Program (ISTP) program described in the first chapter also utilized a self-instructional plan for the supervising teachers with whom the program was tested. Based on all of this

evidence, it was deemed appropriate that the M-TSP in this study adopt a self-instructional approach also.

The program is designed for a group to go through together since many of the training activities require more than one person. However, one person using the manual and the readings, and viewing the tapes and film, doing the written exercises and perhaps videotaping his micro-lessons before volunteers for objective feedback could probably derive a substantial amount of useful information from the program. Lacking, of course, would be the valuable critique of his supervisory behavior given by other trainees experiencing the same program.

Program Components

A variety of training procedures were built into the Micro-teaching Supervision Program. Table 5 presents an overview of the kinds of procedures used in each unit of the program. The purpose was to keep interest high and to provide for different learning styles among trainees. The primary function of the manual units and the readings, for example, was information-giving and preparation for activities. Certain portions of this reading material also served as symbolic models, e.g., lesson transcripts and descriptions of teaching skills. The film and videotapes served as perceptual models, i.e., dramatized examples of teaching and supervising.

Actual practice in microteaching and in supervising was ac-complished through role-playing in three of the training sessions.

TABLE 5

VIEW OF TRAINING PROCEDURES USED IN MICROTEACHING SUPERVISION PROGRAM

Microteaching Supervision Program	Information-giving	Perceptual Model	Symbolic Model	Written Exercise	Large Group Exercise	Microlesson & Critique	Critique of Supervisor	Assigned Readings	Pairs	Trios
Unit One	X	X	X	XX				XX		X
Unit Two	X	X	XX	XX		XX	XX	XXX		
Unit Three	X	X	XXX	X		XX	XX	XX	X	
Unit Four	X	X		XXXX XX	X	X	XX			

Exercises in the program were carried out in several ways; these varied from individuals working alone on a written exercise to group arrangements of pairs, trios, and small or large groups.

The outline below details the sequence of topics comprising the content of the Microteaching Supervision Program. Further discussion of each unit as it was utilized in this study will be found in chapter 3.

Unit One: Introduction to Microteaching

A. The microteaching concept
B. Characteristic features
C. Adapting microteaching to different situations and settings
D. Selecting observable teaching behaviors for microteaching
E. Selected technical skills of teaching

Unit Two: Individualizing Microteaching

A. Identifying the needs of the teacher
B. Role of the supervisor
C. Using leading questions and statements
D. Outcomes of the critique
E. Several training strategies

Unit Three: Five Stages of Microteaching Supervision: Their Rationales

A. Pre-observation conference
B. Observation
C. Analysis and strategy
D. Critique and training
E. Re-teach

Unit Four: A Closer Look at Observing, Analyzing and Critiquing

A. Focused, systematic and objective analysis of data
B. Sample recording instruments
C. Analyzing data: patterns and critical incidents
D. Critiquing: helping skills, directive and non-directive supervisory styles

Rationale. It was important very early in the program to present the essence of the microteaching concept--not only because the participants were going to be trained in its supervision but because they were also going to experience it from the standpoints of both teacher and supervisor. One barrier to utilizing microteaching is the excuse that the right conditions do not exist. The program points out, therefore, that there do not have to be "standard" conditions; rather, the microteaching concept can be adapted to any kind of setting. No situation is necessarily the ideal.

Readings provide background and description of the technical skills of teaching generally used in microteaching. No actual training in these skills is intended in this program although some are briefly demonstrated in the film. The assumption is that experienced in-service professionals are already aware of and using these skills. The readings serve therefore as a refresher and a review of the salient points about each skill. Too, they were meant to provide a common frame of reference for the trainees in planning and critiquing lessons.

In order to avoid the danger of microteaching's becoming a rigid process, the second unit emphasizes individualization. Rather than have supervisors assign the list of skills to be mastered, a more flexible procedure is suggested whereby teachers and supervisors try to determine together what the instructional problems are and what kinds of skills might be learned and practiced in order to overcome those problems.

The complete structure of a microteaching session is presented
next to provide trainees with a logical pattern of procedure. Unit
Three combines the typical teach-critique-reteach pattern of micro-
teaching with the systematic stages usually followed in clinical
supervision.

Since the heart of both clinical supervision and microteaching
is in the careful recording, analysis and critiquing of lessons, the
fourth unit pursues these stages in greater depth than any of the
previous ones. The overall process having been experienced in Unit
Three, the emphasis in Unit Four is on more systematic observation,
in-depth analysis and an interaction style that will yield the most
positive and productive critique. The recording instruments, the
interaction styles and the list of helping skills are presented as
possible helps in the process and not as inflexible requirements.
The point is to be aware of the alternatives. This is in keeping with
an underlying tenet of the program that suggests each supervisor,
after exploring the alternatives, will ultimately adopt the style
and a set of supervisory techniques with which he can be most
comfortable and effective.

Summary

This chapter explained the theoretical and empirical research
upon which the Microteaching Supervision Program (M-TSP) drew for
its development and design. Following the explanation of the research
and theory used as support, its application to the M-TSP program,

materials or procedures is described.

Skinnerian principles of behavioral psychology as practiced in behavior modification, operant conditioning and programmed learning, are manifest in the program, particularly in the manual.

Perceptual and symbolic models taking several forms are an integral part of the program also. Their inclusion is stimulated by the extensive research of Bandura.

The systems approach to learning is closely related to behaviorism and gives emphasis in particular to the feedback mechanisms and to measurement of results in terms of the specified objectives.

The clinical supervision models of Cogan and Goldhammer are merged with the teach-critique-reteach method of microteaching to form the basic five-stage structure of the Microteaching Supervision Program. The emphasis here is on systematic and objective recording, observation and analysis. Specific methods for accomplishing this are suggested in the program.

The importance of affective concerns in the teacher-supervisor relationship as derived from humanistic psychology is reflected in the program's attention to some basic helping skills and to directive/ non-directive interaction styles of supervision.

Finally, the rationale for the use of a self-instructional mode for the M-TSP program is given together with an overall outline of the program topics and training components.

C H A P T E R   I I I

PROCEDURES

The subject of this study, the Microteaching Supervision Program (M-TSP), is in an early stage of development. The primary objective of the study is to pilot-test the first version of the program with an appropriate group of professional educators, and from that implementation derive some useful baseline data for subsequent program development. The study is not intended to be rigorous, "hard-nosed" research but rather an exploration of ideas and an attempt to gain sufficient knowledge to guide future planning. Further corroborative studies will be suggested in chapter 5.

The effectiveness of the Microteaching Supervision Program (M-TSP) described in chapters 1 and 2 was investigated in an initial implementation with a group of ten in-service supervising teachers. The subjects were all members of a graduate-level seminar course in education. All subjects completed a Participant's Data Form and a pre-test (see Appendix F). The pre-test assessed the entry-level behavior of the subjects in terms of their actual knowledge and awareness of microteaching and supervision, which constituted the subject matter of the training program. Four training sessions followed in which all subjects participated using the M-TSP manual as the basic guide for information acquisition and instruction. A coordinator facilitated the conduct of the program

in a peripheral way, that is, by providing materials and facilities
and by organizing subjects for activities but not entering into the
activities in any substantial way. Following the training a post-
test (see Appendix F), identical to the pre-test was administered.
Questionnaires for each unit of the program (see Appendix F) were
given to the trainees at the end of each session to elicit their
opinions about the value of that unit training session and its
materials. One final questionnaire (see Appendix F) was also ad-
ministered at the conclusion of all training to collect the opinions
of the trainees on the overall program. This chapter describes the
investigation in terms of the data collection and treatment procedures.

Data Collection

Subjects. The subjects were ten in-service elementary teachers
(eight women and two men) from the Amherst-Pelham School District
in Amherst and Pelham, Massachusetts. They represented three
elementary schools from the same district. All were enrolled in
advanced degree programs at the School of Education, University of
Massachusetts at Amherst. Two were seeking certification in special
education, one was concentrating on counseling, and a third studying
leadership and reading. Others did not specify their areas of con-
centration. Two of the group already held Master's degrees in Educa-
tion and were pursuing the Certificate of Advanced Graduate Study
(C.A.G.S.). Six of the teachers taught lower elementary grades, three
taught upper elementary, and one was a qualified special education

specialist working with children and families of all elementary school age levels.

Fifty percent of the subjects fell into the 26-30 years age group, while thirty percent were older and twenty percent were younger. Years of professional experience in teaching ranged from four to fourteen with a mean of 6.8 years' experience. (See Table 6 below for a profile of the subjects and Appendix F for a copy of the Participant's Data Form.)

All ten subjects were staff participants in the Amherst-Pelham Elementary Program (APEP), a pre-service teacher preparation program of the School of Education, University of Massachusetts. The program is actively supported by the teaching, administrative and specialist personnel of three public elementary schools in the district: Fort River, Wildwood and Pelham Elementary Schools. Field experiences in the schools and in educational settings within the community have a strong emphasis in the program.

The role of the ten subjects in APEP was a dual one. They served as a) "cooperating teachers" for the student interns having their full semester field experience, and b) as "in-service teachers" for the program. The latter role specified an expectation that the teacher would make some contribution to the in-service growth of other members of the program. For example, he or she might offer a workshop or demonstration that could be attended by other cooperating teachers, administrators, interns,

TABLE 6

PROFILE OF PARTICIPANTS

N = 10

Age		Sex		Highest Degrees Held	
20-25	2	Female	8	Bachelor's	8
26-30	5	Male	2	Master's	2
31-40	3				
41-50	0				
51-60	0				

Pursuing Advanced Degrees in Education
from University of Massachusetts

Master's	8
Certification of Advanced Study	2

Undergraduate Degree from

University of Massachusetts	5
Other	5

Pursuing Certification in Special Areas

Counseling	1
Learning Disabilities	2
Reading	1
None	6

Number of Times Participant Has
Supervised Interns

Schools Represented

Never	1	Wildwood	7 teachers
Three times	1	Fort River	2 teachers
Four times	1	Pelham	1 teacher
Five times	2		
Eight times	2		
Ten times	2		
Twelve times	1		

TABLE 6--<u>Continued</u>

Teaching Levels

Upper elementary	3
Lower elementary	6
Elementary special education counselor	1

Years of Teaching Experience

Four years	4
Five years	1
Six years	1
Seven years	2
Thirteen years	1
Fourteen years	1

Non-Classroom Professional Experience in Education

Giving workshops to interns and teachers	7
Curriculum writing	2
Tutoring	1
None	2

Present Teaching Environment

Open-space classrooms with multi-age grouping and team-teaching	7
Self-contained classroom with team-teaching	2
Individual and small groups only	1

Supervision Experience Other Than with Student Interns or Pre-Interns

Training adult classroom aides	5
None	5

Prior Familiarity and/or Experience with Microteaching

No experience	5
Very little or limited experience	3
No experience but some awareness of purpose of microteaching	2

etc., or the program might be for pre-service teachers alone.

This in-service teacher group has direct responsibility
for student teachers in a line relationship, but also must relate to
other cooperating teachers, college supervisors, and pre-interns
in an "advisory, collaborative and/or instructional relationship."

The Participants Data Form also revealed, in addition to the
information given earlier in this chapter, that eight of the ten
subjects had indeed been involved in educational training and super-
vising apart from their supervision of student interns. They had
presented workshops for pre-interns and other staff and had been
involved in training instructional aides as well as high-school
senior aides. Some also listed curriculum-writing and special needs
tutoring as professional educational experience they had had outside
of classroom teaching.

The extensive foregoing description of the subjects is for
the purpose of establishing their qualifications as appropriate
participants in, and evaluators of, the M-TSP program. M-TSP is
designed for use by experienced professionals who are, or will be,
responsible for the supervision of instruction at some level. The
nature of the APEP program in which they were involved as staff, is
such that the subjects had ample opportunity and support to act in
this role, even while they were undergoing the M-TSP program. The
fact that at least eight of them taught in an open classroom setting
in a team relationship with one or more teachers or aides made the

likelihood even greater that they could, or would, make use of micro-teaching supervision. In such settings, the alternative arrangements that often need to be made to accommodate microteaching practice are more feasible.

Of the ten subjects, all but one had supervised student interns previously. The range was from three to twelve times, the mean being 6.5 times. Thus, the great majority were experienced in practicing some kind of supervision as well as being experienced teachers themselves. It was reasonable to assume, therefore, that these ten subjects would be motivated to participate in a program that might be useful to them pragmatically speaking, and that they would be willing to evaluate it during and after implementation. It was also a reasonable assumption that with their background of experience they would competently handle a self-instructional program as a group.

Orientation. Preparation for the training sessions was kept to a minimum. A letter distributed to the subjects before training described in general the purpose of their participation in the study and the procedures they would be asked to follow. It was emphasized that it was the program, its materials and processes that were being judged and not the trainees themselves. (See letter in Appendix B.)

Also, prior to the first session, the trainees were given instruction and practice in the operation of the video equipment so that difficulty with the technology would not be a hindrance factor once the program was underway. This also gave people the opportunity of seeing and hearing themselves on the video screen,

some perhaps for the first time, and adjusting to the "cosmetic effect" that usually comes when one is confronted with, and fascinated by, one's own physical appearance and behavior in this atypical way.

Pre-test and Post-test. The pre-test was constructed by this writer to find out what the trainees already knew about the facts and concepts of microteaching, clinical supervision and interaction styles prior to M-TSP training. The questions were referenced directly to the contents of the M-TSP manual, readings and non-print resources of the program.

The pre-test was administered to all subjects at the beginning of the first workshop session. It consisted of thirty-seven questions designed to assess the entry-level knowledge and degree of awareness concerning microteaching and modern theory and practice of supervision. It covered, in effect, all of the key concepts and salient points included in the M-TSP program content. Questions were of the "yes-no-don't know," short-answer, multiple-choice, and identification types. (See Appendix F for copies the pre-test and post-test.)

The post-test was administered to all subjects one week following the completion of the fourth training workshop. In the interim, subjects could review the manual and readings if they wished. All materials were collected, however, before the post-test was administered. The purpose of the post-test was to assess the trainees' knowledge at the termination of the training period, i.e., to see what the M-TSP program had taught them about microteaching, clinical supervision and interaction styles. The test was identical to the pre-test and

criterion-referenced to the M-TSP program content. Two questions

were appended to, but not actually part of, the post-test. These

two questions asked trainees to identify their own supervisory

style and preference. The post-test results were compared with pre-

test results to see if there had been an increase in the information

acquired, and to get an indication of possible areas of weakness

and strength in the information-giving aspects of the program.

Unit questionnaire. At the close of each of the four workshop

sessions, a questionnaire was distributed to all subjects. The

questionnaire dealt, in part, with the content material covered

in that day's session. It also asked trainees to evaluate the

manual, the non-print media, the accompanying readings, if any,

and the procedures used in that day's unit of the program. Opinions

were solicited on how successfully the unit explained and clarified

concepts, the usefulness of the exercises, and the overall

strengths and weaknesses of the unit. Most questions were of the

"yes-no-not sure" type with invitations to elaborate on some. The

final question invited comment on any aspect of the unit. (See

Appendix F for samples of all four unit questionnaires.)

Taken as a group, the four unit questionnaires addressed

themselves to the critria listed below:

CRITERIA AGAINST WHICH INDIVIDUAL MANUAL UNITS
ARE TO BE EVALUATED BY PARTICIPANTS

1. The participants determine the success of the manual in con-
    veying clearly the basic concepts and factual information
    presented in each unit.

2. The participants judge the usefulness of the non-print media
    in demonstrating and explaining concepts, rationales and
    procedures.

3. The participants judge whether the timing and/or pacing of
    the non-print media and Exercise D within the unit is
    appropriate.

4. The participants evaluate the completeness and clarity of
    written instructions.

5. The participants determine the usefulness of completing
    individual and group exercises toward clarifying concepts.
    Group exercises include alternate working arrangements,
    e.g., pairs, trios, small and large groups.

6. The participants evaluate the overall appropriateness of the
    manual's level for participants.

7. The participants judge the value of the Readings as
    preparations for each upcoming session.

8. The participants suggest or imply program modifications, both
    in number and in kind.

9. The participants perceive most and least useful aspects of each
    unit and of the overall program.

10. The participants express some degree of confidence in carrying
    out the five-stage clinical supervision model for micro-
    teaching in their own professional setting.

11. The participants judge the significance/need/frequency of
    discussion periods.

12. The participants determine the degree of success of Unit IV
    in persuading them to examine and/or modify their own
    supervisory style.

General program evaluation (GPE). Following the fourth and final
session, the completion of training, a questionnaire called the General
Program Evaluation (GPE) was distributed to all subjects to take
home, fill out at leisure and return the following week. The purpose
of the GPE was to obtain the trainees' reactions to the Microteaching
Supervision Program as a whole. The subjects were asked to complete
the evaluation at home, with the manual and readings at hand to have
time to reflect upon the experiences, the processes and the materials.
They were referred to the outline of content attached to the
questionnaire as a quick reference to the main and sub-topic areas they
had covered in four weeks. And they were referred again to the intro-
ductory page of their manuals (see Appendix C) which explained the
program's purposes. Careful deliberation and the use of their best
professional judgment was urged. (See Appendix F for a copy of the
GPE and its instructions.)

There were thirty-one questions on the GPE, most of which were
"yes-no" or multiple-choice with invitations to elaborate or comment.
Several short-answer questions were also included. For any negative
reactions to any part of the program, subjects were asked to specify
the problem and suggest any modifications or alternatives they might
be able to offer. The specific criteria under consideration in the
GPE are those listed below.

GENERAL PROGRAM EVALUATION (GPE) CRITERIA

The following are criteria against which the overall M-TSP program
will be evaluated by the participant group.

1. The participants evaluate the relevancy of the concepts covered
   to the professional needs and development of supervisors.

2. The participants ascertain the sufficiency of repetition of
   important concepts for retention and emphasis.

3. The participants judge the appropriateness of topic sequence.

4. The participants evaluate the amount and manageability of
   information in each manual unit.

5. The participants evaluate the intensity of topic coverage.

6. The participants determine whether the coverage of important
   topics is comprehensive enough.

7. The participants judge the amount and arrangement of time
   to cover the material in the program.

8. The participants determine the degree of success of the
   individual unit sessions.

9. The participants report on the provision of opportunity to
   practice supervising and critiquing.

10. The participants evaluate the degree of success of the "self-
    instructional" mode of the program.

11. The participants evaluate the overall success of the M-TSP
    program.

12. The participants judge the usefulness of the program for
    alternative trainee groups.

13. The participants determine the effectiveness of the program
    when used by a "family" group.

14. The participants evaluate the value of the program for
    supervising (cooperating) teachers.

15. The participants judge the comfort factor in colleague-
    critiquing.

Exercise responses. After the General Program Evaluation was admin-
istered, manuals were collected so that responses to the various
written exercises in each unit could be examined. How, and whether,
trainees had responded in writing to the various individual exercises
and questions was thought to be another useful though informal method
of gathering data on how trainees had reacted to the program and to the
manual in particular. Of special interest was the response to the
writing assignment in the Unit Four manual. Here the trainee was asked
to examine his or her own supervisory style and make a statement regard-
ing it (see Appendix C, p. 248).

Coordinator's duties. Throughout the four-session course of the M-TSP
program, the coordinator was responsible for being alert to any
significant problems or difficulties that arose with procedures, un-
clear written directions, unclear explanations, unsatisfactory group
functioning, deficiencies, and the like. The coordinator also
noted any unsolicited reactions and comments from participants as to
how the program was proceeding, what value it had for them, and what
modifications might be made at certain points. This writer served
as the coordinator of the program for the present study.

<div align="center">Treatment</div>

The subjects of this investigation underwent a four-session
training program to implement and evaluate a self-instructional
packaged program on microteaching supervision. They did this as
part of a semester-long weekly seminar at the School of Education,

University of Massachusetts. The seminar was usually conducted by
a School of Education faculty member. Each seminar met for two-and-
one-half hours. After the initial meeting of the class, four consecutive
sessions were devoted to the testing and evaluation of the Microteaching
Supervision Program. The group was to function on its own with
nominal assistance from the coordinator (not the faculty member) whose
primary role was to help organize individuals and groups for activities
and exercises as efficiently as possible and to provide materials,
equipment and physical facilities. The coordinator was not to
participate as a trainee group member or as a leader/instructor. The
faculty member observed most sessions but did not participate in
them.

The overall goals that M-TSP was designed to achieve were
the following:

OVERALL GOALS OF THE TRAINING PROGRAM

1. To increase both awareness and specific knowledge of the microteaching concept and process.

2. To enable trainees to conceive of microteaching as a flexible and adaptive concept.

3. To improve supervising techniques, strategies and processes.

4. To become aware of the importance and possible effects of certain interpersonal helping skills.

5. To understand alternative supervisory styles and their possible effects on teachers.

In more specific behavioral terms, the program was designed to
accomplish the following objectives:

OBJECTIVES OF THE TRAINING PROGRAM

1. Each trainee will teach a lesson and critique (as a supervisor) a lesson at least once during the course of the program.

2. Trainees will observe and practice microteaching's "teach-critique-reteach" cycle and identify the most significant features of microteaching.

3. Trainees will describe how to adapt the microteaching concept to make possible the establishment of microteaching activities in his/her own professional setting.

4. Trainees will observe, identify and practice the five stages of the supervision process as employed to improve teachers' instructional skills.

5. Trainees as a group will observe, identify and practice directive and non-directive styles of supervisory leadership as alternate approaches to lesson criticism.

6. Trainees will identify and practice specific interaction skills to utilize within the context of the helping relationship.

7. Trainees as a group will utilize the materials of the program in the self-instructional mode without relying on the coordinator to act as instructor, leader or resource person.

One of the four units of the M-TSP manual was used as the basis for each of the four training sessions. (See Appendix C for the four manual units.) All basic instruction, directions for exercises, and lead-ins to film and videotape are found in these manual units. The topical content of each unit may be found in the outline on p. 212, and the training components of each unit may be seen in Table 5 on page 74. The following pages describe in more detail what was done in each of the four training units.

Unit one. Unit One of the manual was distributed with a page of introduction briefly describing the program, who it was designed for, and what topical areas it would cover. It also emphasized the self-instructional nature of the program, the minimal role the coordinator would play and the consequent need for the trainees themselves to assume responsibility for full and active participation. (See Appendix C.)

Readings A and B also accompanied Unit One (see Appendix D for readings A - G). Their titles, respectively, are "Microteaching: A Description" and "Teaching Strategies." These were to be read during the ensuing week as preparation for the second session.

Session one taught the basic microteaching concept, its identifying and characteristic features, and encouraged the reader by means of an exercise to think flexibly about how to adapt it to different settings. A film titled "Teaching Skills: An Introduction to Microteaching" from General Learning Corporation provided further background, definition and demonstration of microteaching. The basic "teach-critique-reteach" cycle was taught and the unit manual concluded with a discussion of the kinds of teaching skills microteaching does and does not address. The unit gave two assignments: 1) Readings A and B, reinforcing the basic information on microteaching and on selected, observable technical skills of teaching, and 2) preparation of a four- or five-minute lesson on any subject. Session one concluded with the unit questionnaire.

Unit two. The second unit of the manual was distributed. All units
and readings were kept cumulatively by the trainees in a large envelope
which they brought with them to each session each week. Unit Two
stressed how the microteaching model could be individualized so that
rather than imposing a set of supervisor-selected skills on the micro-
teacher, the teacher's own needs could be identified for skill training
and practice. Videotape #1 demonstrated with models how this could be
done. Trainees were encouraged simultaneously to jot down in their
manuals their own observations of the lesson and of the supervisory
critique and compare it later with the manual's observations.

The use of key questions and leading statements by the
supervisor in order to invite open and comfortable communication and
to assist the teacher in identifying his or her own needs and prob-
lems was discussed in the manual. Trainees were again encouraged
to think and write some further leads of their own in addition to
the samples given. The role of the supervisor as a positive re-
inforcer of strengths was stressed. Desired outcomes of the critique
were spelled out concluding with the need for some specific
strategies for a modified re-teach of the lesson. Ways in which a
teacher might acquire and refine a skill were listed. Session two
concluded with an exercise that divided the group into smaller
groups of five. One member in each small group taught, another
critiqued the lesson, while the rest served as pupils. The lesson
was videotaped as was the supervisory critique that followed. The
small group then critiqued the critique. The whole exercise was

repeated to allow different members to assume the roles of teacher and supervisor. The coordinator acted as a time-keeper and a facilitator of overall procedure. The emphasis of the exercise was on helping the teacher perceive and identify his own problems. The session concluded with the unit questionnaire. Readings C, D, and E were assigned in preparation for session three. Their titles, respectively, are "A Summary of Goldhammer's Model of Clinical Supervision," "The Processes of Supervision" and "Phases in the Improvement of Instruction."

Unit three. The Readings C, D, and E described current models of supervision in some detail. They paved the way for the five-stage microsupervision sequence explained in Unit Three of the manual. A written exercise asked the reader to identify the various stages by checking descriptive statments made about activities carried on during each stage. Videotape #2 (see Appendix E for synopses of videotapes 1-3) was shown, demonstrating and further defining the overall five-stage sequence. Again the reader was encouraged to jot down in the manual his or her own observations and comments simultaneously. Another exercise took small groups through the complete five-stage sequence. Again group members served as pupils while one member taught and another critiqued. Both were videotaped. This time, the re-teach step was included. The teacher moved to a new group of "pupils" for this stage but retained the same supervisor. The total forty-minute exercise was then repeated with different people teaching and supervising. Readings F and G, respectively titled "Two Sample Microlessons" and "A Non-Directive Approach to

Supervision," were assigned and the session concluded with a unit
questionnaire.

Unit four. The fourth session emphasized the observing, analyzing
and critiquing stages of the supervision process. Specific techniques
of focused, systematic and objective recording of data were discussed
in the manual. Two sample methods of recording were introduced:
Flanders Interaction Analysis and Bijou's antecedent-consequent events
chart. An exercise provided a test of the trainee's ability to
recognize objectivity in data records. The importance of pattern-
recognition and critical incidents and the effects of these on
pupil learning and behavior, good or bad, were explored in the
manual. Individual written exercises gave the reader the opportunity
to look for patterns in a lesson transcript and to look for a turning
point in a series of related events that determines behavioral
response for better or for worse.

The important area of affective relationship between teachers
and supervisors was introduced in the manual. Five basic helping
skills were defined and amplified with sample statements. Another
exercise asked the reader to identify a helping skill and write a
sample supervisor statement for given situations. Trainees grouped
themselves into twos at the end of this exercise for the sharing
of responses.

Directive and non-directive supervisory styles were defined
and explained next. Videotape #3 modeled the two styles in a
supervisory conference setting. A check-off exercise allowed the

viewer to make some distinctions between styles as he watched the tape. Another small group exercise called for someone to teach a lesson which two others critiqued, one utilizing a directive style, one a non-directive. The group then discussed the critiques. No further readings were assigned, but trainees were asked to make a written statement regarding their own supervisory styles.

A role-playing game, utilized as a culminating activity and involving all ten trainees in a large group, asked members to role-play certain kinds of supervisory behaviors, according to role cards drawn. Each actor was evaluated by the group along a continuum in the manual as a "star" supervisor or one more closely associated with the "tail on a donkey!" The session concluded with the unit questionnaire and an assignement to review the entire manual and the readings for the final post-training meeting the following week. The post-test was administered at that meeting. During the intervening week, trainees were asked to fill out the General Program Evaluation form also.

To summarize briefly the four unit sessions: the first unit introduced the concept of microteaching and the technical skills of teaching. It emphasized the adaptability and flexibility of the microteaching process, encouraging the trainees to think of its ap-plication in terms of their own current situations. Unit Two dealt with individualizing the process so that the teacher's own skill needs would be addressed. During this session, trainees had their first opportunities to teach, critique and videotape lessons. The super-visory critique was also taped and critiqued. The third unit introduced

the five-stage model of microteaching supervision, i.e., pre-observation conference, lesson observation, analysis and strategy, critique and training, and re-teach. Lessons were taught, critiqued and re-taught with trainees moving through all five stages of the process.

The fourth and final unit examined the observation, analysis and critique stages of supervision more closely. Techniques for systematic recording of observation data were introduced, recognition of patterns and critical incidents was stressed for analysis purposes, and basic helping skills were practiced. An examination of directive and non-directive supervisory styles concluded with another microteaching lesson/critique session where both styles were demonstrated and discussed. A final activity/game gave trainees the opportunity to look at and evaluate a variety of role-played supervisory behaviors, both positive and negative. A topical outline of the content of all four units may be found on page 75 of chapter 2.

Summary

This chapter has described the procedures followed in conducting the study of the Microteaching Supervision Program. The plan for collecting data begins with a detailed description of the trainees who participated in the implementation of the program by going through the entire four-session period of training. These trainees, qualified by virtue of their professional experience, gave extensive feedback via several instruments which are briefly described. These included four unit questionnaires and a final overall questionnaire, the General Program Evaluation. In addition, pre- and post-tests were given to

assess the trainees' increase in knowledge about microteaching, inter-
action and supervision subsequent to the training.

Informal evaluation data were also collected from the coordina-
tor's observations and from written exercise responses in the trainees'
manuals. Goals and objectives of the program are outlined next,
followed by a detailed account of the content and procedures of each
of the four unit training sessions.

CHAPTER   IV

RESULTS AND ANALYSIS OF DATA

This chapter presents the results and analysis of the data collected from the ten trainees by means of the evaluation instruments described in chapter 3, namely, the pre- and post-tests, the four unit questionnaires, and the General Program Evaluation. Two kinds of evaluation are represented here: a) subjective evaluation of the Microteaching Supervision Program by the trainees and b) an assessment of trainees' cognitive knowledge about microteaching and clinical supervision before and after the training.

Pre-Test and Post-Test

The same instrument was used for the pre- and post-test. It was constructed by the author and consisted of 37 items. (See test form in Appendix F.) The test was criterion-referenced to the M-TSP program (manual and readings) and was made up of short-answer, multiple-choice and identification questions. The three broad areas covered were the microteaching concept, clinical supervision, and interaction styles and skills.

The pre-test was administered at the first session before actual training began, while the post-test was given one week after the conclusion of the fourth training session. Thus, four

weeks intervened between the administration of the pre- and the post-tests.

The trainees' tests were scored by the author. The highest possible score was ninety-one points. (See test form in Appendix F for number of points assigned to each item.) For all of the questions, there were "correct" answers. Also, there were some additional possible answers that were considered acceptable. Because some of the answers, particularly for the short-answer questions, could be subject to opinion in terms of their phrasing or how closely they approximated correct or acceptable answers, two external evaluators were asked to join the author in the scoring process. This step followed the initial scoring. Both external judges were experienced, practicing professionals in the field of education, each with many years of teaching experience. They hold, respectively, a master's and a doctoral degree in Education. One had recent microteaching supervision experience with college undergraduates, while the other had considerable experience supervising pre-service teachers in the classroom. Where there was disagreement on a test item score, the judgment of two out of the three evaluators prevailed. The results of the scoring appear in Table 7 below.

The test items scores on the pre- and post-tests were totaled and the raw scores compared for each of the trainees. The results are summarized in Table 8 below. The group mean raw score is 42.6 on the pre-test; on the post-test it is 74.9, showing an increase of 32.3 points from pre- to post-test. Tentatively, these results

TABLE 7 (Part I)

INDIVIDUAL TEST ITEM SCORES OF TRAINEES ON PRE- AND POST-TESTS

Test Items		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Tr 1	pre	0	0	1	1	1	3	1	4	0	0	0	1	1	2	0	0	0
	post	4	4	1	1	1	3	1	5	1	1	3	1	1	2	0	1	1
Tr 2	pre	4	0	1	1	1	3	1	3	1	1	0	1	1	2	0	0	1
	post	4	5	1	1	1	2	1	6	1	1	3	1	1	2	3	1	0
Tr 3	pre	3	7	1	0	0	1	1	6	0	1	0	0	1	2	0	1	0
	post	3	8	1	1	1	3	1	6	1	1	3	0	1	2	3	1	1
Tr 4	pre	2	0	1	1	1	2.5	1	3	0	1	2	0	1	2	0	0	0
	post	4	10	1	1	1	3	1	6	0	1	3	1	1	1	0	0	1
Tr 5	pre	0	0	1	1	1	3	1	5	0	1	0	1	1	0	2	1	0
	post	4	8	1	1	0	3	1	6	0	1	3	1	1	2	3	0	1
Tr 6	pre	0	0	0	1	0	0	1	6	0	0	0	0	1	2	0	0	0
	post	2	5	1	1	0	3	1	6	0	1	3	1	1	1	0	1	1
Tr 7	pre	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	post	2	5	1	1	1	3	1	6	1	1	3	1	1	1	3	1	1
Tr 8	pre	3	0	1	1	1	1	0	6	0	0	0	0	1	1	0	0	0
	post	4	10	1	1	1	3	1	6	.5	1	3	1	1	1	3	0	1
Tr 9	pre	2	0	1	1	1	2	1	6	0	0	2	0	1	2	2	0	0
	post	4	8	1	1	1	3	1	6	1	1	3	0	1	2	3	0	1
Tr 10	pre	2	0	1	1	1	3	0	5	0	1	3	1	1	2	0	0	0
	post	4	5	1	1	1	3	1	6	1	0	3	1	1	2	3	1	1

Trainees

TABLE 7 (Part II)

INDIVIDUAL TEST ITEM SCORES OF TRAINEES ON PRE- AND POST-TESTS

Test Items:		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Tr 1	pre	0	1	1	0	1	0	1	0	2	5	0	0	4	4	0	0	0	4	5	0
	post	1	6	1	1	1	0	1	0	4	5	1	1	2	4	1	1	1	4	7	3
Tr 2	pre	1	3	1	1	1	0	0	0	4	4	1	0	4	4	1	0	.5	4	0	2
	post	1	4	1	1	1	0	1	1	4	5	2	0	4	4	1	1	1	4	6	3
Tr 3	pre	0	0	1	0	1	0	0	0	4	4	1	0	4	4	1	0	0	4	5	2
	post	0	6	1	1	1	0	1	1	3	4	1	1	4	4	1	0	0	4	5	3
Tr 4	pre	0	0	1	1	1	0	0	0	4	4	1	0	4	3	0	0	0	4	0	0
	post	1	3	1	1	1	0	1	.5	4	5	2	1	4	4	1	1	1	4	6	3
Tr 5	pre	1	0	1	0	1	0	1	1	4	3	0	1	3	1	0	0	0	4	0	0
	post	1	3	1	1	0	1	1	1	4	4	1	1	3	1	0	0	1	4	6	3
Tr 6	pre	0	0	1	0	1	0	0	1	2	3	0	0	3	4	0	0	0	4	5	0
	post	0	2	1	0	1	0	1	1	4	4	2	1	4	4	0	0	0	4	4	3
Tr 7	pre	1	0	0	0	0	0	0	0	4	5	0	0	2	7	0	0	0	4	0	0
	post	1	6	1	1	0	1	1	1	4	5	1	0	4	2	0	0	0	4	4	3
Tr 8	pre	0	0	1	0	0	0	0	0	4	4	0	0	3	4	0	0	0	4	0	0
	post	1	0	1	0	0	0	1	0	4	4	2	1	4	4	0	0	1	4	4	3
Tr 9	pre	0	2	1	0	1	0	0	0	4	5	1	0	4	4	1	0	1	4	4	2
	post	0	6	1	1	.5	1	1	1	4	4	2	0	4	4	0	1	1	4	7	3
Tr 10	pre	1	0	1	1	1	1	1	1	4	5	0	0	4	4	0	0	0	4	0	2
	post	1	2	1	1	1	1	1	0	4	4	2	0	4	4	1	0	1	4	4	2

Trainees

TABLE 8

RAW SCORES ON PRE- AND POST-TESTS

Trainees	RAW SCORES (Highest possible score = 91)		
	Pre-Test	Post-Test	Increase in Points
1	43	76	33
2	52.5	79	26.5
3	55	78	23
4	40	79.5	39.5
5	39	73	34
6	35	65	30
7	21	71	50
8	35	72.5	37.5
9	55	81.5	26.5
10	50	73	23
Mean Raw Score	42.6	74.9	

NOTE: Increase in mean raw score is 32.3 points.

might be attributable to the M-TSP training, the treatment received by the trainee group. It is possible, however, that the increase was large because the pre-test scores were fairly low. These, in turn, may have been low because the trainees heeded rather seriously test directions which discouraged guessing and suggested checking a "don't know" response or leaving the answer blank when the correct answer was not known. Trainee 7, for example, was diligent in responding this way on the pre-test, and therefore showed a very large gain (50 points) on his post-test. This, in turn, could have skewed the mean score upward and probably exaggerated somewhat the overall increase in the group mean raw score.

To analyze the test items individually for the purpose of observing changes in the results from pre-to post-test, Table 9 below was constructed. For each item, the following information is given: the number of trainees who showed a loss in score, and the number of trainees who scored the same on an item both times. From this data display and from the following tables derived from it (see Tables 10 and 11 below), it is possible to pinpoint such things as: the test items which dealt with program content that evidently was not learned by most trainees; that content which was already known by most trainees before training; and which items showed no losses whatsoever among the trainees from pre- to post-test.

Gains. Table 10 shows the test items on which a majority of trainees, i.e., six or more, showed a gain. There were, of course, gains by some trainees on other test items, but for the purpose of establishing

TABLE 9

TEST ITEM ANALYSIS: GAINS, LOSSES AND SAME SCORES
FROM PRE- TO POST-TESTS

Test Item	No. of Trainees Showing Gains	No. of Trainees Showing Losses	No. of Trainees Showing Same Score
1	8	0	2
2	10	0	0
3	2	0	8
4	2	0	8
5	1	1	7
6	6	1	3
7	3	0	7
8	6	0	4
9	6	0	4
10	5	1	4
11	9	0	1
12	4	0	6
13	1	0	9
14	2	2	6
15	7	0	3
16	5	1	4
17	9	1	0
18	3	0	7
19	9	0	1
20	1	0	9
21	5	0	5
22	0	2	8
23	4	0	6
24	7	0	3
25	5	1	4
26	2	1	7
27	4	2	4
28	9	0	1
29	5	0	5
30	3	1	6
31	1	1	8
32	3	1	6
33	4	0	6
34	6	0	4
35	0	0	10
36	8	1	1
37	9	0	1

TABLE 10

GAINS

The fourteen test items on which a majority (six or more) of the
trainees showed gains.

Gains by 6 Trainees	Gains by 9 Trainees
(4 items)	(5 items)
# 6	# 11
8	17
9	19
34	28
	37

Gains by 7 Trainees	Gains by 10 Trainees
(2 items)	(1 item)
# 15	# 2
24	

Gains by 8 Trainees

(2 items)

1
36

TABLE 11

SAME SCORES

The seventeen test items on which a majority (six or more) of the
trainees scored the same on both pre- and post-tests.

Same Scores by 6 Trainees

(6 items)

\# 12
14
23
30
32
33

Same Scores by 8 Trainees

(4 items)

\# 3
4
22
31

Same Scores by 7 Trainees

(4 items)

\# 5
7
18
26

Same Scores by 9 Trainees

(2 items)

\# 13
20

Same Scores by 10 Trainees

(1 item)

\# 35

some standard of significance, six was arbitrarily selected as the

minimum number of trainees having to show gain in order to assume that

the content of the test item had been successfully taught by the

M-TSP program. Fourteen items fell into this category. Nine of the

questions (1, 6, 8, 9, 11, 15, 17, 19, and 24) dealt with the

specifics of microteaching, three with clinical supervision (28, 34

and 2) and two (36 and 37) with supervisors' interaction styles

(helping skills and directive/non-directive approaches). This

should not be construed to mean that trainees learned more about

microteaching than they did about the other two areas. There were

simply many more test questions about microteaching than the other

two areas since microteaching was basic to everything that followed

it in the program.

Most noticeable were those test questions showing a positive

change made by nine or ten persons. This means that virtually all of

the trainees gained from pre- to post-test on these items. The

subject matter content of the six items where this occurred included

the following:

-- the teach-critique-reteach process of microteaching

-- the idea of pupils giving feedback on teachers' lessons

-- types of questioning skills

-- five stages of microteaching supervision: sequence and
   purposes

-- supervisor utilization of directive/non-directive
   supervisory style

In addition to the above, eight persons showed gains on items

1 and 36, indicating an improved understanding among the group members

of the salient characteristics of microteaching and an increased ability to identify significant helping skills for use in the supervisory conference, or critiquing stage.

The generally strong gain in the microteaching area may in part be attributed to the stress given it in the program. A variety of the materials concentrated on introducing the microteaching concept in some detail: the Unit I manual, the introductory film, two readings, the Unit II manual and videotape #1. Moreover, there was continued repetition of many of the specific points as well as frequent practice opportunities throughout the program.

A second possible reason for the gains described in the areas above relates to motivation. The trainees may have recognized that what they were learning could be of immediate practical value to them as supervisors of interns in their own classrooms. Skills and techniques of both teaching and supervising could be utilized in the real classroom situation. In fact, some trainees indicated on the General Program Evaluation that they had started using these methods even before training ended. That in itself may have helped to reinforce the learning.

Losses. No instances of six or more trainees showing a loss in score on a test item could be found. In fact, on twenty-three test items there were 0 losses from pre- to post-test. Eleven items (5, 6 10, 16, 17, 25, 16, 30, 31, 32, and 36) showed only one loss, and three items (14, 22, and 27) showed two losses. Thus, no test items had more than two people showing a loss in score from pre- to post-

test. The subject matter of these test questions where so few people showed loss should probably be regarded therefore as information learned during the training or already known by the majority of the trainees. The items will not be discussed here since the number of occurrences of loss is so small.

Same scores. Table 11 above lists the test items on which a majority of subjects, i.e., six or more, scored the same on both pre- and post-tests. This can be regarded as either positive or negative. The table does not reveal whether a low score or high score is repeated on the post-test. For example, items 23 and 33 are cases where a majority (six or more) of the trainees had a 0 score on the pre-test and another 0 score on the post-test. Perhaps the program was deficient in making clear that microteaching was originally developed for use with pre-service rather than in-service teachers. Just as likely, however, question 23 may have been misinterpreted to mean that microteaching is an approach that was developed for use by interns and teachers alike while "in service," that is, while conducting instruction in real classrooms. It is probably quite reasonable to read the question this way.

Question 33 refers to the definition of the term "critical incident" which apparently eluded six subjects. This term appeared only in the Unit IV manual with one brief exercise to reinforce it. There was little emphasis on the terminology per se, and although the concept is important for lesson observation, the term by which it is called is not.

Question 35 is an example of "same scores" where a perfect score on the pre-test was repeated on the post-test. In this case, all ten subjects scored perfectly both times on item 35. The question dealt with the modern concept of supervision, that is, the "colleague-helper" concept. Since all agreed, even before training, on this definition of supervision, it is probably true that the group as a whole already approached the training with a mind-set that was conducive to the concepts of supervision that were to be introduced.

Other perfect pre- and post-tests item scores by at least six people occurred in items 3, 4, 5, 7, 13, 20, 22, 26, and 31. Thus a majority of trainees appeared already to have a grasp of the ideas and information represented in these questions. This majority of six or more people seemed to understand at the outset of training that microteaching primarily focused on teacher behavior (items 3 and 26) and was as feasible for in-service teachers as for pre-service teachers (item 4). They appeared to recognize "micro" as meaning not unimportant, but rather as referring to something small and manageable (item 5). They believed that microteaching could be individualized to address teacher needs (item 13). Also, the importance of objectivity and non-judgmental recording of lesson observation data seemed to be already understood (items 7 and 30). Finally, some perception was evident among this majority that teacher-pupil interaction patterns and other affective concerns could be analyzed using the microteaching concept (items 20 and 22).

The M-TSP program cannot take the credit for teaching the significant ideas and facts referred to in the 10 same-score test items above since the majority responded correctly to begin with and retained this accuracy on the post-test. The profile of participants (see Table 6 above in chapter 3) indicated that five people had had some previous limited experience or at least awareness of microteaching and its purpose. This can be taken to mean that they had some brief exposure to it in an education course or some discussion about it in a class or professional meeting. This is often the case. Five others indicated no experience but this does not preclude some exposure via a discussion or journal article. It can probably be concluded from the pre-test results, therefore, that many participants came to the training with a vague fore-knowledge of microteaching as well as a sense of what modern super-vision models stress.

A review of the ten perfect same-scores seems to exhibit a knowledge on the part of many trainees of some broad concepts that help form the framework of the M-TSP. For example, the majority have an idea that microteaching can indeed be useful in learning about affective behavior; that its utilization can extend to in-service training; that individualization of skill-training is feasible; that microteaching is an approach to teacher improvement and therefore teacher behavior is the focus; that video recording is part of the scheme of things for looking at some specific behavior; and that contemporary theory perceives supervisor and teacher interacting on a collegial basis.

A review of the item gains indicates what the M-TSP probably added to this knowledge. In general, it might be said that the trainees gained information that added to and filled out the conceptual framework referred to above. They learned how to operationalize the ideas. For example, they appear to have learned the structure within which microteaching supervision could be carried out. Gains on items 2, 11, 15, 28 and 34 show an understanding of the three-step microteaching structure of M-TSP. They provide information, too, that trainees learned what the purposes and strategies are of certain individual stages, such as the observation stage, the analysis/strategy stage, and the critique/training stage.

A second major area that showed knowledge gains was that of supervisor-teacher interaction. Trainees had a clearer understanding of the helping skills and were able to use the more precise and definitive terms in identifying them. Item 36 showed this gain. Trainees also showed in item 37 an improved understanding of how teachers and supervisors interact when different supervisory styles, i.e., directive or non-directive, are used. Trainees seemed better able, after training, to describe and differentiate the goals of these two types of approaches.

Many specifics about microteaching were apparently learned to flesh out the general information trainees already had. Item 17 showed that a majority could now identify pupils as an important feedback source, while item 6 indicated improved recognition that there were several feedback sources in addition to the expected one

of the supervisor. A key point--that skills and behaviors selected
for microteaching practice have to be observable--was better under-
stood by a majority of trainees as shown by gains in items 8 and 9.
And item 19 shows a strong gain in knowledge of specific teaching
skills, those in the question categories, e.g., probing questions,
divergent questions, etc. Trainees could name, define and distinguish
such questioning skills more accurately and more readily after
training.

The specific features of microteaching that make it such a
useful approach were more precisely listed by a majority of
trainees after training. In contrast to the vague and general
responses to item 1 on the pre-test, trainees were later able to
identify the more salient features, such as: microteaching is low
risk; it is real teaching; it allows the teacher to explore alter-
natives; it provides immediate feedback from several sources; it
focuses on specific teaching skills, etc.

It seems legitimate to say, following this examination of the
gains and same-scores on the pre- and post-tests, that as a result
of M-TSP training, a majority of the trainees did increase their
knowledge about microteaching supervision; particularly, they learned
some significant details, techniques and alternatives for employing
microteaching supervision and they learned about a structure within
which to operate. This, plus a great deal of practice, is what M-TSP
provided. The pre-test, it must be remembered, gives evidence only
of some theoretical knowledge of microteaching, supervsion, and

personal interaction styles. Neither the pre-test nor the post-test reveal whether, in fact, the trainee has the ability to act competently upon this knowledge. The strength of the M-TSP program seems to be that it gives the opportunity both to know and to act.

Unit Questionnaires

The twelve criteria against which the individual manual units were measured are listed in chapter 3 on p. 88. Each criterion is listed again below and discussed in terms of the responses expressed in the four unit questionnaires and, where appropriate, the General Program Evaluation (GPE). Table 12 below presents an overview of precisely which questions in each unit questionnaire addressed which criteria. For example, questions 1, 2, 3, and 4 in the Unit I questionnaire all addressed criterion #1. The responses to those questions provided information as to how successfully the M-TSP met that criterion, in the trainees' opinions.

A tabulation of the response data from these questionnaires was then arranged in the form of clusters of matrices (see appendix H). Each cluster represents the responses received relative to one criterion. Responses were tallied unit by unit from the four unit questionnaires and from the General Program Evaluation (GPE) questionnaire, when applicable.

Each matrix allows the tracing of the specific questions in each of the four units to the criterion about which the questions are designed to provide information. For example, when looking at

TABLE 12

CRITERIA ADDRESSED BY QUESTIONS ON INDIVIDUAL UNIT
QUESTIONNAIRES AND THE GENERAL PROGRAM EVALUATION

		UNIT QUESTIONNAIRES AND GPE			
		Unit I Questions	Unit II Questions	Unit III Questions	Unit IV Questions	GPE
CRITERIA	1	1, 2, 3 4	3, 4, 5 9, 13	2, 3	2, 4, 10	4
	2	5	7, 12	6, 10	7, 8	13
	3	6	6	5, 11	6	NA
	4	7	8	9	5	4
	5	8, 9, 10, 11	10, 14	4, 7, 12	9, 12	14, 15
	6	12	15	14	13	NA
	7	NA*	1, 2	1	1	12
	8	15, Comments	Comments	Comments	16, Comments	8, 10, 16, 27
	9	13, 14, 15	11, 16, 17, 18	15, 16 17	3, 14, 15, 16	24, 25, 26
	10	NA	NA	13	NA	19
	11	11, Comments	Comments	8, Comments	Comments	Comments
	12	NA	NA	NA	11	NA

*NA--not addressed.

criterion #1 (see p. 458), it can be seen that question number 4 in
Unit I is one of quite a few questions that addressed criterion #1.
The matrix also shows that on question 4, eight persons gave "yes"
answers, no one gave a "no" answer, two persons responded with "not
sure," and no one gave no response at all. As the reader progresses
through the matrices, it will be noted, too, that certain of the
twelve criteria were not addressed in every unit questionnaire and
therefore "NA" (for "Not Addressed") is indicated in the matrix.
Table 12 also uses this designation for the same purpose. (The
complete compilation of all actual responses to questions on the four
unit questionnaires and the GPE may be found in Appendix G. Also,
the blank forms of all questionnaires can be located in Appendix F.)

Criterion #1. The participants determine the success of the manual
in conveying clearly the basic concepts and factual information
presented in each unit. Each of the four unit questionnaires
addressed this question of clarity of presentation for the unit.
In all, a total of fourteen questions were related to criterion #1.
They asked whether the units satisfactorily explained, defined and
treated various aspects of the factual and conceptual content.
Generally, there was agreement that this had been accomplished. The
number of "yes" answers, out of a possible ten for each question,
ranged from seven to ten.

   There was total agreement (ten "yes" answers) that the
following ideas had been successfully and clearly conveyed:

     -- difference between a microteaching approach to
        supervision and a "shotgun" approach

-- Microteaching's primary concern with teacher behavior

-- the more fully defined task of observation

-- the use of helping skills.

Near total agreement was achieved on five questions. There were nine "yes" answers on each of these indicating that trainees were satisfied that the following points had been clearly conveyed by the units:

-- the Microteaching Concept

-- important desired outcomes of a supervisory conference

-- helper role of supervisor

-- the stages of the microteaching supervision process and the goals for each.

Three other questions indicated eight "yes" answers and two "not sure" answers out a possible ten. These were questions 3 and 4 in Unit I and question 10 in Unit IV. These results indicate reasonable agreement that the following three ideas were also adequately presented in the manual:

-- identification of main characteristics of Microteaching

-- adaptability of Microteaching to different settings

-- difference between directive and non-directive supervisory styles.

Somewhat less agreement was evident on two questions in Unit II that received only seven "yes" answers. These dealt with the individualization of Microteaching and with training strategies for teaching the technical skills of teaching. In each case, three trainees apparently felt the need for further attention to these topics within the unit. They did not express confidence in their

knowledge of either one.

The final questionnaire, or General Program Evaluation (GPE), also included a question relating to criterion #1. It asked whether each unit of the manual was written in a clear, readable style. Nine trainees agreed that all four units were. One person felt that three were, but that the "unit on Cogan" was not. Although there was no "unit on Cogan," per se, there was a reading authored by Cogan used with Unit III. It may be that the respondent was expressing dissatisfaction with that reading and not with Unit III as a whole. This is reinforced elsewhere in the data; three other trainees expressed dissatisfaction with the same reading.

These results on the four unit questionnaires and the GPE with regard to criterion #1 indicate that the manual units were probably successful overall in conveying clearly the information and concepts built into the M-TSP program. This is particularly significant because of the self-instructional nature of the program which depends essentially on the manual, aided by its attendant readings and non-print materials, to present the content and guide the process of the program. It is crucial that such a program be able, therefore, to convey with clarity and succinctness its basic ideas independent of an instructor. The manual as a whole seems to have done this.

Criterion #2. The participants judge the usefulness of the non-print media in demonstrating and explaining concepts, rationales and procedures. Three videotapes and one film were utilized in the

training program. The film, "Teaching Skills: An Introduction to Microteaching," was produced by the General Learning Corporation. The tapes were produced by the author utilizing doctoral and under- graduate students in the School of Education to model particular skills and styles of supervision. (Synopses of the content of these materials may be found in Appendix E.)

A total of seven questions in the four unit questionnaires addressed this concern of the usefulness of the tapes and film. "Yes" answers ranged from seven to ten. Eight persons out of the ten agreed that the film in Unit I was helpful as an introduction to the rationale and procedures of microteaching. One "no answer" did comment that the film was somewhat helpful, while another person expressed doubt with a "not sure" reply.

In Unit II, nine felt that the tape adequately demonstrated the process of teacher and supervisor jointly identifying problems, and all ten agreed that the tape helped them get ready for performing Exercise B, the first teach-critique session. The "not sure" respondent queried whether the tape depicted role-playing or actual class teaching. This avoids the question and is actually irrelevant to the matter of whether the tape was a successful demonstration.

The tape used in Unit III to demonstrate the five-stage sequence of microteaching supervision appeared to accomplish its purpose. Nine people indicated this, while eight also affirmed its helpfulness as preparation for Exercise D. The exercise put trainees through the performance of all five stages of the supervision

process. Some doubt about the usefulness of the tape was evident in one "not sure" and two no-answer responses. Comments following the questions show that the tape was considered by at least two respondents to be rather lengthy with perhaps too much content to be absorbed at one sitting. It was remarked, however, that the advance readings had helped by giving background on the same subject matter.

The tape differentiating between directive and non-directive styles of supervision in Unit IV was well received by seven persons. Eight persons also felt it was good preparation for Exercise F where they were required to practice and identify the two styles in a critique situation. Three respondents gave "no" or "not sure" replies to the question of the successful demonstration on tape of the styles. (Since unit questionnaires were completed anonymously, it is not possible to determine whether or not the same individuals were giving "no" and "not sure" responses each time.) In each case, they commented on the fact that neither style was shown in "pure" form, that is, there was some overlap or blending. This, in fact, is true to reality and is the idea the manual attempts to convey. Those persons responding "yes" commented that the difference in styles was obvious to them. One person felt the tape was not useful as preparation and another gave no answer on the response choices but commented that the tape was somewhat helpful as a review.

In the General Program Evaluation, eight persons said the three videotapes were "mostly or very helpful" for the respective units. The remaining two persons said "somewhat helpful." Their comments indicated

some boredom with the length of the second tape and a desire for other examples on more tapes.

With respect to criterion #2, it appears that the non-print media used in the M-TSP program were reasonably successful as vehicles for demonstration and as preparation for the practice of the processes and styles of microteaching supervision. Those expressing any degree of dissatisfaction did so mildly and with helpful explanatory comments.

Criterion #3. The participants judge whether the timing of the non-print media and Exercise D within the unit is appropriate. Five questions in the unit questionnaires provided data relating to this criterion. The concern was whether the various non-print materials were placed within each unit's schedule of activities appropriately and with regard for good timing relative to the whole program. Also, the pacing of Exercise D in the third unit received particular attention since this was a forty-minute exercise at the end of Unit III that was immediately repeated.

In Units II and IV there was complete agreement among the ten trainees that the utilization of the videotapes was well-timed. One comment indicated the Unit II tape came at a very appropriate time. Another wondered if the Unit IV tape could be shortened by eliminating the lessons, i.e., show just the two supervisory critiques.

Eight people agreed that the film in Unit I was appropriately timed and two said they were not sure. The tape in Unit III was judged well-timed by eight respondents though one of them felt it

was a bit boring. The remaining two persons did not check a response choice, but one commented that the tape was not necessary for him/her. This was the lengthiest of the tapes; it demonstrated the complete five-stage microteaching supervision process. The teacher's lesson which was shown on the tape used in the previous unit was repeated on this tape, thereby contributing to its length.

Question #11 in the Unit III questionnaire dealt with the timing and pacing of Exercise D, an exercise which put trainees through the entire five-stage process and was then repeated for further practice. It was deemed necessary by the author that participants experience the totality of the process and experience it more than once. This was in order to get at the essence of each stage, to see it in the context of the whole as well as in its relationship to the other stages. In-depth exploration of each stage was not the objective. The response to question 11 was mixed. Six persons felt the pacing of this exercise, that is, the time allotted for the practice of each stage, was satisfactory. However, two of them did comment on the need for a little more time, time to discuss, time to digest. One person felt definitely too rushed while two others did not check a response choice but made comments on their fatigue in completing it or on the "staged" effect of teaching peers. These results indicate a reasonable amount of dissatisfaction with the pacing of Exercise D and with its timing in the unit.

On the whole, the data indicate general agreement that the non-print media were used at appropriate places in the unit and at times

suitable to their purpose. Two tapes were thought by a few to be unnecessarily long because of inclusion of lesson material which had already been shown on a previous tape or lessons that did not need to be seen in order to understand the supervisory critique session. Exercise D was paced satisfactorily in the judgment of a majority, but there were some definite reservations among the group members regarding the pacing. These appear mainly in comments and indicate a desire to take more time in completing the exercise.

Criterion #4. The participants evaluate the completeness and clarity of written instructions. Each unit questionnaire and the GPE contained a question dealing with this criterion. Generally, the question asks whether the written instructions for the main exercise(s) in the unit manuals were clear and complete. In Unit I this was evidently the case since there were ten "yes" answers. In the remaining three units nine persons gave affirmative responses each time. There was one "no" answer each time also, with one comment suggesting more direction on Exercise B and another indicating lack of initial understanding of the chart exercise in Unit IV.

The GPE asked about the overall clarity and readability of the entire manual. There was close to full agreement that all four units were well-written in this respect with a comment on their easy readability. Only one person felt that any unit fell short; that unit was specified as the one "on Cogan." The respondent here may have been referring to Reading D by Cogan or to the whole of Unit III which introduced the five-stage process. This is not really clear. At any

rate, it can probably be stated with some safety that there is fairly
high satisfaction that the manual meets the standards of criterion #4
and that there is a suggestion for more clarity regarding one reading.

Criterion #5. The participants determine the usefulness of completing
individual and group exercises toward clarifying concepts. Group
exercises include alternate working arrangements, e.g., pairs, trios,
small and large groups. The M-TSP manual was designed to provide a
variety of learning modes in order to suit differing learning styles.
Thus there were included individual written exercises as well as
small and large group performance exercises in microteaching and
supervision, and discussions in pairs and trios. The program units were
planned so that each participant was active rather than passive, inter-
acting with both the program materials and with the other trainees.
All exercises were designed to help in the development and clarification
of the major concepts contained in the program. And in all cases, a
feedback mechanism of some kind was built in, either in written form or
in the form of reaction from other group members.

Some mixed reaction existed as to whether the exercises always
met the standard of usefulness stated in this criterion. The "yes"
responses ranged from five to ten. Only five people felt sure of
the usefulness of the exercises in the first unit although there was
unanimous agreement on the helpfulness of the examples given for the
exercise that required the adaptation of the microteaching concept to
their own settings. The latter was done individually first, then
continued in trios. The next two questions in Unit I questionnaire

inquired about the value of this procedure, i.e., working out a problem alone, the sharing ideas with a group. Question 10 in Unit II and question 7 in Unit III also asked questions about doing a written exercise alone. In all cases there was an affirmative response by seven of the participants. Although this demonstrates some agreement, it is obviously not unanimous. Negative, positive or not-sure responses were often accompanied by a comment indicating the desire to discuss the problems further--with the whole group rather than with just a partner or a small group. The response of ten "yes" answers to question 11 in the Unit I questionnaire drives home this point even more.

There is somewhat better agreement, however, about the overall usefulness of the exercises in clarifying concepts except in Unit I. It is unclear why the two Unit I exercises met with five "not sure" responses. It may be that the uncertainty was caused by some hesitancy in being confronted with a good deal of specific information and new procedures in the first session of an untried program. Exercises B, C and F received positive responses, however. These gave opportunities to put into practice the concepts of individualizing microteaching, understanding the five-stage supervision process, and differentiating between directive and non-directive supervisory styles. Exercise G, the role-playing game, was deemed useful as an application exercise by six people. Three were not sure and one did not check a response choice. Comments from these four participants explained that they had not been present for any or part of the game due to early departure from that session. Comments with "yes" answers indicated enjoyment and appreciation of the value of the exercise.

The GPE inquired about the most useful written exercises through-
out the entire manual and the most useful group exercises. Opinion was
elicited through comments only. The replies on written exercises
ranged from a liking for all exercises to the specific naming of ones
such as the helping skills exercise, Exercise E-2, or the first one
on adapting microteaching to one's own setting, Exercise A. Most
liked, however, were the exercises in Unit IV. These included identi-
fying a pattern, a critical incident, helping skills (Exercise E-2),
and directive/non-directive supervisory styles (Exercise F). Exer-
cise G, the culminating role-playing game, was also in Unit IV. Six
people referred to exercises in this unit. Of those six, three
specified the one at the close of Unit IV requiring them to make a
thoughtful statement about their own supervisory style. It appears
that Unit IV contained a diversity not only of content but also of
written exercises that appealed to the majority of participants.

As to the group exercises, seven persons referred generally
to the teach-critique cycle of supervision which was practiced
throughout Units II, III and IV. Another person made particular
mention of practicing the supervisory styles and skills--probably the
exercises in Unit IV. The trainees remarked often on the value of
being in the roles of both teacher and supervisor at various times.
A particularly sensitive comment added, "The exercises which required
me to 'supervise' made me realize how hard it is to do a good job for
the 'teacher.'"

Criterion #6. The participants evaluate the overall appropriateness of the manual's level for participants. Of particular concern was the use of a written style for the manual that would be readable and relatively free of cumbersome jargon and terminology. This was important because the program was to be self-instructional and without the benefit of an instructor's explanations. At the same time it had to be appropriate to the intellectual level of groups who might be using it for training. A question was included in each unit questionnaire relative to the appropriateness of the teaching level, i.e., whether the manual taught at a level that neither "talked down" to its readers nor became pedantic and obscure in its language. For Units II through IV there was complete agreement that the level was indeed appropriate. In Unit I, nine agreed that it was, while one thought it was easy. It appears almost unanimous, therefore, that the manual succeeded in addressing this particular group of trainees at a level appropriate to them.

Criterion #7. The participants judge the value of the readings as preparations for each upcoming session. Two or three readings were assigned at the end of Units I through III to provide trainees with a common background of information for the next session of the training program. Reading A fared best with nine "yes" answers affirming its value. This was Miltz's article on the description of microteaching. Reading B on the teaching skills was judged satisfactory by six persons. One "no response" confessed to not having read it yet. Although six people found all the readings for Unit III (Readings C, D, and E)

helpful with regard to clinical supervision, these readings received the most negative criticism in the comments. The Cogan article (D) was frequently singled out in both the Unit III questionnaire and the GPE as being wordy and too philosophical for practical application. Virtually every reading received at least one negative comment. In the overall evaluation in the GPE, five people said all or most of the readings were helpful, but the remaining five said some or few were helpful. No one felt that none of the readings had any value.

Enthusiasm for the readings was obviously not strong. Although the readings of the selected authors do specifically support the material in the manual units, it may be that the particular selection by an author was not the best example of his written material. Objections seemed to focus on the author's style, not on his ideas.

A second reason for lack of stronger support for the readings may be the fact that they were not discussed during the sessions. Designed as they were for establishing a background of information for the concepts coming up in the next session, no allowance was made in the schedule of activities for participants to share ideas or feelings or gain clarification on the content of the readings. This may be a different approach than they were used to and was not made clear at the outset.

Criterion #8. The participants suggest or imply program modifications, both in number and in kind. If the ten trainees made a substantial number of suggestions for changes in the program, it could be inferred that they displayed a real interest in the program and regarded it as

having some value for them. Moreover, the kinds of specific changes they suggested would be most useful in future revisions. Thus it was determined to include room for comment in all the questionnaires to allow ample freedom for this purpose. The final question in each unit questionnaire invited open comment on any aspect of the unit. These were scrutinized together with all comments on other questions to come up with the number of suggested or implied modifications. Comments that were essentially similar in nature were then grouped together and counted as one kind of suggestion. The number of different kinds of suggestions for each unit were then tallied. An implied modification would be one where the suggestion was not made outright but could readily be deduced instead. For example, a comment such as "not enough time" could be understood to mean that the trainee thought more time should be allotted to that activity.

Of the four units, the third one drew the most suggestions, sixteen in number. These could be broken down into seven suggestions as follows with numbers of respondents in parentheses:

1. Improve videotape #2 by reducing length and content; by including "students" in the lesson analysis (6)

2. Improve and/or consolidate selected readings (1)

3. Allow more group discussion (2)

4. Allow more time for the session and its activities (4)

5. Use real children instead of peers in the microteaching lesson (1)

6. Give more attention to observation skills, e.g., note-taking (1)

7. Have a mediator during critiquing of supervisor to keep group focused on its task (1).

The suggestions relating to time and the videotape were the most frequently repeated. Others may have been mentioned only once.

The session for Unit III was the first very intense session encountered by the participants. A great deal of content information was dealt with and the full five-stage process was experienced and practiced for the first time. This exercise took a total of forty minutes and was then repeated. It may be that the pressure and intensity of this session, both in terms of time and content, prompted the large number of suggestions. It might also be inferred that a livelier interest in the activities of this session yielded a stronger reaction for improvement.

Units I and II both brought forth suggestions that more time be allowed for group discussion. Unit IV comments repeatedly suggested that more time perhaps even a fifth session, be given to completing the activities in that unit. In all units but the first, at least one comment indicated the need for more guidance or for direction from some sort of leader, one variously referred to as a monitor or mediator. A few trainees obviously felt the need for a person to refocus the group on its task or direct a critique or a role-play from time to time.

An interesting modification suggested by one person in the Unit I questionnaire was that of including some trust-building activities as a preliminary to the first microteaching activity. It was also mentioned verbally to the coordinator by two trainees following the first session. This probably came as a result of some

anxiety on the part of younger participants as they anticipated teaching before their colleagues (from their own school) in the following session for the first time.

Four questions in the GPE relating to modifications asked about a) topics that might have been covered more intensively, b) topics that were not covered but should have been, c) suggestions for alternate exercises or activities, and d) any changes that trainees would like to make. These resulted in a total of nineteen suggested or implied modifications. After looking at each question separately, the suggestions were grouped by similarity, and a total of thirteen kinds of modifications were derived from among the four questions. For example, question #8 had two kinds of suggestions, question #27 had seven kinds, and so on. Among the kinds for each question, there was some repetition also. Eliminating the repetition, nine different kinds of modifications were directly or indirectly suggested: (The number in parentheses represents the number of times that kind of modification was suggested in the four questions of the GPE.)

1. Allow more opportunities for discussion (8)

2. Go into more depth on particular (named) topics (4)

3. Give more opportunity to learn how to operate equipment (1)

4. Allow more time for the sessions and/or program (1)

5. Condense manuals (1)

6. Get manuals bound and published (1)

7. Include more varied activities (1)

8. Improve videotapes (1)

9. Use undergraduates as micro-teachers (1).

The suggestion for allowing more opportunity for discussion was the kind of modification most often repeated. Others may have been mentioned only once.

The responses and comments in the questionnaires yielded a gratifying variety of suggestions for change. Some received emphasis by repetition indicating some consensus among many of the trainees. This feedback points out clearly the need for revision in at least two respects: a) discussion opportunities and b) time arrangements.

Criterion #9. The participants perceive most and least useful aspects of each unit and of the overall program. Every unit questionnaire contained three questions inviting comment pertinent to this criterion. The questions asked the trainee to tell what he or she liked most or found most useful, liked least or found least useful, and to make an additional comment about any aspect of the unit. The GPE put these same questions in terms of weaknesses, strengths and most valuable aspect of the overall program.

If certain perceptions, be they positive or negative, were shared by two or more people, this could be considered significant enough to warrant closer scrutiny of that aspect or component of the unit. Again, the perceptions could be useful for future revision of the M-TSP program.

Grouping the individual comments for Unit I according to similarity, five different kinds of "most useful" items and three

different kinds of "least useful" items were found. Table 13-1 below lists the items for Unit I. The frequency of mention is found in parentheses following the item.

Comments were also made in the least-useful category about the pre-test and trainee fatigue (sessions began at 4 p.m. after a day's teaching), but since these were external to the training unit itself, they were not included as criticism of Unit I per se.

The film and the development of the microteaching concept appear to stand out as the most important aspects of Unit I in the opinions of the trainees. Exercise A, or at least the part of it where participants were asked to list problems on their own first, was not particularly liked by at least two people. From earlier comments made about individual written exercises and group exercises under criterion #5, there appeared to be some dislike among a small minority for working on problem exercises alone. On the other hand, this could have been merely a reaction to other parts of the manual which required participants to read through considerable explanatory material silently and as individuals. Finally, two persons said there was nothing they disliked or found least useful.

In the Unit II questionnaire, question 11 asked about the importance of knowing some standard question leads to use in supervisory conferences. All ten trainees were in agreement that it was very useful to have some of these in the supervisor's repertoire. Table 13-2 below shows the other aspects of Unit II judged most useful or least useful.

TABLE 13-1

PARTICIPANT PERCEPTIONS OF UNIT I

Most Liked/Useful	Least Liked/Useful
1. Acceptance of feelings and openness about them (1)	1. Written form (1)
	2. The exercise; writing down the problems alone (2)
2. Fostering of professional growth (1)	3. Section of the film on non-verbal cues (1)
3. Film (3)	
4. Awareness of the Micro-teaching Concept: defined, explained, utilized (4)	
5. Concise writing style of manual (1)	

TABLE 13-2

PARTICIPANT PERCEPTIONS OF UNIT II

Most Liked/Useful	Least Liked/Useful
1. Videotape #1 (4)	1. Formal teacher/supervisor relationship (1)
2. Exercise B: teach-critique with group feedback (6)	2. Uncertainty in operating video machines (1)
3. Comfort level; supportiveness (2)	3. Critiquing; supervising; note-taking for the critique (5)
4. Informal discussion (1)	
5. Clear definitions and examples of the technical skills of teaching (1)	
6. Running videotape recording equipment (1)	

Videotape #1 received favorable notice from four persons, and Exercise B, the first experience with microteaching supervision (which included a critique of the supervisor), was deemed quite useful by a majority of six. Interestingly, two people were pleased with the comfort level and sense of support they evidently felt at the end of the first microteaching experience even though no special activity was built into the program to achieve this. There is the possibility that since this group was a "family" group, i.e., all from the same school district and known to one another, the sense of supportiveness was already extant. Possibly the anxieties of the few who expressed concern over teaching in front of their peers were assuaged after session One.

Five trainees specified the critiquing or supervising in this session as the aspect they liked least. It is probably fairer to say they liked it least than to say they found it least useful. This was their first experience critiquing one another's lessons, and judging from the full text of their comments, some people were becoming aware of their own shortcomings as supervisors, e.g., ". . . it high-lighted basic obvious inadequacies on my part. I wish I had done a better job." There was also some dissatisfaction with how they critiqued the supervisor because of some lack of knowledge of how to do a critique themselves. Thus the concern over how to do a better job of note-taking on the lesson.

Unit III had 9 items listed as most liked and/or most useful and four least liked and/or least useful. Table 13-3 below shows these and

TABLE 13-3

PARTICIPANT PERCEPTIONS OF UNIT III

Most Liked/Useful	Least Liked/Useful
1. Supervising and being critiqued (2)	1. Rapid pace; shortness of time (2)
2. Relevancy (2)	2. Critiquing peers' lessons; unreal situation (3)
3. Experiencing all 3 roles: teacher, student, supervisor (1)	3. Videotape #2 not using real youngsters (1)
4. Practice; repetition (1)	4. Lack of mediator to focus group critique of the supervisor (1)
5. Confirmation of own beliefs (1)	
6. Videotape #2 (1)	
7. Exercises (1)	
8. Conciseness (1)	
9. Everything (1)	

their frequency.

Numbers 3, 4 and 7 in the most liked/useful column in Table 13-3 could possibly be subsumed under number 1. Number 1 refers to Exercise D (performed twice) in which the five-stage process was experienced and practiced through teaching, critiquing of the teacher, and critiquing of the supervisor. However, 3 and 4 seemed to be pointing up added values that heightened the teach-supervise-critique experience, while 7 referred to all exercises in the Unit. Therefore, these members were listed separately from number 1. Even if these three were combined with number 1, however, there would still be six items in the most useful column.

Unit III introduced the five-stage microteaching supervision process and provided two opportunities to try it out. Two persons, or more properly, five, commented on the importance of actually doing it, while two more confirmed its relevancy.

Critiquing colleagues' lessons presented a problem, according to three persons. From the full text of the comments, it can be surmised that it was not so much discomfort in criticizing a fellow teachers' lesson as it was difficulty in trying to critique lessons that were good. It was sometimes hard to identify areas that needed improvement.

The lack of time to work through the five stages in Exercise D at a more leisurely pace was listed as least liked/useful by two persons. This problem was discussed earlier under criterion #3.

Question 10 in the Unit IV questionnaire inquired whether Unit IV provided the trainees with some usable ideas for analyzing lessons. All ten persons were unanimous in agreeing that it did. Table 13-4 below shows the results from the other questions asking about most and least useful aspects of the unit. Five items were listed under most useful, while five were also named least useful.

The third videotape comes in for both positive and negative criticism. Those who did not find it helpful usually remarked that the tape was not clear enough in differentiating between the directive and non-directive supervisory styles. There may have been some expectation on the part of the trainees that the directive super-visor's critique would be a "bad" one while the non-directive critique would be the "good" one. Current thinking in education and psychology tends to reinforce the belief that a non-directive approach is the "right" approach. Both supervisors on the demonstration tape, however, did a creditable job of critiquing in a very pleasant manner although they did indeed use different styles. The styles are not drawn so sharply as to indicate "good-bad" or "black-white," however. Hence the doubt in some persons' minds, probably, about the usefulness of the tape.

The application exercises, F and G, gave participants a chance to "try on" different supervisory styles in role-playing situations. Each was cited as most useful by at least two persons. The problem with the exercises again was lack of time to perform them at a slower pace. This is a recurring theme, particularly in Units III and IV

TABLE 13-4

PARTICIPANT PERCEPTIONS OF UNIT IV

Most Liked/Useful	Least Liked/Useful
1. Exercise F; role-playing a style (2)	1. Videotape #3 (3)
2. Videotape #3 (4)	2. Lack of time for Exercises F and G (2)
3. Exercise G (game) (2)	3. Repetition in G (1)
4. Readings (2)	4. Videotaping the lesson (1)
5. Meaningful sequence of material (1)	5. Amount of material is too much for the session (1)

and should be addressed in any repeat or revision of the program.

The General Program Evaluation (GPE) elicited information in terms of strengths, weaknesses and most valuable aspects for the trainee. Thirteen items comprised the list of strengths and valuable aspects, while five weaknesses were cited. It is likely, however, that more positive aspects were evoked because two questions on the GPE asked for the positive reactions while only one question asked for the negative, i.e., the weaknesses. Table 14 below shows the list and frequencies of mention.

As with the four unit questionnaires, the GPE reveals a variety of opinions as to what the strongest or most valuable components of the M-TSP program are. Six persons cite the actual experiences of teaching, critiquing and practicing the five-stage process as most valuable; four saw the videotapes as very helpful; and three others thought the readings very good. In a real sense, these reactions support the premise that was used in the design of the program, i.e., that people have different learning styles and therefore need exposure to a variety of materials and activities. They will tend, then, to learn most from the particular materials and activities that present the content in a mode most compatible with their own learning style preference.

The basic content material in each unit could be found first in the information-giving sections of the manual. The readings and the non-print materials elaborated upon and reinforced that basic content. Individual written exercises and group role-playing and

TABLE 14

PARTICIPANT PERCEPTIONS OF THE OVERALL M-TSP PROGRAM
AS EXPRESSED IN THE GPE

Strengths/Most Valuable Aspects	Weaknesses/Least Valuable Aspects
1. Experience of teaching, supervising, role-playing, practice (6)	1. Too much practice--critiquing and role-playing (1)
2. Videotapes (4)	2. Operating equipment (1)
3. Coordinator (4)	3. Time squeeze (4)
4. Readings (3)	4. Need for more discussion of theory (1)
5. Organization (3)	5. Re-thinking of supportive readings needed (1)
6. Discussion; sharing (2)	
7. Working with in-service colleagues (1)	
8. Learning the microteaching system (1)	
9. Provision of a supervision model (1)	
10. Various ways of reinforcement (1)	
11. Well-designed, concise units (1)	
12. Simplicity for understanding (1)	
13. Importance of topic (1)	

microteaching exercises gave participants the opportunity to put those learnings into practice, gain immediate feedback on the success of their efforts, and practice again. This active participation further strengthens the learnings and for some, is the most relevant learning activity. For others, the demonstration, by live or taped models, of the ideas to be learned seems to be more significant to their learning. And for still others, a detailed written description with multiple examples is the more satisfying course. Different individuals learn to different degrees from the various approaches offered. M-TSP attempted to provide such alternatives so that trainees could find one or more suitable learning formats for themselves. Although the majority of the group saw the activity of teaching, critiquing and supervising as the most valuable for them other approaches were also cited as being strengths of the program, indicating perhaps that other types of learning style preference needs were being met.

Table 14 illustrates, too, that some participants took a broad view and looked not only at discrete components of the program but also at its overall design, organization, structure and characteristics. Hence the comments on simplicity, conciseness and reinforcement methods. The role of the coordinator was noted as a strength by four persons. This topic will be discussed later in this chapter.

The column on weaknesses points once again to the problem of time and squeezing too much material and activity into too short a span of time. Of some significance here is the fact that all sessions were held starting at 4:00 p.m. after the participants had put in a full day of teaching. The fatigue of some participants was mentioned by them several times in their comments as a reason for occasionally

not being entirely involved in all activities and for sometimes
giving "not sure" responses or no response at all on some of the
questionnaires.

In glancing through the five tables that show participant
perceptions of the program, it appears that the balance generally tilts
in the direction of the "most useful" aspects. That is, the trainees
seemed to perceive more positive aspects about the microteaching
supervision program than negative ones which probably says they see
more right with it than wrong with it.

Criterion #10. The participants express some degree of confidence
in carrying out the five-stage clinical supervision model for micro-
teaching in their own professional setting. Only the Unit III ques-
tionnaire and the GPE addressed this criterion. It is only in Unit III
that the trainees experienced the full five-stage process. In other
units they worked on particular skills within the process.

After having completed Unit III, participants were asked
if they felt they would be able to implement the five-stage process
assuming conditions were favorable. Nine persons said they would.
One said "no" indicating that more practice was needed in being a
supervisor. Specifically, note-taking was given as an example of the
kind of practice needed. Probably this person was mostly concerned
with spending more time on what to observe in a lesson (and how to
record that) and how to analyze the notes subsequently.

The GPE asks the related question of whether any of the
trainees actually tried out any aspects of the M-TSP program with

their own student interns in the classroom. Seven persons said they
had done so and three indicated they had not yet tried it but did plan
to. Some were specific in how they were implementing the M-TSP ideas,
e.g., "She chose skills for me to observe. Used non-directive approach
in critique," "Modified five techniques with my intern" and "I have
modified my questioning approaches and become less of a 'shot
gunner.'"

The majority of positive responses on these two questionnaire
items give evidence of a favorable attitude toward the program. The
fact that so many of the group felt confident in their ability to
employ the process and that a majority of them had already made some
voluntary efforts to implement it on their own can be construed as a
significant indication of their positive regard for it.

Criterion #11. The participants judge the significance/need/frequency
of discussion periods. There were few discussion periods allowed for
in the M-TSP program, especially large group discussions. This was by
deliberate design because of the self-instructional nature of the
program. Without an instructor, or someone designated as a leader, the
group would have to depend on randomly emerging leadership during a
discussion period. This could or could not result in a profitable
discourse. It could also result in much wasted time if discussions
became rambling and aimless. Theoretically, small group critiques
of the supervisors' conferences, based on points already outlined in
the unit, would tend to remain pertinent. Also, discussion was en-
couraged in pairs and trios at several points in the program for the

purpose of sharing ideas about a specific exercise. Keeping groups
small, for the most part, and limiting discussion by the clock--ten
minutes only--was an effort to avoid lengthy and fruitless discussions
that might result when no leader is reponsible for guiding such a
discussion.

Question 11 in Unit I and question 8 in Unit III questionnaires
addressed directly the question of whether it was worthwhile to have
a discussion. In Unit I, the discussion purpose was to talk about
responses to a written exercise; in Unit III it was to discuss a
demonstration tape. Very strong support was voiced among the trainees
attesting to the importance of having these discussions. The "yes"
answers numbered ten and nine, respectively. One person not responding
to the given choices wrote a comment instead indicating that there
should be a discussion if the group expresses the need.

Sprinkled among the comments to questions throughout the five
questionnaires were remarks indicating the desire for more discussion.
These numbered at least twenty in all. Trainees said they wanted more
time to discuss the readings, theory, the technical skills of teaching,
the techniques of lesson analysis, and differences between directive
and non-directive supervisory styles. It appears, then, that the lack
of discussion periods was the source of some amount of frustration and
therefore probably constitutes a definite problem in the structure
of the M-TSP program.

On the other hand, it is quite possible that graduate students
in particular have become so accustomed to the seminar type of class

wherein they are encouraged to exchange viewpoints and to analyze and criticize ideas presented to them, that when a different instructional format is presented, they are somewhat disconcerted. M-TSP is a training-oriented program where discussion is minimized in part because the validity of the training content is a given. This difference probably was not made clear to the participants at the outset of the training period

Criterion #12. The participants determine the degree of success of Unit IV in persuading them to examine and/or modify their own supervisory style. Since supervisory style (in terms of directive or non-directive approaches) was first introduced in Unit IV, it is only in the Unit IV questionnaire that this criterion is addressed. Additionally, however, there are two other sources of data. First, there is a written assignment given in the Unit IV manual asking participants to write a statement about their own supervisory styles. This assignment appears at the conclusion of the M-TSP training and the participants were to write it sometime during the ensuing week. Second, two questions (38 and 39) were appended to, though not part of, the post-test. These questions were given for the purpose of collecting further attitudinal information about directive and non-directive supervisory styles.

Question 11 in the Unit IV questionnaire asked whether the unit had helped the trainee clarify his/her own style of supervision. Eight persons responded "yes" and two did not respond to the given choices but wrote comments instead. These comments were not negative; rather, they

indicated a desire to do more thinking about their styles and an un-
willingness to commit themselves to a definite style. Hence the comments:
"Somewhat--it will take more thinking" and "It will be a job to clarify
it! It is definitely not one or the other and situational."

Personal statements on supervisory style were turned in by all
ten participants a week after the training had been concluded (see
Appendix G). They were frank statements of their natural preferences,
for the most part, but also included some desired goals toward which
individuals felt they should strive. Four persons stated forthrightly
that they had definite tendencies toward the directive style in
conferences with student teachers, two persons said they were non-
directive in their approach, two said they were inclined to use both
styles, and two made statements in which the supervisory style could
not be clearly pinpointed.

In almost all cases where a style was self-identified, the
trainee qualified the identification by saying he thought he should
also consider trying more of the other style. This was as true of
those who said they were non-directive as it was of those who said
they were directive. Most people had the feeling that flexibility,
that is, a moving back and forth between styles, along a continuum,
so to speak, was the wisest course. In their comments, trainees
expressed the following opinions:

> -- the style used may be dependent on the maturity and
> experience of the teacher with whom the supervisor
> is working, i.e., a more directive style might be
> more helpful to the teacher who is uncertain of his
> own goals or has an unclear picture of what his
> performance has been.

-- As the relationship develops between teacher and
   supervisor, and a trust level is established, the
   supervisor can become less directive, allowing the
   teacher or intern more independence, more oppor-
   tunity for self-diagnosis and more responsibility
   for own improvement.

-- It may be more important to be non-directive and
   open-ended initially in order to build a trust
   relationship; then become more directive if need be
   in the interest of time, efficiency and
   accomplishment.

-- A mix of styles is preferable to being too directive.

-- As interns become more able in the skill of self-
   critiquing, the supervisor can move toward a more
   non-directive approach.

The two questions appended to the post-test gave further
indication of the trainees' attitudes towards supervisory styles.
Asked to place themselves on a continuum of directive/non-directive
style, trainees distributed themselves approximately as follows:
(The numeral above the line refers to the number of trainees
checking that point.)

```
                 0    0    1    3    3    0    2    1    0
Non-directive_____Directive
               1         2         3         4         5
```

(See Compilation of Post-test Data in Appendix G.) Whether the mean,
median or mode is calculated, the result is point 3 on the scale, or
a close approximation thereof. Thus the group as a whole appears to
tend toward the middle of the road. Again, their comments often
reinforce the idea of drawing on both styles.

The self-placement on the continuum was informally compared
with the responses on the written personal statement about style

(from the Unit IV manual). Individuals responded in generally the
same way each time with only minor variation. The two persons
whose statement did not pinpoint a style before placed themselves
now in the exact middle of the continuum. Others' statements and
continuum placement agreed, showing the trainees to be fairly
consistent in their self-assessment of style.

The second question inquired whether the members would prefer
to have their own teaching critiqued by a supervisor with a tendency
toward a directive or a non-directive style. Six preferred non-
directive and four directive. Since it was assumed that people
would tend to select the choice that was most like their own style,
this data was compared with information given earlier in the personal
statements and on the continuum.

In most cases there was agreement, i.e., the trainee's
self-identified style was the same style by which he would like
to be critiqued. The two middle-of-the-continuum persons referred
to above selected non-directive supervision. Two other persons
showed interesting reversals, however. One with a strong directive
tendency, in fact, the strongest checked on the continuum, preferred
a non-directive supervisor. His comments showed a clear desire to
modify his own behavior in that direction. The other person, one
with a definite leaning toward a non-directive style herself, stated
a preference for directive supervision, the reason being her time
pressures and the desire for direct feedback if a non-directive
approach became too time-consuming.

The M-TSP program tried to make it clear that no one style was the right style, but that a supervisor's natural preference was a valid consideration in adopting a style. On the other hand, it also emphasized that the supervisor should be aware of and open to other styles, or combinations of them, trying them out in low-risk situations when possible, and being willing to adopt those elements which could usefully help him accomplish his supervisory objectives. The majority of trainees appear to have accepted this basic philosophy, judging by their statements. Whether they hold to these ideas as a result of the training program is not known. However, it does seem that the program succeeded in raising awareness of styles and a willingness to examine one's own style perhaps more thoughtfully than before.

General Program Evaluation

In the previous section, the four individual units were discussed as they addressed a set of twelve criteria specifically applying to them. The data derived from the four unit questionnaires were used to speak to each individual criterion. In a number of cases, data from the General Program Evaluation (GPE) questionnaire were also directly applicable to those unit criteria. Consequently, that information was included in the discussion of the four units and their respective questionnaire results.

The GPE questionnaire was intended to provide an overall perspective of the M-TSP rather than a unit-by-unit analysis. These

questions asked less about content and unit structure, concentrating more on the process, the training procedures, the design and the possible personal utilization of the program. It also provided a retrospective view of the whole program that trainees would not have had as they were proceeding through the program units filling out questionnaires as they went.

The M-TSP program was judged by the GPE questionnaire as well as by the four unit questionnaires. Among the criteria used to evaluate the effectiveness of the program, twelve dealt with the four units as previously discussed. An additional fifteen criteria related exclusively to the overall effectiveness of the total program. These were addressed by the GPE questionnaire and have already been listed on p. 90. Table 15 below illustrates precisely which questions in the GPE questionnaire addressed which criteria. Matrices were then constructed to indicate the results of the data collected from the participants on the GPE questionnaire. (These may be found in Appendix I.) With respect to criterion #1, for example, question number 1 applies. The matrix indicates that four trainees felt that all of the material covered in the program was professionally relevant for them, while six persons agreed that most of it was.

The results of the entire GPE will be discussed according to each of the fifteen critria. (For the complete compilation of all actual responses to the questions on the GPE, see Appendix G. Also, the blank form of the GPE can be located in Appendix F.)

TABLE 15

GPE CRITERIA ADDRESSED BY QUESTIONS
ON THE GPE QUESTIONNAIRE

GPE Criterion No.	GPE Question No.	GPE Criterion No.	GPE Question No.
1	1	9	18
2	2, 3	10	20, 21
3	5	11	22
4	6, 7	12	29
5	8, 9	13	30
6	10	14	28
7	11	15	31
8	17		

<u>Criterion #1. The participants evaluate the relevancy of the</u>
<u>concepts covered to the professional needs and development of</u>
<u>supervisors</u>. All ten of the M-TSP trainees agreed that all or most
of the material covered was relevant for them professionally. Their
comments added that they were now able to look at some ways of refining
their supervisory skills and to add some additional methods of super-
vision. At least one person admitted to feeling weak in the area
and therefore finding the program relevant, while another felt the
program confirmed the kinds of things that he was doing with
student teachers presently.

    The relevancy of the program for this group of supervising
teachers was confirmed by the results. Its importance goes beyond
its usefulness to them as supervisors, however. It is also very
useful to them as teachers in that it reviews, refreshes (and perhaps
even introduces) some important teaching skills; introduces some
techniques for self-analysis; and presents some counseling, or helping,
skills which can be used with pupils and, on occasion, in problem
situations with parents. The program also encourages the habit of
setting goals and getting feedback from various sources including a
videotape recording. All of these have relevance for the trainees
above and beyond what they do to increase competence in supervision.
The trainees seemed to recognize this too, showing a healthy interest
in the descriptions of the teaching skills in Reading B. Additionally,
one teacher wrote the comment that through the microteaching exercises
she got to see some great mini-lessons presented by her colleagues
that she could adapt for use in her own classroom.

Criterion #2. The participants ascertain the sufficiency of repetition of important concepts for retention and emphasis. Two questions on the GPE dealt with the matter of sufficient repetition. The program was designed so that major concepts would be introduced in the materials more than once. Explained initially in the manual, concepts would then be reinforced in other materials such as the videotape, the readings, and then practiced in an exercise. Ten trainees said that all or most of the important concepts were sufficiently repeated. Conversely, the ten also agreed that few or none of the important concepts received too much repetition. Two persons commented on this as a point of excellence in the program, while one also felt that the practice part needed to be extended. From these results it can be concluded that the amount of repetition was generally satisfactory for major concepts in the program as far as this group was concerned.

Criterion #3. The participants judge the appropriateness of topic sequence. The topical outline of program content given on p. 75 also shows the sequence in which the topics were introduced. The rationale for this sequence is given on pp. 76-77. Eight persons felt the sequence to be completely satisfactory and two said it was mostly satisfactory. No suggestions were included in the comments for changes in the sequence. One respondent remarked that the units following the first unit showed freedom and leeway in style and presented many other necessary components of supervision. A majority of the group apparently found the sequence logical and satisfying.

Criterion #4. The participants evaluate the amount and manageability of information in each manual unit. Two questions in the GPE addressed this criterion. There was full agreement among the ten respondents that none of the four units presented too little material. And six people also agreed that none of the units presented too much material. Thus, a majority seemed satisfied that the amount of information for each unit was appropriate. One person felt that two of the units included too much material but did not specify which ones. Two persons felt that one of the units was overloaded. Unit II was specified by one person because its readings were uninteresting and lengthy. Another trainee did not name a unit but felt that Readings B and E were laborious. No one, however, complained that any of the manual unit texts themselves incorporated too much information.

One comment to this question was particularly noteworthy with regard to manageability. Though the respondent did not feel there was too much presented in any one unit, he or she did note that there was not enough time either for discussion or for practicing the concepts in more depth. The particular unit or units where this occurred were not specified. But there is a perceptiveness about this comment which says that although there may not be too much to read and to manage (or process) mentally and in a passive fashion, there may be too much to handle if the trainees are also required to respond actively. If the question were put to the trainees this way, perhaps there would be others who would agree with the writer of that comment.

Criterion #5. The participants evaluate the intensity of topic

coverage. Very few persons, in fact only one, felt that there could

have been less intensive coverage. That person did not like the extent

of the role-playing activity covering the whole supervision cycle.

Nine others disagreed. More to the point, there was a stronger feeling

that some topics required more intensive treatment. Eight people

thought so and two did not. However, analysis of their specific

suggestions did not indicate strong group preference for more intensive

treatment of any given topic. Moreover, two of the suggestions had

to do with the training procedures rather than content topics. The

suggestions are listed below with the frequency of mention:

TOPICS

Inventory of events (Harris) (1)
Flanders' theory (1)
Data collection (1)
Critiquing supervisors (1)
Developing directive and non-directive styles (1)
Individualization of microteaching (1)
Adapting microteaching to one's own professional
    situation (1)

PROCEDURES

More sharing and practicing (1)
Discussion of readings (2)

There is a wide spread of topics, each of them discrete, al-

though the first three are related and could probably be categorized

under a heading such as Observation and Analysis. Other than this

area, it is difficult to tell from these results where to intensify

coverage of any of the topics.

Criterion #6. The participants determine whether the coverage of important topics is comprehensive enough. The question on comprehensiveness was phrased in terms of deficiency, i.e., whether there were topics that should have been covered in this training but were not. Eight responses have no suggestions for additional topics, one person did not respond, and one person said "yes." The one suggestion was that the program look more at stages new teachers, interns and pre-interns go through with their supervisor "in developing what they can become." This comment seems to be focusing on the teacher's developing relationship with the supervisor with regard to dependence-independence and directive/non-directive supervisory style. In an earlier section of this chapter, the notion of a changing relationship appeared to be in the minds of several other trainees also as they discussed their own supervisory styles. This could well be built into the program within the framework of a discussion period. Generally, however, the group seemed to be satisfied that the number of topics covered was fairly comprehensive.

Criterion #7. The participants judge the amount and arrangement of time to cover the material in the program. Four sessions of two-and-one-half hours each were allotted to the actual training (although the first session did include filling out the participant data form and taking the pre-test). Trainees were asked if this were sufficient time to cover the material included in the program. Seven said "yes," but two of those admitted to feeling rushed at

times or actually exhuausted from the pressure of the microteaching

supervision exercises and being videotaped. One suggested a fifth

training session. Three persons said "no," two of them suggesting

another training session also. These individuals seemed to feel

that whether or not the earlier sessions were shortened by fifteen

or thirty minutes, or even lengthened, a fifth session would alleviate

pressure and allow time to pursue some topics in greater depth.

Comments elsewhere in the questionnaire data, including those

in the four unit questionnaires, also suggest the need to pay attention

to time arrangements and pacing. Clearly this is an area that requires

some re-thinking in order to have all or most trainees able to

operate at high levels of efficiency and energy. More discussion of

this problem will appear in chapter 5.

Criterion #8. The participants determine the degree of success of

the individual unit sessions. Responding to the question of whether

any one of the four sessions seemed more successful than the others,

seven people said "no," with a couple commenting that all were

equally valuable. One responded with a question mark which was

counted as "no answer." Two people thought that certain sessions

were better and each named two or three. Sessions I through III

received one vote each while Session IV received two votes. An

element of ambiguity exists here because the question deliberately

looked for an overall impression of which units went well and

which did not. It is not clear, therefore, on what basis the

respondents were judging success. For example, some may be evaluating

the content and how important or practical it was with regard to

supervision, while others may be looking at a session from the

standpoint of how the group proceeded through the schedule of

activities and exercises. No one negated the value of any session

in their comments. Since general impression is what the criterion

refers to, however, it will have to be inferred that there is

moderate agreement among the group that all sessions were successful.

Criterion #9. The participants report on the provision of opportunity
to practice supervising and critiquing. A definite aim of the M-TSP

program was that every participant have the opportunity both to teach

a microteaching lesson and to critique such a lesson as a supervisor.

Arrangements were specifically made to have enough video equipment and

adequate physical facilities available so that trainees in small groups

could experience these important processes. Trainees were encouraged

to take turns in these roles so that everyone could take advantage of

the opportunity. Question 18 revealed whether this aim had been

accomplished at least insofar as the critiquing was concerned. Seven

persons said "yes," that they had done a supervisory critique during

the training sessions. Two had not, and one person did not respond.

The reason for the non-response is not clear.

Although there were enough microteaching exercises to allow

everyone to teach and to critique at least once, there was at least

one absence and one or two instances of an early departure. Thus, it is likely that the missing person in the group lost a chance to do a critique or did not volunteer when he/she had a final chance.

Criterion #10. The participants evaluate the degree of success of the "self-instructional" mode of the program. The M-TSP program was designed to be used with a coordinator whose role it was to provide materials and facilities, make arrangements, keep activities moving along according to a time schedule, and clarify exercise instructions if necessary. The coordinator was not to participate actively in discussions or exercises. Primarily the group was to carry on alone with assistance from the coordinator who provided technical assistance only. Question 20 in the GPE queried the group on how it saw this program working best; four choices, A through D, were given. Of the ten trainees, none saw the program as being used by a group alone (A). And only one person said it would work best with a coordinator (B). Choice C, program used with a resource person, was checked seven times, and D, program used with an instructor, was selected five times. It should be noted that two trainees selected more than one choice. This probably indicates that these people saw the need for the person working with the group to serve in more than one role, acting as a resource person some of the time, and as an instructor or a coordinator at other times. The most popular answer, however, was "resource person" which was defined in the questionnaire as "one who facilitates

but also participates in a somewhat non-directive way; provides information and clarification occasionally."

"Instructor" was also checked five times, defined as "one who facilitates but also actively leads in exercises and discussion in a somewhat directive way." This substantial group of five may be relating to the desire for discussion (and consequently, someone to take the initiative in directing it) that became evident earlier. The overall result on this question also seems to indicate that the large majority did not appreciate the defined role of coordinator as being effective enough for them.

The second question addressing this criterion asked how the trainees perceived the role of the person who actually did coordinate the training. This person was attempting to maintain the role of coordinator as defined above. Of the three choices given, A - coordinator, B - resource person and C - instructor, B was selected nine times. Again, several people selected two or three choices. Five people did this, in fact. Despite the fact that the coordinator was trying to maintain the defined role, nine people perceived her, at least at certain times, acting more in the role of a resource person. The choice of A - coordinator was checked six times, perhaps indicating that the coordinator was successful some of the time in maintaining the assigned role. Finally, one person also checked C - instructor; all three choices were selected by this trainee. A comment accompanied this answer saying that the coordinator had "assumed each role as appropriate to the situation, which varied

frequently." Although other comments were complimentary, the situation seems to reveal that the program did not entirely succeed with this group as a self-instructional package that required only a coordinator, or manager. They did not perceive it that way and they did not agree that this was the best way to utilize the program. The message seems to be that either the program be conducted by a resource person or by someone who can move readily from role to role as the situation requires. There will be further discussion of this point in the final chapter.

Criterion #11. The participants evaluate the overall success of the M-TSP program. While criterion #8 looked at the success of the individual manual units as judged by the participants, this criterion relates to their opinions of the program seen as a whole, a summary opinion, so to speak. The GPE asked how successful the overall program was in light of its purpose as a training program for supervisors of microteaching. Responding to five choices, nine people said the program was successful or very successful, and one person felt it was moderately successful. Two people commented that the sessions were gainful and they expected to utilize the skills learned to become better helpers.

Another question, one not considered in the matrix, but probably applicable to the criterion of success was question 23 asking the trainee if he enjoyed participating in the program. The response could be viewed as an indication of success. There was a

100 percent "yes" response with four persons adding further com-
plimentary remarks about the program.

These opinions were given during the week following the
final training session. Trainees therefore had ample time to
complete the GPE questionnaire at home and at their leisure, time
to reflect upon the past month's four training sessions. Presumably,
this retrospective view helps deliver an impression that is reason-
ably accurate.

Criterion #12. The participants judge the usefulness of the program
for alternative trainee groups. Although this study utilized
supervising teachers, the M-TSP program was designed for use with
various groups within education. In particular, it is to be used
with people who have some responsibility for supervising those who
teach.

Five persons thought it would be useful for all kinds of
supervisors, e.g., administrators, college supervisors, and super-
visors who have been "away from the classroom too long." Three
others suggested the program for pre-service teachers such as interns
and pre-interns. Two more recommended it to school staffs and staff
teams. (The latter was not confined to education but also included
social workers and business people.) One final suggestion proposed
that interested parents take the training as well.

This question brought up some very useful ideas for utili-
zation of the program and also for modification. For example,

although the M-TSP program intent is to serve supervisors, including pre-service participants might be of considerable value. They could present the microteaching lessons, be critiqued, participate in teacher critiques and contribute to critiques of supervisors as well. As supervisors increase their competency in observation and analysis, pre-service teachers would be learning a great deal about what to look for in their own lessons. There is also much to be derived for application to their own teaching from a study of helping skills and directive/non-directive styles.

The implication seems to be present and fairly strong that supervisors and administrators would benefit from this training whether or not they intended to supervise microteaching. Possibly the administrators' experience of refreshing their own teaching skills and practicing their supervisory techniques and human relations skills, opening them up for examination and re-assessment, is one that teachers feel would contribute much to the mutual effort of instructional improvement.

Criterion #13. The participants determine the effectiveness of the program when used by a "family" group. Since all ten participants taught in the same elementary school district, albeit three different schools, they were termed a "family" group. The assumption was made that they all knew each other, to varying degrees, prior to this training. The question queried the members as to whether this relation-ship bore any influence on the program's effectiveness for them. Two

persons checked none of the response choices but did comment, one saying, in effect, "not to any significant extent." The other expressed doubt that it was indeed a "family" group because he did not really know the others well and did not know whether this had any influence. Six people agreed that it did indeed affect the situation. Some of them commented on the comfort and security they felt, though one had the reservation that perhaps criticism was milder coming from friends. Finally, two persons responded that it did not influence effectiveness to any significant extent.

Although a majority of six felt that there was an influence, and it is assumed they felt it was probably beneficial, the agreement among the ten trainees was not very strong. It will be recalled, too, that there existed an initial hurdle among at least two younger members of the group who expressed some reservation about teaching in front of more mature professionals from their own school. Fortunately, this concern appeared to fade after the first microteaching session. No negative comments were made, either verbally or on the GPE, about working as a "family" group. Thus, the matter of how much actual effect the familiarity of members with each other has on the effectiveness of the program is still somewhat ambiguous and probably requires some further investigation. With this group, however, it did not appear to have any negative effects.

Criterion #14. The participants evaluate the value of the program for supervising (cooperating) teachers. Since the program is for use with groups having supervisory responsibility over in-service or pre-

service teachers, people in varying educational capacities might take advantage of this training. However, in the present study, only supervising, or cooperating, teachers took part. The group was asked, therefore, to consider the value of the training for their type of population in particular, i.e., for cooperating teachers who supervise student interns and pre-interns preparing for classroom teaching. Nine respondents affirmed the value of the program for groups such as theirs: five agreed it was extremely valuable and four said valuable. One person felt it was somewhat valuable, adding the comment, by way of explanation, that he felt there had been too much role-playing for this group of experienced teachers. He fails to distinguish, however, between role-playing as teacher and role-playing as supervisor. It may not have been necessary for these trainees to examine and practice their teaching skills (although several thought the referesher was very usesful), but it was most certainly important for them to have repeated practice and critiquing of their supervisory skills. Three additional comments from the respondents checking "extremely valuable" added support to the program noting its emphasis on skill development, additional supervisory techniques and the fact that it was a well-equipped and well-run operation. It would appear then that a strong majority was fairly well convinced that the M-TSP is valuable for groups such as theirs.

Criterion #15. The participants judge the comfort factor in colleague-critiquing. In the M-TSP program and in this particular

study, all participants were colleagues on the same professional level, i.e., cooperating teachers. There were no participants in administrative positions or on the pre-service level. In terms of position, therefore, they were a homogeneous group. In addition they were, as described earlier, a "family" group.

In response to the fixed choices, no one said that in critiquing colleagues they felt "no particular effect." Four felt comfortable with it, while one felt quite comfortable. Four others said uncomfortable and one felt very uncomfortable. Among the respondents was one who felt both comfortable and uncomfortable, ex- plaining in a comment that his own level of self-confidence came into play here. Critiquing tended to be difficult because the lessons of these experienced teachers tended to be good, and it was difficult trying to identify weaknesses. From the comfortable group came comments that the atmosphere was non-threatening and that acquaintance with the teacher did not matter since the critique was based on skills they were learning to implement. The latter is a particularly useful comment for trainees to bear in mind since it helps take the focus of criticism away from the personality and puts it where it belongs, on skill development.

These results should be compared with those asking whether the "family" group circumstance had any influence. They have in common the factor of comfort. In both cases, the final result seems to be a draw, i.e., there is very nearly an equal division of opinion about

whether knowing the person one is critiquing makes a difference. On the "family" group question, a slim majority felt it did make a difference--on the positive side. In the critiquing of colleagues question, there is a somewhat less positive attitude among half the group although no one negated the value of doing it. That point should be made clear.

Ultimately, it is likely that any discomfort is largely a function of personal confidence levels, as expressed, for example, by two persons, particularly since this program involves not just the practice of familiar teaching skills but primarily the learning and implementation of newer supervisory skills.

Summary

This chapter presented the results of data collected from the pre- and post-tests, the four unit questionnaires and the General Program Evaluation (GPE). The pre- and post-tests assessed trainees' cognitive knowledge about the three areas of training: microteaching, clinical supervision, and personal interaction skills. The remaining questionnaires elicitied trainees' opinions about the Microteaching Supervision Program, its processes, structure, and materials.

The group mean raw scores for the pre- and post-test scores showed a substantial increase in favor of the post-test, indicating that after four weeks, the group as a whole knew more about the areas covered by the M-TSP program than they appear to have known prior to training. Strong gains by a majority of the trainees from

pre-test to post-test appear on certain test items relating to the structure of microteaching (teach-critique-reteach) and the structure of the clinical supervision model, i.e., the five stages, their sequence and purposes. Strong gains were shown, too, in knowledge of teaching skills--questioning, in particular--and in supervisory skills. The latter included an understanding of how supervisor observations and video observations (recordings) can complement each other and how directive and non-directive supervisory styles are defined in terms of supervisors' goals. A substantial gain was also shown on an item regarding the practice of pupils giving feedback on the lesson.

There was some evidence in the scores that some trainees came to the program with general background information similar to that which was taught in the program. Scores on certain items were perfect on the pre-test as well as on the post-test.

The responses on the unit questionnaires and the GPE were measured against sets of criteria designed to look at the materials, procedures, structure and organization of the M-TSP program. Generally, the response of the trainee group as a whole was favorable to the program. A variety of strengths was cited including the prac-tice experiences in teaching and critiquing, the videotapes and film, the development of the microteaching concept, the organization of the program, and the usefulness of the coordinator. Weaknesses included some time pressures, rapid pace, lack of longer discussion periods, dissatisfaction with some of the readings, and the length of some of

the videotapes. On balance, trainees had more desirable comments about the program than undesirable ones.

The group of trainees did not perceive the M-TSP program to be entirely self-instructional since they saw the coordinator as more of a resource person, one who occasionally takes a leadership role.

Overall, the group judged the program to be successful and enjoyable, one relevant for their own type of group as well as other groups involved in education, e.g., administrators and college supervisors.

C H A P T E R   V

SUMMARY AND CONCLUSIONS

This chapter will review the purpose, procedures and results of the study, discuss some conclusions, and make recommendations for modifications of the study and the Microteaching Supervision Program. The chapter will conclude with implications for supervisor training and for further research.

Summary

A self-instructional, packaged program to train supervisors of microteaching was developed, implemented and evaluated in the present study. A manual consisting of four units was designed to guide participants in a workshop setting through four training sessions. The units covered four major content areas: 1) introduction to the microteaching concept, 2) individualizing microteaching, 3) the five-stage model of microteaching supervision and 4) supervisor personal interaction styles.

The study investigated a) how successful the program was as judged by the trainees, ten elementary supervising teachers; b) how much knowledge about microteaching supervision the trainees gained; and c) whether the program functioned well in a self-instructional mode with only a coordinator to assist the group.

Each session involved reading the manual units for information and for directions to the written and teaching/critiquing exercises. The latter exercises were videotaped for subsequent critiques of those trainees playing supervisor and/or teacher roles. Readings, a film and several videotapes constituted additional program material integral to the program.

Data were collected by means of a) pre- and post-tests to assess trainees' cognitive understandings of the program content; b) four unit questionnaires administered anonymously to the trainees after each of the four training sessions to elicit judgments on materials, activities, program organization and procedures used in each unit/session; and c) a General Program Evaluation (GPE), a final questionnaire to elicit a retrospective opinion from trainees on the overall program.

A substantial increase, both for individuals and for the group as a whole, was seen from the pre-test to the post-test scores, indicating an increase in knowledge of the concepts of microteaching supervision. Test items were analyzed on pre- and post-tests according to 1) gains, 2) losses and 3) same scores shown by a majority of the trainees.

Results described in the beginning of chapter 4 showed strong gains in knowledge about the structure of the microteaching process, the five stages of supervision, types of questioning skills, the practice of pupil feedback on teachers' lessons, and directive/non-directive supervisory approaches. Improved understanding of the

salient features of microteaching and increased ability to identify
significant helping skills for critiquing were also shown among
majority gains.

Losses in scores from pre- to post-test did occur, but never
by more than one or two people on the same test item.

There were about ten items on the 37-item test where the same
scores--perfect scores--were achieved by a majority on an item in
both the pre- and post-tests. This demonstrated that many in the
group were not completely unfamiliar with microteaching's primary
focus on teacher behavior, the meaning of "micro" in microteaching,
the feasibility of individualizing the microteaching process, the
importance of objective, non-judgemental observation, and the possible
utilization of the microteaching concept for looking at affective
concerns and pupil-teacher interaction.

The four unit questionnaires and the General Program Evaluation
were analyzed by measuring responses against sets of criteria estab-
lished for individual units and for the overall program. The results
showed trainees' opinions of many aspects of the M-TSP program.
Significant among their observations were the following: a) the most
valuable aspect was the practice of teaching/critiquing; b) the
non-print media were useful demonstrations; c) the M-TSP program
was well-organized; d) the microteaching concept was well-developed;
e) the rapid pace and pressure of time caused some concern; f) lack
of discussion periods was sometimes frustrating; and g) working with
and critiquing colleagues became a comfortable experience. Trainees

also agreed that a resource person rather than a coordinator would be more useful. This somewhat defeats the self-instructional mode that was intended. Trainees concluded that overall, the program was enjoyable, successful and relevant for them.

Conclusions

Some major conclusions can be drawn from the summary data above. The results of the study suggest the following:

a) The M-TSP program was probably successful in effectively communicating the information in the three major content areas: utilization of the microteaching concept; structured clinical supervision; and interaction patterns that examine directive/non-directive supervisory styles and helping skills.

Trainees' scores from pre- to post-tests showed considerably greater gains than losses. No doubt some general knowledge that these professionally active people already brought to the program contributed to the substantial post-test scores. It is not unlikely that these trainees, all of whom were pursuing advanced degrees, would be knowledgeable about some current theories and practices extant in the educational field today.

b) The manual was a usable document. It was written in understandable, readable language and served as the basis of the program for information-giving and for directing activity. The teaching level was appropriate to the intellectual level of the group and, except in two minor cases, offered sufficient repetition to allow trainees to absorb and retain

important concepts. Trainees' comments support these points. It
should not appear necessary, therefore, to alter the style or basic
design of the manual.

c) Probably two of the most important keys to success in any program
are 1) that participants accept program content as relevant for them and
2) that participants find immediate utility for what they are learning.
The program seems to have met both these standards. Trainees agreed that
all or almost all of the concepts in the program were, in fact, relevant
to their professional needs. Moreover, many of them said they had
already begun to utilize some of the strategies taught in the program
in their own schools.

Questionnaire items asking about relevancy and comprehensiveness
of content and intensity of topic coverage did not yield opinions about
content. Comments were most often directed at the program's procedures,
organization, structure and materials. Thus, it can be concluded that
for this group of trainees, the content of M-TSP was relevant and
satisfactory. There is probably no need, therefore, to make any sub-
stantive changes in program content.

d) The materials accompanying the manual were generally well-received
by the trainees except in cases where they were unnecessarily long.
Even then, agreement was substantial that the materials--film, video-
tapes and readings--had been successful demonstrations and good
preparation for group activities. The non-print media should be
considered as integral, not supplementary, to the program since they
played an important part in reinforcing concepts, in providing

repetition, background information and model demonstration. Moreover, they provided an opportunity for trainees to use an alternative learning format to the otherwise print-oriented materials of the program.

It can be concluded, therefore, that the non-print media and the readings formed a valuable component of M-TSP and that, with some minor revisions, especially with respect to length, these materials should be retained in the program.

e) The program was successful in maintaining a fairly consistent level of satisfaction among the trainees. Comments on each of the questionnaires seemed generally constructive, honest and positive. There were few, if any, negative reactions though many comments gave specific suggestions for modification. None, however, suggested any major revisions. A possible reason for the continued interest might be the program's attempt to include a variety of activities with an emphasis on active learner response. Units were written so that participants were required to write, role-play, discuss, or do something other than sit passively listening or reading.

Feedback from trainees regarding their liking for the activities and exercises indicated a preference for Unit IV. This unit provided the most variety as well as the greatest number of activities. It also provided for more large group interaction than most of the other units. This is in contrast to Unit I in which there were two relatively individual exercises with little interaction, and which elicited the least amount of enthusiasm. It seems reasonable to conclude, therefore, that units requiring a good deal

of active learner response as well as interaction with the group are
the most successful and the most satisfying. This has implications
for Unit I, suggesting perhaps some large group activity such as
discussion of the film.

f) The program may not be entirely successful as a purely self-
instructional package, i.e., with a coordinator only. Despite the
fact that the coordinator was to serve only as a technical assistant
to the group, a majority of the group did perceive her as a
resource person. This occurred because the group drew the coordinator
more than once into its activity through its need now and then for a
discussion facilitator or by requesting information, opinions or more
directions. It was assumed that in a group of experienced, profes-
sional educators, leaders would emerge to keep discussions and
activities going. Much of the time this was the case. However, it
may be too much to assume that the same group will consistently be
able to direct its own learning without having someone to turn to
occasionally as a guide, leader or resource person, even if only for
verification. Before a final conclusion is drawn, however, the program
should be tried with other types of groups to see if the same percep-
tions occur.

g) The trainees exhibited a mild degree of concern over time pressures
in Units III and IV. Both units were loaded with information and
activity, and a few participants complained in comments on the ques-
tionnaires of feeling rushed, of not having time to think through the
analysis of a lesson, for example. Exercise D in Unit III (the five-

stage process) was a case in point. Therefore, more time should be
allotted for this exercise, plus a brief discussion period allowed before
the repeat of the exercise. Time allotments for other program
activities within the units should also be re-examined. Too rapid a
pace may diminish the usefulness of the activities and lessen the time
needed for absorbing, processing and practicing new techniques
and approaches.

h) Two direct questions in the unit questionnaires addressed the
matter of need for discussion. Trainees expressed strong support
for discussion periods. Additionally, many comments throughout the
five questionnaires made reference to the desire for discussion also.
Apparently, the lack of time to share opinions, particularly on the
readings, the film and the videotapes, was a repeated source of some
frustration to a few participants.

Perhaps the lack of substantial discussion time could diminish
somewhat the effectiveness of the program materials if it is assumed
that the materials did provoke a desire to talk about certain topics.
Interest could be stifled by the lack of opportunity for discussion.
Thus, the inclusion of discussion periods, particularly in larger
groups, should be re-considered. Appropriate places for discussion
would be following the viewing of a film or videotape, upon completion
of a major group exercise, and after Readings C, D and E have been
completed.

i) The generally good results on post-tests may have been partially
due to the Hawthorne Effect. Subjects knew they were participating

in the pilot-testing of a new program. The videotaping of lessons
and critiques was also novel and many expressed interest in its use.
An effect perhaps even more important than the Hawthorne Effect,
however, may have been that of being a "family" group. This could be
regarded as a strong motivation for the subjects to prepare their best
lessons for the microteaching and to prepare themselves to do competent
supervisory critiques of those lessons. It was mentioned several times
that critiquing was not easy because few problems could be found with
the lessons. Subjects knew they were "performing" before their
colleagues and were unlikely to do an unimpressive job even though
many claimed to be comfortable with the "family" group circumstance.

Recommended Modifications of the M-TSP Program

Based on the data analysis and the conclusions drawn, certain
modifications of the program itself, if it were to be repeated, seem to
be indicated.

Time. The primary change that is suggested is a rearrangement of the
time elements. There are several possibilities. The four sessions
could be extended to five in order to add two-and-one-half hours more
to the present ten-hour program. That would be sufficient to complete
all activities in a reasonable amount of time. The four sessions
could be extended to three hours each with ten-minute breaks. Still
another possibility is five sessions of only two hours each--still ten
hours but spaced so that pressure might be less intense.

Unit IV is a long unit with enough material to extend through two sessions. A fifth session, of either two or two-and-one-half hours, would cover the section of Unit IV that deals with directive and non-directive supervisory approaches. The final role-playing game, "Pin the _ _ _ _ on the Supervisor," is a culminating activity for the program, and should also be included in the fifth session. It embraces a variety of the program's concepts and therefore serves as a practical and a final review. Whether time periods are shortened or lengthened, activities would have to be re-arranged within each unit to provide for variation of learning activities, that is, to avoid too much of the same thing going on for too long. Other modifications below will provide more time conservation measures.

Videotapes. Tapes 2 and 3 were 25 minutes in length. These could both be shortened by eliminating repetition of information that appeared in the first tape and by eliminating the teachers' lessons in videotape #3. Since the directive and non-directive conference styles of the supervisors are the focus, one lesson could serve for both supervisors to critique instead of two separate ones.

Discussion. Provide some limited time for discussion in groups larger than the pairs and trios that were used. If necessary, instruct the group to appoint a group leader or rotate such leaders rather than relying on the coordinator to step into discussions. The presence of a resource person or instructor implies that a trained person must be available when the M-TSP program is used.

One of the basic goals underlying the design of this package was that groups should be able to use it independently at their own schools without specialized personnel to make it work. The next best alternative would be to use someone as a resource person who is mutually respected by the group but preferably not an administrator who has responsibility for the professional evaluation of group members. This could introduce an element of threat that might inhibit the trainees in the microteaching and critiquing aspects of the program, thereby reducing its effectiveness. The resource person could be a knowledgeable, professionally active colleague working within the same educational organization, however.

Readings. Eliminate some of the overlap and provide some opportunities for discussing the readings. They provide a valuable source of background material. Perhaps other selections or condensations of the present ones could be used. The readings show some useful approaches and define important skills and therefore their value should not be underestimated. Time for discussion should nevertheless be limited so that discussions do not ramble onto tangents. This is one of the dangers of having no appointed discussion leader.

Recommended Modifications of the Study

Some changes could be made to enhance the study itself yet maintain the basic purpose of evaluating the program.

Data collection. The number of items on all questionnaires and pre-
and post-tests should be substantially reduced, tailored to represent
only the major concepts. The pre- and post-test should be re-
constructed to be less awkward for scoring purposes. The four unit
questionnaires should be reconstructed also so that each has a Part I
that is identical. This section would consist of questions that are
asked in each unit on such things as the teaching level, clarity,
readability, usefulness of readings and non-print media, etc. Part II
of each questionnaire would consist of questions appropriate to that
particular unit only.

The large number of questions to respond to throughout the
program may have contributed to some testing fatigue. This was not
expressed by the participants openly, but could have been a reason
for some "no answers" on questionnaires. By the time of the fourth
session, a few persons may have declined to respond if much more than
a checkmark was required.

Sample. Although larger facilities and more resources would be needed,
as well as an additional coordinator, it would be desirable to have a
larger sample with which to test the program. A broader range of
trainee perceptions and responses could be gathered. In a sense, too,
the present group may evidence a self-selection bias in that the
participants elected to take the university course in which this study
was carried out. The subjects did not know in advance, however, that
they would participate in the study.

These subjects may not, after all, be considered representative
of most supervising teachers. They work in a relatively advanced school
system that places emphasis on professional staff development and en-
courages professional study and activities as ways of keeping abreast of
current thinking in the field. A random sampling of teachers and
administrators in varied systems would give a more representative
view and might produce a different result, especially on the pre-test
scores. The power of the treatment (the M-TSP program) may be somewhat
diminished by the fact that this was already a well-informed group.

Time. Most advantageous would be the selection of a different time
period for the training. In the present study, trainees met from
4:00 p.m. through 6:30 p.m. for four after-school sessions. Weariness
from the activities of the teaching day was evident from occasional
remarks about fatigue and hunger. At least one questionnaire respondent
cited this as a reason for being apathetic about answering questions on
one of the forms.

A more suitable time arrangement, especially for those working in
elementary or secondary schools, might be a series of four or five
half days. Some schools already reserve a half day each week for in-
service activities, curriculum meetings, etc. Other systems set aside
the week before September school opening or a few days during a long
holiday break for a special workshop series. An evening series of
meetings is also a possibility. Any of these arrangements would be
preferable to the time conditions under which the present study was
conducted.

Implications for Supervisor Training

Although M-TSP is a program for preparing supervisors of micro-teaching, it has implications for supervisor education in general. The program utilizes the microteaching concept not only to observe and collect data on the teacher, but also on the supervisor. That is to say, supervisory critique sessions are videotaped and the super-visor's effectiveness with the teacher is observed and itself critiqued. This is a procedure readily transferred to the training of any supervisor even if microteaching with pre- or in-service teachers is never used. Any observable professional task that the supervisor performs in his supervisory capacity can be brought under closer scrutiny utilizing the microteaching concept. It becomes then a matter not of training for microteaching supervision, but rather, training supervisors via microteaching.

Most supervisors study and prepare for supervision without ever having seen themselves functioning as a supervisor. Furthermore, al-though improvement of instruction is the generally agreed-upon func-tion of supervision, it is seldom that the supervisor has the opportunity to practice the face-to-face task of critiquing a teacher's lesson. Whatever skills he brings to that task usually come out of his theoretical knowledge or his own classroom teaching experience.

M-TSP training need not be limited to supervisors in education. Selecting the most appropriate segments of the program, and adapting other parts, groups involved in community services, health care, nursing, library work, Cooperative Extension and adult education, to

name a few, may find applications in the program. For example, prac-
ticing the helping skills would be useful for any individuals who
are involved in some kind of client or counseling relationshop with
other people. Nurse practitioners who work in partnership with
physicians, for instance, often spend time with patients helping
them understand their physical problems and explaining or teaching
a certain needed medical regimen. In doing so, the nurses need to
be aware of the affective milieu that colors patient attitudes and
produces or reduces anxieties. The utilization of appropriate helping
skills can be very important in such situations.

Implications for Further Research

The present study leaves a major question unanswered. Although
the trainees generally agree that the M-TSP program is valuable, and
they seem to have gained some important knowledge from it, has it, in
fact, altered their supervisory behavior in positive ways? Further,
if it has altered supervisory behavior, what has the effect been on
the teachers they supervised?

If further steps in this investigation were to be pursued,
these questions would form the beginnings of the hypotheses. The
ultimate test of the effectiveness of the program will be not what
supervisors say, but what they do.

Observations of the supervisor's interactions with the teacher
could be gathered as baseline data, or as a pre-test. Following the
training, similar information would be collected as a post-test and used

for comparison. Specific supervisory skills would have to be defined and their definitions operationalized in the training program, however, before this could be done accurately.

The present study, however, is limited to a preliminary investigation of a) theoretical information gained by the subjects as a result of training, and b) the value of the program as judged by the subjects. The study provides much valuable information on the materials, organization, and processes of the program that could be useful as foundation information for future follow-up studies.

It would be useful to repeat the present study using a different trainee group representing another professional level in education, e.g., principals, college supervisors, department chairmen, or combinations of these. Different groups would bring different funds of knowledge and fresh perspectives to the training. They would be approaching the problem of teacher supervision from a standpoint different from that of the cooperating teachers used in the present study. They would probably offer some alternative opinions about the strengths and weaknesses of the M-TSP program and the relevancy of the content. Testing the program with diverse groups of educators would also help determine how, or whether, the program would need to be modified for use with distinct groups, e.g., a group of secondary principals, a group of college supervisors, etc. It should be possible to find out exactly the kinds of modifications that would be required to make the program maximally useful to such individual groups.

Another variation on the study would be to conduct the pre- and post-tests of actual critiquing and supervising in a real classroom situation rather than in a clinic or laboratory situation such as was done in this study. For example, an elementary reading supervisor participating in M-TSP training might be videotaped conducting a critique in his or her school with one of the reading teachers for whose instructional improvement she or he is actually responsible. Pre- and post-training tapes could be made to find evidence of growth in critiquing skills. Tapes of practice critiques made during the training sessions could also be compared with tapes made in the real supervisory situation to see how the factor of reality affects the performance of the supervisor. This would provide some additional information on the transfer value of the program for supervising in real situations.

The role of supervisors has been conceptualized in a variety of ways. A study that would give supervisors practice in acting out specific identified roles could also be pursued. Earlier in this work, various kinds of roles that the same supervisor might have to assume were discussed. For example, he might act as a resource person at one point in a supervisory conference, as a focuser at another point, and as an evaluator at yet another time. Other roles include in-terpreter of feedback, shaper (of behavior), and non-judgmental facilitator. Trainees would become aware of what kinds of supervisor behaviors constitute these roles and what their purposes and effects might be.

The M-TSP tried to be comprehensive first, touching on major concepts and skills and the structure into which they could be organized for logical use by supervisors. Still further research could be conducted taking segments of the M-TSP program and developing them into mini-programs where they could be explored in more depth. For example, just the skills of lesson analysis could be developed and practiced more thoroughly in a two- or three-week program. Presently, most of the supervisory skills in the program are briefly explained, read about, modeled and immediately practiced. The encounter with the skill is repeated, but ultimately it is too brief for some individuals. If economy of time continues to be one of the under-lying objectives of this package, then it is not feasible to go into much depth on any one skill.

The trainee feedback on the present study gives ample indica-tion that with some careful revision, the M-TSP program could be an even more valuable tool for microteaching supervision, for general supervisor training and as a springboard to derivative investigations.

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APPENDICES

Appendix A

List of Program Materials

LIST OF PROGRAM MATERIALS

Contents of Manual

1. To Amherst-Pelham Elementary Teachers: an introductory letter
2. Participants Data Form
3. Pre-test

4. Introduction to Manual
5. Outline of Topics Covered in Program

6. Unit One Manual

7. Questionnaire - Unit One
8. Reading A: "Microteaching - A Description" by Robert Miltz
9. Reading B: "Teaching Strategies"

10. Unit Two Manual

11. Questionnaire - Unit Two
12. Reading C: "A Summary of Robert Goldhammer's Model of
    Clinical Supervision"
13. Reading D: "The Processes of Supervision" by Morris L. Cogan
14. Reading E: "Phases in the Improvement of Instruction" by
    John D. McNeil

15. Unit Three Manual

16. Questionnnaire - Unit Three
17. Reading F: "Two Sample Microlessons" by Thomas B. Gregory
18. Reading G: "A Non-Directive Approach to Supervision"
    by Ben Harris

19. Unit Four Manual

20. Questionnaire - Unit Four
21. Post-Test
22. Final Questionnaire: General Program Evaluation
        Letter to program participants
        Outline of topics covered in program

Audiovisual Materials

23. "Teaching Skills: An Introduction to Microteaching" (16mm film)
24. "Identifying Skill Needs: a Microteaching Segment"
    (videotape #1)
25. "Stages of the Microteaching Supervision Process" (videotape #2)
26. "Directive and Non-Directive Supervisory Styles" (videotape #3)

APPENDIX B

Letter to Amherst-Pelham Elementary Teachers

To <u>Amherst-Pelham Elementary Program</u> Teachers:

Your participation in this implementation and critical examination of a training program for microteaching supervisors is greatly appreciated. The four workshop sessions plus the final and overall evaluation/post-testing session will provide a great deal of information about the manual and materials you will be using. Please understand that throughout this period, it is the effectiveness of the program and its materials that we are testing, not the individual participants.

The evaluation forms you will fill out for each session will provide valuable feedback on your reactions to the processes used in the program as well as the materials.

Any personal data that is requested is for the purpose of gathering demographic information on the nature of the group that is testing the materials. This kind of data-gathering is customary in research studies of this type.

You are asked to keep in the large envelope all materials handed out from week to week with the exception of questionnaires and test forms. Bring the envelope with you each week. At the conclusion of the 4-session period, you may retain the four units of the manual and all of the readings in order to review them before taking the post-test. The post-test will be given at the following class meeting. At that time all the envelopes and their contents will be collected. They will be returned to you permanently within two or three weeks.

In order that the program be carried out effectively and reliably, you are strongly urged not to miss any of the next four meetings, to arrive as promptly as possible, and to complete the assigned readings before each class.

I very much hope you will find the experiences of the next few sessions useful to you both personally and professionally. Again, you have my thanks for your part in the development of this study.

                                        Louise Kanus

APPENDIX C

Microteaching Supervision Training Manual

MICROTEACHING SUPERVISION TRAINING PROGRAM

INTRODUCTION TO MANUAL

This program has been designed to train experienced educators in effective ways to supervise microteaching. As participants, you will analyze, study and practice the techniques of micro-teaching supervision. Anyone who is actively responsible in some way for the training, re-training or supervision of teachers, in the colleges or in the schools, may find the program helpful. It will show how microteaching can be a flexible and extremely useful approach to that task when suitably adapted and when close attention is given to the crucial element of adequate supervision.

Four workshop sessions are required to complete the program. They involve individual and group exercises, the viewing of video-tapes and film, and completion of the four units in the manual. The activities will be further supplemented by a series of readings to be done at home.

The topics to be covered are as follows:

---Introduction to Microteaching: Concept and Process
---Individualizing Microteaching
---Five Stages of Microteaching Supervision
---A Closer Look at Techniques and Styles of Supervision

The program, with its manual and other materials, is designed to be largely self-instructional. That is, the person administering the program is not "the teacher," per se, but rather one who coordinates the group's activities, keeps things moving along, and provides the necessary materials, physical arrangements and facilities. All members of the group, therefore, must assume the responsibility for participating fully and actively in all aspects of the program in order to achieve the full measure of whatever benefits the program has to offer.

Outline of Topics Covered in the Program

Unit One: Introduction to Microteaching

    A.   The M-T concept
    B.   Characteristic features
    C.   Adapting M-T to different situations and settings
    D.   Selecting observable teaching behaviors for M-T

Unit Two: Individualizing Microteaching

    A.   Identifying the needs of the teacher
    B.   Role of the supervisor
    C.   Using leading questions and statements
    D.   Several training strategies

Unit Three: Five Stages of M-T Supervision; Their Purposes

    A.   Pre-observation
    B.   Observation
    C.   Analysis and Strategy
    D.   Re-teach

Unit Four: A Closer Look at Observing, Analyzing and Critiquing

    A.   Focused, systematic, and objective recording by
       supervisor
    B.   Analyzing patterns and critical incidents
    C.   Critiquing: use of helping skills
               directive and non-directive styles

UNIT ONE

"Don't I do anything right?"

This was the remark of a young student teacher in tears at
the conclusion of a conference with her supervising teacher.
She had just taught a rather successful lesson to her 6th
grade class. Actually, the supervising teacher was well-
satisfied with the progress of this outstanding young person
and did begin the conference with a few positive comments. But
in her attempts to help the student make the utmost improvement,
she fell into the trap of pointing out a varied list of "mistakes,"
many of them minor, just to be sure the student was aware of them.
At the end of the conference, the young teacher was "aware" of
so many ways she needed to improve that she felt helplessly
discouraged.

This "shotgun" approach to supervision is not uncommon.
The unskilled teacher, or the teacher in need of retraining,
has much to learn that is new and is seldom able to handle
everything well at once. The supervisor whose criticism exposes
a variety of deficiencies at once sets an impossible and
disheartening task both for him/herself and the teacher.

Microteaching uses a focusing approach rather than a
"shotgun" approach. Single skills of teaching are selected
and practiced. The critique following the lesson deals primarily
with the skill being practiced. For example, if questioning
skills are under consideration, the supervisor does not spend
much of the conference time discussing techniques of closure or
non-verbal communication.

The teaching act is, of course, a complex one, composed of
a variety of techniques. The experienced and skillful teacher
integrates these smoothly and effortlessly in a lesson. But
a teacher in training needs to analyze the teaching act, to
look carefully at its component skills, and to try out some of
them under the guidance of a helpful supervisor. Microteaching
provides the structure for this to happen.

The basic pattern of the microteaching process is Teach-Critique-
Re-Teach. Adaptations of this pattern can be made, but regardless
of any changes, the underlying concept of microteaching remains the
same. It is simply this:

The
M-T
Concept

> ONE PERSON, OR MORE THAN ONE, PLANS A PRESENTATION
> WHICH HE GIVES TO A GROUP OR AN INDIVIDUAL. HE
> VIEWS THE RECORDED RESULTS AND RECEIVES BOTH
> OBJECTIVE AND SUBJECTIVE FEEDBACK. HE RE-THINKS
> THE PRESENTATION, MODIFIES IT ON THE BASIS OF THE
> FEEDBACK, AND TRIES IT AGAIN.

The introductory film entitled "Teaching Skills: An Introduction to Microteaching" which you will now view will provide you with more background on the development of microteaching and how the process works. As you watch the film, consider two things:

    a)   the main features that characterize microteaching
<div align="center">and</div>
    b)   how you could apply microteaching to your own situation.

(ROLL FILM)

You have now been introduced to the model of microteaching originally developed at Stanford University. As described, this model works well in a clinical or laboratory setting. Other settings are also possible. First, however, let us identify the characteristic features that describe microteaching. Complete the list below. You may expand the list if you wish.

    1.   MICROTEACHING IS A SCALED-DOWN TEACHING ENCOUNTER WHERE LESSONS ARE BRIEF AND CLASS SIZE IS VERY SMALL.

    2.

    3.

    4.

Among the descriptive features you have listed above, you should be sure to have included most of the following points:

    *** MICROTEACHING ALLOWS THE TEACHER TO CONCENTRATE ON THE PRACTICE OF ONE OR TWO SKILLS AT A TIME.

        The critique focuses on these skills also. Thus the goals are specific and success of the lesson can be measured in terms of the achievement of those goals.

    *** FEEDBACK AND EVALUATION ARE IMMEDIATE AND COME FROM SEVERAL SOURCES.

        The teacher has immediate "knowledge of results" gleaned from supervisor, students, peers, objective videotape recording, and from self.

    *** UTILIZING THE FEEDBACK, THE TEACHER HAS THE OPPORTUNITY TO RE-STRUCTURE THE LESSON AND RE-TEACH IT IMMEDIATELY, OR VERY SOON THEREAFTER.

This "second chance" feature can increase satis-
faction with one's performance and allow professional
growth to be demonstrated.

*** MICROTEACHING IS GENUINE TEACHING.

The "students" in the micro-class may be real
students or they may be peers or colleagues. Never-
theless, the planning of the lesson and the practice
of the strategies constitute real teaching acts.

*** MICROTEACHING IS A "SAFE-PRACTICE" SITUATION.

It provides a low-risk, non-threatening
environment in which new teaching skills can be learned
and tried out. This occurs in a micro-situation
where distractions and complexities are deliberately
reduced.

Your reaction to what you have learned so far about the
microteaching model may be: "Sounds like a good idea. But I'm
not sure how I could use it myself. My situation is different."
You may be right! If this is the case, then change the model.
Adapt its structure to suit the needs of your own setting. The
kinds and numbers of teachers you supervise, the institution
you work in, the constraints of time, money, space, equipment,
etc., will all have some bearing on the modifications you make.
But make them you can. M-T can be as flexible and adaptable
as you yourself are willing to be. You need only keep in mind -
as your touchstone - the underlying concept of M-T:

The
M-T
Concept

> ONE PERSON, OR MORE THAN ONE, PLANS A
> PRESENTATION WHICH HE GIVES TO A GROUP OR AN
> INDIVIDUAL. HE VIEWS THE RECORDED RESULTS AND
> RECEIVES BOTH OBJECTIVE AND SUBJECTIVE FEEDBACK.
> HE RE-THINKS THE PRESENTATION, MODIFIES IT ON THE
> BASIS OF THE FEEDBACK, AND TRIES IT AGAIN.

EXERCISE A

Think of some problems you might have implementing the
traditional M-T model in your own setting. (If you are not presently
in a setting that requires you to supervise anyone, then anticipate
such a situation, perhaps one that you would like to be in soon.)
Briefly state the situation. Then write down the difficulties you
see in the implementation of M-T. Next to the problem, write
possible modifications that would make the use of M-T more viable

in your setting. Two examples are done for you.
     After 10 or 15 minutes, stop writing and join with two other
members of the group to discuss your responses to this exercise.
Try to offer additional suggestions to one another and discuss
the feasibility of the alternatives.

Example #1

My situation: I am a 5th grade teacher in a self-contained classroom with the job of supervising one student teacher assigned to my classroom.

Problems	Possible Modifications
1. Five-minute lessons are too brief for my fifth-graders.	1. Deliberately plan mini-lessons. Use them as enrichment or "fillers" sandwiched between regular lessons. Take a cue from TV's "Bicentennial Minutes."
	2. Videotape (or audiotape) only a 5-min. portion of a longer lesson — whatever part demonstrates the technique being practiced, e.g., closure.

Example #2:

My situation: I'm a Learning Disabilities coordinator responsible for upgrading skills of teachers now dealing with special needs children in regular classrooms.

Problems	Possible Modifications
1. If I hold in-service sessions, how can the teachers themselves be a micro-class of special needs students realistically?	1. If teachers feel they cannot realistically role-play special needs students, then videotape brief segments of their actual classroom teaching episodes with the real students in the group. Use these taped segments in the in-service meetings for analysis and critique.

My situation:

Problems	Possible Modifications

An
Assignment!
> Readings A and B contain descriptions and some examples of specific technical skills of teaching. <u>You should carefully read these through by the time of the next meeting</u>.

It should be understood that these teaching skills described in Reading B are only a few of the competencies required of a professional teacher. They belong primarily to the cognitive domain and are the kinds of skills that teachers would use in lesson presentations, that is, when the teacher is actively engaged with one or more pupils.

Not included here are other very important techniques related to the social-emotional realm, such as establishing a comfortable classroom climate, using criticism wisely, maintaining discipline, promoting positive interrelationships among pupils, fostering enthusiasm for learning, and the like.

Also not included in the list are organizational skills, involving those things the teacher does before facing the class. Planning for teaching, grouping pupils, selecting appropriate activities and materials, deciding upon suitable strategies - these are certainly essential teacher competencies. However, for purposes of staying within a framework that we can reasonably handle, we shall limit descriptions of skills to those given in Readings A and B. A second reason for this is that these skills are easy to isolate and are fully observable within the short period of a micro-lesson. Therefore, they lend themselves to the microteaching situation very readily. Keep in mind, however, that many other kinds of behaviors, methods and interactions are also observable and therefore perfectly valid as subjects for study via microteaching. The limitations on the number of skills detailed here are only to provide us with a common and workable framework from which to begin the study of microteaching supervision.

An
Assignment!
> Prepare a complete 4 or 5 minute lesson to teach to the group. Choose any subject matter you are comfortable with. Group members will be your students.

UNIT TWO

In the traditional microteaching model, the supervisor selects the teaching skills in which the teacher is to be trained. The teacher is put through a training-and-practice program based mainly on the skills described in Reading B of this manual. Established training protocols are often followed utilizing films that model the desired teaching behavior. Likewise, written excerpts of lessons, with the pupil-teacher interchanges transcribed, are used as models.

An alternative to this kind of training program is one based on the individualizing of microteaching. The supervisor, rather than prescribing a skill selected from the list, observes the teacher's lesson and from that performance, determines what skill needs the teacher has. From these, he should be careful to call attention to only one major skill for practice and training, even though several important needs may be demonstrated during the lesson. That which is identified need not necessarily come from the given list. As stated earlier, there are other important teaching strategies. The teacher may want to concentrate, for instance, on some ways of handling a particular type of student. What is important here is that the strategies to be practiced represent the identified needs of that teacher.

You will now view a videotape of a microteaching segment. Notice that during the lesson the camera focuses mainly on the teacher. It is teacher behavior that we are chiefly interested in.

As you watch the teacher's lesson, jot down some of your own observations in the space provided below.

Then, observe the approach the supervisor uses as she conducts the critique. What role does she play in getting a needed teaching skill identified? Write your observations below.

(Turn on videotape #1)

Observations on the lesson:

Observations on the supervisory critique:

There are, no doubt, a number of important things you
noticed during the lesson; however, chief among your observations
of the lesson should be something related to the Introduction.
This is the part of the lesson that prepares the pupils for
what they are to learn. It establishes a positive mind-set
for becoming involved and interested. You probably noticed
that this teacher did very little to establish such a set. Getting
information across seemed more important to her at this point
than inviting the students' interest and participation.

The supervisor also regarded this skill of "Establishing
Set" as one that needed improvement. Therefore, she centers the
discussion around the identification of this problem. Note that
the role she plays is that of helper, or _guide_. She helps
the teacher to see for herself what problems exist and why.
Certain leading questions and comments used by the supervisor
were especially useful in directing the discussion toward this
end:

How did you react to your lesson?
How did you feel when it was over?
What made you wonder if they were really interested?
Is there any part of the tape you want to go back and look at?
Can you think of another way to . . . ?
How do you think you might use the pictures differently?

List here any other key statements or questions that the
supervisor could have used for the same purpose:

It is quite possible that the teacher sees a different
problem she would like to work on - her use of instructional
aids, for instance. If this seems to take priority in her thinking
and she would like to concentrate on improving this skill, then
the supervisor should respect this goal. Practice of set
induction can be reserved for another time. Of course, if a
weakness is seriously eroding the teacher's effectiveness,
then the supervisor must help the teacher re-examine her priorities.
Or, a compromise should be negotiated whereby both of these
skills could be combined in training and practice.

If a supervisor experiences some difficulty in getting
discussion of a lesson underway, or if a teacher finds it hard
to pinpoint problems with the lesson, it may be helpful for the

supervisor to have some general "question leads" at hand. Such leads will help the teacher bring to a conscious level some of the dissatisfactions vaguely felt but not yet explained. Asking the teacher to respond to some of these questions, either orally or in writing, after viewing the taped lesson, will require the verbalization that the supervisor needs to guide the teacher toward identification of a problem. Here is a useful list of question leads. They are, of course, general in nature. Note that they deal not only with what bothers the teacher about a lesson, but also with what pleases him. It is essential that the successful aspects of a lesson be identified and reinforced.

Question Leads*

1. What were your dominant feelings and impressions as you taught this lesson?

2. As you view this tape of your lesson, what aspects of it are most important to you? Why?

3. What were you most concerned about during the teaching?

4. Did you worry more about how well your students were learning or how well you were teaching?

5. Did any aspects of your lesson go better than you expected?

6. Did any aspects fail to meet your expectations?

7. Did this lesson do what you wanted it to?

8. What went well with this lesson? Why?

*The first six questions have been excerpted from Encounters With Teaching by Gregory, p. 15.

The outcomes of the supervisory critique, when attempting to individualize the microteaching process, should be the following:

   a)   the teacher should become aware of the need for improvement in some specific teacher behavior

   b)   if possible, the teacher should state the problem, preferably in his own terms

c) with the help and suggestions of the supervisor, the teacher should plan some modifications of the lesson that would focus on practice of the target behavior.

d) the teacher should come away from the critique with positive feelings and a sense of adequacy.

Follow-up Training:

Before the lesson is taught again to another group, the supervisor may institute some training procedures. These may range from a simple to a complete program. Depending upon the need and upon time and materials available, the supervisor may ask the teacher to do one or more of the following:

a) view a film

b) read about the teaching strategy

c) have a discussion about it

d) observe a demonstration lesson, live or on tape taught by the supervisor or by a master teacher modeling the strategy.

EXERCISE B

1. Form small groups of five people. One person will teach his/her prepared 4 or 5 minute lesson. Another will act as the supervisor, and the remaining persons will be the pupils. Observe a 5 minute time limit strictly.

2. Following the lesson, the supervisor will conduct a brief critique with the teacher while the group members become observers. (This should take 10 or 15 minutes depending on whether all or only part of the videotape is replayed.) The goal of the supervisor is to help the teacher identify any problems he/she or the supervisor perceived during the lesson. The observers, meanwhile, will observe the critique and make note of key questions, remarks, cues and techniques used by the supervisor that facilitated, or did not facilitate, the discussion toward its goal.

3. After the critique, the supervisor will lead a group
    discussion - a "critique of the critique," if you
    will. The observers' notes and reactions will
    be shared and discussed. Allow about 15 minutes
    for this part.

REPEAT EXERCISE B with a new teacher and a new supervisor.
The exercise should take about 30 minutes.

An Assignment!   Complete Readings C, D and E before the
                  next meeting. These will provide needed
                  background for Unit Three's activities.
                  The models for supervisory practice described
                  in the readings should be viewed mainly as
                  sources from which a microteaching supervisor
                  may borrow whatever seems most suitable to
                  his own personal style and setting.

UNIT THREE

    Current models of supervision related to the observation of teachers' lessons seem to follow a similar pattern. The pattern reveals a sequence of several stages of supervision. These stages mesh readily with microteaching's "Teach-Critique-Re-teach" method. (Note: the re-teach step is not always possible in non-laboratory settings. Also, it is sometimes by-passed because of time constraints. However, the ideas for new strategies and objectives gained from the critique session may be applied in a new lesson similar in nature and content to the original one.)

    The stages in a sequence of microteaching supervision would look like this:

        Stage 1: pre-observation conference
        Stage 2: observation
        Stage 3: analysis and strategy
        Stage 4: critique/training
        Stage 5: re-teach

1. Pre-observation Conference

    Purposes: To establish rapport between teacher and supervisor.

                To review together the teacher's plan for the lesson, i.e., the objectives, procedures and outcomes.

                To discuss possible changes in the plan if there is ample time to make such revisions.

                To agree on the specific focus the supervisor is to maintain as he observes the lesson; that is, what teaching behavior or technique he is especially observing. This focus may be suggested by the teacher.

2. Observation of Micro-lesson

    Purposes: To record as objectively and comprehensively as possible the teacher's performance and students' response to it. Videotape recordings serve this purpose well.

                To obtain data for the teacher's self-appraisal.

To obtain data for the supervisor to use in his analysis of the lesson.

To verify the existence of strengths and weaknesses.

3. Analysis and Strategy

Purposes: To look at the data recorded and

a) identify any patterns of teacher behavior and pupil response to them,

b) note critical incidents and events leading up to them,

c) select out that which is important and manageable in terms of the focus agreed upon,

d) note whether stated objectives of the lesson were achieved; evidence of this,

e) note whether sound principles of learning are being put to use.

To plan the approach to be used in the post-observation conference (critique) with the teacher:

a) directive, didactic methods

b) non-directive, facilitative methods

c) combination of a and b

To plan the format of the conference.

4. Critique/Training

Purposes: To allow teacher and supervisor to examine all or selected parts of the data recorded during the observation of the lesson.

To engage teacher and supervisor in a dialog: analyzing the lesson, sharing perceptions, identifying the strengths and weaknesses, discussing evidence of achievement of objectives.

To aid the teacher in setting his own goals and making decisions on improving his instructional effectiveness.

To plan some alternative strategies and objectives for the teacher to incorporate into a re-teach of the same lesson. If there is to be no re-teach, then the development of the next lesson may be discussed.

To provide immediate feedback to the teacher on his teaching performance. Feedback comes from the supervisor and other sources.

To determine the need and provide for further training in specific teaching skills.

5. Re-Teach or Follow-up Lesson

Purposes: To give the teacher the immediate opportunity correct errors and overcome weaknesses in a particular lesson, or one similar to it.

To give observable evidence of a positive change in teacher behavior resulting directly from the critique and/or training strategies employed by the supervisor.

To help the teacher attain a higher level of skill in the particular technique(s) he is focusing on.

With the re-teach, or the follow-up lesson, the supervision process of microteaching repeats iteself. That is, the cycle of stages begins again. The target teaching behavior is practiced until teacher and supervisor are satisfied with the demonstrated level of skill. Then a new teaching technique or behavior is identified for the next micro-lesson.

Exercise C

The following list of activities can be sorted into the 5 stages of the microteaching supervision process. Next to each statement, write the number of the stage to which it seems most appropriate. You may use more than one number for a

statement.

    Stage 1:   pre-observation conference
    Stage 2:   observation of the lesson
    Stage 3:   analysis and strategy
    Stage 4:   critique/training
    Stage 5:   re-teach, or follow-up lesson

_____ A.   Utilizing the supervisor's suggestions, the teacher revises her approach to an introductory lesson on decimal fractions and presents it to another group of 5th graders in the afternoon.

_____ B.   The supervisor deliberates on how to make the teacher aware that she seldom gives pupils enough time for thinking over the questions she asks.

_____ C.   Teacher and supervisor agree that the technique of "Using Probing Questions" is to be the focus of the supervisor's observation later that morning.

_____ D.   The supervisor makes some written notes while a student helper videotapes the lesson on decimal fractions.

_____ E.   Teacher and supervisor discuss how to collect evidence that the pupils understand the content to be presented in the lesson on decimal fractions.

_____ F.   Supervisor decides which parts of the videotaped lesson to show that will best illustrate the points she would like to discuss with the teacher.

_____ G.   At the suggestion of the supervisor, the teacher reads a chapter in a training manual on the use of probing questions and with the supervisor views and discusses a film modeling that behavior.

_____ H.   The teacher suggests that not only should she continue practicing the use of probing questions but that she would also like to work on using higher order questions as well. She plans to try this technique in next week's micro-lesson.

    Are you familiar enough yet with the M-T supervision cycle to have placed the above statements into one of the 5 categories without difficulty? Let's look at them more closely.

A. This is clearly a re-teach (5) since the math lesson
    is being taught for the second time with some modifica-
    tions. In addition, you might also have written
    a (4) if the revising was done with the supervisor
    during the critique session.

B. "The supervisor deliberates" is the cue to the
    analysis-and-strategy stage (3). Having observed
    the weakness, the supervisor privately plans how to
    help the teacher see it for herself. You may have
    put a (4) here, but it is not advisable for the
    supervisor to fall into the habit of devising his
    strategy while the conference is in progress.
    Only severe time restraints should prevent him from
    the more careful planning of stage 3.

C. This activity is occurring during a pre-observation
    conference (1). The teacher may have deliberately
    planned to practice this skill as a result of earlier
    critique/training sessions. Or, he may be simply
    conducting a class discussion and is interested in
    knowing whether he utilizes this skill effectively.
    If not, he and the supervisor may decide he needs
    some training and practice.

D. Note-taking and videotaping are methods of
    recording the events of the lesson during observation
    (2). It is best to have someone other than the
    supervisor operate the camera - a student, a colleague,
    a student teacher. Thus the supervisor is free to
    make special note of points he would like to cover
    later. The videotape will provide the objective
    data to reinforce those points. You may also have
    written a (5) since the re-teach is similarly recorded.

E. Ideally this should happen in the pre-observation
    conference (1). Before the lesson is taught, the
    teacher should be clear on how he will know when
    the students have learned the lesson's objectives.
    The method used should present observable and
    measurable evidence. This discussion could take
    place, however, during the critique (4) if it was
    obvious that the teacher taught the lesson without
    ever finding out if the students did indeed learn the
    content.

F. During the analysis-and-strategy stage (3) the
    supervisor may review the videotape by herself to
    find the objective data that is pertinent. It is
    not always necessary for the entire lesson to be
    re-played during the critique. Only those parts
    which will lead to productive discussion may be
    selected. The teacher should certainly be allowed
    some choice in the selection, however, during the
    course of the critique.

G. This describes the training session that may follow,
    or be part of, a critique (4) depending on time
    available.

H. Again, this suggestion appears to be coming out of
    a critique/training session (4) with the supervisor.
    What is noteworthy is that it is the teacher who
    makes the suggestion, thereby indicating that she
    has begun to take on the responsibility for her own
    professional improvement.

   The following videotape will demonstrate and comment further
on the stages of the Microteaching supervision process. Use
the space provided below for any questions, comments, or
reactions you would like to jot down as you watch.

(Turn on Videotape #2)

Exercise D

Please read all the directions through carefully first.

   In this exercise, teacher and supervisor will go through
   all 5 stages of microteaching supervision.

   1. Form small groups of five. One person will teach

his/her prepared 4 or 5 minute lesson while another person acts as the supervisor. Those who have taught or supervised in the previous session should not do so today. The remaining members of the group will be the pupils. Observe a 5 min. time limit strictly.

2. <u>Pre-observation conference</u>. Prior to the lesson the supervisor and teacher will have a brief pre-observation conference privately.

3. <u>Analysis and Strategy</u>. Immediately following the lesson, the supervisor will have a brief analysis and strategy period by himself to plan for the critique. (No longer than 5 minutes.) Teacher and pupils can wait outside the door.

4. <u>Critique</u>. In the critique that follows, the supervisor may invite the participation of the other members, if he wishes. Or, he may conduct a one-to-one conference with the teacher while the others remain as observers. Either way, there should also be a brief critique of the critique before concluding. All members of the group should share in this discussion of the supervisory techniques used.

5. <u>Re-teach</u>. Utilizing suggestions and ideas that came out of the critique, the teacher will re-teach the lesson to a new group. The supervisor will accompany the teacher.

6. <u>Second critique</u>. Another critique of the lesson will be held with the new group present. Again, they may or may not be included in the critique. The group should conclude with a brief critique of the critique.

7. <u>No more than 40 minutes should be allotted to the entire cycle</u>. (The exercise is to be repeated with a new teacher and a new supervisor.)

8. The following timeline should be followed closely so that the groups are going through the stages more or less simultaneously. They should arrive at the re-teach step at about the same time. This will facilitate teachers being able to switch over to a new group of pupils. It would be wise to appoint a timekeeper to keep the group moving along.

Timeline:

3 minutes	Pre-observation conference
5 minutes	Teach
5 minutes	Analysis and Strategy
12 minutes	Critique
5 minutes	Re-teach
10 minutes	Second critique

REPEAT EXERCISE D.

An assignment!! Complete readings F and G before the next meeting. They relate particularly to the observation and critique stages of supervision which will be emphasized next time.

UNIT FOUR

Observing More Closely

"If the video camera is objectively and faithfully recording everything in the lesson, then what should I be doing during the teaching? In fact, do I really even need to be present?"

The supervisor asking these questions needs to realize several things. First, the camera is not recording everything that is occurring; it is necessarily selective in what it focuses upon. It was stated earlier that its main focus was teacher behavior. A supervisor present during the lesson is in a better position than the camera, therefore, to pick up the quieter student responses, as well as non-verbal cues from the students. He is better able to sense subtle nuances of feeling and interactions that may escape the eye (and ear) of the video machine.

So, given the advantages of being present during the lesson, what should the supervisor be doing? The answer is, recording - but differently from the video recorder. He should be alert to those items mentioned above and make notes on them if they are significant. He should identify specific teacher behaviors that he wants to talk about later. The data recorded by the camera can be replayed as evidence of those behaviors.

Refer back to the sample microlessons in Reading F. The dialogue on the left can be likened to the objective recording of the camera, while the commentary on the right can be compared to the supervisor's observations of teacher behaviors. Each one complements the other. Notice, too, that the behaviors are objectively described, i.e., there are no judgmental inferences made about them at this stage.

If you will also refer back to Reading E, Figure 3, you will find some additional factors plus three significant teacher practices that can further guide your observations of teaching.

The supervisor can also be watching for examples of a specific teaching skill the teacher is deliberately practicing, such as "Using Probing Questions." In a pre-observation conference, both would have agreed that this would be the supervisor's primary focus.

Another possible activity of the supervisor during observation might be tallying the frequency of certain kinds of classroom interaction. Let us suppose the supervisor, after observing

several lessons, has become aware that the teacher is given to
consistent lecturing. Students are allowed little opportunity
to speak except in response to occasional questions. The
supervisor might informally use a system such as Flanders Interaction
Analysis to record data as to what kinds of interaction are actually
occurring in the classroom. From this data, inferences may be
derived as to the effects this teacher behavior might be having
on student learning, attitudes and behavior. (A copy of
Flanders Interaction Categories may be found on the next page.)

To summarize, during the teaching of the lesson, the
supervisor makes note of one or more of the following:

1. The subtler events that are likely to escape the camera
   eye
2. general teaching behaviors and practices
3. specific teaching skills being tried out
4. classroom interaction

> The important thing for the supervisor to
> remember during observations is that although
> he may incidentally observe a great many
> different things, he must know what he is
> specifically looking for and be systematic
> and objective in recording information about
> it. This is a key element in the M-T process.
> The exception might be the case where the
> lesson is an initial one and teacher and
> supervisor have not yet identified a specific
> target for observation.

SUMMARY OF
CATEGORIES FOR INTERACTION ANALYSIS*

TEACHER TALK

INDIRECT INFLUENCE

1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting or recalling feelings is included.

2. PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, but not at the expense of another individual; nodding head, or saying "um hm?" or "go on" are included.

3. ACCEPTS OR USES IDEAS OF STUDENTS: clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to Category 5.

4. ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.

DIRECT INFLUENCE

5. LECTURING: giving facts or opinions about content or procedures; expressing his own ideas, asking rhetorical questions.

6. GIVING DIRECTIONS: directions, commands, or orders with which a student is expected to comply.

7. CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.

STUDENT TALK

8. STUDENT TALK (RESPONSE): talk by students in response to teacher. Teacher initiates the contact or solicits student statement.

9. STUDENT TALK (INITIATION): talk by students, which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.

10. SILENCE OR CONFUSION: pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

(Note: No scale is implied by these numbers. Each number is classificatory. It designates a particular kind of communication event. To write these numbers down during observation is to enumerate, not to judge a position on a scale.)

*From: Amidon and Flanders, The Role of the Teacher in the Classroom.

Exercise E-1

Which of these two sets of notes on the same observation would be more appropriate for a supervisor to have taken during the lesson, Set A or Set B?

_____Set A

Specific focus: "Using Probing Questions"

Teacher briefly reviews main ideas of previous lesson.
Calls attention to new science demonstration on table.
An incongruity is obvious but T. does not explain it.
T. invites questions non-verbally: quizzical gesture,
    shrug, facial expression (see videotape)
Several pupils respond with observations.
T. begins to probe to get more complete descriptions:
    What's happening? Can you tell me more?
    Anything else? What do you mean by that word?
    Many pupils respond.   (see videotape)
T. moves class from descriptions to hypothesizing with
    more probes:
    Do you know if that's really happening?
    Why do you think so?
    What do you mean?
    Do you agree with Tom's idea?
    If that's true, then how do you explain . . .?
T. asked same student a series of questions (See tape near
    end of lesson.)
Used probes to clarify Jane's statement and to help Fred
    justify his.
Probing questions used throughout body of the lesson.

Interaction: mostly teacher-to-pupil with pupils responding
    to teacher's questions.

_____Set B

T. reviews previous lesson
Science demonstration really good. Comment on excellent set
    induction. Really captured attention.
T. should not stand too long in front of windows. Hurts
    kids' eyes.
Positive reinforcement usually good although several times T.
    ignored a wrong answer.

> Fine use of probing questions throughout lesson.
> T. showed favoritism to a bright student by asking him too
>   many questions. Other students must dislike this.
> Class seemed to enjoy the lesson. Lots of student talk.
> T. should remind students to keep their feet off the chairs.
>   New furniture. Bad posture.

Hopefully, A was your choice of the better set of notes. It describes in a straightforward way the sequence of events without making early judgments. It makes reference to places in the videotape where the data will illustrate the supervisor's point. But, most important, the notes deal largely with the agreed-upon focus, the use of probing questions. No doubt the supervisor noticed some other important things, but the notes indicate that the critique will probably center around the goal agreed upon by the supervisor and teacher.

Set B abounds in the use of evaluative words - good, excellent, bad, fine - indicating judgments that are better left to the analysis and critique stages. Furthermore, the notes make assumptions that the supervisor does not know to be true on the basis of the data: "favoritism," "others must dislike this." The main problem with these notes, however, is that they are so scattered in their emphasis. If the use of probing questions was the skill being practiced by the teacher, then the supervisor seems to have missed that point. Several other skills are also mentioned, together with a couple of extraneous notes on windows, posture, and furniture. The "student talk" is not related to the teacher's behavior and the use of questioning. If these notes are any indication, the conference with the teacher may well reflect the "shotgun approach."

Analyzing More Closely

PATTERNS

With notes in hand and recorded data on videotape, the supervisor is ready to analyze a lesson, making some inferences and drawing some tentative conclusions.

One important way to go about the analysis is to look for patterns. A pattern is the re-occurrence of certain teacher behavior. It is only worth considering if it is a significant pattern, that is, if it is likely to have an effect on students' learning and/or behavior. Also, the presence of the pattern should be clearly demonstrated in the recorded data.

Look for the pattern(s) in the lesson segment transcribed below. Does it appear to be significant?

1.	T.	All right. We've come up so far with one factor that could control or affect the climate of a region and that is nearness to a large body of water. Now what could be another climate control?
2.	Peter:	How far south the region is?
3.	T.	Why do you say that?
4.	Peter:	It gets hotter as you travel south?
5.	T.	Oh? Is it hotter at the south pole than it is here? That's as far south as you can go!
6.	Peter:	(no response)
7.	T.	Who can think of another climate control?
8.	Millie:	Altitude. The higher you get, the colder it is.
9.	T.	O.K., good. (Writes "elevation" on the blackboard.) That's what you really mean, Millie. The higher the elevation of a region, the more likely it is to be cooler.
10.	T.	Now we have two factors. What's another?
11.	Louie:	Mountains, I think.
12.	T.	And what do you think about mountains?
13.	Louie:	They affect the weather.
14.	T.	We're talking about climate, not weather. Do you remember the difference?
15.	Louie:	Yes.
16.	T.	Can someone else explain the effect mountains might have on a region's climate?

<u>Describe the pattern(s)</u>:

<u>Write below what you think the potential effects on student learning or behavior might be</u>:

More than one pattern can be seen emerging, even in this brief transcript. First, the teacher is showing an unfortunate tendency toward sarcasm. This is displayed at least twice, in lines 5, 12 and probably 14. Second, the teacher quickly rejects student responses that are not stated clearly and concisely. Both Peter and Louie gave answers that were at least on the right track. Neither was given the opportunity, through patient probing, to work out the correct answers themselves. Instead, the teacher effectively cut them off and directed the next questions elsewhere. Even Millie's correct reply was not fully honored. Teacher wrote something else on the board without giving Millie the chance to arrive at the more correct term herself.

These two patterns merge to indicate a larger problem, a serious lack of respect on the part of the teacher for the students' feelings and their abilities. The supervisor should be cautious, however, about making early judgments. If, over the course of several lesson observations, these trends continue to be evident, then the supervisor has the responsibility of helping the teacher become aware of these patterns and their probable effects.

In microlessons, patterns may be harder to detect because the time durations are so short. However, after several microlessons, patterns may begin to emerge. Notes on each lesson should be kept in a cumulative file so that the re-occurrences of certain behaviors can be recognized and substantiated.

It is well to remember that good patterns need recognition as well as the less desirable ones. If, for example, a teacher intuitively encourages pupil-initiated talk and pupil-to-pupil interchange in most discussions, this should be brought to her attention as a strength on which she can capitalize.

> Remember, the criterion for pattern analysis is the significance of the pattern - how important it is to students' learning and behavior. The final question must be: does the pattern lead to the desired outcomes of the lesson, or does it impede the accomplishment of those goals?

CRITICAL INCIDENTS

Another method of analyzing teaching is to look at critical incidents. Unlike a pattern which occurs repeatedly, a critical incident is a single or occasional act of the teacher. But it is one that is likely to have a strong and perhaps lasting effect on one or more students. Relationships, attitudes, learning

and behavior can all be affected. Like patterns, these incidents can be either positive or negative in nature.

The impact that a critical incident can have, both on teacher and students, makes it worthy of close examination. It is important to identify the stimulus events leading up to the incident as well as the behavioral responses (verbal and non-verbal) of both teacher and students to one another's actions. The teacher's response may become the stimulus, or antecedent event, for the student's next action. The teacher's behavior is therefore critical in that a situation can get better, or worse, depending on how the teacher responds.

Study the incident transcribed below. Circle the number that you consider to be the one most critical behavior of the teacher.

Stimulus	Behavior	Consequent Event
1. Class is taking math test.	2. Humbert begins grumbling under his breath as he works on the test.	3. Teacher glances at Humbert.
3. Teacher glances at Humbert.	4. H. avoids looking at Teacher. Continues to mumble angrily, now increasing in volume.	5. T. (in quiet voice) says: "Humbert?"
5. T. (in quiet voice) . . .	6. H. fires his pencil across the room. Shouts: "I can't do these things!" Throws test booklet on the floor. "I don't know that stuff!" Slumps in chair with head down.	7. T. picks up pencil and booklet and puts them on H's desk. Says: "O.K., class, go back to work now." Bends down and puts arm across H's shoulders and says in a low voice: "I know some of these examples are hard for you, but no one is expected to be able to do all of them. Just do as many as you can. You know you are quite good in computation. The ones you do finish are probably pretty accurate and that's important. Here, let's find where you left off. Don't worry, Humbert, you'll do all right."
7. T. picks up . . . you'll do all right."	8. H. picks up his pencil, straightens up in his chair. Says, as he starts to work: "O.K., I"ll try to do some more, but I just don't know all these things, that's all."	

The turn of events in the incident above hinged on what the teacher did at point #7, of course.   A very different response might have produced entirely different consequences.

Teachers should be helped to see the effects of their actions in such critical moments. They need to determine how they were brought to that point, whether their responses were appropriate or inappropriate, and whether such behavior should be avoided in future or developed into a useful pattern.

Critical incidents of a dramatic nature are not likely to occur often in micro-lessons. If an adaptation of M-T is being used in real classroom situations, however, then such an occurrence may not be unexpected. There are varying degrees of "critical-ness"; events of a milder nature do happen where the teacher's behavior leads to distinctly favorable or unfavorable consequences. These, too, are worthy of analysis. The supervisor should be cautioned, however, against overenthusiastic pursuit of critical incidents, especially where they do not exist!

To summarize, analysis can focus on two important aspects of instructional behavior, teaching patterns and critical incidents. Attention to these can help teacher and supervisor stick to relevant and significant issues and minimize time spent on "griping" and assorted trivial matters.

Analysis is not the sole province, by the way, of the supervisor. The teacher should be encouraged and prepared to assume an active role in analyzing his own teaching. If the supervisor does all of the analyzing for the teacher, the teacher can become too dependent on the supervisor. The likelihood of the teacher continuing to self-initiate professional growth when the supervisor is not around is thereby diminished.

HELPING SKILLS

A survey of 113 teachers in Georgia revealed a surprising consensus on the most irritating habits of supervisors. Out of 50 habits, they ranked these four at the top:

1. "He says something and denies it at the next meeting."
2. "He passes the buck in problems."
3. "We'll have to think about it, he'll say."
4. "He doesn't give me a chance to talk. I go in with a problem and never do get a chance to tell about it."

Other common complaints included:

--"Whenever I make a suggestion, he throws cold water on it. I've quit making suggestions."
--"He interrupts me when I talk."
--"He argues with everything I have to say even before I state my case."
--"He rephrases what I say in such a way that he puts words into my mouth that I didn't mean."

Among other things, such habits in a supervisor betray a lack of respect for teachers and a deficiency in listening skills. It is not hard to understand why teachers might resist supervision from such persons. But even well-intentioned supervisors can unwittingly fall into some of these same traps, not realizing the effects of their behaviors on teachers. It is a good idea, therefore, for supervisors to review some basic helping skills which may make teachers more responsive to their supervisory efforts.

1. <u>Attending behavior</u>.
    This is simply the skill of demonstrating to the teacher that you are interested and listening to what he has to say. Eye contact is maintained and you avoid changing the topic if the teacher has still more to say about it.

2. <u>Leading</u>.
    Particularly useful in the opening stages of a conference, this skill invites verbal expression and opens the lines of communication. Through the use of question leads, you can help the teacher probe, analyze, elaborate and generally be active rather than passive in the critique of a lesson. The leads generally anticipate the direction you want to go, e.g., "Tell me more about what happened at the end of the lesson." (direct leading). Or, the lead may be to get the teacher to determine his own direction, e.g., "What do you think about your lesson?" (indirect leading).

Several other sub-skills are included in this cluster:

2a. <u>Focusing</u>.
    This skill may be employed to pin down a topic that the supervisor thinks would be productive to explore. If a larger problem is being discussed, it can help isolate a component part that needs to be dealt with. When a discussion seems to be rambling, or ranging superficially over too many topics, this skill can be most useful. In M-T supervision, where a main focus is so important, you will find this a frequently-used skill.

Examples: "Yes, that seems to be part of the problem. Suppose we take a closer look at it."
"Which of those 3 things do you think it's most important for us to talk about first?"

2b. Questioning.
      Open-ended questions are the type that will elicit the most response from the teacher and encourage him to further explore and understand an issue. Conversely, a closed-ended question can usually be answered with a brief yes or no and is more often for the purpose of supplying information to the supervisor.

Examples: "Do you get along well with the students?" (closed)
"Could you tell me a little about how you feel you're getting along with the students?" (open)

2c. Clarifying.
      This skill shows that you are trying to understand the teacher's perceptions of a situation, that you are trying to see it as he is seeing it. You may make a statement such as: "I'm not quite sure what you mean. Let me state what I think you are saying and tell me if this is right." Or, you may phrase it as a question: "Would you explain that to me again?"

      Rightly used, this skill is telling the teacher you sincerely want to understand his point of view. Wrongly used, this skill can imply criticism or imposition of your own interpretation, e.g., "I'm confused. Are you saying that you take no responsibility for what happened?"

3. Reflecting feeling.
      Feelings can get in the way of a successful conference if they are not expressed and acknowledged, particularly if they are anxiety- or anger-producing feelings. This skill demonstrates to the teacher that you are aware of and responding to the feelings he is experiencing.

Examples: "You really feel relieved now that the observation is over."

      Sharing feelings is an extension of this skill: "I often felt anxious about being observed, too." Be careful, however, not to shift the focus to yourself for more than a moment or two.

4. Respecting.
      With this skill you are displaying a positive regard for the teacher as an individual and as a human being. You respect his feelings, his experiences, and his capabilities.

Examples: "You've worked successfully with kids outside of

school. Let's see if we can capitalize on that
and transfer some techniques to the classroom.
It's bound to help matters."
"Maybe you can give me some suggestions as to
   how I might best help you?"

5. Summarizing.
     This is a natural note on which to end a conference. The
ideas are reviewed and tied together so that both you and the
teacher leave with a common understanding of what occurred and
a clear indication of a direction to take. Agreements and
plans are re-stated. What makes this a basic helping skill is
that it gives the teacher assurance that you have been listening
and that there is a definite movement toward change, progress
and accomplishment.

          Examples: "Before we go, would you just briefly review those
                       two main concerns and what you've planned to
                       do about them?"

     None of these helping skills is new, they are simply ways
of facilitating positive human relations. However, a supervisor
should make a deliberate effort to increase his awareness of them
and build them into his repertoire of supervisory skills.

Exercise E-2

For each situation, write a) the helping skill(s) called for and
b) a sample statement or question you as supervisor might make.

1. The teacher's explanation of her objectives is vague and lengthy.

     a) helping skill -
     b) supervisor's statement -

2. The teacher is attempting to analyze the lesson himself.
    In doing so he has touched on several main topics but
    treated none of them in any depth.

     a) helping skill -
     b) supervisor's statement -

3. The lesson has been a flop. The teacher arrives at the
    conference with a "grin and bear it" smile on her face.

     a)
     b)

4. The conference is about over and you want to be sure the
   teacher feels he is going away with concrete advice on how
   to modify the lesson for the re-teach tomorrow.

   a)
   b)

5. You feel the teacher should plan her next lesson with the
   idea of practicing questioning skills. However, she does not
   feel ready to do that and wants to read more on questioning
   first. Meanwhile, she says she'd be more comfortable with an
   easier skill, namely, use of repetition.

   a)
   b)

WHEN YOU HAVE COMPLETED THIS EXERCISE, TAKE 5 MINUTES TO SHARE
AND EXCHANGE YOUR RESPONSES WITH SOMEONE SEATED NEXT TO YOU.
DISCUSS YOUR RATIONALE FOR THOSE RESPONSES.

DIRECTIVE AND NON-DIRECTIVE SUPERVISORY STYLES

The ultimate goal of any supervisor, regardless of his style
is the improvement of instruction. Nonetheless, depending
upon his natural inclinations, training and experience, a supervisor
eventually adopts a particular style that suits him best.

It is not our purpose here to advocate one style over another,
but merely to examine two styles, what they try to accomplish,
and how they approach their task. When you finish this section
of the manual, you will have increased your awareness of these
styles and perhaps be able to identify your own supervisory
style and/or what you might like it to be.

Directive Supervision

The directive style has quite definite outcomes planned for
the critique/training session. The supervisor generally has in
mind a list of points to cover and therefore does a good deal of
the talking during the conference. He is very active in giving
this feedback, both positive and negative, while the teacher tends
to assume a somewhat more passive role. He may give a list of
suggestions to improve the lesson as well as suggest the skills
that he feels should be practiced in the next lesson. Question
leads that he uses are designed to elicit the kind of responses
from the teacher that will direct the critique mainly in the
direction he feels it should go.

In the extreme, this kind of supervision can become too
didactic and authoritarian, leaving the teacher with little
experience, or for that matter, initiative, for analyzing his
own teaching.

Non-Directive Supervision

The non-directive style seeks to put the burden of responsibility
for analysis on the teacher. The teacher is encouraged, mostly
through open-ended question leads, to do most of the talking.
The supervisor attempts to use neutral probes to get the teacher
to identify needs, analyze the lesson and examine strengths and
weaknesses. The teacher is urged to think of alternatives and
modifications; they are not provided by the supervisor.

Even though the supervisor may have in mind some specific
weaknesses that the teacher needs to correct, he resists the
temptation to tell them. He is willing to wait a longer time,
if necessary, until the teacher himself is able to identify
them. The non-directive supervisor utilizes the helping skills
to a very great extent to accomplish his purposes.

In the extreme, this type of supervision can be very
inefficient in terms of time and quite frustrating to some
teachers who desire more definite direction and evaluation.
It may even appear to some that the supervisor has abdicated
altogether his responsibility for giving concrete advice to
teachers.

Fortunately, neither extreme is common and neither style
is pure. Modern supervisors will most often try to incorporate
elements of both styles, with a leaning toward whichever one
is more natural to them.

The videotape you will now view demonstrates this.
While each supervisor has a definite style, you will notice
each borrows techniques from the opposite style.

(Turn on videotape #3)

As you view each critique on the videotape, check the box (Directive or Non-Directive) to which each statement applies. It is possible that a statement may apply in both cases.

	Directive	Non-Directive
1. The supervisor does most of the talking.		
2. The teacher talks at least as much as the supervisor.		
3. The S. gives specific suggestions for modifying the lesson.		
4. The S. gives his/her own opinions freely.		
5. The S. does more question-ing than telling.		
6. The S. frequently calls attention to techniques used in the lesson and encourages the teacher to analyze what she did and why she did it.		

Exercise F   20 min.

1.   Form 2 small groups of five. One teacher in each group will
     teach his prepared 5-minute lesson.

2.   Two people will role-play the students.

3.   Two others will act as supervisors, one directive, one
     non-directive.

4.   Following the lesson, one supervisor will leave the room while
     the other gives a 5-minute critique in his assumed style.
     He will not announce in advance what his style is.

5.   Next, the second supervisor will come in and give his 5-minute
     critique.

6.   Following the critiques, the group members can identify and
     compare styles and discuss reactions.

        An   Before the next meeting, write a brief
    Assignment!   statement describing your own supervisory
                            style as you see it. Tell what it is, what
                            its advantages are, whether you see any
                            need to modify it in any way, and why.
                            Use the space provided below.

Exercise G   "Pin the _ _ _ _ on the Supervisor" (a role-playing game)

1. Choose a partner.
2. Select a role-play card and share it with your partner <u>privately</u>.
3. When called on, play out your roles according to instructions
    on the card. One person is the teacher, the other the supervisor.
    (3-4 minutes.)
4. During the role-play the rest of the group will rate the
    supervisor on a continuum. Observing his/her behavior
    (role-played, of course), does this supervisor deserve to
    have a <u>s t a r</u> or a <u>t a i l</u> pinned on him/her?
5. After each role-play, the group members can give their ratings
    and state the reasons for them in terms of styles and helping
    skills used (or not used).

Supervisor 1:

1_____2_____3_____4_____5
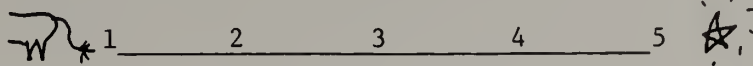
Reasons:

Supervisor 2:

1_____2_____3_____4_____5
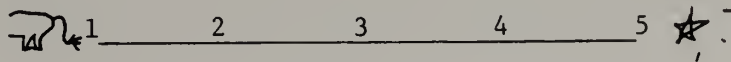
Reasons:

Supervisor 3:

1_____2_____3_____4_____5
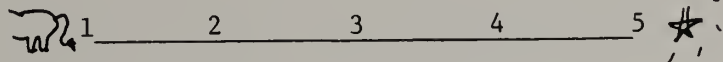
Reasons:

Supervisor 4:

1_____2_____3_____4_____5
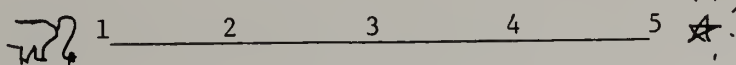
Reasons:

Supervisor 5:

1_____2_____3_____4_____5
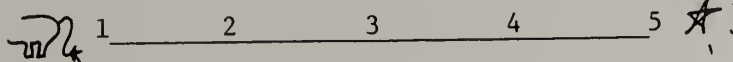
Reasons:

A
FINAL
ASSIGNMENT!

<u>Before the next meeting</u>, review manual
units One through Four as well as Readings
A - G. The post-test will be given at that
meeting.

ROLE-PLAY CARDS
FOR "PIN THE - - - - ON THE SUPERVISOR"

Pair 1:

The teacher has just taught a fine lesson on tree identification to third-graders. She was attempting to use a discovery method with the children for the first time and succeeded quite well. She had asked the supervisor to observe her use of this method.

In the critique, the supervisor seems to have a <u>series of minor items</u> he wants to discuss instead of the discovery technique. The teacher keeps trying to get back to the main focus while the supervisor continues to pursue his own agenda. <u>The supervisor seems to have forgotten what he agreed to observe</u>.

Pair 2:

The teacher has taught a reading lesson stressing the long and short vowel sounds of a. At the end of the lesson, many of the children are still confused by the short a sound because the teacher used some poor examples. Throughout the critique, the supervisor demonstrates <u>poor attending behavior</u> even though he invites the teacher to talk. He is overly concerned with his notes, <u>avoids eye contact and tends to change the topic</u> before the teacher has finished with a point.

Pair 3:

The teacher's lesson has been on multiplication with a 2-digit multiplier. The pupils are poor math achievers so the teacher <u>wanted the supervisor to observe his use of positive reinforcement</u>, both verbal and non-verbal. He succeeded only moderately well. The supervisor gives a <u>very directive critique</u> and does virtually all of the talking. She cites both strengths and weaknesses in the teacher's practice of the skill, tells the teacher what he should have done and what he should do in the next multiplication lesson. It is mostly a disguised way of asking him to agree with her diagnosis and prescription. Most of the time the teacher merely nods, agrees and says, "Uh-huh."

Pair 4:

The teacher has taught a spelling lesson stressing the plural endings of nouns ending in y, such as candy-candies and alley-alleys. She first gave the rules governing pluralization, then the examples and written exercises. The lesson was quite dry and matter-of-fact. The pupils were bored and not doing

especially well.

Since she almost always uses this deductive approach in her teaching, the supervisor would like to have the teacher attempt a re-teach using an inductive approach. She would like to see the students try to derive the rule for themselves by noticing certain plural patterns from a series of examples. The supervisor is trying to accomplish this by using an inductive approach in her own critique. Therefore, she is using a non-directive style, trying to get the teacher to do most of the talking in analyzing the lesson.

Pair 5:

The teacher has just taught a disastrous lesson and knows it. He attempted to teach a science lab lesson on "Characteristics of Liquids." The class ended with discipline in a state of chaos. Various liquids were spattered over desks, floor, clothing and hair. Little learning took place.

The focus of the observation was to be the use of questioning skills. Although he had good questions prepared, the teacher had not thought enough about the physical arrangements of the lab. Crowding and lack of sufficient equipment contributed to the problem.

The teacher is emotionally distraught and ready to give up Education forever. He is very angry with the children but also with himself. He feels extremely incompetent at this moment. The supervisor starts the critique by mentioning what the focus was to have been, but that maybe the teacher would rather not talk about this right now. From that point on, the supervisor utilizes a variety of helping skills: leading focusing, reflecting feelings, respecting, etc. As the teacher talks out his problem, he clearly begins to feel better about himself and also stops blaming the children for his problems.

APPENDIX D

Readings A – G

TITLES OF READINGS

Reading A . . . . . "Microteaching: A Description" by Robert Miltz

Reading B . . . . . "Teaching Strategies"

Reading C . . . . . "A Summary of Goldhammer's Model of Clinical Supervision"

Reading D . . . . . "The Processes of Supervision" by Morris L. Cogan

Reading E . . . . . "Phases in the Improvement of Instruction" by John D. McNeil

Reading F . . . . . "Two Sample Microlessons" by Thomas B. Gregory

Reading G . . . . . "A Non-Directive Approach to Supervision" by Ben Harris

Microteaching - A Description
by
Robert J. Miltz
Director, Microteaching Laboratory
University of Massachusetts

Ever since human beings have begun to communicate, they have been searching for ways to make this communication clearer and more effective. Since teaching is basically composed of communicating with others, educators have spent a great deal of time trying to figure out how to communicate more effectively. Unfortunately, most of the teacher improvement models developed have been much too simplistic, since the teaching process, itself, is an enormously complex process. Gage (1963, 1968) points out that after years of research on learning there has been little impact on instruction in schools; and there has been even less research on teaching, which has produced little of value for the classroom teacher. At the present state of our search into the mysteries of teaching, we can say very little, if anything, that is definitive.

It seems that our problem is to develop effective alternatives which, in concert with other alternatives, will begin to chip away at the complexities of teaching and help us build a variety of models which can be utilized flexibly. Microteaching is one alternative in response to this situation. While microteaching is not a total answer in itself, it is one attempt to simplify the complexities of the normal classroom. Microteaching is an attempt to use simulation techniques to break down the teaching process into smaller, and more easily understood, units. It must be continued, however, that the microteaching situation is not a substitute for real classroom experience, it is simply an approximation of this reality which allows the beginning teacher to experiment in a secure environment. While the concept of microteaching has been adapted to situations ranging from pre-service to in-service education, this introductory description will focus on the pre-service level.

Microteaching

Microteaching, as originally developed, focuses on providing prospective teachers with teaching practice before they actually begin teaching assignments in schools. Often, microteaching

takes place in a laboratory setting where a teacher gives a short lesson (usually lasting from 5-20 minutes) to a class of from three to six students. Typically, each lesson is used for the practice of a pre-determined teaching skill (for example, lecturing, questioning, discussing, or using instructional aids). Each lesson is videotaped and the trainee hears and sees himself immediately after the lesson. A supervisor, who attended the lesson, then analyzes the performance with the teacher, utilizing both the videotape recording of the lesson and written feedback provided by the students. Armed with this immediate feedback and suggestions for improvement, the teacher then reteaches the same lesson to a different group of students. The teacher then has the opportunity to view the result of this lesson.

It can be seen from the above description that there are basically three ingredients which are important to the microteaching concept. These three ingredients are: 1) the safe practice dimension, 2) the teaching techniques dimension, and 3) the immediate feedback dimension.

The first dimension, safe practice, is an important feature of microteaching. Usually, a pre-service teacher does not have the opportunity to try out teaching styles and techniques until they become student teachers and have to work within a regular classroom. The student teacher has no place for "try-outs", free from the fear of failure. The microteaching laboratory does give the student a chance for "try-outs" (with genuine pupils), without having to worry about failure. In fact, often more is learned when a lesson does not go as planned.

The second dimension, teaching techniques, has evolved from long standing educational theory and practice. The learning theory which underlies programmed learning is the basis for the assumption that the complex teaching act can be broken down into more easily understood concepts and learned step by step before tried out as a whole. Thus the teacher can acquire a repertoire of teaching skills to use, when appropriate, in a variety of situations. This repertoire then allows the teacher to become more flexible and versatile, since she now has more options available. Detailed manuals and a series of model films explaining and illustrating these skills have been developed for training purposes.

The third dimension, immediate feedback, is perhaps the most important aspect of microteaching. This dimension really has three aspects, all of which are important. They are: 1) student feedback, 2) videotape feedback, and 3) supervisor feedback. Student feedback means that the people who are being taught have the opportunity to express their feelings about the strengths and

weaknesses of the lesson. The second concept, videotape feedback, simply allows the teacher to view the lesson she has just taught. This self-confrontation allows the person to see themselves as they actually are and compare the student feedback to the actual teaching situation. While it is true, and has often been said, that videotape equipment is not essential to microteaching; it is equally true that without videotape, the microteaching situation is not nearly as powerful since the self-confrontation cannot really take place. The third aspect, supervisor feedback, becomes the catalyst between the student and videotape feedback. Once a person has identified an area that she would like to work on, she then needs suggestions on what to do next. The supervisor, then, can suggest alternatives that the teacher might try and help her to plan for the reteach session. Thus the well-informed and sensitive supervisor becomes the difference between a fair microteaching experience and an excellent one.

Microteaching - A Caution

The above comments give a fairly comprehensive description of the microteaching concept. A brief description of the skills identified, up to this time, is included at the end of this paper. New skills are continually being identified and added to the list as they prove useful. However, a note of caution needs to be added at this point. A note of concern has been epxressed as to whether we should be training our students to perform specific skills, even if they are seen to be important to good teaching. Perhaps by doing so, we are guilty of treating our students as objects to be shaped to behave appropriately. The real danger is that in its purest form, microteaching could be used in such a way. In fact, the concept of skills <u>must</u> be presented to students as ideas to try out and to subject to critical examination in order to decide whether they are appropriate for the kinds of teachers that <u>they</u> want to be. Thus it can be seen that the supervisor carries an extra heavy burden in the microteaching situation. The supervisor has an excellent opportunity to facilitate prospective teachers to become what they want to be rather than become what we want them to be.

Brief Descriptions of Teaching Techniques

The following are brief descriptions of skills presently used in the microteaching setting.

Establishing Set

The term set refers to the establishment of rapport between

pupils and teachers to obtain immediate involvement in the lesson.
Experience indicates a direct relationship between the
effectiveness in establishing set and effectiveness in the total
lesson. If the teacher succeeds in creating a positive set, the
likelihood of pupil involvement in the lesson will be enhanced.

Establishing Appropriate Frames of Reference

A student's understanding of the material of a lesson can
be increased if it is organized and taught from several appropriate
points of view. A single frame of reference provides a structure
through which the student can gain an understanding of the
materials. The use of several frames of reference deepens and
broadens the general field of understanding more completely than
is possible with only one. For example, the Emancipation
Proclamation becomes more meaningful to the student when it is
understood from the frames of reference of the Northern white
abolitionist, the Southern white, and the Black slave in the
seceded South.

Achieving Closure

Closure is complementary to set induction. Closure is
attained when the major purpose, principles, and constructs of
a lesson, or portion of a lesson, are judged to have been learned
so that the student can relate new knowledge to past knowledge.
It is more than a quick summary of the ground covered in a
lesson. In addition to pulling together the major points and
acting as a cognitive link between past knowledge and new knowledge,
closure provides the pupil with a needed feeling of achievement.
Closure is not limited to the completion of a lesson. It is also
needed at specific points within the lesson so that pupils may know
where they are and where they are going.

Recognizing and Obtaining Attending Behavior (Visual cues)

Teachers can become more sensitive to the classroom behavior
of pupils. The successful experienced teacher, through visual
cues, quickly notes indications of interest or boredom, comprehension
or bewilderment. Facial expressions, directions of the eyes,
the tilt of the head, and bodily posture offer commonly recurrent
cues which make it possible for the skilled teacher to evaluate
his classroom performance according to the pupil's reactions.
He can then change his "pace," vary the activity, introduce new
instructional strategies as necessary, and improve the quality of
his teaching. Unlike his more experienced counterpart, the
beginning teacher has difficulty perceiving and interpreting
these visual cues. Through videotape recordings in microteaching

sessions, supervisors are able to sensitize teachers to visual cues of pupil's attending and non-attending behavior.

Providing Feedback

The feedback process in the development of teachers may be simply stated as providing "knowledge of results." Teachers often ignore the availability of information accessible during the lesson. Questioning, visual cues, informal examination of performance, are immediate sources of feedback. Teachers can be sensitized to techniques to elicit feedback from students to modify their lesson accordingly. Teachers unconsciously tap a a variety of feedback sources but unless they are sensitized, they tend to rely unevenly on a limited number of students as "indicators" and to rely on a restricted range of feedback cues.

Employing Rewards and Punishments (Reinforcement)

Reinforcing desired pupil behavior through the use of reward and punishment is an integral part of the teacher's role as director of classroom learning. Substantial psychological evidence confirms the value of reinforcement in the learning process. The acquisition of knowledge of specific techniques and the development of skill in using them appropriately in specific situations is most important. Experience indicates that teachers can acquire skill through microteaching practice in reinforcement of pupil learning.

Control of Participation

Microteaching sessions enable teachers to analyze the kinds of pupil-teacher interaction which characterize their teaching. Control of pupils' and teachers' participation is one important variable in the successful learning for the pupils. Microteaching sessions provide an opportunity for teachers to practice different techniques for encouraging or discouraging classroom interaction and to gain insight into the casual relationship between a series of teacher-pupil interactions.

Redundancy and Repetition

The purpose of this skill is to clarify and reinforce major ideas, key words, principles, and concepts in a lecture or discussion. The use of redundance and repetition is a powerful technique in focusing and highlighting important points, and describing them from a different point of view. There are two main varieties of repetition: 1) Literal repetition – using

simple, massed, distributed, and accumulative repetition; and
2) figures of speech - metaphors, analogies, verbal emphasis,
focusing, gestures, and visual highlighting.

Illustrating and Use of Examples

The use of examples is basic to teaching. Examples
are necessary to clarify, verify, or substantiate concepts.
Both inductive and deductive uses of examples can be used
effectively by the teacher. Effective use of examples includes:
1) starting with simple examples and progressing to more complex
ones; 2) starting with examples relevant to students' experience
and knowledge; 3) relating the examples to the principles or
ideas being taught; 4) checking to see if the objectives of the
lesson have been achieved by asking students to give examples
which illustrate the main point.

Asking Questions

Prior to the development of probing and higher order
questioning techniques comes the concept of asking questions.
Too often beginning teachers lecture and tell students rather
than asking questions which can elicit the answers from the
students themselves. Techniques have been developed by which
teachers can see model videotapes of teachers demonstrating this
skill, and by practicing in a microteaching situation increases
the number of questions which they ask of students. Having
achieved this goal the emphasis can be placed on higher order
questioning techniques.

The Use of Higher Order Questions

Higher order questions are defined as questions which cannot
be answered from memory or simple sensory description. They
call for finding a rule or principle rather than defining one.
The critical requirements for a "good" classroom question is that
it prompts students to use ideas rather than just remember them.
Although some teachers intuitively ask questions of high quality,
far too many overemphasize those that require only the simplest
cognitive activity on the part of the students. Procedures
have been designed to sensitize beginning teachers to the effects
of questioning on their students and to provide practice in forming
and using higher order questions.

The Use of Probing Questions

Probing requires that teachers ask questions that require
pupils to go beyond superficial "first-answer" questions. This
can be done in five ways: 1) asking pupils for more information

and/or more meaning; 2) requiring the pupil to rationally justify his response; 3) refocusing the pupil's or class's attention on a related issue; 4) prompting the pupil or giving him hints; and 5) bringing other students into the discussion by getting them to respond to the first student's answer.

Teacher Silence and Non-Verbal Cues

Many teachers are frightened by silence or pauses in classroom discussion. They usually hasten to fill silence gaps by talking. What many teachers do not realize is that teacher silence is a powerful tool in the classroom. Teacher pausing can be used after: 1) Introductory statements to provoke the students into thinking about the teacher's statement; 2) questions to the students to give them time to think about a proper answer; 3) questions from the students to direct the question to another student with a look or gesture; 4) student response to elicit a continuing response.

Completeness of Communication

Although the importance and need for clear communication is blatant, it is not often the guiding principle in actual communication. Sensitivity training on the importance, and the difficulty, of being understood is the focus of this concept. Several classroom games have been devised which dramatically demonstrate to teachers that what they consider to be clear instructions are often not clear at all to the students. Sensitivity training in the skill of communicating with others will produce teachers who are more responsive to possible miscommunication.

Integrative Skills

The following are classified as integrative skills because they consist of combinations of other skills. Mastery of the separate skills is not enough to produce effective teaching. For this reason new skills are listed which consist largely of other skills in a different context.

Varying the Stimulus Situation

Psychological experiments have shown that deviations from standard, habitual teacher behavior result in higher pupil attention levels. Teachers should be sensitized to their habit patterns and made aware of attention producing behavior that they can control. The behaviors include teacher movement, gestures,

focusing pupil attention, varying the interaction styles, pausing, and shifting sensory channels.

Lecturing

Training in some of the successful techniques of lecturing based upon a communication model is the focus for this technique. Delivery techniques, use of audio-visual materials, set induction, pacing, closure, redundancy and repetition, and other skills related to lecturing are included.

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READING B

Teaching Strategies

Set Induction

Many teachers spend outrageously little time preparing their students for classroom activities. Often this preparation consists only of telling their students to read some story by the next class session or to watch some demonstration carefully. With such a limited introduction, could any teacher truly expect his students to be attentive and eager to learn the material? The purpose of this exercise is to stimulate you to think of better ways of preparing your students for learning. You will learn to establish a "set" with your students that will facilitate communication between you. A "set" is a predisposition to respond.

Several psychological experiments have demonstrated the importance of set induction in learning. Research indicates that activities preceding a learning task influence the performance of the task. The research also indicates that the effectiveness of a set depends somewhat on the situation to which it is applied. Hence, a teacher must find those kinds of sets most appropriate to his purposes and must modify these sets to fit the specific classroom situation.

In most cases, the initial instructional move of the teacher should be to establish a set. The set focuses his students' attention on some familiar person, object, event, condition, or idea. The established set functions as a point of reference around which the students and the teacher communicate. The teacher uses this point of reference as a link between familiar and new or difficult material. Furthermore, an effective set encourages student interest and involvement in the main body of the lesson.

The establishment of a set usually occurs at the beginning of class period, but it may occur during the session. Set induction is appropriate whenever the activity, goals, or the content of the lesson is changed so that a new or modified frame of reference is needed. Set induction is also used to build continuity from lesson to lesson and from unit to unit. Thus, a new set may be linked to an established set or to a series of sets.

Everyone has experienced the influence of set induction on responses to a situation. If we have been told that some person is a brilliant scientist, we respond differently than we would if we had been told he was a star athlete. What we "learn" during the conversation with this person will depend in part on what we have been told about him. Similarly, whatever information the teacher gives his students about the degree of difficulty and format of a test will probably affect the way they study for it.

Suppose that a teacher wants his students to read Chapter Six in their textbooks as homework. Suppose Chapter Six is about the Constitutional Convention of 1787. What remarks or activities will produce the most learning for the next day? He could say "Now class, for tomorrow I want all of you to read Chapter Six in the text." Such a weak set would normally produce a weak response. The next day he might discover that half the class had not read the assignment, and that the other half, although claim to have read it, was unable to discuss it in any depth.

The teacher might have said, "For tomorrow, I want you to read Chapter Six in the text and come to class prepared for a discussion." This set is an improvement. It gives the students more information about the instructional goal: they are to prepare for a discussion. But the students need a good deal more information before they will be able, or disposed, to prepare themselves for an interesting, stimulating discussion. Exactly what will be discussed? What points should they consider as they read? What should be the focus while they read? How should they use previously learned material? Should they study facts or principles? Should they compare? Should they contrast? Both? Neither?

The teacher could take a completely different approach to the Constitutional Convention of 1787. A different set, one more likely to motivate the students, might be something like the following:

Teacher: Suppose you were setting up a colony on a distant planet. Since this colony will be self-governing, the colonists have to draw up some kind of rules for governing themselves. For tonight I want each of you to pretend that you are a colonist on that planet, and that tomorrow you will be in discussions to draw up some sort of constitution. Think about what kinds of rights each individual will be guaranteed. Also consider

what the colony will do when its population expands to
over a million people. Each one of you should answer
these questions and be prepared to discuss them
tomorrow.

After spending a subsequent class period discussing these
and related questions, the teacher could assign appropriate
reading and conduct discussions about the problems that confronted
the Founding Fathers in 1787. The teacher would have established
a sufficient set, one that both stimulated his students and
prepared them for the learning activity.

Sets are appropriate for almost any learning activity.
For example, a set is appropriate:

1. at the start of a unit,
2. before a discussion,
3. before a question-and-answer period,
4. when assigning homework,
5. before hearing a panel discussion,
6. before student reports,
7. when assigning student reports,
8. before a film or filmstrip,
9. before a discussion following a filmstrip,
10. before a homework assignment based on a discussion
    that followed a filmstrip.

The most effective sets are those that catch the student's
attention and interest them in the material. The following
examples present learning activities or lesson material with
ideas for appropriate sets:

1. Lesson: A chapter on the Civil War.
    Set: Ask the students to think about how they would
             have tried to prevent the war had they been
             President.

2. Lesson: Tone in poetry.
    Set: Compare Joan Baez with The Jefferson Airplane.

3. Lesson: Henry James' Turn of the Screw
    Set: Ask the students to decide if this is a
             ghost story or a story written by a neurotic
             who distorts reality.

4. Lesson: Shirley Jackson's "The Lottery".
    Set: Say, "Before we read 'The Lottery,' I want to
             finish giving grades. I've decide to fail
             three students. I have planted three slips in

this hat that say 'You fail' and thirty slips
that say 'You Pass'. Now we will pass the
the hat . . ."

5. Lesson: Student book reports.
    Set: Give examples of good book reports.

6. Lesson: Ordering and categorizing behavior.
    Set: Give the class 35 record jackets. Ask them
             to sort the jackets into four categories.

7. Lesson: Cultural differences.
    Set: Ask the students to imagine that they are
             Italians, and you are an American walking
             down a street in Rome. Ask them if and
             how they could tell you were an American.

8. Lesson: Government
    Set: Make up a set of questions about the Constitution.
             Have the students give this test to members of
             the community.

9. Lesson: Density and specific gravity.
    Set: Put an ice cube into each of two beakers
             filled with a clear liquid. In one beaker the
             cube floats; in the other it sinks.

Lecturing

The lecture has been used frequently in elementary and secondary schools, colleges, and universities. However, with the current emphasis on "inquiry training" or "discovery learning," many educators consider lecturing outmoded. They say, for example, that the lecture does not engage its listeners in active learning, that material taught through lectures is quickly forgotten, and that the lectures themselves merely repeat material that can be found in textbooks. They add that lectures are boring and conclude that lecturing should be done away with as an instructional technique.

The authors argue that, while much of the criticism is valid, it is not the technique itself, but rather its abuse, that is at fault. Used properly and appropriately, the lecture is a valuable tool.

There are two forms of lecturing. A formal lecture is purely verbal. Communication is basically one-way, from speaker to audience. In an informal lecture, communication is two-way: from speaker to listeners to interrupt with questions or comments. Used more often in public schools than the formal lecture, it frequently incorporates audio-visual media to enhance the presentation.

Uses of the Lecture

To Convey Information: A lecture can be used to convey information otherwise inaccessible to the students. For example, a specialist can offer information unavailable in textbooks.

To Reinforce Written Work: A lecture covering previously learned material reinforces student learning through repetition. Use of this sort of lecture should be limited to emphasis of main points in the material.

To Change The Pace: Any teaching method, used exclusively, is boring. A teacher who relies only on classroom discussions might well profit by lecturing occasionally.

To Synthesize Many Sources: Lecturing is economical. A teacher is able to synthesize several sources, thus saving his students the trouble.

<u>To Inform Students of Expected Results</u>: A lecture can be a means of informing students of the expected results of a learning activity. If used in this way, it functions as an introduction to the activity by focusing the students' attention on the most important aspects of the material.

<u>To Convey Enthusiasm</u>: A lecture can convey to students the teacher's enthusiasm for a subject. An exciting lecture demonstrates the teacher's interest, which will stir the students also.

There is evidence that lectures are not appropriate when:

1. the instructional objective is other than the acquisition of information,
2. the instructional objective involves the application of skills,
3. the instructional objective involves the changing of attitudes or behavior,
4. the information acquired is to be retained for a long time,
5. The material is complex or abstract,
6. student participation in the learning activity is required,
7. the levels of intelligence and educational experience of the students are below average.

Effective Lecturing

Effective use of the lecture technique requires thoughtful consideration of the following factors:

<u>Personality of the Lecturer</u>: A lecturer should be warm, friendly, and confident. He should speak clearly. He should have control of the English language - syntax, word selection, enunciation, pronunciation, the use of meaningful figures, and so on. A teacher who lacks these characteristics should avoid using the lecture.

<u>Consideration of the Audience</u>: Students must be prepared to respond to the lecturing technique. The teacher should be sure that his students know how to listen for main ideas. Many students lack this skill.

<u>Planning and Organization</u>: Effective lectures are planned lectures. The teacher's main points must be sharply defined, and the supporting material well-organized. "Tell them what you're going to tell them, and tell them what you've told them" is an old but useful guideline. Summaries of main ideas, both at the beginning and at the end - and sometimes interspersed

throughout the lecture – add to the students' retention.
Summaries give the students an outline on which to hang details.

Vocabulary: A teacher only communicates to students
who can understand his language. For this reason, the teacher
must carefully choose the vocabulary of his lecture.

Repetition: Repetition of the lecture's main ideas
increases the chances that students will remember them.
Repetition appears to be more effective than verbal emphasis,
pauses, or gestures for stressing main points. But the teacher
should avoid excessive repetition. Four or five repetitions
of a single point will normally produce restlessness or boredom.

Varied Stimuli: Reading a lecture is usually less effective
than speaking freely from a well-thought-out lecture plan.
Reading tends to result in monotonic, dull delivery. Good
lectures vary voice pitch, loudness, intensity, and speed of
delivery. Such variety of stimuli is more likely to hold attention.
The speed of delivery should vary between 115 and 160 words
per minute. Simple material should be delivered quickly;
difficult material more slowly.

Time Length: Most lectures are too long. Even with a good
lecturer and an interesting topic, the attention span of most
audiences is short. For most school children, a lecture should
be kept short: thirty minutes or less.

Illustrative Devices: Illustrative devices enhance a
lecture and increase learning. But audio-visual materials must
not be used for their own sake. To be appropriate, they must
complement the lecture and enhance its effectiveness.
Furthermore, students must be adequately prepared for their
use.

Using Questions in Teaching

Questioning as an instructional technique has been recommended to teachers since Socrates first used it to draw out ideas from students. A steady stream of books and monographs on the "art of questioning" have appeared over the years. These attest to the belief that appropriate questioning behavior is an important teacher characteristic. A common theme throughout the literature is that questioning is a means by which one elicits higher order mental processes such as critical judgment. It was John Dewey who pointed out that thinking itself is questioning. It would seem that the critical requirement for a "good" classroom question is that the question prompt the student to use ideas rather than just remember them. The generally accepted premise is that the form of the question serves as the stimulus for eliciting certain kinds of cognitive activities which may range from simple recall to highly complex inferences from data.

Thus one of the first things a potential questioner must learn to recognize is the fact that questions have different characteristics. Among the many types of questions we may distinguish two, those which are factual, or lower order, and those which are more complex, or higher order questions. Some people break down the lower order category into sub-categories such as interpretation, analysis, synthesis, evaluation, etc. The reason for attempting to identify different kinds of questions is quite simple, it is believed that different types of questions produce different kinds of cognitive responses on the part of the students.

Not all the responses of students are cognitive. Some responses can be seen through simple observation of classrooms. For example, when a teacher asks a simple memory question like "Who was the sixteenth president?" you often notice students wildly raising their hand, and/or you can hear such sounds as "ooh-ooh" and others which in general try to attract the teacher's attention in order to be called upon. The students are sure they know the answer. They are sure they can deliver a response for which the teacher will respond positively to them. On the other hand, when a question is highly complex, students will often ask for clarification of the question or show signs of puzzlement or tentativeness in the hand-raising that occurs. These are observable behavioral indicators of the simplicity or complexity of the various questions that are being asked. Thus even through simple observation, and without any access to the

cognitive structure of students, we can often see the effects
of questions.

Questions can also be asked in certain kinds of sequences.
For example, a number of factual questions in a row can be used
to establish a certain data base. This can be followed by a
higher-order question which incorporates material from the
established factual data base. Other strategies might call
for simple alternation of lower-order and higher-order questions.
The "correctness" or "incorrectness" of using the various
strategies is unknown. What is desirable is that the teacher
recognize that such strategies do exist.

Probing Questions

Teacher: Would you say that nationalism in Africa is now greater
           or less than it was twenty years ago?

Student: Greater.

Teacher: Right. Why is that so?

Student: Because there are more nations now.

Teacher: That's right, too, but that's only part of it. Can
           anyone else give me some more reasons?

Class: (Silence)

Teacher: Well, basically, it's because . . .

A teacher wants his class to discuss a topic. He asks
a question and receives a cursory answer that adds next to nothing
to the discussion. The discussion drags. It evolves into an
unprepared lecture. In many cases, this is the teacher's fault.
He may ask questions that are embarassingly simple. However, it
may be that his students are shy, afraid of answering incorrectly,
or just naturally taciturn.

Effective teachers keep discussions going by asking questions
that require more than superficial answers. They do this in two
ways. One is to forestall superficial answers by asking questions
to which such answers cannot be given. This is what higher order
questions do. The other approach is based on techniques that may
be used after a student has given a superficial response. By
probing, the teacher requires the student to go beyond his first

response. His cue is the student's response. Once it has occured, the teacher, instead of advancing to another question, probes the student's response by means of one of the techniques outlined below.

More than any other skill in this cluster, probing will require you to give an unrehearsed response. Because the probe depends on the student's response, you will rarely be able to prepare probing questions in advance of the lesson. However, by practicing probing questions with a variety of responses, you can develop a repertoire of question formats to apply when appropriate in the classroom.

The probing techniques outlined below can be used in any situation where student participation is necessary to realize the goals of the lesson. A given technique, of course, may be appropriate in one situation but not in another.

1. The teacher seeks clarification. He may ask the student for more information, or clarification, by saying:

   a. "What, exactly, do you mean?"
   b. "Please rephrase that statement."
   c. "Could you elaborate on that point?"
   d. "What do you mean by the term . . . ?"

2. The teacher seeks to increase the student's critical awareness. He wants the student to justify his response. Examples of appropriate probing questions are:

   a. "What are you assuming?"
   b. "What are your reasons for thinking that is so?"
   c. "Is that all there is to it?"
   d. "How many questions are we trying to answer here?"
   e. "How would an opponent of this point of view respond?"

3. The teacher refocuses the response. If a student has given a satisfactory response, it might seem unnecessary to probe it. However, the teacher could use this opportunity to refocus on a related issue. Examples of probing questions that might also refocus the responses are:

   a. "If this is true, what are the implications for . . .?"
   b. "How does John's answer relate to . . .?"
   c. "Can you relate this to . . .?"
   d. "Let's analyze that answer."

4. The teacher prompts the student. The teacher gives the student hints to help him answer the question:

Teacher: "John, what's the square root of 94?"
John: "I don't know."
Teacher: "Well, what's the square root of 100?"
John: "Ten."
Teacher: "And the square root of 81."
John: "Nine."
Teacher: "Then what do we know about the square root of
94?"
John: "It's between nine and ten."

5. The teacher redirects the question. This is not a probing
technique, per se, but it does help bring other students into
the discussion quickly, while still using probing techniques.
The teacher changes the interaction from himself and one
student to himself and another student:

Teacher: "What is the theme of Hemingway's Old Man and
the Sea?"
Sam: "It's about an old man's courage in catching a fish."
Teacher: "Mary, do you agree?"
or: "Mary, do you think it's that simple?"
or: "Mary, can you elaborate on Sam's answer?"

These techniques have two main characteristics in common in
that they are initiated by the teacher immediately after the
student has responded, and they require the student to think
beyond his initial response.

Higher Order Questions

Higher order questions are questions that cannot be answered
merely from memory or by simple sensory description. This
kind of question requires abstract thinking on the part of the
student. It requires him to go beyond the factual or descriptive
statement and learn to generalize, to relate facts in meaningful
patterns, to compare and contrast concepts or principles, to
make inferences, to perceive causes and effects. Higher order
questions call for the discovery of concepts rather than for their
definition. They prompt the student to use ideas rather than
just to remember them.

The key word related to higher order questions is why. The
question "Why?" requires the student to go beyond the factual
or descriptive answer. However, such questions do not necessarily
demand more than memory. The question, "Why did the Civil
War break out?" is merely a factual or descriptive question if the

student is expected simply to repeat what he was told in a lecture or in a textbook. That same question would be a higher order question if the student were expected to identify the major causes himself, after considering a variety of conditions and events preceding the war. The salient feature of higher order questions is that they lead students to figure out answers rather than to remember them.

Each student brings a different frame of reference into the classroom, based on the sum of his knowledge, experience, and values. Consequently, a higher order question for one student might be a factual question for another. For example, asking one student to prove that two triangles are congruent might be asking him to perform a mathematical operation that is new to him. Asking the same question of another student might be asking him simply to repeat an operation he knows by heart.

Here are six specific functions that higher order questions may perform:

1. <u>Asking for evaluations</u>: Questions asking for evaluations resemble divergent questions in that there is no "right" answer. They deal with "matters of judgment, value and choice." Norris Sanders states that any idea can be evaluated in two main steps. The first step is to set up appropriate standards. The second is to judge how closely the idea or object being evaluated meets these standards. If no standards are offered, or if they are only suggested, then a question is considered evaluative. It is evaluative because the respondent must himself set standards against which to evaluate whatever is in question. An evaluative answer is always somewhat subjective. Either the standard cannot be proved to be correct, or the idea or object cannot be judged with reference to the standard's criteria. The following examples of evaluative questions imply that the student must set up standards to use in answering the question:

   a. Which of the two cartoons do you believe contributes the most to an understanding of the problems of the American Indian in the twentieth century?

   b. Assuming equal resources, whom would you rate as the more skillful general, Robert E. Lee or Ulysses S. Grant? Why?

2. <u>Asking for inferences</u>: Inferences always involve either deduction or induction. <u>Deduction</u> is reasoning from a general principle to a particular case covered by the principle. Deduction is essentially a logical operation: if it is true that all men are mortal, then if Socrates is a man it follows necessarily that Socrates is mortal. <u>Induction</u> is the discovery of a general principle

from a collection of specific facts: if the sun has been observed to rise every day since the beginning of recorded history, one may induce the generalization that the sun rises every day. This operation of induction is not essentially logical. As Hume (from whom this example of the sun is taken) long ago showed, there is no logical necessity that the sun will indeed rise tomorrow. However, logic does figure in induction, though not essentially. When a generalization occurs to someone, he usually judges its worth by returning, through deduction, to specific cases covered by the generalization. He reasons to himself, "If this generalization is true, then it should follow that such-and-such is the case." If "such-and-such" proves not to be the case, he rejects the generalization. He can never prove the generalization to be true, but he can corroborate it. The more instances in which the generalization is not shown to be false, the more confidence he can have in it. In science, this process of testing generalizations (called hypotheses) is done formally in most cases. In everyday life, the process, when it occurs, is usually automatic or quite casual.

Question a asks for a deductive inference, and question b asks for an inductive inference.

a. Why does wet laundry hung on a clothesline dry faster on a hot summer day than on a cool autumn day?

b. We have examined the qualities these many world leaders have in common. What might we conclude, in general, about the qualities necessary for leadership? Why?

3. Asking for comparisons: A Comparison question asks a student to determine if ideas or objects are similar, dissimilar, unrelated, or contradictory. We can make several different kinds of comparisons. The simplest asks whether or not two or more ideas or objects are identical, as in example a. Another kind, example b tests the degree of similarity between ideas or objects. A third kind asks the student to relate sets of ideas on similar points. Example c is such a question. But, as Norris Sanders has argued, the most challenging comparison is one where the student is free to choose which aspects of things he will compare. Example d is this fourth kind of question.

a. Is a mussel the same thing as a clam?

b. What are the similarities and differences between London and New York City?

c. Compare the life cycle of the bumble bee with that of an ant.

d.   What is the connection between a representative form
     of government and the American Revolution?

4.   <u>Asking for application of concepts or principles</u>: A
concept is defined as a classification of events or objects that
have common characteristics. A principle is defined as the
relationship between two or more concepts. Teachers can test
understanding of a concept or principle by asking the student
to use it in a context different from that in which he learned
it. If the student uses the concept correctly, the teacher is
reasonably assured that the student understands.

a.   How is Newton's Third Law demonstrated in the
     movement of a balloon when air is let out of it?

b.   Can you think of another example which fits this
     definition?

5.   <u>Asking for problem solving</u>: Problem-solving questions
require a student to use previously-learned knowledge to solve
a problem new to him. Questions of this nature require the
student to see relationships between his knowledge and the problem.
Often these questions demand a great deal of creativity from the
student. One of the difficult steps in solving a problem is
to decide which facts or skills are relevant. When students do
not know where to begin or what knowledge will be relevant, they
can be given hints or directions by the teacher.

a.   Given this information, how would you go about solving
     the food shortage problem?

b.   Can you prove that these two paintings were created
     by the same artist?

6.   <u>Asking for cause and effect</u>: These questions require
the student to perceive casual relationships between events and
persons, objects, ideas, or other events. They ask the student
to find a link that connects one with another.

a.   If I were to heat this water, what would be the result?

b.   If the wheat crop all over the world failed, what foods
     would be missing from our diet?

Higher order questions stimulate students to go beyond the
factual level of thinking in order to generalize, infer, evaluate,
and perceive relationships. Imaginative use of higher order questions
can enliven an otherwise dull classroom discussion. A teacher

should know what kind of thinking he wishes to stimulate and should select the appropriate kind of question. Sustained higher order questioning is difficult. But practice combined with diligent study will result in a more versatile and effective questioner.

Divergent Questions

The kind of question probably asked least often in the classroom is what has variously been called the <u>divergent</u>, the <u>heuristic</u>, or the <u>creative</u> question. Such a question has no "right" answer. It is an open-ended question, requiring students to use both concrete and abstract thinking to determine for themselves an appropriate response. Students are free to explore the problem in whatever direction they prefer; they are asked to think creatively, to leave the comfortable confines of the known and reach out into the unknown. This is often more uncomfortable for the teacher than it is for the students, since the answers he receives cannot be classified as right or wrong. But this is the fascination and challenge of divergent questioning. The teacher and the students free themselves to explore hypotheses and possibilities.

The following are divergent questions:

1. What might happen to our economy if the gasoline automobile were declared illegal for smog-prevention reasons?

2. If you were stuck on a desert island and the only tool you had was a screwdriver, what uses might you make of it?

3. What might happen if Congress passed a law preventing the manufacture and sale of cigarettes in the United States?

4. How would the story have been different if John had been a tall, strong boy instead of a cripple?

5. How would life in the San Francisco Bay Area be different if the bay were filled in?

6. In what way would history have been changed had the Spanish Armada defeated the English in 1588?

Reinforcement

A teacher plays a key role in the creation of desirable learning conditions in the classroom. As Sears and Hilgard have said:

> First, teacher personality and behavior act through a kind of contagion, in which the teacher becomes a model for appropriate behavior. The principles at work here are those of imitation and identification. Second, the teacher, as an administrator of rewards and punishments, wields power and creates a structure in which learning occurs. Here the principles are the more usual ones of positive and negative reinforcement.[1]

The teacher's role as a positive reinforcer is the focus of this exercise. Positive reinforcement of a behavior increases the likelihood that the behavior will recur. If a student behaves in a desirable way, immediate positive reinforcement increases the probability of his continuing to do so.

The difficulty is that the strength and quality of any reinforcer varies with the student to whom it is applied. No teacher can know exactly what will positively reinforce each of the thirty or so students in each of his five or six classes. It is impossible for him to acquire this information from the science of human behavior at its present stage of development. Tests may eventually be developed to furnish such information, but that day is a long way off. Hence, the contemporary teacher must rely primarily on the words, phrases, and gestures that experience has shown to work as reinforcers in most cases. In addition, he should notice his students' individual traits. These will suggest that certain reinforcers might be more effective than others.

Besides directly increasing learning, reinforcement is an effective means of increasing student participation in classroom activities. Participation, in turn, usually increases learning.

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[1]Pauline S. Sears and Ernest R. Hilgard. "The Teacher's Role in the Motivaton of the Learner," Theories of Learning and Instruction. The Sixty-third Yearbook of the National Society for the Study of Education, Part I (Chicago, 1964), p. 206.

When students take part in classroom activities, they are more
likely to become involved with the material than when they do not
take part. They pay closer attention. An experiment conducted
at Stanford University has shown that teachers who often reinforce
their students for joining in class discussions draw more participa-
tion from their students than teachers who reinforce infrequently.

Four kinds of positive reinforcement are available to the
teacher:

1.   Positive verbal reinforcement occurs when the teacher
     immediately follows a desired student response with such
     comments as "Good," "Fine," "Excellent," "Correct," or
     other statements indicating satisfaction with the response.

2.   Positive nonverbal reinforcement occurs when the teacher,
     in responding to a desired student response, nods his head
     affirmatively, smiles, moves toward the student, or keeps
     his eyes on the student while paying close attention to
     the student's words. The teacher may write the student's
     response on the chalkboard or otherwise nonverbally indicate
     pleasure at the student's response.

3.   Positively qualified reinforcement occurs when the teacher
     differentially reinforces, either verbally or nonverbally,
     the acceptable parts of a response, as in the following
     example:

     Teacher: John, how is yellow fever transmitted?
     John: I think it is transmitted by flies.
     Teacher: You're right; it's an insect that carries the
               disease, but it isn't a fly. What is it?

4.   Delayed reinforcement occurs when the teacher emphasizes positive
     aspects of students' responses by redirecting class attention
     to earlier contributions by a student, as in this example:

     Teacher: Class, which side would you have expected the
               English industrialists to support during the
               Civil War: the South or the North?
     Class: The South. The North. (class is divided)
     Teacher: Jane, do you remember earlier in the class you
               mentioned one of the leading industries in England?
     Jane: Yes. It was clothes-making.
     Teacher: Does that give anyone a hint?
     Sam: They supported the South because they wanted the cotton
           the South grew for making clothes.
     Teacher: Good, Sam. That was a good deduction.

Note here that both Jane and Sam have been reinforced by the teacher: Jane, because the teacher drew the students' attention to her earlier contribution and asked her to repeat her statement; Sam, because the teacher praised him for deducing the answer to the original question.

Shy students who rarely join in class discussion present a difficult problem but not an insoluble one. Gradually, these students can be encouraged to become involved. When a teacher notices a shy student looking at him or attending to what is going on in class, the teacher should reinforce this behavior by nodding or smiling at the student; in effect, the teacher says he is pleased that the student is paying attention. The teacher can further encourage this student's participation by asking him easy questions. This insures that the student will have successful experiences when he first begins to participate. If the teacher extends this process over a period of time, the student should take part more. Each time he participates, he should be reinforced until he reaches a normal level of involvement.

Most of us, in our normal conversation, use a very narrow range of reinforcers. "Good," "Uh-huh," "Right," and "Yeah," are frequently used as reinforcers. It is hoped that this exercise will enable you to extend your range of both verbal and nonverbal reinforcers. The possible range is a very broad one. It extends from such exclamations as "Fantastic!" and "Tremendous!" through statements such as "Excellent," "Very good," "Good," and "Yes, " to mild gestures such as a slight nod of the head. Each of these reinforcers should convey a different feeling and meaning. Your task is to enlarge your repertoire of reinforcers and to apply them sensitively. Saying "Tremendous!" to an average response, or even to a very good response, is ridiculous. Reinforcement must correspond to the adequacy of the student's response. A few of the reinforcing statements and actions required by the practice exercises may feel uncomfortable to you at first. They may seem foreign to your interaction style. However, as you develop your range of reinforcers, you should, in the long run, have a greater effect on your students.

Stimulus Variation

Nearly everyone who has read a book has had the experience
of a sudden sound or movement interrupting his reading. Before
the interruption, the book was the object of the reader's attention.
There were undoubtedly several other stimuli in the immediate
environment, but the mind is a selective instrument capable of
focusing on one stimulus while ignoring others; it took a sudden
sound or movement to distract the reader. The intruding stimulus
became, momentarily, his new object of attention, and temporarily
he forgot about the book.

Stimulus variation occurs continually in the classroom
If a student is interested in an activity, he will disregard
most of the other stimuli that bombard him, such as noise in the
hallway, birds chirping outside, or traffic sounds. It takes
a strong stimulus to distract an interested child.

Teachers should remember, though, that most youngsters
have short attention spans; they often lose interest after
a certain period of time. Good teachers vary learning activities
and their teaching behavior during a classroom session so that
students receive new stimuli that will keep them interested.
The stimuli constructed by the teacher compete, in a sense, with
irrelevant stimuli that might distract the students.

Most teachers undoubtedly have been exposed to at least
one professor who could put his students to sleep with a lecture.
He probably spoke in a monotone, stood rigidly at the podium, and
moved his hands only to turn the pages of his notes. Unless
the content of his lesson was extremely interesting, he held no
one's complete attention. His students soon became attuned to the
stimuli he was sending, and it became difficult to concentrate on
his students' attention, perhaps too weak even to keep them awake.
Had this professor pounded the lecturn occasionally, varied the
pitch and loudness of his voice, or occasionally broken off in
the middle of sentences to write on the board, he would have
been more successful in teaching his material.

A teacher must vary the stimuli he presents to his students.
If he doesn't, they may "tune him out." Other stimuli (including
day-dreams) may gain their attention.

The purpose of this exercise is to help you become more aware
of the variety of attention-producing behavior you can incorporate
into your teaching. Six simple behaviors or behavior patterns will

be studied and practiced. You may wish to devise additional
stimulus-varying behaviors suited to your particular teaching
style.

Six behaviors that vary the stimulus

    Gestures: Hand, head, and body movements are important
in oral communication. Alone, the oral message does not convey
meaning as effectively as it does when combined with gestural
cues. Think of the lively communication of Marcel Marceau and
Harpo Marx at one end of a continuum of oral and gestural
communication; at the other, the dry, lifeless communication of
the professor described earlier.

    Focusing: Focusing is control, through structured behavior,
of the direction of students' attention. The teacher can focus
by using verbal statements, specific gestures, or a combination
of both. Verbal focusing can be accomplished by such statements
as, "Look at this diagram!" or "Now here'e something really
important!" Gestural focusing can be accomplished by pointing
to an object or emphatically banging the blackboard. An example
of combining verbal and gestural focusing would be for the teacher
to say, "Look at this diagram," as he pointed to the diagram.

    Interaction Styles: A teacher can normally use three different
interaction styles during one presentation:

    a.   Teacher-Group: The teacher lectures or demonstrates to
        all students and asks questions of the group at large.

    b.   Teacher-Student: The teacher speaks directly to one
        student or asks a question of one student.

    c.   Student-Student: The teacher redirects a student's
        response to another student for comment or clarification.
        Or the teacher can ask one student to explain something
        to another student. In either case, the teacher briefly
        withdraws from the lesson.

    Deliberate patterning of these interaction styles varies the
context within which material is presented, thereby increasing
attention.

    Pauses: Most public speakers are aware of the effectiveness
of silence as an attention-demanding behavior. Teachers, however,
do not use silence as often as they could. Many, in fact, seem
afraid of it: whenever the classroom becomes quiet, they rush
to fill the silence. This is unfortunate. When pauses are
deliberately inserted into a presentation, interesting events occur.

First, the content of the presentation is broken into more easily absorbed units. Second, students often become more attentive; silence acts as a new stimulus. Third, since the stimulus (silence) lacks structure, the students may strain for cues and direction. Finally, a distinct pause prepares students for the next statement by the teacher.

Shifting sensory channels: When a teacher shifts from one communication mode to another (such as from speech to gestures) the student must adjust to this change by switching his "primary receptors" (e.g. from ears to eyes). If he does not, he will miss the teacher's message. But if he does, the adjustment may induce a higher level of attention.

Most of the time, the teacher conveys oral messages. He might supplement these with visual messages using gestures, black boards, pictures, objects, etc. Tactile attention is demanded when the teacher passes an object around the class or asks students to adjust or manipulate an apparatus.

When using the blackboard or any other visual medium, the teacher should occasionally rely on the visual image alone to convey meaning. For example, if he writes the word "monkey" on the board, he might, rather than pronounce the word, make the students shift primary sensory channels from listening to watching. However, this kind of stimulus variation should be used sparingly. It would be inappropriate, for instance, when the teacher wanted to reinforce the students' reception of the word.

Movement: Movement by the teacher requires visual and aural sensory adjustments from the student. The student does not shift from one primary receptor to another; rather, he adjusts each behavior. Most theories of attending behavior hold that a high number of sensory adjustments per unit of time helps keep attention level high. The behavior required from the teacher is that of moving around to various parts of the room. He should be seen sometimes on the left side of the room, sometimes on the right, sometimes in front, and sometimes in back. He should occasionally move among the students.

The relatively simple behaviors described above are just a few of the ways by which the stimulus in the classroom can be varied. You should not feel limited to these behaviors. These are simply examples to stimulate you into thinking about the problem and devising stimulus variations appropriate to your own teaching style. Every teacher already has a repertoire of techniques for varying the stimulus. This exercise is designed to help you extend your repertoire.

Uses of Examples

When a teacher is explaining a difficult idea to a group of students, he is likely to be asked for examples and illustrations. An abstract idea is easier to understand when it is related to a concrete illustration. If the teacher cannot provide an illustration, the students may be unable to comprehend the idea, and they may wonder if the teacher himself understands it.

Because concrete images are necessary for understanding new and difficult concepts, the use of example is basic to good teaching. The purpose of this exercise is to enable you to practice the use of examples and illustrations when conveying new ideas to students.

There are two basic approaches to the use of examples. The deductive approach is probably more common in the classroom. It consists of three basic steps. First, the teacher states the idea or principle he wants the students to understand. Second, he gives examples which illustrate, clarify, or substantiate the idea. He may do this orally, by way of analogy or metaphor; or he may use a written or visual illustration, such as a book, a picture, an experiment, or the solving of a problem. Third, the teacher relates the example back to the main idea: or he may ask the students to give examples and relate them back to the main idea.

Using the inductive approach, the teacher does not start with the idea. Instead, he starts with examples illustrating the idea. After studying the examples, the students try to generalize and make inferences. If the students fail to arrive at the main idea, then either they have not induced correctly, or the examples were misleading. In the former case, the teacher points out the fallacies in their inferences; in the latter, the teacher finds better examples. The teacher does not tell the students what the examples illustrate. Eventually, the students arrive at the correct generalization themselves.

Two kinds of verbal illustrations merit special consideration: the analogy and the metophor. An analogy usually highlights similarities between a thing that is already understood and a thing that is not, thus bridging the gap between the known and unknown. For example, comparisons that indicate the similarities between a human heart and a pump, or a tank's armor and a crab's shell, are analogies. However, a teacher must be careful not to stretch analogies too far, as perfect ones are rare. Both of those given above, for example, are useful but imperfect.

Imperfect analogies presented as perfect ones confuse students rather than enlighten them. The teacher should emphasize only those parts of the analogy that hold true, and he should point out imperfections.

A metaphor suggests a resemblance and is more vivid than a literal example. A metaphor is a word or phrase applied to something to which it is not literally applicable. The sentences, "His mind is a sieve," and "that horse is a bag of bones," each use a metaphor. Metaphors and analogies, interspersed with literal examples, can enliven a teacher's explanation of a concept.

The following are guidelines for the effective use of examples:

1. Start with the simplest examples. Work from simple examples to complex ones. A basic principle of concept-formation is that examples given to illustrate a concept confront the learner with a complex sorting task. Some of the information conveyed by the example is relevant; some is not. If you begin with complex examples, the students may become confused by excess information and miss the point. Therefore, begin with simple examples and work up to complex ones, emphasizing only the relevant aspects of each.

2. If examples are not within the range of the students' experience and knowledge, then they are useless as illustrations of a concept. How do you know that an example is appropriate for your students? This information is a function of your familiarity with your students' backgrounds. The more you know about your students, the more you will be able to select relevant examples.

3. After presenting some examples, sharpen your students' understanding by offering an irrelevant example - one that has no relation to the concept. In other words, once the students have acquired a basic understanding of the concept, present them with examples that do not illustrate the concept. This use of "non-examples" helps students discriminate between the concept you are teaching and other, similar concepts. However, do not include a non-example too early in the presentation. Wait until the students are likely not to be confused by it.

4. Don't assume that the more examples you give the better the students will understand the concept. Unless the additional examples illustrate new aspects of the concept, or provide more information about it, they will add nothing to the students' understanding.

5. Remember that the point of using examples is to illustrate, clarify, or substantiate an idea. Therefore, you must relate the examples to the idea. Don't assume that students will automatically connect examples they are given with an idea. Either relate the examples to the idea yourself, or have the students do it.

6. One way to make sure that students have understood a concept is to ask them to give you additional examples of it. If their examples are good, they have probably grasped the concept. If their examples are faulty, they have probably misunderstood, and you can adjust the lesson accordingly.

Planned Repetition

Teachers are frequently dismayed and annoyed when they discover that students don't remember important ideas or points mentioned in class. By simply reminding the students of the discussion in which the point was mentioned, a teacher may or may not inspire recall. Although he believes he emphasized the point adequately, he finds that learning apparently did not occur. Why? Perhaps he failed to communicate clearly and completely; perhaps the students were inattentive; perhaps the point was discussed in a different frame of reference from the present one. Another possibility is that "overlearning" did not occur. Overlearning can best be described with the help of an example. If a student is memorizing a poem, and after a number of trials succeeds in reciting the entire poem without a mistake, he can be said to have learned the poem. If he continues to recite from memory, beyond the point of initial mastery, he is overlearning the poem. A student who continues to study material beyond initial mastery will normally retain the material longer than if he stops after initially mastering it.

It is a general rule that if students overlearn material they will retain it longer than if they only achieve initial mastery of it. The purpose of this exercise is to help you develop various ways to repeat main ideas, concepts, or key facts, in order to help the students overlearn the material. Through planned repetition during a lecture or a teacher-led discussion, for example, the teacher can provide opportunities for overlearning. But overlearning should not be thought of as mere drill or rote learning. The teacher can arrange a variety of situations in which students can be active with the concept while overlearning it.

Repetition can occur in a variety of situations and in a variety of ways. For example, in a math class, repetition might involve solving several similar problems. However, we will discuss in detail only literal repetition, the kind usually most appropriate for a lecture or a teacher-led discussion. To repeat literally is to repeat information verbally, using essentially the same words, throughout a lesson or over a series of lessons.

There are four different patterns of literal repetition. Simple repetition occurs when ideas or statements are repeated immediately following the initial presentation:

Teacher: The most important thing to remember about this process

is that first, you check the temperature; second, you add the chemicals; and third, you check the temperature again. Remember: first, check the temperature; second, add the chemicals; and third, check the temperature again.

Alternatively, have a student or students do the repetition:

Teacher: The most important thing to remember about this process is that first, you check the temperature; second you add the chemicals; and third, you check the temperature again. Mary, what's the first thing you do?

Mary: Check the temperature.

Teacher: Good. John, what is the next thing you do?

John: Add the chemicals.

Teacher: Right. Sam, what's the last step?

Sam: Check the temperature again.

Teacher: All right, let's begin.

Spaced repetition is repetition at various intervals during a lesson or over a series of lessons. By identifying key words or concepts and repeating them periodically during the lesson over a series of lessons, the teacher increases the chances that the students will remember them. Spaced repetition is useful because it allows relearning to occur. Moreover, students are able to practice with the concept by reviewing it after an interval.

Teacher: Essentially, then, the Law of Supply and Demand tells us that if there is a shortage in the supply of goods, the demand will push the price upward. Conversely, if there is a surplus in the supply of goods, the demand for those goods is less than the supply, and the price falls.

Teacher: (ten minutes later) Remember, if the supply is short, and the demand is great, the price of the goods will rise. If there is a surplus in the supply, and the demand cannot keep pace, the price of the goods will fall.

Teacher: (ten minutes later) The primary reason why the price
of goods falls is that the supply is greater than the
demand. The main reason that the price of goods goes
up is that the demand is greater than the supply.

Cumulative repetition is repetition of all the prior concepts
in a sequence before new points are presented. This pattern
is useful when you are teaching material such as the advantages
and disadvantages of a method or the main causes of an event.
But cumulative repetition becomes extremely monotonous if used
too often. It is only effective when used sparingly:

Teacher: A number of physical factors contribute to flood
conditions. The first one we'll discuss is the
amount and distribution of precipitation . . . In
addition to the amount and distribution of precipitation,
the slope of the land is an important factor . . . Besides
the amount and distribution of precipitation, and the
slope of the land, the amount and kind of vegetation
greatly affects flood conditions . . . Thus far we've
talked about precipitation, slope of the land, and
vegetation. A final factor is the condition of the
soil.

A fourth pattern of literal repetition is called massed
repetition. All the important points or main ideas are repeated
together, as a sequence. Such a summary may occur at the conclusion
of the lesson or at any time the teacher believes a summary
would be appropriate:

Teacher: In our discussion today, we've talked about four
steps in digestion. First was the intake of food;
second, the breakdown of food; third, the absorption
of food; and fourth, the elimination of waste
material.

It is not enough to introduce a new idea and then expect
the students to remember it. The teacher must structure the
learning situation in such a way as to be sure that the students
will come in contact with the idea again. Repetition allows
overlearning and the relearning of forgotten material to occur.
Overlearning and relearning increase the probability that the
material will be remembered for a long time.

Nonverbal Cues

Probably when Eve was introduced to Adam, his first response was a gesture; one might imagine a smile, and an attempt to find the right thing to say. From that humble beginning, humans have developed multimodal forms of communication, usually emphasizing words, but adding meaning and direction through the wide range of nonverbal elements.

To the teacher in the classroom, the world of words appears paramount. Students are expected to conceptualize words and word ideas, communicate orally using words in precise meaning. The beginning teacher faced with this expectation of performance, and anxiety on "how do I look," most times assumes a rigid, restrictive posture before the class, presents the materials in a monotone, and succeeds in communicating badly.

Studies indicate that each individual, culture, and society have characteristic nonverbal postures, gestures, intonations, inflections, and movements. The use of movement seems to make a difference in the way words are perceived and understood. We react to the meaning of the phrase "Good Morning" more by the pitch of the voice, the facial expression, body posture and sweep of a hand than by the words alone. We are more acutely aware of miscommunication when the speaker of the words smiles, yet is hunched over, rigid, with fists locked tight. The message of something amiss strikes us immediately. When asked to explain the mis-message, the usual response is that the words do not appear to be sincere or friendly.

Sensitizing to the nonverbal domain begins with the first lesson and the realization that the basic inner tension state _is_ visible to students through actions. The effort to relax the face and body, physically move about, approach students, point, gesture and give meaning to the enthusiasm a teacher possesses, at first seems overwhelming. By systematically looking at nonverbal behaviors and practicing in a microteaching setting, teachers can improve their range of nonverbal cues.

Of the many facets of nonverbal behavior, we will examine seven general categories that the beginning teacher could develop increased awareness of: a) eye contact, b) facial motion, c) head motion, d) body posture, e) body motion, f) arm hand finger motion, g) directed arm hand finger motion.

Eye contact asks the question, "Where does the teacher focus his gaze?" Teachers are encouraged to look at students one at a time, the class as a group, at an object or prop they are using. Insecure individuals tend to avoid looking at the class, usually focusing on their hands or feet.

Facial motion asks the question, "Does the teacher's facial expression add enthusiasm to what is being said?" Such motion as raising of the eyebrows, smiling, laughing, frowning, all add meaning to what is being said.

Head motion asks the question, "Does the teacher add to the communication without the use of words?" By the simple act of nodding either yes or no, students can be encouraged or discouraged. By tilting the head the teacher can assume a pose which indicates thinking - students respond with clarification of what they are saying. By turning the head and focusing on a particular student, that student can be drawn into a discussion. In this case, a group could be directed without the teacher really saying a word.

Body posture asks the question, "Does the teacher stand or sit immobile before the class or does the teacher show enthusiasm and animation?" By sitting, standing, leaning, folding and unfolding arms, hands clasped or unclasped, hands on hips, hands at sides, the class gains meaning of the inner tension state of the teacher.

Arm-hand-finger motion asks the question, "To what degree does the teacher use the arms, hands, and fingers to facilitate the flow of communication?" Such actions as moving the hands across the body, up or down, using loops, sweeps, open or closed fists add to the image being projected by the teacher.

Directed arm-hand-finger motion asks the question, "Does the teacher have enough confidence in himself to engage the students by pointing to students, or himself, writing on the board, or manipulating objects skillfully?"

While not all nonverbal strategies are appropriate simultaneously, the smooth use of nonverbal cues has definite effects on the conduct of the class.

Completeness of Communication

The failure to communicate completely and accurately is a universal weakness. Miscommunication seems to be the human condition. While frequent difficulty in communicating cannot be avoided, we can still remain alert to it, recognize it when it does occur, and try to remedy its effects. A teacher oblivious to the possibility of miscommunication allows misunderstood ideas, confused processes, and misinterpreted facts to linger in his students' minds. Awareness of the failure to communicate can make the difference between an effective teacher and an ineffective one.

The purpose of this exercise is to sensitize the teacher to the phenomenon of miscommunication, so that he may be prepared to recognize it. The teacher will learn that communication between himself and his students cannot always be assumed. He will learn that his students often misunderstand - or simply do not understand at all - his verbal directions. Most teachers are aware of this fact, but only dimly. This exercise will demonstrate it vividly.

The exercise should also sensitize the teacher to the potential of student feedback. In order to perform the exercise well, the teacher must carefully attend to the students' responses, both verbal and nonverbal. The teacher must be alert for indefinite cues of misunderstanding or confusion. Once the teacher discovers that miscommunication has occurred, he must take steps to idenfity its nature and to correct it. He can do this in a number of ways.

Let us assume that, while giving verbal directions for completing a task, the teacher notices that one student seems puzzled. The teacher might then ask that student to explain what he has just been told. When the teacher has identified the nature of the student's misunderstanding, he might try to clarify it with a metaphor or an example. He might try simply restating the directions, or he might ask another student to do this. Or, he might poll the class to find out if the one student's confusion is representative.

A more difficult task is to determine when the students do not understand but think they understand. If the students think they understand, they are unlikely to give verbal or nonverbal cues suggesting misunderstanding. The teacher should systematically check to see if this has occurred. One way is to ask carefully

worded questions that will elicit the degree to which the
student has understood.

For this exercise, you will use one of the geometric patterns
on the following page. Your task will be to direct your students
to reproduce the pattern. The students will not see the pattern;
they will depend entirely on your verbal directions to correctly
reproduce it. All directions must be verbal; no gestures or
facial expressions may be used. Both you and the students should
feel free to ask any questions related to the drawing of the
pattern, but you may not look at the student's attempts during
the lesson. This will approximate a learning situation in which
the students' comprehension is not immediately evident. You
should look at the drawings after the lesson. They will reveal
the clarity and thoroughness of your directions. They may also
indicate where miscommunications occurred.
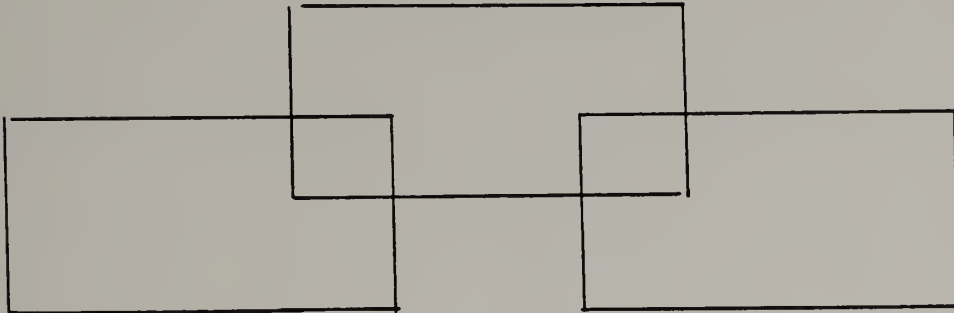
READING C

A Summary of Robert Goldhammer's Model of

Clinical Supervision*

The prototype of a sequence of clinical supervision consists of the five stages.

STAGE 1: The Preobservation Conference

This stage is mainly intended to provide a mental framework for the supervisory sequence to follow. Although its functions can be viewed somewhat differently by the teacher and the supervisor, in general, in our practice, it has served the following purposes:

(a) Re-establishing Communication; relaxation: The idea here is simply that it can be useful for Teacher and Supervisor to talk together sometime in the sequence before the supervision conference, if only to renew their habits of communication, their familiarity with one another's intellectual style and expressive rhythms, for both of two reasons: (1) in some measure, to eliminate problems of re-establishing mutual adjustments from the supervision conference (at which the stakes are sometimes rather high), and (2) to reduce anticipatory anxieties as both parties prepare to join again in important collaboration. In homely terms, we seem to find that Supervisor and Teacher can be more relaxed in the following stages of the sequence if they have been able to talk together successfully in the initial stage.

(b) Fluency: Both Teacher and Supervisor require fluency in Teacher's plans for the teaching that will, presumably, be observed. Understanding the teacher's frame of reference is necessary for either of two purposes--for helping him to function successfully in his own terms or for modifying his plans according to concepts existing in the supervisor's frame of reference. The principal means, in this stage, for enhancing both members' fluency is for the teacher to present his most polished and updated version of plans whose formulation was begun during the prior sequence of supervision in this cycle. His presentation serves dual purposes: Supervisor learns just what Teacher has in mind, and Teacher is able to test and increase his own fluency by verbalizing his ideas to Supervisor.

*Robert Goldhammer, Clinical Supervision, Holt, Rinehart, Winston, New York, 1969.

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(c) Rehearsal: In a rudimentary sense, we can imagine
that the simple enunciation of his plans provides Teacher
with a degree of rehearsal for his teaching, at least a
conceptual rehearsal. Additional opportunities exist in
Stage 1 for more thorough rehearsal of instructional behavior.

(d) Revisions: Besides providing Teacher with a chance
to rehearse planned episodes of his instruction, Stage 1
creates an opportunity for last-minute revisions in the
lesson plan.

(e) Contract: The preobservation conference is a time
for Teacher and Supervisor to reach explicit agreements about
reasons for supervision to occur in the immediate situation
and about how supervision should operate. Among other things,
having established what the teacher is after and how he thinks
he feels about the whole business, the question ought to be
raised of whether observation and the rest of the sequence
should take place at all.

STAGE 2: The Observation

The supervisor observes to see what is happening so that he can
talk about it with the teacher afterwards. He generally writes down
what he hears and sees as comprehensively as possible. Instead of
recording general descriptions, the observer should get the stuff
down verbatim; everything everybody says, if that's possible, and as
objective an account of nonverbal behavior as he can manage. Why?--
because in the supervision to follow, the main job will be to analyze
what has taken place in the teaching.

One reason for Supervisor to observe is that, being engaged as
he is in the business of teaching, Teacher cannot usually see the
same things happening as a disengaged observer can. By adding eyes,
the data are increased. Another reason--this also backfires occa-
sionally--is to demonstrate commitment to Teacher, a serious enough
commitment to justify paying such close attention to his behavior as
the observer must.

Another rationale for Stage 2 is that by putting himself in
close proximity to the teacher and the pupils at the very moments
when salient problems of professional practice are being enacted,
the supervisor occupies a position from which he can render real
assistance to Teacher, in Teacher's terms, and according to specific
observational foci (tasks) that Teacher may have defined in Stage 1.

If observational data can be used for developing solutions to problems of practice, then such data can also be employed to authenticate the existence of certain problems, to make sure they are real, and as bases for articulating previously undefined problems.

STAGE 3: Analysis and Strategy

Stage 3 is intended for two general purposes: first, in Analysis, to make sense out of the observational data, to make them intelligible and manageable; and second, in Strategy, to plan the management of the supervision conference to follow, that is, what issues to treat, which data to cite, what goals to aim for, how to begin, where to end, and who should do what.

The analytical component of clinical supervision is intended to make it safer--less whimsical, less arbitrary, less superficial-- than supervision of the past. And particularly when Teacher is trained to participate in analysis of his own teaching, based on the truest and most comprehensive representations of that teaching that can be created, his chances of experiencing profit from the enterprise are most favorable.

Supervisor's next step, after having performed an analysis of the observational data, is to make decisions about how the supervision conference should be conducted.

The principal rationale for Strategy, like that of instructional planning, is that a planned approach toward specified goals by deliberate processes is more likely to work out than a random one.

In a more general sense, if supervision is intended to result in process outcomes as well as in purely technical ones, that is, if it is intended to affect patterns of behavior and underlying psychological predispositions as well as simply to transmit substantive information, then it is more difficult to prepare for supervision than it would be otherwise. Rather than simply having to prepare one's material, as for a lecture, one must additionally prepare oneself for collaboration intended to benefit one's supervisee; both technical and process outcomes depend very much upon one another.

If Teacher is functioning well in supervision, if he is relaxed, intelligent, committed, professionally creative, and functioning autonomously, then Strategy gives him time to order his priorities and to screen issues for the conference accordingly.

STAGE 4:   The Supervision Conference

In succinct terms, the supervision conference is intended:

1.   To provide a time to plan future teaching in collabora-
tion with another professional educator. Perhaps the best
measure of whether a conference has been useful, in Teacher's
framework, is whether it has left him with something concrete
in hand, namely a design for his next sequence of instruction.

2.   To provide a time to redefine the supervisory contract:
to decide what directions supervision should take and by what
methods it should operate (or whether supervision should be
temporarily terminated).

3.   To provide a source of adult rewards. In common prac-
tice, teachers have few opportunities for their value to be
acknowledged by other adults who have professional sophistica-
tion and who know their work, that is, Teacher's work,
intimately.

4.   To review the history of supervision, that is, of the
problems that Supervisor and Teacher have addressed formerly
and to assess progress in mastering technical (or other) com-
petencies upon which Teacher has been working.

5.   To define treatable issues in the teaching and to
authenticate the existence of issues that have been sensed
intuitively.

6.   To offer didactic assistance to Teacher, either
directly or by referral, in relation to information or theory
that Teacher requires and of which Supervisor may have rela-
tively advanced knowledge.

7.   To train Teacher in techniques for self-supervision
and to develop incentives for professional self-analysis.

8.   To deal with an array of factors that may affect
Teacher's vocational satisfaction as well as his technical
competency. The question of what issues of this kind are
appropriate to treat in supervision depends largely upon the
participants' inclinations, the supervisor's special skills
for such work, pertinent situational variables and the over-
riding question of how supervision can be therapeutic (small
"t") without becoming Therapy (large "t").

STAGE 5:   The Post-Conference Analysis ("Postmortem")

The postmortem is the time when Supervisor's practice is
examined with all of the rigor and for basically the same purposes
that Teacher's professional behavior was analyzed theretofore.   In
both instances our principal rationale is that examined professional
behavior is more likely to be useful--for everyone--than unexamined
behavior; that, perhaps, the only truly worthwhile existence is an
examined existence.

The postmortem arises from pragmatic, methodological, and
historical considerations.   First, it represents a basis for assess-
ing whether supervision is working productively, for ascertaining
its strengths and weaknesses, and for planning to modify supervisory
practices accordingly.   In this context, any and all variables are
appropriate to review: supervisory technique, implicit and explicit
assumptions, predominating values, emotional variables, technical
and process goals, and the like.   Second, Supervisor can demonstrate
skills of self-analysis by familiarizing Teacher with the work he
does regularly in postmortem.   In other words, if he chooses, for
example, to have Teacher witness his verbal enactment of a postmortem
in the context of some other teacher's supervision, by this technique
Supervisor could turn the PM to didactic advantage in his supervision.
Third, Teacher's awareness of Supervisor's regular practice of Post-
Conference Analysis should help to offset misgivings that may exist
concerning Supervisor's commitment and the historical disparity
between his professional vulnerability and the Teacher's.

READING D

The Processes of Supervision*

by

Morris L. Cogan

Introduction

This excerpt is adapted from a paper prepared for the super-
visory staff of an experimental summer session providing student
teaching for secondary school interns in the Master of Arts in Teach-
ing Program at Harvard. Since some aspects of both the student
teaching and the supervision were significantly different from most
programs having similar objectives, a few words of explanation may
clarify some of the ideas found in this paper.

1. The practice teaching preparatory to the "solo" teaching
of the internship must usually be accomplished in the six-week summer
session. Three or four interns are assigned to work under the super-
vision of a master teacher. As a result, many teaching performances
are planned and evaluated by the entire group.

2. The supervisory organization comprises the staff of master
teachers, a corps of special (subject matter) supervisors and their
assistants, and a group of general supervisors responsible for the
formulation of policy and the supervision of practice for the entire
staff.

The result of the operation of such an organization of super-
visors, plus the component of the master teacher-interns group, is
the appearance of a kind of team supervision in which as many as 8
persons may take active roles. Under such circumstances the need for
the discussion, below, of "Levels of Supervision," "The Format of
Conferences," and "Some Dangers of Group Conference" will be obvious
to most readers.

Levels of Supervision

From a long series of observations of how the master teachers
go about their supervisory tasks, certain fairly common patterns have
emerged. Perhaps a brief discussion of these will be useful.

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*From Supervisory Behavior in Education by Ben M. Harris,
Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963.

1. _The Inventory of Events_. The tendency for some master teachers to recount to their interns a series of discrete and unrelated events that have occurred in the teaching session, and then to assign cause-and-effect relations to them represents their effort to create the sense of the whole performance through a recital of details. Why such a tendency is so strong is not difficult to understand.

Separate events are easy to record or to note mentally during the class. Then, when the master teacher moves from observation directly to conference period, without planning the conference, without devising a strategy of evaluation, without having made sense of the totality of the classroom events, and without some idea of the long-term planning necessary to improve the intern's teaching, then the almost inevitable outcome is the inventory of events, each event described, analyzed, and checked off as "covered."

2. _The Anecdotal Account_. The anecdotal account, or the treatment of critical incidents, represents a step beyond the inventory. In it the master teacher usually cuts down on the details by stressing important events that mark the turning points of the instruction.

The disadvantage of this method is that it frequently does not picture for the intern the events leading up to the critical incident. Even more serious is the common failure to show the interrelatedness of the incidents themselves.

3. _Pattern of Events_. A third level of supervision is reached when the master teacher attempts to lead the post-teaching conference into a discussion of the interrelations of classroom events. This is an effort to find patterns in the sequences of the teacher's behavior and the classroom occurrences.

If human behavior is patterned, in the sense that it derives from strong themes in one's personality, then it seems likely that these themes will make themselves evident in the patterned behavior of teachers. This simply means that there may be recurrent behaviors of the intern that, brought to his attention in connection with other possible alternatives of behavior, could help him to change his behavior.

An example adapted from an actual class may illustrate the level of "pattern." An intern was attempting to have his 8th grade social studies class arrive at some critically examined generalizations about the characteristics of American heroes. A portion of the discussion went as follows:

<u>Pupil</u>:	Jesse James stole from the rich to give to the poor.
<u>Intern</u>:	Since a robber obviously <u>can</u> be a hero, we had better cross "honesty" off our list of characteristics.
<u>2nd Pupil</u>:	Our heroes come from the common people like Abraham Lincoln.
<u>Intern</u>:	So we can say that one characteristic of the American hero is humble origin.
<u>3rd Pupil</u>:	Billy the Kid . . .
<u>Intern</u>:	(interrupts) Yes, a great gunfighter.
<u>4th Pupil</u>:	Andrew Jackson was a great fighter too. He came from the common people and fought for their rights.
<u>Intern</u>:	Look on page 237 in your text and you will find proof of that. Now, we've had characteristics of common origin, love of common people, personal bravery, and so on. Now Andrew Jackson . . .

Such interchanges took place several times in the course of the lesson. The period had started well, but had ended in inattention and disorder. What is the pattern? The pupils propose an idea, the teacher elaborates it. The pupils make assertions, the teacher finds evidence for them. The meaning of the pattern? It may be that the teacher sees himself as <u>the</u> active person in the classroom transactions. He casts the pupils in the role of suppliers of facts and single ideas. He himself evaluates, elaborates, proves, and draws conclusions.

This is not a great and dramatic insight, but it does help to make sense for the intern of what might otherwise seem to be disconnected events. It permits him to make an informed guess as to why the class became disorderly at the end of the period. But more important, the intern has seen his own behavior and can be helped directly in planning to improve (1) his perception of what the teacher should do, and (2) how to teach from within the implications of this perception.

4. <u>The Constructive Program</u>. The fourth level of supervision grows directly out of the beginnings made in the pattern analysis. The steps in the constructive program of clinical supervision may be set down as follows:

1) Make a series of related observations.
2) Isolate the most important behaviors and the patterns of instruction.
3) Select those that are amenable to change under the conditions of the internship program.

4) Set up a program by which you will help the intern to capitalize on his strengths, correct or compensate for his weaknesses, and develop his own, personal, best teaching style.

Some Suggestions for the Supervisory Conference.

1) Plan the strategy for each conference and for the long-range program.
2) Select details to mention; do not overwhelm the intern.
3) Establish the honest, tough, objective facts of the performance as the baseline for supervisory conferences.
4) Reward successful elements of the performance and build forward from these. The successful performances of the intern may provide one of the models for him to follow.
5) Whenever it can justifiably be done, try to end the conference or the whole program of supervision by leaving the intern still confident that he is at least basically and potentially adequate as a teacher. We cannot create doubt in the intern about his fundamental potential for adequate performance and still realistically expect him to continue to act on suggestions for the development of his teaching competence.

The Format of the Conference

How should the group supervisory conference be conducted at the summer school? Many kinds of organization have proved to be productive for these sessions.

A simple format, and one found occasionally to be useful, develops as follows:

1. The intern who has taught is given an opportunity first to communicate his perceptions of what has happened.

2. He may be encouraged to probe some of his own statements, as suits the strategy developed by the master teacher or another supervisor.

3. The master teacher calls directly on the other interns for their analysis.

4. Opportunity is provided for the other supervisors to contribute, as dictated by the strategy for the session.

5. The next lesson is planned on the basis of the session.

One of the dangers of this format is that the intern who has taught, having committed himself to his analysis, may become defensive when other views are proposed. In addition, the process of calling on the other interns and supervisors in turn may find those who are last in the series "dry" of new ideas and under pressure to say something new even if it must be contrived.

On occasion a straightforward, "didactic" analysis directed by one person and designed as a strategy to bring out a point of view may be productive.

In its essence, the principle for the development of the strategy of the conference must be derived from the needs of the student teacher, the characteristics of the lesson(s) he has taught, and the supervisory resources available. A strategy must be devised that will offer the best probabilities of establishing with the student teacher the kind of communication that is likely to change his teaching performance.

READING E

"Phases in the Improve-
ment of Instruction"

McNeil, John D. _Toward Accountable
Teachers._ New York: Holt, Rine-
hart and Winston, 1971.

Professor Robert H. Anderson at Harvard has pio-
neered in developing programs aimed at improving teach-
ing. Those working under his leadership have employed
a useful four-phase framework or cycle for organizing
procedures in the supervising of teachers. Although there
are differences of opinion about the procedures for use
within each of these phases, there is general agreement
on the value of differentiating stages in the supervisory
act. Initial help in selecting instructional intents and role
clarification of the observers occurs during phase one,
the _preobservational conference._ The second phase is
observation, which demands a recording of the teaching
act. A third phase is termed _analysis and strategy,_ a time
devoted to interpreting the facts collected during observa-

tion and planning ways to share these interpretations with the teacher. The final phase is the *postobservational conference* where there is assessment by both teacher and supervisor of the results of the lesson and where use is made of the analysis in order to formulate subsequent teaching plans including new objectives and changed teaching strategies.

THE PREOBSERVATIONAL CONFERENCE

The preobservational conference between the teacher and those who will observe the lesson occurs at least one day in advance of the lesson to be taught. Because often the teacher will want to change objectives and teaching plans as a consequence of new insights gained from the meeting, the conference is not scheduled immediately before he is to teach. The conference is attended by the teacher and those who are going to observe the lesson or assess its effects, for example, master teacher, principal, consultant, or peer—all are supervisors when engaging in this cycle. A chief purpose of the conference is to ensure that all are agreed on the instructional intents of the teacher and on how evidence will be gathered to show that the intents are fulfilled, that is, what learners will be able to do after instruction that they could not do before, how this change will be manifested, to what degree the learner will acquire mastery of the task. Also, the teacher must specify whether he expects all pupils to reach this expectation, and if not, he should stipulate the modified standards to be exhibited by individuals.

When the purpose of supervision is to improve instruction and *not* simply to judge the competency of a teacher, the supervisor should define at the conference his forthcoming role as a fellow problem-solver, not rater,

during observation analysis sessions. The teacher should know that the supervisor will focus on the extent to which the pupils attain the objective(s) set by the teacher and on describing the interactions between student and teacher that relate to the objective. Generally the supervisor will not observe the lesson from the point of view of other objectives which have not been agreed upon in advance, although in some situations the teacher may want the supervisor to observe learner's behavior without reference to the objective in order that new needs for the pupils can be established and new objectives formed. This special request, however, should be made and accepted at the preobservational conference.

It is much better if the teacher is assured that, when a supervisor observes for the purpose of improving instruction, the teacher is not to be punished if the pupils do not achieve as intended. When emphasizing improvement, immediate success with pupils is less important than helping the teacher (1) recognize that learners have not achieved and (2) acquire a willingness to look at the analysis of the lesson with the idea of planning new instructional strategies. Most lessons are not successful: effecting a change in a learner is difficult. We need teachers who, when confronted with evidence that learners are not progressing as desired, are able and willing to modify their teaching and, in turn, test these modifications. This is a far cry from the teacher who either does not check to see if learners attain objectives or when faced with poor results blames the learners and carries on in the same manner "only louder."

The following are characteristics of a "good" preobservational conference.

1. *Agreement as to what the teacher intends to achieve.* The intents are stated in terms of what pupils will be able to do that they could

not do at the start of the lesson. The supervisor and teacher may not always be in agreement that the objective selected is the best one to teach. When teachers are just starting to participate in preobservational conferences, they sometimes need assurance. They need to learn to trust the supervisor. By way of supervisory strategy, it is recommended that the supervisor focus first upon *instructional deficiencies* (helping teachers find new instructional procedures for the ends he has in mind) rather than focusing upon *curricular deficiencies* (trying to get the teacher to select ends of greater merit). The focus on curricular deficiencies can come in later sessions. With apprehensive teachers, the supervisor will promptly decide not to bear down hard in the first "preob" in getting the teachers to formulate objectives of greater worth. Instead, the supervisor will be interested in seeing how effective the teacher is in attaining an objective with which he feels most confident. On the other hand, teachers who have had two or more conferences should be challenged on their choice of objectives. The teacher should be asked to justify each objective in terms of its importance to anticipated instructional tasks, its relevance to the children at hand, its appropriateness to social conditions today and to those expected in the future, its factual correctness, and the like.

One of the chief values of the preobservational conference is that it helps teachers consider objectives which would otherwise be overlooked. The supervisor need not always know the most important objective which should be taught but should play a "devil's advocate" in getting the teacher to generate more appropriate objec-

tives. The teacher who continues to state objectives which lack validity is a teacher who has a *curricular deficiency* signaling the need for preparation in a subject field and in curriculum development. After conducting a number of "preobs," the supervisor will be struck by the way teachers differ in their expectations as to what can be taught in, say, a 30-minute lesson. At first some teachers state objectives that would be more realistic in a ten-week period or a year's course of instruction. Others state objectives that are invalid because the pupils already possess the competence which the teacher is intending to teach. The latter error is more common, so common, in fact, that a rule should be established requiring the teacher to pre-assess pupils on the objective before the preobservational conference and arrive at the conference with evidence that the learners indeed have not already mastered the objective.

2. *Agreement on plans for collecting evidence that the learners have or have not reached the objective.* At the end of the conference, supervisors and teacher should know how the teacher will collect evidence that the learners have or have not achieved. Usually, this proposal for the collecting of evidence takes the form of giving a random sample of pupils (or the entire class) problems that they could not solve at the beginning and then seeing if they can solve them at the end of the lesson. Some objectives, such as those which call for the learner to display a particular process or way of working rather than just getting the "right" answer, require that three or four pupils be asked to attack a problem after instruction while the teacher and supervisor observe to see if the desired process is exhibited. Evidence that some objectives have been

reached can be found in the *product* which a learner can produce after instruction. Written compositions, for instance, can be examined to see if they subsequently have qualities such as multiple sentence patterns, colorful words (modifiers), and more accurate punctuation. Also, the teacher may elect to sample indicators of the *attitudes* of pupils to see if they are favorable to a newly introduced activity or learning experience. Simply asking the children to write a *yes* or *no* response anonymously to the question, "Would you like to do this again?" may give a clue as to whether pupils have positive feelings toward the activity.

Supervisors and teachers should be careful to note that the test or evidence sought matches the performance called for in the objective. To have an objective which states that learners will be able to properly construct something requires that the test demands that learners actually construct, not merely point to items that are and are not properly constructed. Also, just so there will be no argument after the lesson as to whether the teacher meant that all of the class or one-third of the class would reach the objective, the teacher and supervisor should agree in advance on the percentage of the class who will achieve the objective before the lesson will be considered successful.

3. *Agreement on the role the supervisor will play during observation.* The teacher should know that the supervisor is in the room during the lesson for the purpose of recording teacher-pupil interactions (such as questions and responses), the instructional stimuli presented, and what pupils do when given these stimuli.

At one time there was a rule that the observer should not make notes in the presence of the pupils and teachers. That rule might have been needed when the teacher did not know what kind of data was being gathered or what inferences the supervisor might be jotting down in order to later clobber the teacher. With supervision by objectives the teacher knows that the supervisor is recording those aspects of pupil-teacher exchange that can be seen and heard. He is not recording inferences or commenting about the teacher's appearance (unless such appearance might be a key problem in the attainment of the objective). The teacher must recognize that the more accurate the data collection, the better chance there will be to analyze the lesson and derive alternative approaches in the event the objective is not reached (that pupils do not change as intended by the teacher). Whether the supervisor is writing rapidly and continually to get the classroom dialog down or whether a videotape machine is doing the recording job, the teacher must accept that an analysis of the lesson requires data—observation of the teaching event—and that it is the supervisor's job to collect these data.

Occasionally a teacher will want the supervisor to make specific observations unrelated to the instructional objectives. The teacher may want the supervisor to focus on some aspect of the teacher's personal behavior in the classroom, such as what learners do when the teacher uses certain language in explanation. These special requests should be made at the time of the preobservational conference.

OBSERVATION

An observation should result in data, not just a generalization. The untrained observer confuses two tasks in supervision of instruction: (1) recording what the teacher and pupils do during the instructional session (data) and (2) generalizing the meaning of the actions seen and heard. Many currently used instruments and systems for the study of teacher behavior, such as the popular one promoted by Amidon and Flanders, demand that the observer not record the actual words and actions used by the teacher but make a tally or summary of events that fall within a category of teacher-pupil behavior (Amidon and Flanders, 1963). Differences between generalizations and actual data can be seen below:

Generalization or Category	*Data*
1. Teacher gives instruction.	"Circle the pictures of animals that are not warm-blooded."
2. Teacher rephrases pupil responses.	"Tom meant to say that *some* Scotchmen are tight."
3. Teacher lets a pupil know a response is correct.	"Very good. When you add the 4 it does make 12."

Note that the generalized statements are far less accurate. They are also less useful in helping a teacher see in detail what is happening during classroom interaction. As generalizations, they are economical in that one does not have to look at specific incidents in order to focus upon the teacher's characteristic style. However, the teacher can best accept these statements as generalizations when they are accompanied by the data from which they are drawn.

The usefulness of data cannot be overemphasized. To point out that the teacher spent one-third of a les-

son in giving instruction may be of some importance, but critical analysis will not occur without opportunity to examine the nature of the instruction given. For instance, in the first illustration above, if pupils did not respond to instruction, the teacher and supervisor can use the data to hypothesize why. Did the children not know the meaning of "circle," or was it that they could not recognize positive instances of "warm-blooded?" See also how much more information is contained in the data column opposite number 2. It may be helpful for a teacher to know that he is continually rephrasing pupil responses, but it will be more valuable to know the nature of the rephrasing. Are the rephrased statements the kind that would diminish respect or the self-concept of the pupil? Actual data are necessary to make such inferences. Also, in example number 3 one can see that the data tell us the teacher is giving more than knowledge of correctness of response—he is giving words of praise.

Generalizing and analyzing should be separated from recording of data. Ideally an observer will record all instances of pupil-teacher interaction. A videotaped lesson is one form of such a record. A film which faithfully records verbal and visual responses of participants is a good observation, but many videotapes fail to focus on all pupils or representative samples of pupils. Most observations are in the form of notes, written protocols of verbal interactions between pupil and teacher. The records report what is said rather than what is seen, and there is less attention given to nonverbal behavior such as expressions on faces. Making of records of verbal behavior requires that the observer write fast, perhaps using a short-hand system, for example c for child. After the record is made, the specific responses should be then categorized, generalizations formed, and other interpretations of the data made. When one attempts to analyze and interpret while recording, he will miss valuable data and risk draw-

ing inferences which are neither valid nor comprehensive. Also, if one looks only for data which might support a generalization in a single category of teacher behavior (the category which is serving as an advanced organizer), he is likely to have an invalid picture of that teacher's practices. For example, to concentrate on collecting data that can be categorized as indicators of "teacher use of criticism" is likely to be less valuable than collecting a wide range of data. Comprehensiveness of data allows interpretations about the teacher's habits of criticism as well as other practices which together give a more descriptive picture of that teacher's conduct.

Observation should be more descriptive than interpretive, providing descriptive facts with which the teacher can make interpretations and decisions regarding future practice. Choice of words used in the record can reveal whether one is describing or interpreting. To diagnose your own ability to differentiate statements of description from interpretations, try identifying the descriptive statements found in the list below:

1. The girl is stumbling into the room.
2. The girl has her hands on her face.
3. The teacher is chastizing the child.
4. The girl is ashamed of what she has done.
5. The boy does not like the lesson.
6. The boy is holding the microscope in his right hand.
7. The boy is confused by the explanation.
8. The teacher is talking too much.
9. The teacher has his back to the class.
10. The teacher asked 5 questions beginning with *what*, 1 question beginning with *how*, and none with *why*.

Numbers 2, 6, 9, 10 are descriptive.

Practical Answers to the Problem of Too Much Data

Principals, fellow teachers, and others who should participate in observation and subsequent sessions of analysis often do not because they think it takes too much time. Furthermore, to reproduce in writing what happens during a 45-minute class period is tiring, and there is so much information collected during 45 minutes that one is overwhelmed with data and often despairs of making sense out of it.

The concept of *microteaching* offers a solution to the complexity of classroom observation. Microteaching is real teaching; it lessens the complexities of classroom teaching by reducing the class size, scope of content, and time; it allows the teaching to focus on the accomplishment of specific tasks; it permits one to reveal particular instructional skills and techniques of teaching. Through microteaching, teachers can show their own mastery in using certain curricular materials, or a microteaching lesson can be staged to provide evidence of how the teacher acts with given kinds of students and in the presence of other factors believed to influence one's teaching (Allen and Ryan, 1969). In microteaching, instead of teaching 45-minute lessons, the teacher is asked to select an objective which he thinks can be taught in 5 minutes. After observation, this 5-minute lesson becomes the basis for analysis. Recording of the lesson by observers occurs through videotape, tape recorder, or paper-and-pencil recording. In addition to limiting the lesson to approximately 5 minutes, the number of students involved can be reduced from, say, 30 to 5, and by focusing on the responses of 5 pupils, observers can be more reliable. When starting to learn how to make observations, it is often de-

sirable to begin by observing lessons of short duration and few pupils. Subsequently, lessons can be of longer duration and pointed toward more advanced objectives, and the number of pupils to be taught can be increased, approximating the situation found in more normal classrooms. Some persons may be surprised at what learning can be accomplished in a 5-minute lesson. Insistence on a short microlesson is based on the demand for a highly focused, highly concentrated experience. Five minutes of teaching gives both teacher and observer plenty to consider. The short teaching experience, as opposed to longer sessions, allows for reliable recall of specific instances during the teaching episode and provides a manageable amount of data for practicing analysis of instruction.

Teams of observers offer another way for dealing with the embarrassment of too much teaching to observe. A team can be organized so that each member records only those instances which fall within a given category for which he is responsible, or each team member may monitor the responses of a few specific pupils. Possibilities exist for more sophistication in the staging or selection of lessons to be observed. The supervisor may want to see only lessons dealing with certain levels of objectives (one calling for the learners to recall information, one demanding that learners apply a concept to new situations). Or the teacher may want the observer to record what is happening during instruction to learners with given characteristics (the extremely anxious child, the child who will not compete, or the one who competes but doesn't cooperate). The team system can be economical of time and data-collecting by arranging teaching situations which promise to reveal particular teaching practices, practices which would not be present by chance.

Effects of Observers' Beliefs upon Observations

It is said that most observation systems are unreliable. Brown and Stoffell speculate that this is because the behavior of the teacher is unstable, because the recording practices of the observers are inconsistent, or because observers are unable to agree on what occurs (Brown and Stoffell, 1968). My own view is that the problem lies in confusing interpretation with description. What is called an observation system turns out to be an interpretation of what is going on, not a factual recording of what can be seen or heard. Let me admit, however, that the decision to select certain facts and ignore others will result in factual recording without meeting the criterion of objectivity. For this reason, I argue that it is usually better to record all verbal behavior during the lesson. Brown and Stoffell say their discoveries support the thesis that beliefs of observers influence observation of teachers' classroom behavior. This conclusion rests on their finding that groups of observers who are experimentalists in their educational philosophies and groups of observers who are opposed to John Dewey's philosophy of experimentalism differ in what they "see" when viewing teaching practices. The observers who are experimentalists see relatively fewer experimental teaching practices than do those whose own belief orientation is nonexperimental. It is speculated that experimentalists are looking at less experimentation than they would like to see and that both groups of observers tend to exaggerate those practices to which they are opposed. "Negative" or "bad" practices are the ones which they notice, just as the automobile driver pays most attention to other drivers on the road whose driving practices irritate him, while virtually ignoring those drivers who please him by meeting his expectations.

pectations. Or, it may be that expertise is operating. Observers who are in high agreement with Dewey's expectations are likely to know more about it. Their sensitivity to the concept tends to make them hypercritical of teachers who fail to come up to their high expectations with respect to experimentation, and they tend to be stingy in recording experimental practice. Something like two observers of opera—one who hates opera and knows little about it and one who likes and knows a great deal about it. Both are asked to record specific behavior on the opera stage. The opera lover is likely to be more precise and more demanding in his analysis of the performance than is the opera hater. Even though the whole thing may sound like uncontrolled screeching and screaming to the opera hater, he is likely to respond more kindly to a mediocre performance than is his expert colleague, because he cannot distinguish good opera from bad opera by any standard. Notice that Brown and Stoffel are talking about analysis and judgment as observations. My point is that the judging and analyzing of lessons should follow observation and not necessarily be done simultaneously with observation. Objectivity in observation comes with the recording of concrete, specific behaviors, and the more complete the record, the more objective it will be.

ANALYSIS AND STRATEGY

In the analysis session, one first looks at the results (were the objectives attained as desired?). If the answer is *no*, then the analysis should throw light on why this might be *so*, suggesting new teaching procedures to try and to test, new objectives to reach. If the answer is *yes*, then the analysis might indicate what made the lesson successful as well as point to the direction for subsequent lessons.

Analysis is not teaching but reflection upon the teaching act. An analysis may be as simple as noting whether or not the teacher was standing before a visual display, thereby making it impossible for the pupils to get information necessary for learning. It can also be as complex as applying an analytical scheme requiring special training before use, for example, the techniques for analyses developed by Amidon and Flanders (1963), Bellack (1963), and Medley (1963).

More than 75 systems exist for classifying classroom interaction, many of which are modifications of Flanders' way to record and classify verbal statements made in the classroom. Such systems give information such as (1) who talks and how much, (2) extent of group participation, (3) the emotional climate of the classroom, (4) the kind of thinking that is most evident, and (5) changes in verbal behavior under different circumstances.

The danger in using these systems is that one begins to believe that the presence or absence of a statement in certain of the categories called for is automatically good or bad. When one quantifies the amount of teacher talk to pupil talk in a lesson, he tends to assume that the teacher who talks most of the time is doing something wrong. Actually the proper ratio of teacher to pupil talk is relative to a particular objective and to given learners. There are times when a teacher should talk all of the time, other times when he shouldn't talk at all. Similar conclusions could be drawn for more than a hundred teacher behaviors used in analyzing a lesson. Quantification showing amount of student-initiated questions, teacher use of statements that include judgment rather than fact, teacher's rejection of pupil factual answers or teacher disapproval of pupil interpretation, and so on, should be tested, not prized or abhorred as teaching practices of inherent worth or harm.

Place of Theory in Analyzing Lessons

Man continues to develop his theoretical models for indicating how he thinks teaching should proceed. The task of those engaging in classroom problem solving is not to laugh at nor blindly accept these models but to test them and to use them in drawing attention to factors that are present but which they would not otherwise see. These factors may or may not influence pupil gain. Gagné, for instance, has introduced a model in which he specifies eight kinds of learning (Gagné, 1970). One kind, signal learning, is very simple: the individual learns to make a general response to a signal. Another is multiple discrimination learning, in which the individual learns to make different responses to many different stimuli that resemble each other in physical appearance. Other kinds are termed concept learning, principle learning, and problem solving. It is Gagné's belief that lower kinds of learning in a given field (mathematics, science, language, reading) must be mastered before the higher kinds can be learned. It may be that by gaining skill in the use of Gagné's model one can identify sequential patterns in the presentations of instruction by a teacher which might be reordered to good effect. Because we do not have principles of teaching which are valid in all situations, we cannot with certainty tell a teacher what he should do in a classroom in order to get results. Why then analyze? We analyze to select factors which may help us design new teaching procedures in hope that these new procedures will bring better results. In trying innovative practices in which we manipulate the factors, we validate the practices and show the power of the variable by noting what happens to pupils, not by assuming that the procedures are better because someone in authority says they are better. One should not accept a procedure simply be-

cause someone or some theory holds that the new procedure will work better than a current practice.

True, there are some factors which promise to be more useful in the design of instruction than others. Hilgard has summarized psychological "principles" of potential use in practice (Hilgard, 1967). However, as seen in the examples below, these principles are general statements which do not give sufficient specific direction to a teacher but only indicate a point of departure in analyzing and planning lessons:

1. Repetitive practice is important in learning a skill.
2. Positive rewards and success aid learning.
3. The learner should be active. He should make the responses we want him to learn.
4. It is important to practice a new learning in varied contexts if the teacher expects it to generalize.
5. A learning problem should be presented so that essential features (interrelating parts) are open to inspection by the learner.
6. Goal setting by the learner is important as motivation.
7. Divergent thinking (inventive solutions, creation of novel products) should be nurtured along with convergent thinking (logically correct answers).
8. With some tasks high anxiety learners perform better if *not* reminded of how well or poorly they are doing; low anxiety learners do better if they *are* interrupted with comments on their progress.
9. The group atmosphere of learning (competition versus cooperation; isolation versus group work) will affect satisfaction in learning as well as the products of learning.

10. Some long-range goals affect short-range activities. Thus college students of equal ability may do better in courses perceived as relevant to their majors than in those perceived as irrelevant.

Eclectic Use of Tools

Teachers and supervisors should be eclectic in their use of tools for analyzing instruction, not wed to a single theoretical model. In the absence of a single scheme of instruction that can "work" for the teacher in getting results, it is better to try and test a host of plausible ideas from a variety of sources—experienced teachers, behavioral scientists, psychologists, sociologists, etc. An example of eclectic ideas which may be useful in analyzing lessons appears in Figure 3.

The difficulty of finding any single instructional variable that alone contributes to achievement of pupils is shown in a study by Rosenshine. This investigator checked out the association between (1) teachers who were successful and teachers who were unsuccessful in teaching two 15-minute lessons prepared from identical material and (2) variables developed from research in linguistics and instructional set, experimental studies of instruction, and multivariate studies of the behavioral correlates of teaching effectiveness (142 variables). Only three of these variables reliably discriminated between teachers whose pupils made high and low scores on the common post-test (Rosenshine, 1968). The three significant practices were:

1. Rule and example-rule pattern of discourse. Teacher used a pattern of explanation which opens with a structuring statement, follows it with details, and concludes by restating the statement.

Figure 3 FACTORS THAT MAY BE USEFUL IN ANALYZING INSTRUCTION

Presentational Factors	Kinds of Data
Pupils able to succeed (difficulty of lessons and concept of mastery)	Illustrations from the lesson that pupils cannot respond correctly, can respond correctly (error rate).
Opportunity to practice objectives	Describe incidents where pupil has opportunity to practice a task identical to that called for in the objective.
Level 1	Describe incidents where pupils are asked to solve problems identical to one given by teacher in his explanation.
Level 2	Describe incidents where pupils are asked to solve new problems of the same class of problems with which the lesson deals.
Knowledge of results	Incident and number of times teacher gives: 1. indication of correctness or incorrectness of pupil responses 2. information as to what it takes to have a correct response
Prompting	1. Incidents and number of times questions are rephrased when pupils do not respond appropriately. 2. Incident and number of times teacher gives hint as

Figure 3 (continued)

	to the correct answer or number of examples.
	3. Incident and number of times teacher gives review questions.
Pacing	Record number of new concepts or skills introduced in session.
	Record number of pupils who are able to finish tasks given. Record latency of pupils' responses.
Ratio pupil-teacher talk	Each three seconds observe (record) whether pupil or teacher is talking—later compute the ratio.
Ratio pupil-teacher initiated questions	Number of times pupil initiated the contact; number of times teacher solicited the contact.
Preassessment	Number of pupils who do not already possess stated objectives as indicated by pretext or other evidence.
Perceived purpose	Evidence that pupils can state reasons for the learning task. Evidence that pupils can give examples of what they will be able to do at the end of the lesson.
Rule and example pattern	Record incidents when teacher did and did not state principle to be learned, gave examples

Figure 3 (continued)

	of principle and restated the principle.
One-sided vs. two-sided argument	Record teacher's arguments in discussing an issue.
Embellishment, for example, humor	Describe instances of embellishment.
Teacher's Personal Factors	
Nonverbal affect, for example, touching pupil	Describe.
Movement and gesture	Describe.
Reference to students' interest outside of class	Record what teacher said.
Number of alternative activities available, such as cooperative and competitive games; pupils free to select own activities	Describe.
Teacher expansion of student ideas	Give examples.
Ratio of praise to criticism (but be careful —how do you know it was seen as praise—you must have data of what teacher did or said and observation of pupils' response)	Give examples.
Linguistic Factors	
Length of words used	Evidence from teacher's statements.

Figure 3 (continued)

Prepositional phrases
used

Use of personal
references, such as "I"

Use of negative
statement, such as
something that is not

Use of explaining links,
such as "because, if-then,
consequently"

2. Explaining links. Teacher explained frequently
by using prepositions and conjunctions which
indicate the cause, result, means, or purpose
of an event or idea. Words and phrases such
as "because," "in order to," "if . . . then,"
"therefore," and "consequently." The effective
teachers used more of these words per lecture,
per minute, and per 100 words.

3. Gesture and movement. Gesture was defined
as movement of the arms, head, or trunk, and
movement was movement from one fixed place
to another.

If observation shows that a teacher is not getting re-
sults desired and is not using any of the three practices
above, it might be worthwhile to see if learners start to
achieve more after the teacher tries giving explaining
links, using more rule-example patterns, and displaying
gesture and movement.

Variables Useful in Analyses

When the purpose of analyses is to derive new ob-
jectives and new teaching strategies, some instructional

principles have been found useful because they apply to
the teaching of many different objectives and many kinds
of pupils. These principles can be easily acquired, and
their application will reveal possibilities for changing
one's sequences of instruction as well as one's instructional
objectives.

Appropriate Practice Supervisors should look at the
data to see if the pupils had opportunity to practice the
kind of behavior implied by the objective. If a teacher of
mathematics, for instance, wanted the pupils to be able to
solve word problems, did pupils practice with word prob-
lems and not engage in continuous practice on equations
alone?

Knowledge of Results The learner should be given an
indication of whether his responses are correct. Does the
data show that there was "feedback" to tell the learner
whether he was on the right or wrong track? Was the pu-
pil given a clue to what his efforts were producing in order
to increase the likelihood of improvement?

Identifying Prerequisites We assume there are some
subject matters that are best learned when presented in a
hierarchical order, for example, when during a lesson on
multiplication, there is evidence that learner(s) cannot
add, it makes sense to suggest that the teacher formu-
late and teach to a new objective in addition before di-
rectly pursuing the problem of teaching multiplication.
Another assumption is that learners find participation in a
learning task rewarding when that task is itself reward-
ing or is associated with an activity or with someone by
whom the learner has been rewarded in the past. When
data from an observation indicate that learners are
"turned off" by an instructional activity (regard it as an

aversive stimulus), it may be helpful to get information on what the learners have found previously rewarding and use this as a means to equip the learner with a more favorable attitude or predisposition, as a prerequisite to the task at hand.

Strategy for Planning the Postobservational Conference

When planning strategies for dealing with a teacher, a team of supervisors already know the discrepancy between what the teacher stated pupils should achieve (original instructional intents) and what pupils actually achieved. Supervisors also have a record of what pupils and teacher said and did during instruction. Data in these records have been looked at from a variety of ways —the extent to which learners had a chance to practice the behavior called for in the objectives, what the teacher did when pupils evidenced confusion and error, indications of harmful rivalry between classmates, and so on. As a consequence of these analyses, some new objectives might be warranted. Also, the analyses will probably suggest changes in teaching procedure that promise to produce better results.

Questions of strategy include: Will we share the data and analyses with the teacher by letting him draw his own implications and formulate for himself new objectives and procedures? Do we want the teacher to provide any data that we might not have or to tell us his own feelings about the lesson? Why?

Are we going to follow the old-time admonition "tell him something nice about his teaching and then let him have it"? If we are trying to avoid giving personal judgment of the teaching and prefer to let results in terms of

pupil progress determine "goodness" and "badness," do we neither praise or condemn what we saw? How much of the analysis should be shared in the first conference? Is it better to select one aspect of the instruction and do a thorough job? Can we treat several observed factors without overwhelming the teacher, making it difficult for him to reflect and act upon the content presented? What part of our analysis points to a *curricular* problem—inappropriate objectives? What part has implications for *instructional* improvement—new teaching procedures? Are we all agreed that no one will make any comment about the teaching without having data available to back up the statement?

How can we be sure that the teacher hears the information we believe important for him to have? Will we assign responsibility to each person to share particular information with the teacher? Is there anyone on the supervisory team who is reluctant to share information with the teacher even if it is based on facts because he fears it will make the teacher angry? Do we believe that a teacher knows when a group of supervisors is not "leveling" with him? If a teacher has his own evidence that a lesson was not successful, will he not lose confidence in those who pretend that all was "rosy cozy"?

POSTOBSERVATIONAL CONFERENCE

Evidence that a good postobservational conference has occurred is seen when the teacher leaves the conference with new objectives he wants to try to achieve, new instructional procedures to try out, and plans for checking the results that follow implementation of the new departures.

During the course of the conference, the teacher

should be given opportunities to hear the point of view of others about the teaching act under discussion. However, these opinions will not reflect the personal outlook of the supervisor independent of concrete observations. The theory expressed will be a response to the data, data from which the teacher and other supervisors may derive different interpretations. The validity of the points of view will be tested in the classroom as the teacher agrees to follow suggestions and to note the effects of these suggestions when acted upon with pupils.

The following is a brief summary of some of the chief characteristics found in the four stages:

Preobservation Phase
1. Evidence is presented from preassessment that learners cannot perform the task.
2. Relation of objective to long-term objectives, to learner, to other factors is given.
3. The objective is clarified, and a way to measure change in learner is proposed. There is agreement on the teacher's criterion of success.
4. Team members clarify what their future roles will be during observation, analysis, and postobservational conferences.

Observation Phase
1. Data are collected. There is more stress on recording what can be seen and heard than upon making a judgment.
2. There is focus on learner responses and actions initiated by learners. Attention is given to describing presentational variables, such as questions posed by teacher.
3. Evidence of changes in learners (as agreed upon in the preobservational conference) is collected.

Analysis and Strategy
1. Results of the lesson are compared with previously stated desired results.
2. The lesson is analyzed. A number of instructional factors and principles are considered, such as the principle of appropriate practice.
3. Generalizations are formed from supporting data (no generalization is permitted without data to back it up).
4. A plan for conducting the postobservational conference is formed—for example, responsibility is given to team members for sharing data and inferences with the teacher; attention is given to the teacher's own expectations from the team; allowance is made for the teacher's own analysis of the lesson.

Postobservational Conference
1. The focus is on results attained versus results desired.
2. New objectives are derived from results, data, and inferences made during observation.
3. New teaching strategies (hypotheses) are considered.
4. The teacher indicates what strategies will be acted upon and validated in subsequent lessons.

READING F

Two Sample Microlessons*

by

Thomas B. Gregory

Example Microlesson: 5th grade social studies and science

Verifying Hypotheses

At this point your students hopefully have at hand several possible explanations for the incongruity or solutions for the problems they have encountered. The next step is for them to verify the correct or best hypothesis. In such a situation, a useful teaching strategy may be to not teach. Staying out of the discussion as much as possible allows students to make their own mistakes and find their own solutions.

The point during the microlesson at which the correct or best hypothesis is verified, seems to make little difference. The climax should probably come shortly before the end and you may wish to guide the verification process toward this outcome by having students work with some of the "incorrect" hypotheses first. There is, however, nothing wrong with verifying the correct or most appropriate hypothesis at the outset. If one alternative is clearly more feasible than the others, students may view a delay in verification of it as a phony attempt to avoid the obvious. Early verification of the correct hypothesis is advisable under such circumstances. Your students can then examine the other hypotheses to determine why they are unacceptable or less appropriate.

Verification procedures are usually best dictated by the nature of your subject area as well as the topic of your microlesson. One reason for teaching for process (problem-solving) objectives is to get students to think like scientists, mathematicians, linguists, artists, historians, etc. Encourage students to use the methodology of your subject area. Too little attention to process has been characteristic of the teaching of most subjects even at the undergraduate level. You may therefore be uncertain of what your discipline's methodology encompasses. Your teaching laboratory instructor can be of assistance in this case.

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*Excerpted from Encounters With Teaching by Thomas B. Gregory, Prentice-Hall, 1972.

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Stating the Principle

Another of your objectives for this microlesson is to help your students make a formal statement of the principle that reconciles the incongruity or solves the problem. Besides providing effective closure for your microlesson, having your students state the principle requires them to pull together any loose ends that may still be dangling. The activity also becomes a very effective summary since it is provided by your students. Having them state the principle is also important because it is yet another way for you and your students to check their comprehension of it.

Dialogue	Commentary
(T. reviews work the class has been doing with ancient civilizations and then starts describing the mystery surrounding the huge stone structures of Stonehenge, England. T. describes the general kinds of tools with which the people had to work and presents the problem.)	T. sets constraints (ground rules for the search).
T: You are the people of Stonehenge. Using only simple tools, how would you go about erecting two pillars and placing a huge stone across their tops?	
S: Now what do we have to do? I don't understand.	
T: You need to build an arch that is going to look like this (illustrates, using 3 wooden blocks on pile of sand), except you can't lift the stones up like this because you have nothing to lift them up with. You have no cranes or tractors or other machinery. You do have something resembling a shovel, and an axe, and probably a knife.	T. tries to clarify task. T. uses concrete objects to aid concept acquisition and simulate reality.
S: How are we going to do it then?	

	Dialogue	Commentary

T: That's the problem. How are you going to go about building your arch? (pause) Mary?

T. prompts student.

S: Get a horse.

T: What would you do with him?

S: A horse is stronger than I am.

S: You might lift up the stone with a lot of horses.

S: If you tied it on the horses, they could.

T: How could you lift it?

T. tries to get S. to more accurately verbalize their intent.

S: Well, if you tied something around the stone, then rode the horses the other way, then it would lift it up in the air.

T: (silence)

S: It would just drag.

T: (silence) Tim thinks it would just drag. Why don't you try to show him how you would do it, Mary? Here's some string. You can pretend that it's rope and show us.

T. encourages S. to illustrate what she is having trouble verbalizing.

S: Well, if you tie it on here (pause). Well, if I tied it there and had the horses pull that way, it would go like that (illustrates by stopping base of pillar from sliding on sand and gradually raising the tied upper end with the lateral force of the horses).

Dialogue	Commentary
T: That's definitely one possibility, isn't it? Are there any others? What if you didn't have any horses? Or what if you didn't have any rope? Janice, you look like you've got an idea.	T. reinforces contribution and calls for additional hypotheses. T. sets additional constraints.
S: Well, I just thought if you had something, you know, to keep the bottom pulled up somehow but I just don't know how to go about that. I thought if you got something underneath it and you tried to pull it up.	
T: What might you do if you get something underneath it? How might you lift it a little bit at a time? Let's see you do it--go ahead. Get some help from the other students.	T. gives S. cues. T. prompts S.
S: What about if you lifted it up a little bit and put something underneath it?	
T: All right. What would you lift it with?	T. asks for principle to be incorporated.
S: How about a lever?	S. identified principle.
T: Why don't you try that?	T. avoids verifying hypothesis, and asks S. to do it.
S: Well, you've got to have something else down here that will go up like that.	
T: Yes, okay. Let's assume you do. You can put a small stone there to act as a fulcrum. Now what do you do? You're holding it up along with a lot of other men.	

Dialogue	Commentary
S: And somebody could put sand underneath there.	
T: Let's do it. That was heavy, wasn't it, Janice?	T. tries to humorously increase reality of task.
S: Yeah. Couldn't you just keep doing that and keep lifting it up a little bit at a time?	
T: Let's try that; workers, go at it (pause). Okay, it's leaning there. Can we keep going now? Can we raise it up a little more? Eventually we would get it standing there like that. That's definitely another possibility.	T. reinforces contribution.
S: We could keep doing that for the pillars but what about the ones that go across the top?	S. identifies next step in problem.
T: That's an excellent question. Let's assume we now have both pillars standing. How do we get the third stone on top of them? It's called a "lintel" incidentally.	
S: (After several aborted suggestions) You could push all the dirt up to the top and then pull it up.	S. discard their own hypotheses after wondering them out loud.
T: Can you show us what you mean, Sue?	
S: We have to make the hill steep so we could pull it up?	
T: Oh, you would make a hill? Where?	
S: All around the pillars—cover them up.	

Dialogue	Commentary
S: Yeah and then have a whole bunch of men drag it up on top and put it on the other two stands.	
T: Fine, do it (S. illustrate procedure). Now what do you do?	
S: You would have to move all the dirt out.	
T: Go ahead.	
S: Would you do it like this?	
T: They could have, couldn't they? Which of the two ways we've worked with seems most likely to be the way that Stonehenge Man built his arches?	T. avoids personally verifying hypothesis, but asks S. to do it.
S: The second.	
T: Why?	
S: Because the first takes more things--ropes and horses.	
S: You can't build the top that way anyway, so why use it at all?	
T: Anyone think differently? (pause) Let's test our conclusion a little further. Now, if you can move the stones from somewhere else to here, can you do everything else?	
S: We just did, didn't we?	
T: Did you?	
S: Yes.	

Dialogue	Commentary
T: I think you're right. Can anyone identify how we increased our power so that we could build our arch?	T. asks for formal statement of principles used.
S: The lever?	
T: What do you mean?	
S: We used a lever to lift up the heavy stone a little at a time.	
T: How else did we make our job easier?	
S: The sand. We piled sand under the stone after we lifted it.	
T: The sand stopped it from coming right back down while we moved the lever, didn't it? (silence)	
S: We used the sand to build the hill, too.	
T: Was the hill important?	
S: It allowed us to inch the stone up on top.	
T: We used this same principle once before. Can anyone remember what it was called?	

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Example Microlesson: Kindergarten science

Dialogue	Commentary
T: All right, class, please clear your desks. (pause) Anyone know what a specimen is?	T. begins assessing entering behavior through questioning.
S: (Several incorrect guesses are offered.)	
T: Well, that's a very difficult word, but a specimen is a true-to-life example of something. It's a word used in science and I have a specimen for each of you. (Opens small carton.)	
S: Worms!	
S: Ugh! (Series of varied exclamations from class.)	
T: (Gives each student a worm.) You don't have to touch it, just keep it on the paper towel.	
S: (Much comment from class, teacher allows initial excitement to subside.)	T. permits S. to do their own experimentation and manipulation, but observes them closely as they do so. Later, T. decides they are ready to continue.
T: Okay, class, now while you look at your worms, I'm going to ask you some questions about them. Asher, can you tell me anything special about your earthworm?	T. begins establishing a learning set--describing worms.
S: He's got dirt on him.	
T: What is he doing compared to Joan's earthworm?	T. asks for similarities within their populations of worms.
S: He's a . . . They are both doing the same thing.	

Dialogue	**Commentary**

T: And what's that?

        T. begins refining learning set--describing worms' movements.

S: Trying to see where they are at.

T: Why do you say that?

S: They're crawling all over the paper.

T: That's right, they are, aren't they? Hershel, what is your worm doing?

        T. reinforces answer involving movement.

S: He's wiggling.

T: Very good. Are all your worms moving?

S: (Several students say yes.)

T: Very good, now I have some questions I want to ask you and I know you will be able to answer them.

        T. tries to build confidence in their capabilities.

How do you move? (pause) Diana, how do you move from place to place?

        T. asks S. to transfer descriptions of movement to other animate objects.

S: I walk.

T: You walk.

S: Sometimes I skip.

T: Joan, do you walk?

S: I walk mostly.

T: What parts of your body do you move? Hershel, what parts of your body do you move when you walk?

S: Your arms.

	Dialogue	Commentary

T: Anything else?

S: Toes, your feet.

S: You move your whole body.

S: How does the worm move?   S. asks about differences in modes of movement.

S: He doesn't have any feet.

T: Are you sure?

S: I don't see any feet.

T: What is the answer to Joan's question then? Be careful of your worms.

S: By wiggling forward.

T: What do you mean, Asher?

S: He kinda skootches along.

T: Yes. We walk and worms wiggle. Let's see how many different ways we can think of that animals move. How many other ways do things move besides walking and wiggling?

Commentary for last exchange: Learning set--describing different modes of movement-- is established. T. presents S. with problem-- classifying modes of movement.

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READING G

Excerpted from Harris, Ben. Supervisory Behavior in Education. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

A NON-DIRECTIVE APPROACH TO SUPERVISION

The 1960-1961 school year began with a large number of teachers needing special assistance at the Vallecito Elementary School. Owing to teacher turnover, an increase in the number of faculty members, and the general shortage of teachers, 14 of the school's 32 teachers appeared to need special help, at least at the beginning of the school year. Of these, eight were non-degree teachers and an equal number were new to this school. Two of them were teaching for the first time.

Keeping in mind the special needs of the faculty, a supervisory program was planned for the current school year. Special emphasis on the teaching of spelling seemed in order, because new spelling textbooks

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were being used, and they presented a slightly different approach to the spelling program. In addition to spelling, the reading program was emphasized in working with the eight teachers new to this school.

Supervisory Planning

An evaluation of the supervisory program made toward the end of the first semester indicated the need for more intensive assistance for a small group of teachers who had requested additional help. An investigation was made of new techniques being used which might be helpful. A study of Carl Rogers' *Client-Centered Therapy*[1] suggested some possibilities for applying some principles of non-directive counselling to the supervision of teachers seeking help. The next step was to formulate a program in which the supervisor could experiment with this technique, using only a few teachers.

The plan formulated was based on the premise that teacher improvement can be achieved by critical self-analysis when accompanied by a personal desire to do better through one's own efforts. For this reason the supervisor decided to assume the role of a process stimulator while working with one teacher in this type of a supervisory program.

The Teacher. Selected for this study was Mrs. Mabel Wills, a young second-grade teacher who had demonstrated an interest in self-improvement.

Teaching for a second year under an emergency certificate, Mrs. Wills had only 45 semester-hours of college work, 12 of these in elementary education. She was most interested in becoming a professional second-grade teacher. She worked equally well with all types of students, was extremely patient and understanding, and seemed to adjust fairly well to changing situations. She seemed capable of learning quickly and easily.

Needs and Problems. Mrs. Wills above all lacked experience. Having taught for only a little over one year, she had little in the way of experience on which to draw in planning the instructional program. She lacked formal preparation in both principles and methods of teaching. Lacking in both experience and training, Mrs. Wills seemed to rely on imitating a conglomeration of teaching methods and learning activities used by other teachers. Some ideas she borrowed from fellow teachers much less competent than herself though more experienced. To Mrs. Wills a teacher's manual served not as a guide and an aid in the formation of an instructional program; it became a rigid mandate from which she dared not deviate.

[1] Carl R. Rogers. *Client-Centered Therapy*. New York: Houghton Mifflin Company, 1951.

Although Mrs. Wills had good discipline and the children had a certain amount of freedom, the teacher was the dominant figure in the classroom. Almost all of the learning experiences were presented directly by the teacher.

Mrs. Wills lacked confidence in her own abilities. She worried about her ability to become a good teacher despite reassurances from her principal.

When asked if she would care to participate in a program to help her improve, her assent was quick and enthusiastic. Her only reservation was that she felt so incompetent that she was sure that little satisfactory results could be achieved.

Procedures

The proposed program was to consist simply of a series of classroom observations, each to be followed by a teacher-supervisor conference.

The classroom observations were made at times requested by Mrs. Wills. The supervisor sat through each lesson and made notes of significant items concerning the teaching and the learning situation. A tape recording was made at the same time. This permitted the teacher to listen to the taped lesson and make additional notes concerning the class. The public address system was used for recording purposes so as not to disturb the class.

The teacher and supervisor met following each classroom observation and discussed the lesson previously observed and recorded. The supervisor made every effort in these interviews to use non-directive counselling techniques while discussing the lesson. He tried to create a sympathetic atmosphere and to mirror back the teacher's statements and to encourage self-analysis as an important first step in identifying the problems. These interview sessions were recorded to permit further analysis in identifying problems, as well as to enable the supervisor to evaluate his use of the non-directive techniques.

It was hoped that extended use of these activities would lead to teacher understanding of the problems she faced and help her take remedial steps.

The Spelling Lesson

With planning sufficiently complete and all the necessary tools at hand, it was felt that the stage was ready for proceeding with this program of supervision. The first lesson observed and recorded was taught on January 16.

This lesson consisted of a review of the first six units in the spelling book. The lesson was designed to serve as an exercise and a test in identifying beginning consonant sounds, short vowel sounds within a word, and final consonants.

Observer's Notes. The following notes were made during the class period by the observing supervisor while the tape recorder was recording in the office.

1. EXCESSIVE USE OF SARCASM. At various times the teacher resorted to the use of sarcasm in correcting the children. The three uses listed below were noted:

"Joe, you won't find the answer up here; look in your book." This was said to a child that obviously did not understand a question and kept looking at the teacher while the other students scanned the book for the answer.

When instructed to close their books, a number of students placed them in their desks. "I didn't say anything about putting them up, did I?"

When various students replied to a question directed at Lupe, the teacher commented, "There is only one Lupe in the room."

This use of sarcasm had not been noted before in this classroom.

2. CLAPPING RHYTHM. In teaching beginning sounds of words, the teacher used a clapping game which the students seemed to enjoy. The teacher wrote a beginning sound on the board, such as "g," and recited a list of words. As she said each word, the children were supposed to clap if it began with the same letter as the one written on the board. If the word began with a different letter, the children were to remain silent. There were quite a few errors made by the children even though they seemed to know the sounds. In calling out the words, the teacher set a rhythm and the children responded with clapping in rhythm rather than listening to the beginning sounds.

3. CONFUSION OVER SOUNDS. Reviewing vowel sounds seemed most difficult for the children owing to the frequent use of examples containing the schwa sound rather than the vowel sound which the teacher was attempting to demonstrate.

4. ADEQUATE DIRECTIONS. Several students doing the wrong thing in the exercises points to the possibility that they did not understand the directions to the activities.

5. PRONUNCIATION ERRORS. There was much interchange between "sh" and "ch" sounds by the students; "mush" for "much"; "wich" for "wish"; and so forth. Teachers in this predominantly Spanish-speaking community were generally very conscious of this. Mrs. Wills did not seem concerned about it.

Teacher-Supervisory Interview No. 1. Immediately after school on

the same day the lesson was recorded and observed, the teacher and the supervisor met in the office and listened to the recording. Both used pencil and paper and made notes as they listened to the tape. Up to this time there had been no discussion of the lesson. After listening to the recording, the teacher and the supervisor discussed the lesson.

At the beginning of the discussion the teacher was extremely nervous. The presence of the microphone on the desk may have disturbed her. As the conference progressed, she seemed to relax, however.

The first important insight gained from this study came from the first exchange of ideas:

SUPERVISOR: "Now, in the light of the different aspects of the lesson that we listened to, what is your opinion of the class that you taught this morning?"

TEACHER: "Well, I am sure that they all know the beginning sounds of the lesson."

Here the supervisor's meaning was not conveyed to the teacher. The supervisor used the word "class" to mean the lesson taught. The teacher interpreted the word "class" to mean the group of students that she teaches. The teacher was evaluating pupil progress rather than her own teaching.

On several occasions the supervisor pushed the conversation into topics which the teacher did not seem to want to discuss. This produced silence as well as extremely apologetic responses from the teacher. For instance, the teacher had mentioned the children's difficulty in understanding her pronunciation. The supervisor suggested giving a stronger emphasis to the sound being presented:

SUPERVISOR: "Do you think something like that (giving stronger emphasis) would help?"

TEACHER: "Well, I'll try. . . . When I'm teaching the class, I do try!"

On other occasions the strong phrasing of a question produced a similar reaction. Mrs. Wills suggested the use of repetition of vowel sounds for additional emphasis:

SUPERVISOR: "Who recommended that procedure?"

TEACHER: "No one. I just did it slowly so that . . ."

Of significance in both cases is the teacher's apparent need to defend herself against the supervisor's probes.

In the latter part of the interview, the supervisor probed to get the teacher to discuss some of her techniques and attitudes. Several attempts were made to guide the conversation into the area of the sarcasm noted in the classroom:

SUPERVISOR: "I noticed a phrase that you used. I wonder if you noticed it on the tape recording. For instance, 'Joe, you won't find the answer up here; look in your book.' What did that imply?"

TEACHER: "He's a daydreamer, and he sits like this (DREAMY LOOK) all day long. He has yet to complete a paper, and he was looking around the room. I wanted him to get his eyes and his mind back on his book."

SUPERVISOR: "Did it accomplish it?"

TEACHER: "For the minute it did, and then his eyes were in the back of the room. (PAUSE) He is just a daydreamer. . . . I just can't keep his mind . . . or make him do his work."

A second attempt was made shortly to bring Mrs. Wills to consider her use of sarcasm:

SUPERVISOR: "I notice another phrase that I wrote down, 'There is only one Lupe in the room.' Do you remember hearing that on the tape?"

TEACHER: "Yes."

SUPERVISOR: "What brought that about?"

TEACHER: "I asked Lupe to tell me the beginning sound of a word, and about six pupils yelled the answer, so I reminded them that there was only one Lupe and only one should have answered the question."

A third probe was made into this area:

SUPERVISOR: "I've got another statement here that you made: 'I didn't say anything about putting them up, did I?' That produced a big response from the kids. Do you remember to what that was related?"

TEACHER: "Yes, I wanted them to close their books so that they wouldn't be trying to look through it, finding any of the other answers that they could have gotten from the first part of the book, and the minute I said, 'Close the book,' books go into the desk. I needed them for later work."

In all three of these instances Mrs. Willis failed to realize the point being insinuated by the three probes and responded in relation to the activities that prompted her remarks. Her focus was on the behavior of the students. She was resisting analysis of her own behavior.

This first interview conference contained a long discussion centered around the inability of the students to differentiate between the various vowel sounds. The conversation highlights this as a real problem as the teacher sees it. The students, for the most part, are reading at the first-grade level. All but two of the students are learning English as a second language. Being unable to differentiate between closely related vowel sounds in order to spell words correctly is not very surprising. Still, the teacher was most sensitive about this problem:

TEACHER: ". . . I am not quite sure that they know their vowel sounds.

As I was walking around the room, I noticed that some didn't understand the vowels, especially the 'a' and the 'e'."

SUPERVISOR: "Was that while you were teaching the class, or had you noticed it beforehand?"

TEACHER: "I had noticed it beforehand. . . . I had hoped that they had all learned them by now."

The children's handicap in distinguishing these similar sounds was further accentuated by the teacher having a slight pronunciation problem. Being from the South, she had always pronounced *ten* as "tin" and *pen* as "pin." The teacher was unaware of her error in pronouncing these words. The following excerpt illustrates this problem:

SUPERVISOR: "Are those the only sounds with which they are having difficulty?"

TEACHER: ". . . Occasionally the 'e' and the 'i'. But now, I kind of blame the book for that. For example, the word *pen*, as in *fountain pen*, they use that to illustrate the (short) 'e' sound, and I just don't get it. I have to mispronounce it because I say 'pin'. Now is this a 'pin' or a 'pen'? . . . And the number *ten*. They have it here with the 'e' sound, 'ten'. Now it might be me."

SUPERVISOR: "I would think that it was part of your language background, coming from the deep South."

TEACHER: "That's what I thought, but I still can't get any 'e' in 'ten'."

A Reading Lesson

At the invitation of the teacher, the supervisor visited the class a second time on January 19, 1961. The teacher wanted the supervisor to observe a reading lesson.

Observer's Notes. She was working with a group of children (about 15 of them) in a first-grade basal reader. As mentioned earlier, the children were academically retarded owing to a language handicap at the time of entry into school. The lesson was from pages eight to ten, and is outlined as follows in the teacher's manual:

I. Preparation
   A. Setting the scene—Review of previous part of the story
   B. Introducing new words: *black, yellow, night, fire, wet*
II. Reading and discussion
   A. Silent reading
   B. Talking it over
   C. Oral reading

The teacher had sentences on the board in order to introduce the new words. Most of the sentences were taken from the teacher's manual for this book.

The lesson was interesting and participation was good. The teacher had an easy way with the children, and they seemed to enjoy her teaching.

The supervisor noted three things that could be discussed in the follow-up interview:

1. The teacher reversed the recommended procedure by introducing the words out of context and then having the students use them in a sentence. According to the author's recommendation, she should have used them in the sentence first.

2. The second item noted was the tendency for the teacher to dominate the oral activities. Since the students had a language handicap, it might have been desirable to encourage them to do more of the talking. Little allowance was made for student participation beyond the answering of a few questions. Even in cases where the child did not know the answer, the child was not encouraged to talk about it, though he probably needed the conversational experience more than the other children. The following quotations from the lesson illustrate this problem:

TEACHER: "Where did Tommy go? Do you remember that, Cruz?"
CRUZ: "He . . . go . . . to the . . ."
TEACHER: "Dan?"
DAN: "He went into the house."

Many other examples of this were evident, particularly in cases where the child hesitated before answering, did not know the answer, or failed to recall the phrases necessary in answering the question. Mrs. Wills was inclined to move along quickly to another student.

The sarcasm that was so prominent in the first observation was entirely absent in this session.

Teacher-Supervisor Interview No. 2. Soon after this classroom observation, the teacher and the supervisor listened to the tape recording. The teacher again made notes while listening to the tape. After playing back the complete tape, the supervisor discussed the lesson with the teacher, again endeavoring to use a non-directive approach. The entire conference was recorded.

Having had little prior success in getting teacher recognition of major problems, the supervisor attempted to have the teacher search for minor problems in the hope that in identifying and discussing these minor problems the teacher would probe back to their common sources in some of the major problems.

The supervisor was attempting to show the teacher the need for pupil

conversation in the classroom, since this is about the only time that the children would have opportunities to speak the English language. In doing this the supervisor attempted to establish a relationship between the children's problem and the teacher's recognition of a personal pronunciation problem.

SUPERVISOR: "You . . . have indicated that you don't pronounce the words the same way that Northerners do. . . . If that is the case, what can you do about it?"

TEACHER: "More practice. Even at home. Here I do try to say the words clearly . . . but when I get home, I'm with my husband, who is also from (the South), and the others around there, and I just go back to my everyday language. . . . If I could speak correctly at home, I could get into the habit. . . ."

SUPERVISOR: "Here is a parallel situation. . . . You say you have a pronunciation difficulty, and the last time that we talked about this in connection with spelling, you said that the children are having a similar problem, such as pronouncing 'alephant' for *elephant*. Is this in your mind a parallel situation?"

TEACHER: "I think so. . . . Very few of them speak English at home. Their English is just what they get from eight o'clock until three o'clock."

SUPERVISOR: "How can this (problem) be remedied?"

TEACHER: "I think a study of the consonants. . . ."

Although the teacher came very close to the identification of a classroom problem, she did not identify it as such but rather as a minor pronunciation problem requiring a specific remedy related to "the consonants." Although she could see the relationship between her problem and the students', she failed to diagnose it as a need for additional supervised experience involving planned conversational activities in the classroom.

Another Reading Lesson

In assessing the progress in this supervisory program, it was decided that the teacher might profit from having the tape recording and studying it alone. This would serve the double purpose of giving the teacher more of an opportunity for self-analysis and also lift the burden of responsibility for this analysis from the supervisor to the teacher. The supervisor could use his notes from the classroom observation for discussion purposes. Classroom observation number three and the follow-up interview were carried out with this plan in mind. The third lesson observed in this series was a basal *Observer's Notes.*

reading lesson. The teacher followed the manual very closely in developing the lesson. The following notations were made by the observing supervisor:

"1. The teacher did a good job of teaching the lesson. Student interest and participation were high. It is gratifying to see so much progress being made, both in English language development and in reading.

"2. The lesson is still too much teacher-dominated. It is felt that much more progress could be made if the children were encouraged to participate more actively in the classroom discussion.

"3. The teacher introduced new words as prescribed in the manual. The first time the children saw the words, they were in context.

"4. The teacher varied her pronunciation of some of the words. *Around* was first introduced with a beginning long 'a' sound, then used in context with a short 'a' sound. The same thing was done with *away* and *about.* This could be very confusing and frustrating to the children learning the word for the first time.

"5. There was a brief period in the discussion of the lesson when many of the students did a great deal of speaking. One of the children told the story of an incident in his experiences that was similar to the one experienced by the kitten in the story. It would be very desirable if there were more participation such as this.

"6. Students not comprehending the reading lesson are being passed over in the discussion. Provision should be made for them, by using the easier questions that they could have answered if asked.

"7. The sarcasm noted in the first classroom observation has not been evident since then."

Teacher-Supervisor Interview No. 3. At the end of the day, the teacher took this third tape recording home with her in order to play it and study it more intensely. On the following day the teacher and the supervisor met and discussed the lesson.

Mabel Wills came to the interview with several pages of notes that she had made while studying the tape. She was very much at ease and seemed very determined to present various items.

Her first comments were about the advantages of being able to make a detailed study of the tape recording by herself. The conversation at the beginning of the conference proceeded like this:

SUPERVISOR: "How many times did you play it (the tape)?"
TEACHER: "About three times."
SUPERVISOR: "Do you feel that you got more out of it than you have in the past?"
TEACHER: "Definitely! I played it three times all the way through. Some parts I went over at least seven or eight times."

SUPERVISOR: "And you made some notes on the recording?"
TEACHER: "Yes, sir, I did. The introduction of words could have been presented much better."
SUPERVISOR: "How?"
TEACHER: "For example, on the word *around*. I had Joe come up and walk around the chair. I thought that was a pretty good idea; but when Joe started reading, he had no idea what the word *around* meant. Not once when he was walking around the chair or going back did I have him say the word. . . ."

After skirting the problem of the teacher-dominated situation in previous interviews, the teacher identified this problem in the following conversation:

SUPERVISOR: "What was wrong with it (the lesson taught)?"
TEACHER: "I did all of the talking. I was not letting them explain what they had done, using sentences to get practice in using the past tense."

In another part of the conversation between the teacher and the supervisor:

TEACHER: "I sound like an echo. Everything the child says, I repeat. . . . Listening to the tape, I heard myself over and over again repeating all or the last part of it. . . ."
SUPERVISOR: "What effect will this have on the conversation?"
TEACHER: "I hadn't thought about that."
SUPERVISOR: "While you are following this procedure, who is the center of conversation?"
TEACHER: "The children should be, but it sounds to me like I am. I'm doing most of the talking. Maybe another child should agree instead of my going ahead and repeating the same thing."
SUPERVISOR: "And . . . do you feel that the conversation should be child-centered?"
TEACHER: "Definitely!"

At this point the teacher was asked about planning a change in the instructional program to improve her techniques in this regard. Although her reply does not illustrate an ideal solution, it seemed a step in the right direction:

SUPERVISOR: "When introducing these words, you're going to make a special provision to avoid making the conversation teacher-centered?"
TEACHER: ". . . I'll have the child make a sentence and do what the word calls for. If he says, 'I will run around the room,' I'll just let him. I'll say, 'Now tell us what you did.' I hope that he will say, 'I ran around the room.' But I know one thing, I'll keep my mouth shut a little bit more."

Continuing to read from her notes, the teacher hit on another problem she has identified in the recording:

TEACHER: "On the last question or two, they began to lose interest. I don't know if the class was going too long for this slow group, but I had to repeat the questions several times. . . ."

SUPERVISOR: "How long was the class?"

TEACHER: "Approximately thirty minutes, which may be a long time for their interest."

SUPERVISOR: "How long can you hold their interest?"

TEACHER: "Approximately twenty or twenty-five minutes. . . ."

Although the next item could hardly be classified as a major problem, it shows evidence of the teacher's development of insight into her teaching techniques:

TEACHER: "Joe's reading was very slow. He's one of the poorest readers in the class. . . . Since he was so slow, the others lost all interest. . . . I began by saying, 'Joe, would you like to read the whole page?' That was a mistake, because it took him almost ten minutes to read the whole page, and the other children lost all interest. I should have said, 'Joe, will you begin reading for us?' and when I noticed the other children were not watching any more, I could have said, 'Good!' and let somebody else read."

Teacher Takes the Lead

During the months of February and March, Mrs. Wills worked at developing better methods of teaching that would take into account the children's language handicap. Although the teacher consulted with the supervisor frequently and requested advice on specific matters, as well as keeping him informed of pupil progress, she did not make another request for a recording until the 21st of March.

On that day the recorder was again connected to the sound system at her request, and the supervisor sat in on a basal reading lesson.

The teacher listed in her plans these four objectives for this review lesson: "(1) Allow the students to read familiar passages in order to test expression and comprehension in reading. (2) Check their ability to recognize the new words in context. (3) Prepare the children for future dramatization of the story. (4) Build interest in 'silly stories' for later individual creative writing in connection with the teaching of spelling."

The children were given ample opportunities to discuss the material read. Occasionally they discussed and corrected their own mistakes with little teacher direction. The only problem noted by the supervisor was the

extended time spent on oral reading. It would have been desirable to use a variety of activities rather than allowing the 15 children to read consecutively. Mrs. Wills was developing techniques but still had much to learn.

Teacher-Supervisory Interview No. 4. This interview session was characterized by much less probing than usual on the part of the supervisor. From the beginning of the interview, the teacher took the lead in discussing the lesson taught as well as in discussing several minor problems in the class. In contrast to the first recorded interview, where the supervisor did continuous probing, in this session periods as long as six or seven minutes elapsed without any comments on the part of the supervisor. There was considerable overlap in the discussion with previously discussed problems, and no new major problems were discussed by the teacher. Deeper insights into ways of improving her teaching continued to develop.

TEACHER: "In the discussion that followed, I asked several questions. 'What did you like most about the story?' I've decided that, the next time I do that, I'm going to leave them close their books, because they were pointing to the page they liked but would not talk about it. If their books were closed, they would have to tell me what they were referring to instead of pointing to the pictures."

The teacher seemed to be very happy about her new insights. Above all, perhaps, her open acceptance of her own mistakes was the most important outcome. She was more aware of language being an underlying problem with the class. She was increasingly making provisions for better student participation.

Summary of the Non-Directive Supervisory Program

Although limited results were obtained by the first few applications of this approach to classroom supervision, there were indications that the technique could lead to substantial results in the hands of one more skilled in such interview techniques. Use over a longer period of time might also prove more effective.

The First Interview. When this approach was first used, the interview began with considerable confusion over the meanings implied by some of the words used by the supervisor. As the conference progressed and the supervisor probed rather specifically, the teacher became defensive and later apologetic. When the supervisor worded the probes so as to leave more freedom for teacher response, the probes led to a shift of blame from blaming the students for failure to learn, to blaming the

textbook for pronunciation errors, and finally to a probable realization by the teacher that her teaching techniques were inadequate.

This use of a new approach to supervision involving the use of a recorder created considerable tension, confusion, and anxiety during the first interview.

The Second Interview. In contrast to the first interview session, the second one was smoother, easier, and apparently more profitable. Both the teacher and the supervisor were less nervous, and the teacher seemed more at ease.

The supervisor did a better job of using neutral probes. The teacher was better acquainted with the technique being used and seemed to accept it. This time she seemed to be more aware of what to expect, and she was prepared to at least discuss her teaching.

The supervisor was still carrying much of the conversation, however. He was still trying to direct her attention to her problems as he saw them. The teacher responded by agreeing but did not really seem to understand.

The Third Interview. The teacher identifies several problems, including a major problem that had been pursued by the supervisor from the beginning. The teacher-dominated classroom situation is recognized by the teacher. It is also in this interview that the teacher begins to seriously consider what remedial action she should take.

Conspicuous by their absence in this interview are the previous tendencies on the part of the teacher to become apologetic or to rationalize by blaming the students for their lack of retention or the books for creating confusion. She was accepting responsibility not only for her own actions but also for the learning that took place.

The Fourth Interview. It is at this point that unique outcomes of the non-directive approach to supervision can be most clearly seen. The teacher is happy to discuss her teaching situation and takes pride in being able to detect better ways of teaching. She talks freely and is unmindful of the microphone in front of her. The supervisor finds it unnecessary to probe and can look forward to teacher growth through her own self-evaluation and efforts with continued guidance, encouragement, and assistance.

The Use of Tape Recordings in a Non-Directive Supervisory Program

In this program the tape recorder proved to be a valuable asset to supervision. As used by the teacher being supervised, it gave her an opportunity to hear herself teaching and to discover areas in which im-

provement could be made. In addition to this, it allowed the teacher to hear the students objectively and to determine their needs in specific areas. By re-playing the tapes, she was able to make a detailed study of their pronunciation, reading habits, participation in classroom discussions, and so forth.

Originally, in planning the program it was intended that the recorder was to be used in the teacher's room. However, background noise, distance from the microphone, and a lack of mobility made the first attempts valueless. Perhaps the most undesirable aspect of the first attempt at recording in the room was the effect it had on the children. They had a tendency to speak in whispers and refrain from classroom discussion if at all possible.

Having had no success in using the tape recorder in the room, it was then tried by connecting the recorder to the office sound system. This technique produced clear, loud recordings that were quite usable. The children did not know that they were being recorded, and they carried on their normal classroom activities uninhibitedly.

Although the recording of the teacher-supervisor interviews initially led to an overguarded discussion, this declined in the second interview, and by the third interview the advantages seemed to far outweigh the disadvantages. It wasn't until the tape recording of the first teacher-supervisor interview had been played back several times that the value of such a recording was really appreciated. Whereas, previous to this, evaluation and planning for the interviews were based on short notes and memory, here was a voluminous wealth of information about the teaching program, the teacher, the supervisor, and the techniques being used that could be sifted again and again, each time yielding information that had escaped attention the time before.

In short, much of the success experienced in this program was due to the insights provided by tape recordings.

Recommendations

Before a person can embark on a program using such techniques as these, it is necessary that the supervisor acquaint himself with the special interview technique and undertake a "practice" program. The lack of such preparation presented serious obstacles to the success of this program. It was very tempting for the supervisor to fall into an "expert" role and analyze, diagnose, and solve all the teacher's problems without any effort on the teacher's part. A deliberate effort is demanded to keep relatively quiet and to allow the teacher to think through her problems, stimulated only by neutral probes. On the other hand, when there is a

reluctance to look into and think about a specific problem, great skill is needed to encourage self-appraisal without becoming directive.

It is well to realize the limitations of this approach before attempting to use it. It can be used most effectively with a person who is willing to face reality, identify problems, and work toward their solution. A person convinced that he can do no wrong may be unwilling to shatter this conviction by identifying shortcomings in his work. Teachers who lack the background, training, or intelligence required to resolve problems cannot be expected to do so by observation-recording-interview techniques. Other experiences will also be required.

Yet, in cases where the teacher is responsive, the approach has unlimited possibilities. The teacher learns to look at her teaching objectively, to identify problems, and to seek solutions on her own initiative. The burden of responsibility for improvement in the instructional program is shifted to the shoulders of the teacher.

APPENDIX E

Synopses of Videotapes 1 - 3

Videotape #1

Title: "Individualizing Microteaching: Identifying the Needs of
          the Teacher"

Length: 15 minutes

        The program begins with the teaching of a 5-minute lesson by
a student teacher. The Pueblo Indians are being introduced to a class
of four pupils (role-played by peers). The lesson touches briefly on
geographical setting, agriculture, homes, occupations and life today.
The teacher holds up some photographs of Indian children near the close
of the lesson. There is little practice of the skill of set induc-
tion, and the teacher is seen telling the pupils a great many facts
about this Indian group during the course of the lesson.

        Supervisor and teacher join together in a critique in which
the supervisor's objective is to get the teacher to look at her les-
son closely and participate in the identification of problems and needs.
Using a variety of question leads, the supervisor gets the teacher to
react to the lesson, expressing her doubts and uncertainties about
certain parts of the lesson. They look at sections of the videotape
to answer questions or to confirm observations. In particular, they
examine the beginning of the lesson and the teacher comes up with the
suggestion of introducing the lesson with the photographs as one means
of eliciting more interest from the class. The problem of the teach-
er pouring out too much factual information in this initial lesson is
also identified. The supervisor responds appropriately, emphasizing
the value of set induction and what it can do to make lessons more
successful. In conclusion, she asks the teacher to summarize the main
objectives for the re-teach of the lesson in terms of the teaching
skill she plans to utilize.

Videotape #2

Title: "Five Stages of Microteaching Supervision"

Length: 25 minutes

        This videotape introduces and demonstrates each of the five
stages of Microteaching Supervision as described in the manual of Unit
III. It provides a general overview of the whole process utilizing
the example of the microteaching lesson seen in videotape #1.

Synopses (cont'd.)

A narrator describes the goals and purposes of a stage, rounding out the explanation with some supplementary detail but also reinforcing information already found in the text of the manual and in the readings. These comments are followed by a demonstration of what occurs in that stage.

The teacher and supervisor shown in the first videotape are seen having a pre-observation conference (stage 1) where the purposes and plan of the lesson on Pueblo Indians are being discussed and a rapport being established that will set the tone for a comfortable relationship. Next the supervisor is shown observing the lesson (stage 2) while the narrator comments on the duties and responsibilities of the supervisor during this stage. A few minutes of the lesson shown on the previous tape are included on this tape, followed by the analysis/strategy stage (stage 3) where the supervisor works alone reviewing the lesson and planning the supervisory conference.

The supervisory conference follows (stage 4). This segment of the tape is a shortened repeat of the critique seen in the first videotape.

The re-teach of the lesson (stage 5) is shown in full. The suggested changes that resulted from the critique are implemented by the teacher in this lesson, particularly with regard to set induction and the emphasis on doing less "telling."

An alternate method of critiquing is also demonstrated by having a group critique conducted by the supervisor. Peers who role-played the pupils participate in sharing their impressions and observations. The supervisor sets a tone that encourages peers to respond in helpful and supportive ways. She also asks the group members significant questions about how the teacher did certain things in order to increase their awareness, perception and their skills in lesson analysis.

Finally, the narrator discussed the various sources of feedback available to the teacher, e.g., peers and colleagues, pupils, videotape, supervisor and self. A sample rating form sometimes used with set induction skill practice is also shown.

Videotape #3

Title: "Directive and Non-directive Supervision"

Length: 25 minutes

Teachers and supervisors shown on this tape are not the same persons seen on previous tapes.

A five-minute lesson is taught by a student teacher to a group of peers. It is an introduction to a particular reading method teachers might use and is taught on an adult level. The supervisor critiques the lesson in a directive style after first allowing the teacher to react to the question of how she felt about her own lesson.

Supervisor then comments on the lesson, referring to a written list of points he wants to make. He begins his agenda with the positive points, then proceeds to some negative ones, asking a question here and there, but doing most of the talking throughout the remainder of the critique. His manner is affable and his way of phrasing his concerns is such that he appears to maintain a positive affective relationship with the teacher. At the conclusion of the critique, the teacher has several concrete suggestions given to her by the supervisor that will improve her presentation when she re-teaches it.

A second student teacher presents an introductory five-minute lesson on an elementary level to a group of peers role-playing youngsters. The lesson is then critiqued by a non-directive supervisor (different person from the directive supervisor). The technique of the supervisor includes considerably more questioning and the use of statements and pauses that require verbalization by the teacher. The supervisor asks "why" questions often in order to have the teacher analyze things she said or did. She brings to the teacher's attention some of the positive and useful things the teacher did that gave strength to the lesson. The supervisor did little or no telling of what was right or wrong. Rather, she tried to help the teacher explore what the teacher might be doubtful about, or she affirmed with positive statements what she agreed with the teacher about. A comfortable, non-threatening relationship appeared to exist between the two.

APPENDIX F

Data Collection Instruments:

Participants Data Form
Pre-Test/Post-Test Form
Unit Questionnaire Forms I - IV
GPE Form

<u>Participants Data Form</u> (confidential)

Name: _____

Address: _____

Phone: _____   Sex: M   F

Age: _____20-25   _____41-50

_____26-30   _____51-60

_____31-40

Please describe your present position: _____

_____

_____

Name of school: _____

Years of professional teaching experience: _____

Grade Level(s): _____

Subjects Taught: _____

Experience in the field of Education other than classroom teaching:

_____

_____

Degrees Held	Dates Awarded	Institutions	Major Fields

Are you pursuing a graduate degree? _____ If yes: Master's,
Doctorate, or C.A.G.S.? _____ In what area? _____

Are you pursuing certification? _____ If so, what kind? _____

_____

Participants Data Form - p. 2

Have you ever been a cooperating teacher for a student intern?

_____   How many times? _____

If not, do you anticipate having a student intern within the next
year?
         _____

Other than having a student intern, have you ever been responsible
for training or supervising someone who is learning to teach?

_____   Please explain: _____

_____

Describe the nature of your classroom organization, that is, self-
contained, team teaching in a quad, etc.: _____

_____

Please describe the extent of your familiarity and/or experience with
microteaching prior to the present semester:

_____

_____

                                                        Thank you.

PRE-TEST/POST-TEST

The purpose of this test is to assess the state of your knowledge up-
on entry into the training program for microteaching supervisors.
The same test, or a similar one, will be administered upon completion
of the program. Please answer the following questions to the best of
your ability. If you do not know an answer, please check "don't know"
or leave the question blank. Thank you.

1. List 4 of the most characteristic features of microteaching.

    1.

    2.

    3.

    4.   (4 points)

2. List the 5 stages that comprise the total supervisory scheme for
    microteaching. Give one important purpose for each stage.

    1.

    2.

    3.

    4.

    5.   (10)

3. The focus of microteaching is primarily on teacher behavior
    rather than on pupil behavior.

        _____yes   _____no   _____don't know   (1)

4. Microteaching is a method for the preparation of pre-service
    teachers and is therefore unsuitable for in-service situations.

        _____yes   _____no   _____don't know   (1)

5. The "micro" in microteaching refers to the small part it should
    play in the total training of teachers.

        _____yes   _____no   _____don't know   (1)

6. Name at least 3 sources of feedback provided for in microteaching.

    1.

    2.

    3.   (3)

7. What means does microteaching customarily use to assure that all data from lesson observations is obtained as objectively as possible?

                                                                       (1)

8. From the following list, check only those items which would lend themselves well to microteaching practice.

    _____selecting films for a science unit

    _____developing long-term goals for curriculum units

    _____asking divergent questions

    _____using examples and analogies

    _____planning for academic grouping arrangements

    _____positively reinforcing pupil behavior   (6)

9. What is a main criterion to be used in the selection of teaching skills that can be practiced in microteaching?

                                                                       (1)

10. During the observation of a microlesson, the supervisor focuses his/her attention on a variety of teaching behaviors which are subsequently discussed with the teacher.

            _____yes   _____no   _____don't know   (1)

11. What is the basic 3-step pattern of the microteaching process?

                                                                       (3)

12. For microteaching to be effective, a microteaching supervisor should select for training and practice only those teaching behaviors that are on the list of identified teaching skills in the microteaching literature.

    _____yes   _____no   _____don't know   (1)

13. Individualizing microteaching according to the needs of the microteacher is not feasible.

    _____yes   _____no   _____don't know   (1)

14. List at least 2 expected outcomes of the supervisory critique session that follows the teaching of a micro-lesson.

    1.

    2.   (2)

15. List at least 3 training strategies a microteaching supervisor might employ to train the teacher in a specific teaching behavior.

    1.

    2.

    3.   (3)

16. The learning theory that underlies the microteaching model is the same as that which produced the idea of programmed learning.

    _____yes   _____no   _____don't know   (1)

17. The pupils who have been taught the micro-lesson are not asked to give their opinions of the teacher's lesson.

    _____yes   _____no   _____don't know   (1)

18. Given sufficient time and practice, teachers should be expected to learn and adopt as their own all of the microteaching skills already identified as important to good teaching.

    _____yes   _____no   _____don't know   (1)

19. Identify 3 types of questioning skills and write definitions of each that distinguish them from one another.

    1.

2.

3.   (6)

20. Microteaching is a training method that focuses on a teacher's
    lesson presentation skills only and is therefore not a suitable
    method for analyzing teacher-pupil interaction patterns.

            _____yes   _____no   _____don't know   (1)

21. It is possible to conduct microteaching sessions without the use
    of videotape recorders or other such technological equipment.

            _____yes   _____no   _____don't know   (1)

22. Microteaching can address the affective concerns that are also
    part of teaching, that is, the realm of feelings and sensitivity.

            _____yes   _____no   _____don't know   (1)

23. Microteaching was developed primarily for use as an in-service
    approach to the improvement of classroom instruction.

            _____yes   _____no   _____don't know   (1)

24. In microteaching the teacher usually concentrates on practicing
    at least 3 teaching techniques in a single lesson.

            _____yes   _____no   _____don't know   (1)

25. Trying out the use of a new kit of math materials with a class
    and videotaping the session for later analysis is an example of
    utilizing the microteaching concept.

            _____yes   _____no   _____don't know   (1)

26. In the teaching of micro-lessons, what should the video camera
    primarily focus upon?

            _____A. the teacher's behavior
            _____B. student behavior
            _____C. use of materials
            _____D. everything   (4)

27. Which of the statements below describes what a supervisor should be doing during the observation of a micro-lesson?

    _____A. Making sure the students behave well.
    _____B. Recording factual information about the events observed.
    _____C. Judging which are the positive and negative points that should be discussed with the teacher.
    _____D. Writing a running critique of the lesson.
    _____E. Supervisor does not really need to be present.   (5)

28. Explain briefly how the supervisor's observations complement the observation data recorded on videotape and vice versa.

    (2)

29. What observation system might a supervisor be using if during a lesson he were tallying the frequency of certain teacher behaviors, such as lecturing, giving directions, accepting ideas of students, praising and encouraging?

    (1)

30. Of the statements listed below, check the most important one for the supervisor to remember during observations of lessons.

    _____A. Never intervene in a lesson in any way.
    _____B. Know each student in the class well so you understand the situation the teacher is in.
    _____C. Make it a point to be friendly with the teacher in front of the class.
    _____D. Know specifically what you are looking for in the lesson and record it objectively.   (4)

31. Which of these observation notes taken by supervisors during lessons is an inappropriate one?

    _____A. Teacher breaks the tension now and then with humorous remarks.
    _____B. Teacher is not capable of dealing effectively with the brightest students.
    _____C. No repetition of the 3 main points anywhere in the lesson.
    _____D. Frequent use of positive reinforcement brought additional responses from students.   (4)

32. On what basis can a pattern of teaching behavior be judged signif-
    icant or not significant?

                                                                    (1)

33. A single, or occasional, action of a teacher (as opposed to a
    pattern of teaching behavior) that is very significant is termed
    a

                                                                    (1)

34. In which stage of microteaching supervision is the close examin-
    ation of significant teacher behavior by the supervisor most
    appropriate?

                                                                    (1)

35. The modern concept of supervision ideally views the supervisor
    as a(n)

    _____A. leader
    _____B. evaluator
    _____C. colleague-helper
    _____D. teacher   (4)

36. Write the name of the helping skill being used by the supervisor
    in each statement or behavior below.

    a) _____ "If your questioning skills are
                                          what you really want to work
                                          on, then that's what is most
                                          important right now."
    b) _____ "In other words, you're feeling
                                          quite anxious about this con-
                                          ference."
    c) _____ Supervisor leans forward slightly
                                          and maintains eye contact.
    d) _____ "Let me see if I understand
                                          clearly what you're saying."
    e) _____ Supervisor avoids changing the
                                          topic.
    f) _____ "We seem to be touching on a
                                          lot of things here. Suppose we
                                          zero in on . . ."
    g) _____ "Let's review the highlights of
                                          what we've talked about today
                                          so that our direction from
                                          here on is clear."   (7)

37. Assuming that the improvement of instruction is the ultimate goal
    of all supervision,

    a) What is the supervisor's goal in using a <u>non-directive</u> super-
        visory style?

    b) What is the supervisor's goal in using a <u>directive</u> style?

    c) How do you distinguish between the two styles?

                                                                    (3)

                        END OF PRE-TEST/POST-TEST

Appended to post-test only:

38. Where would you place yourself on this continuum?

non-directive   directive
  supervisor   supervisor

1   2   3   4   5

Please comment.

39. If you were the teacher, by which kind of supervisor would you prefer to be critiqued?

_____a) one with a tendency toward non-directive supervision

_____b) one with a tendency toward directive supervision

Please explain.

QUESTIONNAIRE - UNIT ONE

1. Has this unit succeeded in giving you a clear understanding of
    what the Microteaching Concept basically is?

    _____yes   _____no   _____not sure

2. Do you know the difference between the Microteaching approach to
    supervision and a "shotgun" approach?

    _____yes   _____no   _____not sure

3. Do you think you can identify the main features that character-
    ize Microteaching?

    _____yes   _____no   _____not sure

4. Do you think you understand how Microteaching can be adapted to
    suit differing situations and settings?

    _____yes   _____no   _____not sure

5. Was the film helpful to you in explaining the rationale and pro-
    cedures of Microteaching?

    _____yes   _____no   _____not sure

6. Was the film used at an appropriate time in Unit One?

    _____yes   _____no   _____not sure

7. Were the instructions for the written exercises clear and com-
    plete?

    _____yes   _____no   _____not sure

8. Did you find the exercises useful in furthering the concepts of
    Unit One?

    _____yes   _____no   _____not sure

    If not, please elaborate:

9. In the second exercise (page 4), were the two examples given help-
    ful in clarifying your task?

    _____yes   _____no   _____not sure

If not, please explain:

10. Do you see any value in doing that exercise alone first?

   _____yes   _____no   _____not sure

11. Was it worthwhile to join with a group to share and discuss your responses to that exercise?

   _____yes   _____no   _____not sure

12. The teaching level of the manual – Unit One – was:

   _____too easy   _____difficult

   _____easy   _____too difficult

   _____appropriate

13. What did you like most or find most useful about today's session?

14. What did you like least or find least useful?

15. Your comments on any aspect of Unit One are invited here:

                                            Thank you ·

QUESTIONNAIRE - UNIT TWO

Please feel free to write comments for any answer you would like to
explain further, especially if your answer is "no" or "not sure."
Use the blank side of the sheet.

1. Was Reading A useful to you in reviewing the basic features of
    Microteaching (M-T) covered in Unit One?

    _____yes   _____no   _____not sure

2. Did Reading B help to define for the group a common set of teach-
    ing skills that might be used in identifying teacher needs and
    critiquing lessons?

    _____yes   _____no   _____not sure

3. Does this unit explain satisfactorily how M-T can be individual-
    ized to meet the specific needs of a teacher?

    _____yes   _____no   _____not sure

4. Are you clear on what the important outcomes of a supervisory
    critique should be?

    _____yes   _____no   _____not sure

5. Was the idea clearly conveyed that teacher behavior is what M-T
    is primarily concerned with?

    _____yes   _____no   _____not sure

6. Did the videotape come at an appropriate time in Unit Two?

    _____yes   _____no   _____not sure

7. Did the videotape adequately demonstrate the process of teacher
    and supervisor jointly identifying teacher needs?

    _____yes   _____no   _____not sure

8. Were the instructions for Exercise B clear and complete?

    _____yes   _____no   _____not sure

9. Was the role of the supervisor as a helper clearly conveyed?

    _____yes   _____no   _____not sure

10. As you watched the tape, did writing your own observations on the lesson and on the critique serve a worthwhile purpose?

_____yes _____no _____not sure

11. Do you think it is important to know some standard "question leads" that you might use in a supervisory conference?

_____yes _____no _____not sure

12. Was the tape helpful as a preparation for Exercise B?

_____yes _____no _____not sure

13. Do you think you know at least 3 training strategies a supervisor might use to give the teacher needed training in a teaching technique?

_____yes _____no _____not sure

14. Did participation in Exercise B contribute to your understanding of the concepts in Unit Two?

_____yes _____no _____not sure

If not, please comment.

15. The teaching level of the manual – Unit Two – was:

_____too easy _____difficult

_____easy _____too difficult

_____appropriate

16. What did you like most or find most useful about today's session?

17. What did you like least or find least useful about today's session?

18. Your comments on any aspect of Unit Two are invited here:

                                        THANK YOU!

QUESTIONNAIRE - UNIT THREE

Feel free to write comments for any answer you would like to explain further. <u>Please comment if your answer is "no" or "not sure."</u> Use the blank side of the sheet.

1. Were each of the 3 readings (C - Goldhammer, D - Cogan, and E - McNeil) helpful in providing background for studying the 5 stages of Microteaching supervision?

   _____a) Yes, all of them were helpful.

   _____b) No, none of them was helpful. (Please comment.)

   _____c) <u>Some</u> of them were <u>not</u> helpful. (Please specify and comment.)

2. Did Unit Three (includes manual, tape, and readings) explain sat-isfactorily what each stage of supervision consists of?

   _____yes   _____no   _____not sure

3. Do you think you have a clear understanding of what the major goals for each stage should be?

   _____yes   _____no   _____not sure

4. Did the written exercise (Ex. C) in the manual help differentiate the stages from one another as well as draw attention to some significant aspects of the stages?

   _____yes   _____no   _____not sure

5. Did the videotape come at an appropriate time in Unit Three?

   _____yes   _____no   _____not sure

6. Did the videotape adequately demonstrate the 5-stage sequence of Microteaching supervision?

   _____yes   _____no   _____not sure

   Please comment.

7. Did writing down your observations and reactions while viewing the videotape serve a worthwhile purpose?

_____yes   _____no   _____not sure

8. After viewing a demonstration tape, do you feel it is important to stop and discuss it before continuing in the manual?

_____yes   _____no   _____no opinion

9. Were the instructions for Exercise D clear and complete?

_____yes   _____no   _____not sure

10. Was the videotape helpful as preparation for Exercise D?

_____yes   _____no   _____not sure

11. Which statement describes your feeling about the pacing of Ex. D (time allotted for each stage)?

_____a) I felt too rushed to get anything out of it.
_____b) I felt there was enough time to sample the essence of each stage.
_____c) I have no strong feeling about it either way.

12. Did participation in Ex. D contribute to your understanding of what should (or should not) occur in each of the 5 stages?

_____yes   _____no   _____not sure

13. Do you feel, after having gone through the exercises and other materials of Unit Three, that you, as a supervisor, would be able to employ the 5-stage sequence? (Assume that conditions are favorable for doing so.)

_____yes   _____no   _____not sure

If no or not sure, please elaborate.

14. The teaching level of the manual - Unit Three - was

    _____too easy   _____easy   _____appropriate

    _____difficult   _____too difficult

15. What did you like most or find most useful about today's session?

16. What did you like least or find least useful about today's session?

17. Your comments on any aspect of Unit Three are invited here:

QUESTIONNAIRE - UNIT FOUR

Feel free to write comments for any answers you would like to explain further. Please comment if your answer is "no" or "not sure."

1. Were Readings F (2 sample micro-lessons) and G (non-directive approach) useful in providing background for a closer study of observing, analyzing, and supervising lessons?

    _____yes   _____no   _____not sure

2. Has Unit Four been helpful in defining the observation task more fully?

    _____yes   _____no   _____not sure

3. Has the unit provided you with some usable ideas for analyzing lessons?

    _____yes   _____no   _____not sure

4. Have the helping skills been sufficiently treated in Unit Four so that you feel you could use them in supervision?

    _____yes   _____no   _____not sure

5. Were the instructions for all exercises clear and complete?

    _____yes   _____no   _____not sure

6. Did the videotape come at an appropriate time in the unit?

    _____yes   _____no   _____not sure

7. Did the videotape adequately demonstrate the difference between directive and non-directive supervisory styles?

    _____yes   _____no   _____not sure

8. Was the videotape helpful as preparation for doing Exercise F?

    _____yes   _____no   _____not sure

9. Do you feel that Exercise F contributed to your understanding of the two supervisory styles?

    _____yes   _____no   _____not sure

10. In terms of <u>approaches</u> and <u>goals</u>, do you see the difference be-
    tween the two supervisory styles?

    _____yes   _____no   _____not sure

11. Has Unit Four helped you to clarify your own style of supervision?

    _____yes   _____no   _____not sure

12. The purpose of Exercise G (Pin the ---- on the Supervisor!) was
    to provide practice in combining helping skills with supervisory
    styles. It was also to give more practice in evaluating critiques.
    Did it succeed in this purpose?

    What is your opinion of this exercise?

13. The teaching level of the manual - Unit Four - was:

    _____too easy   _____easy   _____appropriate

    _____difficult   _____too difficult

14. What did you like most or find most useful in today's session?

15. What did you like least or find least useful in today's session?

16. Your comments on any aspect of Unit Four are invited here:

FINAL QUESTIONNAIRE - GPE

To Program Participants:

The purpose of the final questionnaire is to obtain your reactions to the program as a whole. It is recommended that you read through the entire questionnaire first. Then answer the questions with the manual and readings in front of you for easy reference.

The purposes of the program are explained on the page in your envelope entitled "Introduction," and an outline of the program content is given on the last page of this questionnaire. You will want to refer to both of these.

Please answer every question. If the question is a multiple choice, check only one answer. Qualify your answer, if you wish, with a comment. If a comment or explanation is specifically requested, please take the time to write it. Your careful deliberation and professional judgment will be very much appreciated.

Thank you.

Louise

P.S. Please bring this questionnaire back to class on Wednesday, April 7th. Also bring the 4 unit manuals (with the last assignment in Unit 4 completed).

FINAL QUESTIONNAIRE

General Program Evaluation (GPE)

1. Was the material covered in the program relevant to your profes-
   sional needs and/or development? (See last page for outline of
   content.)

   _____yes, all of it was relevant
   _____most of it was relevant
   _____some of it was relevant
   _____not much of it was relevant
   _____none of it was relevant

   Comment?

2. Generally, were the important concepts repeated often enough through-
   out the program (via manual, readings and/or videotape)?

   _____all of the concepts were sufficiently repeated
   _____most of the concepts were sufficiently repeated
   _____some of the concepts were sufficiently repeated
   _____too few of the concepts were sufficiently repeated
   _____none of the concepts was sufficiently repeated

   Comment?

3. Did any of the concepts receive too much repetition?

   _____all of them did
   _____most of them did
   _____some of them did
   _____few of them did
   _____none of them did

   Comment?

4. Was each unit of the manual written in a clear readable style?

    _____all four of the units were
    _____three of the units were
    _____two of the units were
    _____one of the units was
    _____none of the units was

    Please specify any that were not.

5. With regard to the topics covered, was the sequence of presenta-
    tion satisfactory? (See last page for sequence of topics).

    _____yes, completely satisfactory
    _____mostly satisfactory
    _____somewhat satisfactory
    _____not very satisfactory
    _____no, completely unsatisfactory

    Please suggest any changes in the sequence that would seem more
    logical to you and explain why.

6. Were there any units in the manual that presented too much material
    (information)?

    _____all four of the units presented too much material
    _____three of the units presented too much material
    _____two of the units presented too much material
    _____one of the units presented too much material
    _____none of the units presented too much material

    Please specify and explain which units, if any, presented too much.

7. Were there any units that presented too little material?

_____all four units presented too little material
_____three units presented too little material
_____two units presented too little material
_____one unit presented too little material
_____none of the units presented too little material

Please specify and explain which units, if any, presented too little.

8. Were there any topics you feel should have been covered more intensively?

_____yes   _____no

If yes, please elaborate.

9. Were there any topics that could have been covered less intensively?

_____yes   _____no

If yes, please elaborate.

10. Do you have any suggestions for topics that should have been covered in this training program for M-T supervisors but were not?

_____yes   _____no

If yes, please explain.

11. Do you think four sessions of two-and-one-half hours each are sufficient to cover the material presently included in the program?

_____yes   _____no

If no, please explain or make suggestions.

12. Generally, did you find that the readings each week were informative and pertinent to the upcoming units?

_____all of them were
_____most of them were
_____some of them were
_____few of them were
_____none of them were

Please specify any that were not useful and explain why.

13. In general, did the three videotapes serve as helpful demonstrations for their respective units?

_____they were very helpful
_____they were mostly helpful
_____they were somewhat helpful
_____they were not too helpful
_____they were not at all helpful

Please comment on any you felt were not helpful.

14. Of the written exercises, which was (were) the most useful one(s) and for what reasons?

15. Of the group exercises, which was (were) the most useful and why?

16. Optional question.

    Do you have ideas for any alternative exercises or activities that would improve the program?

17. Did any of the four sessions seem more successful than the others?

    _____yes   _____no

    If yes, check the session(s) and explain why you think so.

    _____session I   _____session II   _____session III

    _____session IV

18. Did you get the opportunity to supervise and critique someone's teaching at least once during the four class sessions?

    _____yes   _____no

19. Have you tried out any aspects of the program in any way within your own professional situation (outside of this class)?

_____yes   _____no

If yes, please describe.

20. In which of these modes do you think the program would work best?

_____a) a group using it alone
_____b) a group using it with a "coordinator" (one who coordin-
          ates activities, makes arrangements, and moves things
          along but does not actively participate in exercises
          or discussions)
_____c) a group using it with a "resource person" (one who
          facilitates but also participates in a somewhat non-
          directive way; provides information and clarification
          occasionally)
_____d) a group using it with an "instructor" (one who facili-
          tates but also actively leads in exercises and dis-
          cussions in a somewhat directive way)

Please give reasons for your choice.

21. How did you perceive Louise's role?

_____a) coordinator
_____b) resource person
_____c) instructor

Comment?

22. In looking at the overall program, and in light of its purpose as
     a training program for supervisors of Microteaching, would you
     say it was

     _____very successful
     _____successful
     _____moderately successful
     _____moderately unsuccessful
     _____unsuccessful
     _____very unsuccessful

     Comment?

23. Did you enjoy participating in this program?

     _____yes   _____no

24. What was the most valuable aspect of the program for you?

25. List the strengths of the program.

26. List the weaknesses of the program.

27. If you had the opportunity to make changes in any aspect of the program (manual, readings, tapes, film, exercises, procedures, organization, etc.) what would those changes be?

28. Do you see this program as a valuable one for groups such as yours (cooperating teachers)?

_____yes, extremely valuable
_____valuable
_____somewhat valuable
_____not particularly valuable
_____no, it has no value for our type of group

Comment?

29. What other groups, if any, do you see this program serving?

30. Did being members of a "family group" rather than a "stranger group" influence in any way the effectiveness of this program? ("Family group" is defined as people working together in the same school or school system.)

_____yes, very much so
_____much of the time it did
_____about half of the time it did
_____not to any significant extent
_____no, not at all

Comment?

31. In critiquing colleagues, I felt

_____quite comfortable
_____comfortable
_____no particular effect
_____uncomfortable
_____very uncomfortable

Comment?

Outline of Topics Covered in the Program

Unit One: Introduction to Microteaching

    A. The M-T concept
    B. Characteristic features
    C. Adapting M-T to different situations and settings
    D. Selecting observable teaching behaviors for M-T

Unit Two: Individualizing Microteaching

    A. Identifying the needs of the teacher
    B. Role of the supervisor
    C. Using leading questions and statements
    D. Several training strategies

Unit Three: Five Stages of M-T Supervision; Their Purposes

    A. Pre-observation
    B. Observation
    C. Analysis and Strategy
    D. Critique
    E. Re-teach

Unit Four: A Closer Look at Observing, Analyzing and Critiquing

    A. Focused, systematic, and objective recording by super-
      visor
    B. Analyzing patterns and critical incidents
    C. Critiquing: use of helping skills
           directive and non-directive styles

APPENDIX G

Compilations of Data:

Answer Key: Pre-/Post-test
Pre-test
Post-test
Unit Questionnaires I - IV
General Program Evaluation
Trainee Statements on Supervisory Style

ANSWER KEY

Pre-/Post-Test

Note: Where more than the required number of answers are given, the others may be considered acceptable answers also.

1. a. M-T is real teaching
    b. Brief lesson
    c. Focuses on an observable teaching behavior or skill
    d. Small class size; no more than a few pupils
    e. Limit to skills being practiced: one or two
    f. Safe, low-risk, non-threatening practice situation
    g. Immediate feedback from several sources; evaluation
    h. Opportunity for re-teach
    i. Pattern is teach-critique-re-teach

2. a. <u>Pre-observation conference</u>: establish rapport; review les-
        son plan and objectives; possible changes if time available;
        agree on specific focus supervisor should maintain regarding
        skills practiced.
    b. <u>Observation</u>: recording data on lesson objectively for later
        analysis; obtaining data for teacher self-appraisal and for
        verification of strengths and weaknesses.
    c. <u>Analysis/Strategy</u>: time for supervisor to identify patterns,
        critical incidents; to select data pertinent to the agreed-
        upon focus (skill being practiced); to plan critique with
        teacher, i.e., method, approach.
    d. <u>Critique or Post-Observation Conference</u>: to review recorded
        lesson data with teacher; discuss achievement of objectives
        and skill focused upon; aid teacher in goal-setting and plan-
        ning lesson modifications; provide feedback; provide strategies
        for further skill training.
    e. <u>Re-teach</u>: to give teacher immediate opportunity to overcome
        errors and weaknesses; help teacher attain higher level of
        skill in the teaching behavior focused upon; to give observa-
        ble evidence of a positive change in teacher behavior result-
        ing from critique and training strategies.

3. Yes
4. No
5. No

6. a. videotape recording; audiotape recording
    b. supervisor
    c. pupils
    d. peers or colleagues
    e. self

7. videotaping; audiotaping; note-taking

8. a. –
   b. –
   c. x
   d. x
   e. –
   f. x

9. Observability; individual needs of teacher; limitation to one skill or two; mutually agreed upon

10. No
11. Teach–critique–re-teach
12. No
13. No

14. a. Teacher becomes aware of need for improvement in some specific behavior or skill
    b. Teacher should come away from conference with a positive feeling about own adequacy and competence
    c. Teacher should be able to state the problem in own terms
    d. Plans should have been made for any necessary modification or re-structuring of the lesson; alternative approaches understood, etc.
    e. Communication between teacher and supervisor is honest.
    f. Teacher should know whether objectives have been met.

15. a. View filmed or taped model
    b. Read description of the target behavior
    c. Teacher and supervisor have discussion of the skill
    d. Observe demonstration of the skill by a live model
    e. Role-playing of the skill

16. Yes
17. No
18. No

19. a. Lower order questions: those requiring simple recall; factual questions; right answers; interpretation; analysis
    b. Probing questions; clarification questions: requires student to go beyond first response or superficial response to clarify or justify. Teacher uses to prompt, refocus, redirect.
    c. Higher order questions: ask why, requires making inferences, generalizing, evaluating; deductive or inductive reasoning; making comparisons, applications, problem-solving
    d. Divergent questions: creative, heuristic, open-ended; no right answers

20. No
21. Yes
22. Yes
23. No
24. No
25. Yes

26. a. the teacher's behavior
    b.   –
    c.   –
    d.   –
    e.   –

27. a.   –
    b.   x
    c.   –
    d.   –
    e.   –

28. Supervisor can assess classroom climate, can see total environ-
    ment of the teaching situation while camera only records teacher.
    Supervisor may record pupil behaviors as they interact with
    teacher.
    Supervisor can use videotape to back up his/her points, reinforce
    what he is explaining to teacher. Supervisor picks up non-verbal
    cues, nuances, feelings, etc., not caught by camera and having to
    do with classroom interaction.
    Supervisor can provide support in a way that the objective video
    recording cannot.

29. Flanders Interaction Analysis

30. a.   –
    b.   –
    c.   –
    d.   x

31. a.   –
    b.   x
    c.   –
    d.   –

32. The effect on pupil learning; on pupil behavior; on the students

33. critical incident

34. analysis/strategy; critique; conference

35. a.   –
     b.   –
     c.   x
     d.   –

36. a. respecting; accepting; supporting
     b. reflecting feeling; paraphrasing
     c. attending; listening
     d. clarifying; paraphrasing; rephrasing
     e. attending; listening; focusing; leading
     f. focusing; targeting; leading
     g. summarizing; reviewing; recalling

37. a. Goal of non-directive style: primarily seeks to get teacher
         to analyze own lesson; select own skills for practice; iden-
         tify own needs; come up with own ideas for alternative ap-
         proaches; S. does not provide answers; uses probing questions;
         helps teacher become self-evaluative.

     b. Goal of directive style: points out to teacher the strengths
         and weaknesses of lesson; makes specific suggestions for
         change; gets teacher to see his points; selects skills for
         practice; active in giving feedback to teacher; evaluates
         the teacher.

     c. Distinguishing between styles: Non-directive supervisor does
         more questioning than telling; teacher does much of the talk-
         ing; Supervisor points out what happened and asks teacher to
         analyze what occurred and why.

         Directive supervisor tends to do more of the talking; tells
         teacher the positive and negative points about lesson; S.
         gives opinions; suggests alternatives and changes; teacher
         does less talking and more listening.

COMPILATION OF RESPONSES ON PRE-TEST

1. <u>List 4 of the most characteristic features of microteaching</u>.

Subject 1. No response for 1 - 4.

* * * * * * *

S2. Short term.
Observation.
Evaluation.
Goal-setting.

* * * * * * *

S3. Observation.
Critiquing.
Assessment.
Planning next step.

* * * * * * *

S4. Made up of team or group of supervisors that teacher
agrees upon.
Teachers view themselves and can begin to answer
their own questions.
Focus attention on that behavior which teacher wants
help on.
Can address the affective concerns.
Focus is on teacher's behavior.

* * * * * * *

S5. No response for 1 - 4.

* * * * * * *

S6. No response for 1 - 4.

* * * * * * *

S7. No response for 1 - 4.

* * * * * * *

S8. A short lesson.
A specific topic.
Review with supervisor
- - -

Q # 1. (Cont'd.)

* * * * * * *

S9.   Concentrates on observable behavior.
      Not judgmental.
      Supportive style.
      – – –

* * * * * * *

S10. Brevity.
      Simplicity.
      Introductory.
      – – –

2. List the 5 stages that comprise the total supervisory scheme for
    microteaching. Give one important purpose for each stage.

Subject 1. No response for 1 – 5.

* * * * * * *

S2. Don't know.

* * * * * * *

S3. Pre-observation: initial meeting with helpee to set
                       up what will be observed and method
                       of observation.
     Observation: videotaping, etc.
     Gathering data and putting together to present at
                     post-observation conference.
     Post-observation meeting: sharing data, working on
                     analysis and next step.
     Looking at self as supervisor and role played, plan-
                     ning next steps.

* * * * * * *

S4. No response for 1 – 5.

* * * * * * *

S5. No response for 1 – 5.

* * * * * * *

S6. No response for 1 – 5.   No response or
                                               don't know: 9

* * * * * * *

Q # 2. (Cont'd.)

> S7. No response for 1 - 5.
>
>   * * * * * * *
>
> S8. No response for 1 - 5.
>
>   * * * * * * *
>
> S9. No response for 1 - 5.
>
>   * * * * * * *
>
> S10. No response for 1 - 5.

3. The focus of microteaching is primarily on teacher behavior rather than on pupil behavior.

    yes___8___   no___0___   don't know_____

4. Microteaching is a method for the preparation of pre-service teachers and is therefore unsuitable for in-service situations.

    yes___0___   no___8___   don't know___2___

5. The "micro" in microteaching refers to the small part it should play in the total training of teachers.

    yes___1___   no___7___   don't know___2___

6. Name at least 3 sources of feedback provided for in microteaching.

> S1. Videotaping
>   Verbal feedback from supervisor
>   Self-evaluation
>
>   * * * * * * *
>
> S2. Peers
>   Supervisor
>   Self
>
>   * * * * * * *
>
> S3. Verbal
>   Non-verbal   Videotaping
>   Auditory

Q # 6. (Cont'd.)

* * * * * * *

S4. Videotape
     People observing
     Written procedure of what was done and said through-
       out the lesson

* * * * * * *

S5. Videotape
     Supervisor
     Peer group

* * * * * * *

S6. No response for 1 - 3

* * * * * * *

S7. Videotaping
     - - -
     - - -

* * * * * * *

S8. Audio
     Visual
     - - -

* * * * * * *

S9. Verbal
     Video
     Written

* * * * * * *

S10. Self
      Supervisor
      TV screen

7. What means does microteaching customarily use to assure that all
    data FROM lesson observations is obtained as objectively as pos-
    sible?

    Video, videotaping,
    TV camera, videotapes___7___   no response___3___

8. <u>From the following list, check only those items which would lend themselves well to microteaching practice.</u>

	No. of times checked
a) selecting films for a science unit	1
b) developing long-term goals for curriculum units	3
c) asking divergent questions	8
d) using examples and analogies	8
e) planning for academic grouping arrangements	4
f) positively reinforcing pupil behavior	9

9. <u>What is a main criterion to be used in the selection of teaching skills that can be practiced in microteaching?</u>

S1. No response

S2. Individual needs

S3. Don't know

S4. No response

S5. No response

S6. Something or one objective that can be focused upon easily in a microteaching session

S7. No response

S8. No response

S9. Don't know

S10. You yourself must be able to teach the skills

Summary: no response 5   don't know 2

10. During the observation of a microlesson, the supervisor focuses his/her attention on a variety of teaching behaviors which are subsequently discussed with the teacher.

yes 4   no 5   don't know 1

11. What is the basic 3-step pattern of the microteaching process?

S1. No response

S2. No response

S3. Don't know

S4. Discussion of what is to be observed
     Tape or observation
     Discussion of evaluation (critique)

S5. No response

S6. No response   No response or
                                     don't know 7
S7. No response

S8. No response

S9. Observe
     Discuss
     Interpret (analyze)

S10. Micro-lesson
     Viewing
     Re-teaching same lesson

12. For microteaching to be effective, a microteaching supervisor should select for training and practice only those teaching behaviors that are on the list of identified teaching skills in the microteaching literature.

yes 2   no 4   don't know 4

13. Individualizing microteaching according to the needs of the micro-teacher is not feasible.

yes 0   no 9   don't know 1

14. <u>List at least 2 expected outcomes of the supervisory critique</u>
<u>session that follows the teaching of a microlesson.</u>

      S1.   Recognition of strengths and weaknesses.
               Alternative ways of approaching a particular task.

      S2.   Feedback from others.
               A positive feeling about what one has done.

      S3.   New awareness of self in teaching.
               Planning of next steps.

      S4.   Teacher is able to verbalize or see different methods
                  she could use without supervisor saying it.
               Honest communication.

      S5.   No response for 1 and 2

      S6.   Improve a skill focused upon.
               Positive feedback.

      S7.   No response.

      S8.   Setting new goals.
               - - -

      S9.   Change in behavior.
               Better relationship between observer and teacher.

    S10.   The teacher is aware of the successes he has made.
               He is aware of other ways of handling particular
                 situations.

15. <u>List at least 3 training strategies a microteaching supervisor</u>
<u>might employ to train the teacher in a specific teaching behavior</u>.

      S1.   No response for 1 - 3.

      S2.   No response for 1 - 3.

      S3.   Don't know.

      S4.   No response for 1 - 3.

      S5.   Videotape
               Flanders
               - - -

      S6.   No response for 1 - 3.

Q # 15. (Cont'd.)

    S7. No response for 1 - 3

    S8. No response for 1 - 3

    S9. Role-playing
        Observing others - video, etc.
        - - -

                                    No response or
    S10. No response for 1 - 3   don't know 8

16. The learning theory that underlies the microteaching model is
    the same as that which produced the idea of programmed learning.

    yes 2   no 2   don't know 5

17. The pupils who have been taught the microlesson are not asked
    to give their opinions of the teacher's lesson.

    yes 3   no 1   don't know 6

18. Given sufficient time and practice, teachers should be expected
    to learn and adopt as their own all of the microteaching skills
    already identified as important to good teaching.

    yes 1   no 4   don't know 5

19. Identify 3 types of questioning skills and write definitions of
    each that distinguish them from one another.

    S1. Higher order questioning.
        Cognitive: showing use of individual thought
          processes.
        - - -

                    * * * * * * *

    S2. Higher order: inference, putting information to-
          gether cohesively.
        Simple recall
        Deductive reasoning.

                    * * * * * * *

    S3. Don't know

                    * * * * * * *

Q # 19.   (Cont'd.)

        S4.   No response for 1 - 3

                * * * * * *

        S5.   No response for 1 - 3

                * * * * * *

        S6.   No response for 1 - 3

                * * * * * *

        S7.   No response for 1 - 3

                * * * * * *

        S8.   No response for 1 - 3

                * * * * * *

        S9.   Clarifying: asking for greater depth in a given
             answer.
             - - -
             - - -

                * * * * * *

                                     No response or
        S10. No response for 1 - 3   don't know 7

20. Microteaching is a training method that focuses on a teacher's
lesson presentation skills only and is therefore not a suitable
method for analyzing teacher-pupil interaction patterns.

    yes   0   no   9   don't know   1

21. It is possible to conduct microteaching sessions without the use
of videotape recorders or other such technological equipment.

    yes   3   no   4   don't know   3

22. Microteaching can address the affective concerns that are also
part of teaching, that is, the realm of feelings and sensitivity.

    yes   8   no   0   don't know   2

23. <u>Microteaching was developed primarily for use as an in-service</u>
<u>approach to the improvement of classroom instruction.</u>

yes__6__   no__0__   don't know__4__

24. <u>In microteaching the teacher usually concentrates on practicing</u>
<u>at least 3 teaching techniques in a single lesson.</u>

yes__1__   no__3__   don't know__6__

25. <u>Trying out the use of a new kit of math materials with a class</u>
<u>and videotaping the session for later analysis is an example of</u>
<u>utilizing the microteaching concept.</u>

yes__2__   no__3__   don't know__5__

26. <u>In the teaching of microlessons, what should the video camera</u>
<u>primarily focus upon</u>?

		No. times checked
A.	The teacher's behavior	8
B.	Student behavior	0
C.	Use of materials	0
D.	Everything	2

27. <u>Which of the statements below describes what a supervisor should</u>
<u>be doing during the observation of a microlesson</u>?

		No. times checked
A.	Making sure the students behave well.	0
B.	Recording factual information about the events observed.	9
C.	Judging which are the positive and negative points that should be discussed with the teacher.	2
D.	Writing a running critique of the lesson.	2
E.	Supervisor does not really need to be present.	3

28. <u>Explain briefly how the supervisor's observations complement the observation recorded on videotape and vice versa.</u>

      S1.   No response

      S2.   The supervisor provides a human element - support, comments, observation. The camera provides the reality of what happened.

      S3.   Strengths can be dealt with and brought out - new awareness made known.

      S4.   If there is a question you can check back to the tape.

      S5.   No response

      S6.   No response

      S7.   No response

      S8.   No response

      S9.   Can be used to highlight recorded observation, can therefore be more descriptive.

      S10. No response   No response<u> 6 </u>

29. <u>What observation system might a supervisor be using if during a lesson he were tallying the frequency of certain teacher behaviors, such as lecturing, giving directions, accepting ideas of students, praising and encouraging?</u>

Flanders<u> 1 </u>   No response<u>   5   </u>

Other responses: critique<u> 1 </u>
                        base line<u> 1 </u>
                        The supervisor might look for only 1 behavior and make an appropriate checklist of its occurrence.<u> 1 </u>
                        Microsupervision<u> 1 </u>

30. <u>Of the statements listed below, check the most important one for the supervisor to remember during observations of lessons.</u>

                                              No. Times
                                            Checked

     A. Never intervene in a lesson in any way.   <u>   4   </u>

Q # 30.   (Cont'd.)

		No. Times Checked
B.	Know each student in the class well so you can understand the situation the teacher is in.	0
C.	Make it a point to be friendly with the teacher in front of the class.	0
D.	Know specifically what you are looking for in the lesson and record it objectively.	9

31.   Which of these observation notes taken by supervisors during lessons is an inappropriate one?

A.	Teacher breaks the tension now and then with humorous remarks.	1
B.	Teacher is not capable of dealing effectively with the brightest students.	9
C.	No repetition of the 3 main points anywhere in the lesson.	2
D.	Frequent use of positive reinforcement brought additional responses from students.	0

32.   On what basis can a pattern of teaching behavior be judged significant or not significant?

S1.   No response

S2.   Its effectiveness with the given group of students

S3.   What it does to the children

S4.   From teacher view

S5.   No response

S6.   No response

S7.   No response

S8.   No response

S9. Effectiveness on children

S10. No response

No response__6__

33. A single, or occasional, action of a teacher (as opposed to a pattern of teaching behavior) that is very significant is termed a_____.

No response__10__

Critical incident__0__

34. In which stage of microteaching supervision is the close examination of significant teacher behavior by the supervisor most appropriate?

No response__8__

After videotaping__1__

During the analysis of the videotape__1__

35. The modern concept of supervision ideally views the supervisor as a(n)

A. Leader __0__

B. Evaluator __0__

C. Colleague/helper __10__

D. Teacher __0__

36. Write the name of the helping skill being used by the supervisor in each statement or behavior below.

a) "If your questioning skills are what you really want to work on, then that's what is most important right now."

Respecting __0__

b) "In other words, you're feeling quite anxious about this conference."

Reflecting feeling __2__

Q # 36. (Cont'd.)

    c) Supervisor leans forward slightly and maintains eye
        contact.

                Attending
                (Listening)   __1__

    d) "Let me see if I understand clearly what you're
        saying."

                Clarifying   __1__

    e) Supervisor avoids changing the topic.

                Attending
                (Listening)   __0__

    f) "We seem to be touching on a lot of things here.
        Suppose we zero in on . . ."

                Focusing   __2__

    g) "Let's review the highlights of what we've talked
        about today so that our direction from here on is
        clear."

                Summarizing   __2__

37. Assuming that the improvement of instruction is the ultimate goal
    of all supervision,

    a) What is the supervisor's goal in using a non-directive
        supervisory style?

    No response __7__

    Other responses: Makes the assumption that the teacher
                     knows, on an intellectual level, what
                     needs to be done, and just needs the
                     opportunity to act that out. __1__

                     Self-evaluation of helpee.   __1__

                     Generally lends support and
                     builds confidence.   __1__

Q # 37. (Cont'd.)

b) What is the supervisor's goal in using a
   <u>directive</u> style?

   No response___7___

   Other responses: Makes assumptions about the specific
                     needs of the teacher - helps to
                     act on them.   __1__

                     Direction.   __1__

                     Helping person stay focused,
                     have goal and see progress
                     towards it.   __1__

c) How do you distinguish between the two styles?

   No response___8___

   Other responses: Supervisors actions and com-
                     ments.   __1__

                     In non-directive, the supervisor
                     allows the teacher to pinpoint, on
                     his own, the areas of strengths or
                     weaknesses in his teaching; in
                     directive, he brings particular areas
                     of strengths and weaknesses to the
                     attention of the teacher.   __1__

                     END OF PRE-TEST

COMPILATION OF RESPONSES ON POST-TEST

1. <u>List 4 of the most characteristic features of microteaching</u>.

    Subject 1.   Explore alternatives.
                 Real teaching situation.
                 Feedback from supervisor, students and colleagues.
                 Constructive evaluation of specific skills - low
                    risk.

            S2. That it is real teaching to a real group of students.
                 That it focuses on specific objectives, co-determined
                    by teacher and supervisor.
                 That there is an opportunity to try out a lesson more
                    than once.
                 That the focus is on developing specific teaching
                    skills.

            S3. Allows the teacher to concentrate on one skill at
                    a time.
                 Real teaching, involving students, etc.
                 Critiquing after teaching, planning next step.
                 Teacher is in control of what skills chosen to work
                    on.

            S4. Scaled down approach - less students, shorter time
                    (5 min.)
                 Non-threatening where one or two skills <u>only</u> are
                    focused on.
                 Genuine teaching.
                 Re-teaching takes place.

            S5. Provides video feedback.
                 Provides a no-failure setting.
                 Provides a re-teaching situation.
                 Provides supervisor feedback.

            S6. Shortened teacher encounters - brief lessons, small
                    classes.
                 Varied teacher approaches.
                 Improved skills.
                 Teacher feedback.

            S7. Pre-conference.
                 Teach lesson.
                 Observe lesson.
                 Re-teach lesson.

Q # 1. (Cont'd.)

        S8.   The videotape machinery.
              The shortness of the lesson.
              The specificity of the goals.
              The re-teaching.

        S9.   Helps teacher focus on one or two skills.
              Safe environment.
              Receive immediate feedback from several sources.
              Allows for re-teach.

        S10. It is real teaching.
              It is safe practice of one or two skills.
              Feedback from several sources is "immediate."
              Re-teaching provides opportunity for improvement
                 and further development of skills.

2.   List the 5 stages that comprise the total supervisory scheme for microteaching. Give one important purpose for each stage.

      Subject 1.   Pre-observation conference.
                    Observation.
                    Analysis and strategy of supervisor.
                    Supervision conference.
                    Post-conference analysis.

        S2.   Pre-observational conference.
              Observation.
               Analysis/strategy.
               Critique.
               Re-teach.

        S3.   Pre-observation conference - establishing purpose
                (goals, objectives) of lesson to be observed -
                what to watch for.
              Observation - Supervisor observes teacher behaviors,
                skills used, etc., as set up in pre-observation
                conference.
              Analysis/strategy - deciding how to present informa-
                tion obtained during observation.
              Post-observation conference - critique of skills ob-
                served, e.g., teacher behaviors, etc.
              Evaluating and planning for next step in teaching -
                deciding what to change and how for teaching les-
                son again.

Q # 2.   (Cont'd.)

S4.   Pre-observation - increases communication between
      supervisor and teacher; set goals.
      Observation - observe what is taking place using a
      videotape plus observation notes.
      Analysis/strategy - supervisor organizes his thoughts
      and selects approach to be used (non-directive,
      directive or both).
      Critiquing/training - supervisor and teacher meet to
      help aid teacher to focus on areas or a skill to
      be worked on.
      Re-teach - for purpose of letting teacher try again
      after suggestions have been given.

S5.   Pre-observation - provides for a relaxed feeling be-
      tween supervisor and teacher.
      Observation - gathering data.
      Analysis and strategy - organizing data.
      Supervision conference - provides feedback to teacher.
      Post-conference - critiquing supervisor.

S6.   Pre-observation conference.
      Observation.
      Analysis/strategy.
      Critique/training.
      Re-teach.

S7.   Pre-conference.
      Observe lesson.
      Analyze data.
      Post-conference.
      Re-teach.

S8.   Pre-observation conference - to set goals.
      Observation - to gather data.
      Strategy/analysis - to organize data and set up agenda.
      Critique and training - to go over data and modify
      lesson.
      Re-teach - to practice skill.

S9.   Pre-observation conference - define goals, establish
      what supervisor will watch for.
      Observation - get objective data on agreed areas.
      Analysis - organize data, look for patterns.
      Post-observation conference - share data, re-think
      class, prepare to re-teach.
      "Post-mortem" for supervisor - share perceptions,
      did supervisor do what agreed upon.

S10. Pre-teaching conference or planning session.
       Teaching session.
       Planning session for supervisor.
       Post-teaching conference with supervisor and teacher.
       Post-teaching session or re-teach.

3. <u>The focus of microteaching is primarily on teacher behavior rather than on pupil behavior</u>.

    yes 10   no 0   don't know 0

4. <u>Microteaching is a method for the preparation of pre-service teachers and is therefore unsuitable for in-service situations</u>.

    yes 0   no 10   don't know 0

5. <u>The "micro" in microteaching refers to the small part it should play in the total training of teachers</u>.

    yes 2   no 8   don't know 0

6. <u>Name at least 3 sources of feedback provided for in microteaching</u>.

    Subject 1. Supervisor's feedback.
                 Student feedback.
                 Teacher's self analysis/videotaping/colleagues' feed-
                    back.

            S2. Videotape.
                 Supervisor's notes.
                 Supervisor's observation (verbalized).

            S3. Videotape.
                 Supervisor.
                 Students.

            S4. Supervisor.
                 Self.
                 Videotape.
                 Peers.

            S5. Student.
                 Supervisor.
                 Video.

            S6. Videotape.
                 Supervisory notes.
                 Pupil feedback.

Q # 6. (Cont'd.)

        S7.   Videotape.
                Teacher observation.
                Students' observations or reactions.

        S8.   Supervisor feedback.
                Student feedback.
                Teacher/self feedback.

        S9.   Video.
                Student.
                Supervisor.

       S10.   Self.
                Students.
                Supervisor.

7.   What means does microteaching customarily use to assure that all data from lesson observations is obtained as objectively as possible?

    Videotaping, videotape,
    camera   10   No response 0

    Answers supplementing
    videotape response: V-T and also teacher is encouraged to do most of analyzing.
                           V-T. The observer records data that is not drawing conclusions one way or the other. No judgments are made in the notes.
                           V-T and audio tape.
                           V-T, or tape recording, or notes.

8.   From the following list, check only those items which would lend themselves well to microteaching practice.

	No. of Subjects Checking This Choice
Selecting films for a science unit	0
Developing long-term goals for curriculum units	1
Asking divergent questions	10
Using examples and analogies	10

Q # 8. (Cont'd.)

	No. of Subjects Checking This Choice
Planning for academic grouping arrangements	0
Positively reinforcing pupil behavior	10

9. What is a main criterion to be used in the selection of teaching skills that can be practiced in microteaching.

Subject 1. Individualization. It is imperative the supervisor use strategies which represent the identified needs of the teacher.

S2. Comfort level of the teacher (teacher needs).

S3. That the skills improve teaching and classroom effectiveness.

S4. Recording patterns a teacher may use throughout her lesson and recording subtler events that may occur.

S5. A general observation of a lesson - from there, skills can be selected for a micro-teaching session.

S6. Focusing.

S7. The main criterion is what the teacher feels is a need when she has the conference with the supervisor.

S8. The skill should be picked by the teacher.

S9. Is it an observable skill?

S10. They are those which are mutually agreed upon by teacher and supervisor.

Summary: (Don't know or no response) 0

Answer related to individual teacher need 4

Answer related to teacher selection, agreement 2

Observable skill 1

10. <u>During the observation of a microlesson, the supervisor focuses his/her attention on a variety of teaching behaviors which are subsequently discussed with the teacher.</u>

yes <u> 1* </u>   no <u> 9** </u>   don't know <u>   0   </u>

   * Yes answer, but word "variety" is question-marked and under-lined.
  ** One of these is marked yes, but comment states, "Only 1 or 2 skills at a time." Indicates correct understanding and is therefore included in the "no" column.

11. <u>What is the basic 3-step pattern of the microteaching process</u>?

Teach-critique-re-teach<u> 10 </u>   (no response)
                                                        or
                                            don't know<u>   0   </u>

12. <u>For microteaching to be effective, a microteaching supervisor should select for training and practice only those teaching be-haviors that are on the list of identified teaching skills in the microteaching literature.</u>

yes<u>   2* </u>   no<u>   8   </u>   don't know<u>   0   </u>

  *One of these comments, "Yes. Unless they find better."

13. <u>Individualizing microteaching according to the needs of the micro-teacher is not feasible.</u>

yes<u>   0   </u>   no<u>   10 </u>   don't know<u>   0   </u>

14. <u>List at least 2 expected outcomes of the supervisory critique session that follows the teaching of a microlesson.</u>

Subject 1. Alternate ways of presenting lesson.
         New resources, positive feedback of strengths, label-ing mastered skills, labeling weakness (feeling of support and trust).

      S2. Teacher learning about how the objective was met. Teacher feeling good about something that was ac-complished.

      S3. Awareness on teacher's part of teaching behaviors and the effect on class.
         Learning new skills or more effective ways of using known skills.

<u>Q # 14.   (Cont'd.)</u>

S4.   Teacher should become aware of skill she/he needs to
        work on.
      Teacher should be able to verbalize the skill area
        where he/she needs help.

S5.   The teacher knows of additional ways to approach a
        lesson.
      The teacher has a good feeling for what they have or
        will do.

S6.   Preparation for post-conference.
      Focusing in on and bringing attention on skills that
        are strengths and skills that need to be improved.

S7.   Agreement on the handling of the target behavior.
      An agreed upon approach to handling the target be-
        havior in the re-teach.

S8.   Modifying of lesson.
      Re-teach the lesson.

S9.   Teacher would feel some basis of rapport and support.
      Teacher and supervisor would have discussed the skills
        teacher had been working on and teacher would have
        ideas on how to modify for the re-teach.

S10. Teacher learns specific behaviors or patterns which
        affect student learning.
      Teacher plans to build upon strong points while
        correcting weak areas.

15.   <u>List at least 3 training strategies a microteaching supervisor
      might employ to train the teacher in a specific teaching behavior.</u>

Subject 1.   Directive
              Non-directive
              Combination of the two

         S2. Showing videotapes of other lessons.
              Verbalized recounting of alternative methods.
              Suggesting appropriate readings.

         S3. Film.
              Observation of lesson by someone else.
              Discussion, readings.

Q # 15.   (Cont'd.)

        S4.   Directive.
               Non-directive.
               Combination of both.
               (I'm not sure what you really mean.)

        S5.   Provide literature.
               Arrange for observation of a trained person in that
                  skill.
               Re-teach.

        S6.   Focusing.
               Summary.
               Analogy.

        S7.   Refer to literature on the behavior.
               Discuss possible methods.
               Provide a model for the teacher to observe.

        S8.   Observe other teachers.
               Do some reading in that area.
               Re-teach the lesson.

        S9.   By observing another teacher or supervisor.
               Lecture method.
               Rehearsal with supervisor.
               (I'm not sure I understand it.)

        S10. Give a demonstration.
               Suggest a specific skill used by another teacher.
               Assign reading.

16.   The learning theory that underlies the microteaching model is
      the same as that which produced the idea of programmed learning.

      yes 6*   no   3   don't know 1

      *A don't know answer commented: "I imagine yes." Counted as a
      yes, therefore.

17.   The pupils who have been taught the microlesson are not asked to
      give their opinions of the teacher's lesson.

      yes   1   no   9   don't know   0

18. <u>Given sufficient time and practice, teachers should be expected</u>
<u>to learn and adopt as their own all of the microteaching skills</u>
<u>already identified as important to good teaching.</u>

    yes 3   no 7   don't know 0

19. <u>Identify 3 types of questioning skills and write definitions of</u>
<u>each that distinguish them from one another.</u>

    S1. Probing – teacher asks questions that require more
             than superficial answers (elaboration by student).
         Higher order – "Why?" Asking for rationales or justi-
             fication.
         Divergent – Open-ended, asks children to choose in-
             dividual cognitive processes employing both con-
             crete and abstract.

                    * * * * * * *

    S2. Probing questions – looking for implied meaning.
         Examples – to determine if the child can generalize.
         Clarifying questions – to get at what the student
             means.

                    * * * * * * *

    S3. Open-ended – having a child explore further in
             thought an idea or concept.
         Probing – gathering more information on subject.
         Clarifying – asking for clarification of idea ex-
             pressed.

                    * * * * * * *

    S4. Probing – How do you feel about that happening to
             someone?
         Higher Order – Why do you think he was a selfish per-
             son?
         Lower Order – Who was the first president?

                    * * * * * * *

    S5. Divergent – What would happen if everyone lost their
             job?
         Probing – Yes, but then what would have to be done?
         Clarifying – Could you state that in another way?

                    * * * * * * *

Q # 19. (Cont'd.)

   S6. Open-ended - Teacher gets students to ask questions,
      give feedback, find solutions.
     Lecture - Teacher lectures to students, ask ques-
      tions, students answers mostly factual.
     Rhetoric - Teacher gives questions, answers them;
      too little pupil involvement.

       * * * * * * *

   S7. Factual - This type of questioning skill brings out
      basic knowledge of the students. Usually there
      is a right or wrong, yes or no answer.
     Probing - This involves follow-up questions to help
      the student discover a more difficult concept.
     Higher Order - this helps students to <u>generalize</u>
      about the concept.

   S8. No response for 1 - 3.

       * * * * * * *

   S9. Probing - Asks students to go into more depth on a
      given subject, open-ended in nature.
     Cause and effect - Asks student to relate not just to
      concept, but to actual cause and effect situations.
     Comparison - Asks student to use either concrete or
      higher order thinking to draw inferences, bring
      other related data together.

       * * * * * * *

   S10. Probing questions get a student to continue in a
      desired direction.
     - - -
     - - -

     Summary: No response or
          don't know   1

20. <u>Microteaching is a training method that focuses on a teacher's</u>
  <u>lesson presentation skills only and is therefore not a suitable</u>
  <u>method for analyzing teacher-pupil interaction patterns.</u>

  yes 0   no 10   don't know 0

21. <u>It is possible to conduct microteaching sessions without the use</u>
    <u>of videotape recorders or other such technological equipment.</u>

    yes___8___   no___2___   don't know___0___

22. <u>Microteaching can address the affective concerns that are also</u>
    <u>part of teaching, that is, the realm of feelings and sensitivity.</u>

    yes___6___   no___2*___   don't know___2___

    *One of those comments: "I feel a bit confused. I do think
     there are some affective areas it's not appropriate for."

23. <u>Microteaching was developed primarily for use as an in-service</u>
    <u>approach to the improvement of classroom instruction.</u>

    yes___4___   no___4___   don't know___2___

24. <u>In microteaching teh teacher usually concentrates on practicing</u>
    <u>at least 3 teaching techniques in a single lesson.</u>

    yes___0___   no___10___   don't know___0___

25. <u>Trying out the use of a new kit of math materials with a class</u>
    <u>and videotaping the session for later analysis is an example of</u>
    <u>utilizing the microteaching concept.</u>

    yes___5___   no___5___   don't know___0*___

    *A don't know answer comment: "I imagine yes." Counted as a
     yes, therefore.

26. <u>In the teaching of microlesson, what should the video camera</u>
    <u>primarily focus upon?</u>

	No. of Subjects Checking this choice:
A. the teacher's behavior	10
B. student behavior	0
C. use of materials	0
D. everything	1

27. <u>Which of the statements below describes what a supervisor should</u>
<u>be doing during the observation of a microlesson?</u>

<div align="right">
No. of Subjects
<u>Checking this choice:</u>
</div>

A. Making sure the students
behave well.   0

B. Recording factual information about
the events observed.   10

C. Judging which are the postive and
negative points that should be
discussed with the teacher.   0

D. Writing a running critique of the
lesson.   6*

E. Supervisor does not really need to
be present.   1

*One of these comments: "Meaning → recording as accurately as possible
what has been said, esp. if looking for
pattern."

28. <u>Explain briefly how the supervisor's observation complements the</u>
<u>observation recorded on videotape and vice versa.</u>

S1. Given it has been pre-determined in pre-observation
conference which skill will be focused on the supervisor
takes notes and can show the teacher on the tape exactly
which behaviors she is referring to. Teacher can observe
them herself on the tape and may see things in other areas
she would like to change.

S2. They add a human dimension; involve the supervision more
closely; pick up more than the camera can.

S3. The supervisor can pick up more on human interactions than
the video tape. The V-T will show what is focused on where
the supervisor may be in a position to see much more and
record such accordingly.

S4. Supervisor can make notes on non-verbal cues being given
that tape cannot pick up. Also, supervisor can help
complement the tape by working on patterns the teacher
may use or behaviors by teacher.

Q #28. (Cont'd.)

S5. The supervisor might point out a behavior and then show that behavior on the videotape and have the teacher look at the results or absence of results as far as children are concerned. The student teacher can actually see how what the supervisor has recorded is factual and the proof as to what the supervisor is saying is evident.

S6. Supervisor picks up non-verbal clues, facial expression, etc. Total environment.
Physical set up.
Verbal comments.

S7. The supervisor's observations should be backed up by the videotape.

S8. The supervisor is able to be selective, highlight major points. The supervisor can pick up student reactions and non-verbal feelings.
The videotape doesn't miss anything.

S9. The video focuses mainly on teacher behavior. It is therefore not seeing pupil response, and other important classroom information.
The supervisor can pick up on facial expression, student response, etc., quite well, thus complementing the video, which usually focuses on the teacher.

S10. Supervisor often can see the "panorama" which is not available to the camera or recorder and can share more observations with the teacher.

29. What observation system might a supervisor be using if during a lesson he were tallying the frequency of certain teacher behaviors, such as lecturing, giving directions, accepting ideas of students, praising and encouraging?

Flanders 6   Don't know or no response 0

Other responses: IA or inventory of events. S1
                    Data collecting. S2
                    Baseline - recording the frequency of a targeted
                        behavior. S7
                    I don't really understand the term observation
                        system in this context. S9
                    Microteaching. S10

30. <u>Of the statements listed below, check the most important one for</u>
<u>the supervisor to remember during observations of lessons.</u>

No. of Subjects
Checking This Choice:

A. Never intervene in a lesson
in any way.   2

B. Know each student in the class
well so you can understand the
situation the teacher is in.   0

C. Make it a point to be friendly
with the teacher in front of the
class.   0

D. Know specifically what you are
looking for in the lesson and
record it objectively.   9

31. <u>Which of these observation notes taken by supervisors during les-</u>
<u>sons is an inappropriate one</u>?

No. of Subjects
Checking This Choice:

A. Teacher breaks the tension now
and   then with humorous
remarks.   0

B. Teacher is not capable of deal-
ing effectively with the bright-
est students.   8

C. No repetition of the 3 main
point anywhere in the lesson.   2

D. Frequent use of positive re-
inforcement brought additional
responses from students.   1

32. <u>On what basis can a pattern of teaching behavior be judged</u>
<u>significant or not significant</u>?

S1. If it affects students' learning and/or behavior.

S2. If it affects learning.

Q # 32. (Cont'd.)

> S3. The frequency of the pattern and its effect on the students.
>
> S4. How did it affect the students' learning?
>
> S5. No response.
>
> S6. Number of times it is repeated.
>
> S7. The effect that the behavior has upon the objectives.
>
> S8. If it happens often and in different situations.
>
> S9. How often does it occur, does it occur during specific times or around a certain type of situation?
>
> S10. If it affects the learning of the students.

33. A single, or occasional, action of a teacher (as opposed to a pattern of teaching behavior) that is very significant is termed a _____.

Don't know or no response 4   Critical incident 4

Other responses: Target behavior. S3
                  Crisis situations. S8

34. In which stage of microteaching supervision is the close examination of significant teacher behavior by the supervisor most appropriate?

Don't know or no response 0   Analysis or Analysis/Strategy 5

Other responses: Critique. S2
                  Not at the beginning but after there is an established trust relationship. S3
                  Post conference. S6
                  Observation stage. S7
                  Post-conference, or critique. S10

35. The modern concept of supervision ideally views the supervisor as a(n)

       A. leader   __0__

       B. evaluator   __0__

Q # 35.   (Cont'd.)

       C.   Colleague/helper   10

       D.   Teacher   0

36.   Write the name of the helping skill being used by the supervisor in each statement or behavior below.

    a)   "If your questioning skills are what you really want to work on, then that's what is most important right now."

       (No answer)   2   Respecting (or Accepting)   4

       Other responses: Focusing   S3
                        Reflecting   S5
                        Focusing   S6
                        Targeting   S7

    b)   "In other words, you're feeling quite anxious about this conference."

       (No answer)   1   Reflecting feeling   6

       Other: Focus - 2
              Target - 1

    c)   Supervisor leans forward slightly and maintains eye contact.

       (No answer)   1   Attending   7
                        (Listening)
       Other: Accepting - 1
              non-verbal att. - 1

    d)   "Let me see if I understand clearly what you're saying."

       (No answer)   1   Clarifying   7

       Other: Paraphrasing - 2

    e)   Supervisor avoids changing the topic.

       (No answer)   1   Attending   0
                        (Listening)
       Other: Focusing - 4
              Respect/reflect - 1

Q #36. (Cont'd.)

        Lead – 1
        Stay with – 1
        Forwardness – 1
        Targeting – 1

    f) "We seem to be touching on a lot of things here.
       Supoose we zero in on . . . ."

    Focusing___9___

    Other: Directing – 1

    g) "Let's review the highlights of what we've talked about
       today so that our direction from here on is clear."

    Summarizing___10___

37. Assuming that the improvement of instruction is the ultimate goal
of all supervision,

    a) what is the supervisor's goal in using a non-directive super-
visory style?

      Subject 1. To have teacher analyze her own behavior and
               look at things she might want help on.

           S2. To have the teacher reflect on his/her behaviors
               and elicit the feeling of the teacher himself;
               focuses on the teacher's needs.

           S3. The teacher takes responsibility for identifying
               needs and plans for the next step accordingly.
               The supervisor is supportive and clarifying, etc.

           S4. To get the teacher to do most of the analyzing
               after recorded results are presented.

           S5. The teacher will analyze his/her own lesson and
               through this analysis, will be able to conclude
               new approaches to the lesson or to other ways of
               doing it.

           S6. Giving the teacher time to become aware of his
               own skill improvement needs and finding solutions
               to them himself. Supervisor through open-ended

Q # 37a.   (Cont'd.)

questioning proves teacher to analyze and criti-
cize his own lesson. Give suggestions through
his own awareness of improving weaknesses, build
on strengths.

S7.   The goal is for the teacher to identify areas of
strengths and weaknesses. The teacher is en-
couraged to discuss weak points and methods of
improvement.

S8.   To permit the bulk of the responsibility of im-
provement on the perceptions and ideas of the
teacher.

S9.   To help the teacher establish and understand her
own needs, to permit the teacher, through self-
examination, to improve her instructional tech-
niques.

S10.   Allowing the teacher to define or identify the
skills he needs to work on.

b)   what is the supervisor's goal in using a <u>directive</u> style?

Subject   1.   Very specific skills that the supervisor feels
need work.

S2.   To provide concrete information and reinforcement.

S3.   The supervisor has a set of goals, does most of
the talking, establishes what skill will be worked
on and does the evaluating.

S4.   Lists both positive and negative occurrences
throughout lesson and verbalizes them. Very much
straightforward where supervisor does most of the
talking and analyzing.

S5.   To provide factual feedback on the lesson, to
state in black and white terms the data collected
and to provide suggestions for re-teach.

S6.   Supervisor identifies skill needs of teacher and
takes a direct approach to finding the solution
with little teacher participation. Supervisor
also judges strengths as well. Teacher has lit-
tle feed-in.

<u>Q # 37b.</u> (Cont'd.)

S7. The supervisor identifies the strong and weak points. Also offers advice as to how to improve the weak points.

S8. To analyze a series of points with the teacher and "tell" him/her how each affected the lesson.

S9. To improve, quite rapidly, a teacher's competence by focusing that teacher on what needs to be worked on, how to go about it, etc.

S10. Directing the teacher to define or identify skills he needs to work on.

c) <u>how do you distinguish between the two styles</u>?

Subject 1. Non-directive supervisor encourages teacher to analyze and elaborate. Open-ended. Directive – specific suggestions and alternatives by supervisor.

S2. The non-directive supervisor talks less, asks more clarifying questions.

S3. The involvement of the teacher and supervisor. More teacher involvement for non-directive. More supervisor involvement for directive.

S4. Non-directive – teacher and supervisor do about same amount of talking and sharing. Directive – supervisor does most of the talking and is very straightforward.

S5. In non-directive the teacher does most of the talking; In directive, the supervisor does.

S6. Non-directive: open-ended.
Directive: authoritarian.

S7. Directive: the supervisor does most of the talking.
Non-directive: the teacher and supervisor <u>discuss</u>. The supervisor does a lot of paraphrasing and rewording statement.

S8. Non-directive style has less supervisor talk, more probing questions.

<u>Q # 37c.   (Cont'd.)</u>

        S9.   Non-directive: impetus for change comes from
              teacher's own evaluation and analysis of her-
              self.
            Directive: "Outer directed." Needs perceived
              by supervisor, teacher works on them.

       S10.   In directive, supervisor does most of the talking.
             In non-directive, he does more listening.

                   END OF POST-TEST

(QUESTIONS 38 AND 39 APPENDED TO, BUT NOT PART OF, POST-TEST.)

38. <u>Where would you place yourself on this continuum?</u>

```
                              S6
                              S5,
non-directive                        directive
  supervisor          S9  S4,   S8    supervisor
              S10    S1       S2,   S7
   |_____|_____|_____|_____|
   1          2          3          4          5
              <——>
               S3
```
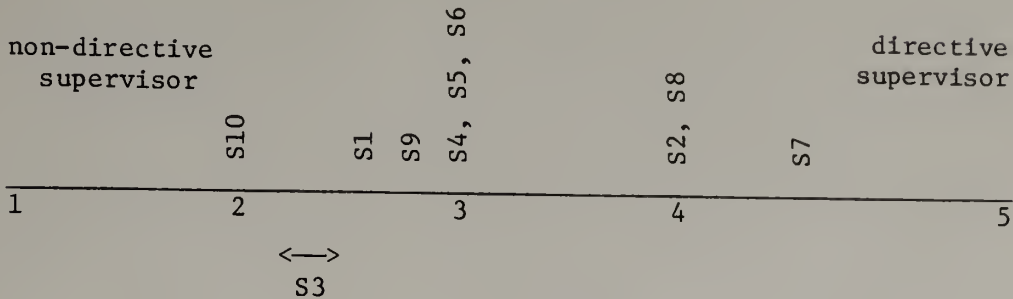
Subject 1.	Between 2 & 3.	Point 1	0
S2.	4	Between 1 & 2	0
S3.	Range from 2 to 3 checked.	Point 2	1
S4.	3	Between 2 & 3	3
S5.	3	Point 3	3
S6.	3	Between 3 & 4	0
S7.	Between 4 and 5.	Point 4	2
S8.	4	Between 4 & 5	1
S9.	Between 2 and 3.	Point 5	0
S10.	2		

<u>Comment:</u>

Subject 1. (No comment.)

S2. I feel that most teachers appreciate direct feedback.

S3. I find myself changing between 2 and 3 depending on the stage my pre-II interns are at. I know I do have information, etc., that I give to them, but try to get them to self-evaluative places.

S4. I have a tendency to mention things as they come up in the classroom. This is due primarily to the environment in Wildwood (meetings, etc.) (and no other

Q #38.   (Cont'd.)

    time available).   Parent pressure when mistakes do
    occur.

S5.   I give the student teacher a lot of time to speak
      and analyze but I do a lot of talking and directing myself.

S6.   I feel I use elements of both styles.

S7.   I tend to talk too much.

S8.   I have a more directive style. I will often offer
      my own views and observations.

S9.   Essentially at first I attempt to get a feel for
      what style the person is more comfortable with. I tend
      to be fairly middle of the road, comfortable to help a
      person perceive own needs but also comfortable to give
      feedback and perceptions too.

S10. I feel both teacher and supervisor can be more com-
      fortable in this method.

39. **If you were the teacher, by which kind of supervisor would you
     prefer to be critiqued?**

A) One with a tendency toward non-directive supervision ___6___

B) One with a tendency toward directive supervision   ___4___

Explain why.

Subject 1.   A. (No comment.)

      S2.   B.   I personally appreciate hearing someone else's
                  perceptions, and use those as a stimulus to compare
                  my reactions with.

      S3.   A.   I'd like to see for myself if I can look at my own
                  skills, styles of teaching, etc., and find places
                  for improvement. A non-directive supervisor would
                  help me do this. Yet being a great asset in giving
                  feedback and non-judgmental identification of what
                  they observed (patterns, etc.).

      S4.   A.   Seems less threatening.

Q #39.   (Cont'd.)

S5.   A. I am very confident in my teaching and
          really don't need to have the lesson and
          its components stated. I would rather
          talk about the lesson, students and why I
          approached the lesson this way. I feel I'm
          capable of analyzing the weaknesses of a lesson
          and am creative enough to come to new ideas
          for re-teaching.

S6.   B. I guess I feel more comfortable with structure.
          I need to know where I'm coming from. However, I
          do not want to be told how to do it. Give me some
          leeway for identifying my own skill needs and
          suggest alternative solutions, but give me help when
          I need it.

S7.   A. As a teacher I realize that we learn better
          through a discovery approach. No one likes to be
          told weak points. There is more growth in the non-
          directive approach.

S8.   B. I would like to express my opinions and feeling
          in the critique, but basically it would help me
          to have clearly stated my supervisor's observations
          and reactions. I would like a little more direct,
          structured approach.

S9.   B. Although I am fairly aware and able to do a good
          deal of self analysis, I get bugged about the time it
          takes. And I would rather get direct feedback if
          after a while I was still missing the point! Maybe
          my time pressures have affected my heavily
          Rogerian training!

S10.   A. I prefer to find my own strength and weaknesses,
          rather than being told.

COMPILATION OF QUESTIONNAIRE - UNIT ONE

1. Has this unit succeeded in giving you a clear understanding of
    what the Microteaching Concept basically is?

    yes 9   no 0   not sure 1

2. Do you know the difference between the Microteaching approach
    to supervision and a "shotgun" approach?

    yes 10   no 0   not sure 0

3. Do you think you can identify the main features that character-
    ize Microteaching?

    yes 8   no 0   not sure 2

4. Do you think you understand how Microteaching can be adapted to
    suit differing situations and settings?

    yes 8   no 0   not sure 2

5. Was the film helpful to you in explaining the rationale and pro-
    cedures of Microteaching?

    yes 8   no 0   not sure 1   (no response checked) 1

    Comments:

    - (no response checked) Somewhat.

6. Was the film used at an appropriate time in Unit One?

    yes 8   no 0   not sure 2

    Comments:

    - (yes) as background.

7. Were the instructions for the written exercises clear and complete?

    yes 10   no 0   not sure 0

    Comments:

    - (yes) very.

8. <u>Did you find the exercises useful in furthering the concepts of</u>
   <u>Unit One? If no, please elaborate</u>:

   yes__5__   no__0__   not sure__5__

   <u>Comments</u>:

   - (not sure) I might have gotten more out of a discussion with
     whole group.

9. <u>In the second exercise (p. 4), were the two examples given helpful</u>
   <u>in clarifying your task? If no, please explain</u>:

   yes__10__   no__0__   not sure__0__

   <u>Comments</u>:

   - (yes) Very much so.
   - (yes) Using a Special Education example is good.

10. <u>Do you see any value in doing that exercise alone first?</u>

    yes__7__   no__3__   not sure__0__

    <u>Comments</u>:

    - (yes) as long as discussion follows.

11. <u>Was it worthwhile to join with a group to share and discuss your</u>
    <u>responses to that exercise</u>?

    yes__10__   no__0__   not sure__0__

12. <u>The teaching level of the manual - Unit One - was</u>:

    too easy__0__   easy__1__   appropriate__9__

    difficult__0__   too difficult__0__

    <u>Comments</u>:

    - Most appropriate.

13. <u>What did you like most or find most useful about today's session</u>?

    - Being able to be open about my feelings and having them accepted.
      It was O.K. to not know all the answers.
    - I found this session to be clear, concise, thought-provoking and
      exciting in terms of professional growth.

Q # 13. (Cont'd.)

- Film.
- Seeing Dwight Allen on film and with a tie on. Also the break-
  down of the concept.
- The examples in the film of microteaching.
- The definition.
- The film.
- Gave me a better understanding of the utilization of the micro-
  teaching technique.
- Some awareness of what Microteaching is.

14. What did you like least or find least useful?

- Nothing.

- Written form.

- The pre-test was hard.

- Unnecessary to spend 5 - 10 minutes writing down problems.
  Brainstorming is excellent.

- Answering questions by myself (too tired!)

- Nothing in particular. Probably sitting around after group
  discussion.

- The exercise may not have furthered my understanding.

- My tiredness!

15. Your comments on any aspect of Unit One are invited here:

- It would seem fitting that there be some preliminary trust-
  building activities.

- The amount presented in Unit One was appropriate. Also it
  was written very concisely.

- In the film the man using the non-verbal clues was definitely
  unrealistic. I strongly feel that example be cut from the
  tape - there are so many better ways to use non-verbal clues.
  That one was ridiculous.

- I enjoyed the session very much, but if you don't mind I'd like
  to make what may be a "picky" observation. Both Lesson One and
  the film listed the feedback sources, in my opinion, in a sort
  of resource order. I would place "SELF" at the top of any list
  of any type of resources for evaluating one's teaching technique.

<u>Q # 15.   (Cont'd.)</u>

- (Participant's comment to explain a total of 6 "not sure" re-
  sponses): Not your fault - I'm out of it today! (See also
  response of same person in #14: "My tiredness.")

COMPILATION OF QUESTIONNAIRE - UNIT TWO

1. Was Reading A useful to you in reviewing the basic features of Microteaching covered in Unit One?

    yes 9   no 0   not sure 0   (no response) 1

    Comments:

    - (yes) Mostly.

2. Did Reading B help to define for the group a common set of teaching skills that might be used in identifying teacher needs and critiquing lessons?

    yes 6   no 0   not sure 2   (no response checked) 2

    Comments:

    - (no response checked) Haven't read it yet.
    - (not sure) I got fuzzed up about 3/4 way through.

3. Does this unit explain satisfactorily how M-T can be individualized to meet the specific needs of a teacher?

    yes 7   no 0   not sure 2   (no response) 1

    Comments:

    - (yes) If there is a group discussion, it might be beneficial.
    - (not sure) There needs to be approaches written up to use with various types of personalities. One approach can't be used with all.

4. Are you clear on what the important outcomes of a supervisory critique should be?

    yes 9   no 0   not sure 1

5. Was the idea clearly conveyed that teacher behavior is what M-T is primarily concerned with?

    yes 10   no 0   not sure 0

6. Did the videotape come at an appropriate time in Unit Two?

    yes 10   no 0   not sure 0

Q # 6. (Cont'd.)

Comments:

- (yes) Very much so.

7. <u>Did the videotape adequately demonstrate the process of teacher</u>
    <u>and supervisor jointly identifying teacher needs?</u>

    yes____9____ no____0____ not sure____1____

    Comments:

    - (not sure) Was this roleplaying or an actual class?

8. <u>Were the instructions for Exercise B clear and complete?</u>

    yes____9____ no____1____ not sure____0____

    Comments:

    - (no) More direction for the first time would have improved it.

9. <u>Was the role of the supervisor as a helper clearly conveyed?</u>

    yes____9____ no____0____ not sure____1____

    Comments:

    - (yes) In readings.
    - (yes) By you. I like it when you give of yourself personally.
             Your comments do have much meaning and are less mechani-
             cal.

10. <u>As you watched the tape, did writing your own observations on the</u>
     <u>lesson and on the critique serve a worthwhile purpose? Please</u>
     <u>comment.</u>

     yes____7____ no____0____ not sure____3____

     Comments:

     - (yes) It was nice to go on reading, only to discover many of
              the things you felt were important, the text supported.
     - (yes) It kept in mind points which helped me when I was taped.
     - (yes) Kept me focused on task.
     - (yes) Group discussion was also of equal help.
     - (yes) But I felt it should possibly have been guided - as we
              needed someone to refocus us at times.
     - (not sure) Had some similar comments of observation.

11. Do you think it is important to know some standard "question leads" that you might use in a supervisory conference?

yes 10   no   0   not sure   0

Comments:

- (yes) Very.
- (yes) Useful.
- (yes) For me.
- (yes) To have available, yes!

12. Was the tape helpful as a preparation for Exercise B?

yes 10   no   0   not sure   0

Comments:

- (yes) To a certain extent.

13. Do you think you know at least 3 training strategies a supervisor might use to give the teacher needed training in a teaching technique?

yes   7   no   1   not sure   2

14. Did participation in Exercise B contribute to your understanding of the concepts in Unit Two? If not, please comment:

yes   9   no   0   not sure   1

Comments:

- (not sure) I understand the concepts. I felt very uneasy about critiquing as the one I was critiquing was teaching a child's lesson to adults and it wasn't a true lesson.

15. The teaching level of the manual – Unit Two – was:

too easy   0   easy   0   appropriate   10

difficult   0   too difficult   0

16. What did you like most or find most useful about today's session?

- The videotape and supervisor cycle for observation, and running the videotape machine for the first time.

Q # 16. (Cont'd.)

- My supportive co-workers; flexibility.

- Observing the taped lesson was helpful in giving me a good
  visual example of microteaching. Roleplay Exercise B.

- The teaching tape and discussion were most useful. It seemed
  hard to critique our peers.

- The critique I did and the feedback that followed.

- Being taped myself in a comfortable group - may help to
  lower my anxiety in the future.

- The teaching lessons and critiques.

- My experience as "supervisor" made me realize that I am not
  always fully cognizant of others' behaviors as I could be.
  I don't always listen effectively.

17. What did you like least or find least useful about today's session?

- The critiquing of me.

- Nothing.

- More of a discussion on how to take notes to critique - maybe
  samples.

- The critique of the critiques.

- I am still unsure as how to efficiently use all the videotape
  machines.

- I was not totally aware of what was happening in critiquing of
  supervisor; because I was not with it today. Couldn't remember
  questions supervisor asked.

- I liked supervising least because it highlighted basic obvious
  inadequacies on my part. I wish I had done a better job.

- Formalizing teacher, supervisor. (Would rather talk and exchange
  ideas.)

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18. <u>Your comments on any aspect of Unit Two are invited here</u>:

- I liked the clear definitions and examples given of the technical skills of teaching.

- I thought the session was helpful – look forward to playing the role of supervisor. I think it will be hard.

- It was a useful, beneficial session.

COMPILATION OF QUESTIONNAIRE - UNIT THREE

1. <u>Were each of the 3 readings (C - Goldhammer, D - Cogan, and E - McNeil) helpful in providing background for studying the 5 stages of Microteaching supervision?</u>

    a) Yes, all of them were helpful.
    b) No, none of them was helpful. (Please comment.)
    c) Some of them were <u>not</u> helpful. (Please specify and comment.)

    a)__6__   b)__0__   c)__3__   (No response)__1__

    <u>Comments</u>:

    - (a) There were some real similarities but some definite differences between the readings.
    - (c) I found Goldhammer disappointing but I can't say exactly why except that I had heard so much about him that I expected more. Seemed like a lot of "verbiage" to me.
    - (c) Part of Cogan's was unbelievably verbose and hard to follow. Could the readings be consolidated better?
    - (c) I'm not sure on Cogan.

2. <u>Did Unit Three (includes manual, tape, and readings) explain satisfactorily what each stage of supervision consists of?</u>

    yes__9__   no__0__   not sure__0__   (no response)__1__

3. <u>Do you think you have a clear understanding of what the major goals for each stage should be?</u>

    yes__9__   no__0__   not sure__1__

    <u>Comments</u>:

    - (not sure) I think I know; not sure I could state concisely.
    - (yes) I question some of the responses on the readings where we had to complete the exercise. I felt G and H could be responses 1 or 4.

4. <u>Did the written exercise (Ex. C) in the manual help differentiate the stages from one another as well as draw attention to some significant aspects of the stages?</u>

    yes__10__   no__0__   not sure__0__

    <u>Comments</u>:

    - (yes) Only to reinforce what I thought I knew.

5. <u>Did the videotape come at an appropriate time in Unit Three?</u>

   yes___8___ no___0___ not sure___0___ (no response checked)___2___

   <u>Comments:</u>

   - (yes) But a little bit boring.
   - (no response checked) The videotape is not necessary for me.

6. <u>Did the videotape adequately demonstrate the 5-stage sequence</u>
   <u>of microteaching supervision? Please comment.</u>

   yes___9___ no___0___ not sure___1___

   <u>Comments:</u>

   - (yes) It seemed to tie everything together for me in "one"
            concise package. It would, however, have been more
            conductive to have "children" in on the final analysis
            of the teaching.
   - (yes) The videotape was rather lengthy.
   - (yes) With readings, yes. Without them the tape handled too
            much to absorb at a sitting.
   - (yes) Well listed and defined.
   - (yes) Yes, they were evident in the technique the supervisor
            used.

7. <u>Did writing down your observations and reactions while viewing</u>
   <u>the videotape serve a worthwhile purpose?</u>

   yes___7___ no___1___ not sure___2___

   <u>Comments:</u>

   - (yes) Plus discussion after.

8. <u>After viewing a demonstration tape, do you feel it is important</u>
   <u>to stop and discuss it before continuing in the manual?</u>

   yes___9___ no___0___ no opinion___0___ (no response checked)___1___

   <u>Comments:</u>

   - (no response checked) If the group expresses the need.

9. <u>Were the instructions for Exercise D clear and complete?</u>

   yes___9___ no___1___ not sure___0___

Q # 9. (Cont'd.)

Comments:

- (yes) But it all went too quickly - not enough time!

10. Was the videotape helpful as preparation for Exercise D?

yes___8___ no___0___ not sure___0___ (no response checked)___2___

Comment:

- (no response checked) Somewhat - possibly a better tape would
  help.

11. Which statement describes your feeling about the pacing of Ex.
    D (time allotted for each stage)?

a) I felt too rushed to get anything out of it.
b) I felt there was enough time to sample the essence of each
    stage.
c) I have no strong feeling about it either way.

a)___1___ b)___6___ c)___1___ (no response checked)___2___

Comments:

- (b) But there needed to be more time for discussion. It seems
       very mechanical.
- (no response checked) Doing this with peers is too staged.
       Would be more helpful to have real children.
- (no response checked) I was tired.
- (b) But also rushed. Maybe a bit slower, more time to digest
       it.
- (a) I felt somewhat rushed.

12. Did participation in Ex. D contribute to your understanding of
    what should (or should not) occur in each of the 5 stages?

yes___8___ no___0___ not sure___1___ (no response checked)___1___

Comments:

- (yes) Somewhat.

13. Do you feel, after having gone through the exercises and other
    materials of Unit Three, that you, as a supervisor, would be
    able to employ the 5-stage sequence? (Assume that conditions
    are favorable for doing so.) If no or not sure, please elabor-
    ate.

Q # 13. (Cont'd.)

    yes___9___ no___1___ not sure___0___

    <u>Comments</u>:

    - (no) There should be more practice involved in taking notes
           and being a supervisor because that's what we're trying to
           learn. We need a mediator to help keep us on task. All
           our group ended up critiquing the teacher instead of
           critiquing the supervisor. [Arrow from this response to
           #16 also.]*

14.   <u>The teaching level of the manual - Unit Three - was</u>:

    too easy___0___ easy___0___ appropriate___10___

    difficult___0___ too difficult___0___

15.   <u>What did you like most or find most useful about today's session?</u>

    - Having a chance to play the different roles (child, teacher,
      supervisor).

    - It was a confirmation of something I believe in and find useful.

    - I liked being the supervisor and having my supervising critiqued.

    - Repetition and overlearning I like.

    - The videotape was especially helpful to me, as well as the ex-
      ercises.

    - Roleplaying supervisor and focus on each stage as discrete.

    - Everything.

16.   <u>What did you like least or find least useful about today's session?</u>

    - Only that the videotape used "peers" in the teaching session
      and critique. They were not good at playing the age level for
      which the "lesson" was appropriate.

_____

    *Brackets mine.

Q # 16. (Cont'd.)

- [See this participant's comment for #13. Arrow drawn to #16.
  Comment is as follows: "There should be more practice involved
  in taking notes and being a supervisor because that's what we're
  trying to learn. We need a mediator to help keep us on task.
  All our group ended up critiquing the teacher instead of
  critiquing the supervisor."]*

- Doing a lesson with peers is not helpful for me. Of course
  the lesson proceeds nicely and there is no real indication of
  areas that need to be worked on.

- The session was long and the pace rapid. The lessons were all
  pretty good - sometimes finding weaknesses was hard.

- The shortness of time - the feeling of having to rush through.
  The superficiality of not having the real situation to teach
  in and supervise.

17. Your comments on any aspect of Unit Three are invited here:

- I'm delighted to see this unit as a component of microteaching.
  Keep with it!

- I like it. Thank you!!

- Everything seemed concise and relevant.

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*Brackets mine.

COMPILATION OF QUESTIONNAIRE - UNIT FOUR

1. <u>Were Readings F (2 sample microlessons) and G (non-directive approach) useful in providing background for a closer study of observing, analyzing, and supervising lessons</u>?

   yes:<u> F </u>   no:<u> F-3 </u>   not sure<u> 1 </u>   (no response)<u> 1 </u>

   <u> G-3 </u>   <u> G </u>

   <u>Both-5</u>   <u>Both</u>

   <u>Comments</u>:

   - (no) F was not that useful to me. G was.
   - G yes; F no.
   - G okay; F no.

2. <u>Has Unit Four been helpful in defining the observation task more fully</u>?

   yes<u> 10 </u>   no<u> 0 </u>   not sure<u> 0 </u>

3. <u>Has the unit provided you with some usable ideas for analyzing lessons</u>?

   yes<u> 10 </u>   no<u> 0 </u>   not sure<u> 0 </u>

4. <u>Have the helping skills been sufficiently treated in Unit Four so that you feel you could use them in supervision</u>?

   yes<u> 10 </u>   no<u> 0 </u>   not sure<u> 0 </u>

5. <u>Were the instructions for all exercises clear and complete</u>?

   yes<u> 9 </u>   no<u> 1 </u>   not sure<u> 0 </u>

   <u>Comments</u>:

   - (no) Initially I did not understand the chart for the videotape. All else O.K.

6. <u>Did the videotape come at an appropriate time in the unit</u>?

   yes<u> 10 </u>   no<u> 0 </u>   not sure<u> 0 </u>

Q # 6. (Cont'd.)

Comments:

- (yes) Was it necessary for us to see the lesson in the videotape?
- (yes) If I would have arrived on time.

7. Did the videotape adequately demonstrate the difference between directive and non-directive supervisory styles?

yes___7___   no___1___   not sure___2___

Comments:

- (yes) Fairly well.
- (not sure) At times, but then at times the differences were vague.
- (yes) The style differences were obvious; however one could see that neither in the purest form was the ultimate.
- (yes) It was very easy to tell the difference.
- (not sure) As you noted, neither style was "pure."
- (yes) They were clear for me. I could really see a difference.
- (yes) I definitely could see the difference in the supervisory style between directive - more authoritarian, supervisory responsibility and non-directive - open-ended, teacher aware-ness development and responsibility.
- (no) too much sameness and blending of the two styles.

8. Was the videotape helpful as preparation for doing Exercise F?

yes___8___   no___1___   not sure___0___   (no response checked)___1___

Comments:

- (no response checked) Somewhat - more as a review.

9. Do you feel that Exercise F contributed to your understanding of the two supervisory styles?

yes___10___   no___0___   not sure___0___

Comments:

- (yes) Glad I got to observe and talk it through as to my obser-vation - I think!

10. In terms of "approaches" and "goals," do you see the difference between two supervisory styles?

yes___8___   no___0___   not sure___2___

11. <u>Has Unit Four helped you to clarify your own style of supervision?</u>

yes <u> 8 </u>   no <u> 0 </u>   not sure <u> 0 </u>   (no response checked) <u> 2 </u>

<u>Comments</u>:

- (no response checked) Somewhat - it will take more thinking.
- (no response checked) It will be a job to clarify it! It is definitely not one or the other and situational.

12. <u>The purpose of Exercise G ("Pin the ---- on the Supervisor") was to provide practice in combining helping skills with supervisory styles. It was also to give more practice in evaluating critiques. Did it succeed in this purpose? What is your opinion of this exercise?</u>

yes <u> 6 </u>   no <u> 0 </u>   not sure <u> 3 </u>   (no response checked) <u> 1 </u>

<u>Opinions</u>:

- (yes) Needed more supervision or monitor - people wanted to cut and could have.
- (yes) It was fun and yet served its own useful purpose.
- (yes) It's a good one - helps to observe quickly a variety of styles. Role-playing makes it non-threatening.
- (N.S.) Fun.
- (yes) It's a risky one but effective.
- (yes) Fun - at times the role of supervisor was evident (good acting, I guess).
- (N.S.) Looked good. Could not stay.
- (N.R.C.) Did not do. (left early)
- (yes) Good. Need more of it.
- (N.S.) I remember reading it but not sure of specifics.

13. <u>The teaching level of the manual - Unit Four - was</u>:

too easy <u> 0 </u>   easy <u> 0 </u>   appropriate <u> 10 </u>

difficult <u> 0 </u>   too difficult <u> 0 </u>

14. <u>What did you like most or find most useful in today's session?</u>

- Being a supervisor and role playing the directive style. I'd like a chance at non-directive.
- Reading before class and discussion.
- Again, the videotape was quite good.
- The readings - good for future reference, too.
- The videotaping.
- The videotape.

Q # 14. (Cont'd.)

- Exercise F.
- Role playing. (Ex. G)
- Role playing. (Ex. G) Good to observe and identify what skills
  were being used in supervision.
- Viewing the videotape. It was most meaningful.

15. What did you like least or find least useful in today's session?

- Probably the video itself.
- Videotape.
- Nothing.
- "Pin the Tail . . ." It was fun but it was repetitive for the
  objectives.
- Perhaps the videotape, merely because the styles were not dis-
  tinctly differentiated enough.
- Exercise F didn't provide sufficient time for pre-conference
  to determine goals of the lesson. Maybe it was "our" fault.
- Lesson on tape before critique.
- I left early.
- Role playing - it was hard for me to role play on such short
  notice - not having time to really look at situation and think
  it through.

16. Your comments on any aspect of Unit Four are invited here:

- Sequence of material is meaningful.
- Great.
- I felt that not reading the material in advance didn't hamper
  my learning.
- Amount of material for a lesson - maybe consider if it is too
  much for a two hour session.

COMPILATION OF RESPONSES ON FINAL QUESTIONNAIRE

General Program Evaluation (GPE)

1. Was the material covered in the program relevant to your professional needs and/or development? (See last page for outline of content.)

    Yes, all of it was relevant   4

    Most of it was relevant   6

    Some of it was relevant   0

    Not much of it was relevant   0

    None of it was relevant   0

    Comments:

    Subject 2 – Most... Almost all was. I feel weak in the supervisory area and have made skill-building in that area a personal goal, so this fit in beautifully.

    S3 – Yes... All of it was relevant in that I gained awareness of what M-T was and there were many times where there was a confirmation of what I am doing now and looking at ways of refining what I'm doing.

    S8 – Most... I felt that the material was well presented and has given me an additional method of supervision.

    S9 – Most.. The four units themselves were of the most value. The additional readings were less valuable. More discussion of them would have helped.

2. Generally, were the important concepts repeated often enough throughout the program (via manual, readings and/or videotape)?

    All of the concepts were sufficiently repeated   7

    Most of the concepts were sufficiently repeated   3

    Some of the concepts were sufficiently repeated   0

    Too few of the concepts were sufficiently repeated   0

    None of the concepts was sufficiently repeated   0

Q # 2. (Cont'd.)

Comments:

S3 - All... Repeated yes, but maybe not enough time to
practice, in the group, the skill given.

S8 - All... Excellent reinforcement of concepts.

S9 - All... A strong point of the program.

3. Did any of the concepts receive too much repetition?

All of them did ___0___

Most of them did ___0___

Some of them did ___0___

Few of them did ___4___

None of them did ___6___

Comment:

S2 - Few... Very few.

4. Was each unit of the manual written in a clear readable style?
Please specify any that were not.

All four of the units were ___9___

Three of the units were ___1___

Two of the units were ___0___

One of the units was ___0___

None of the units was ___0___

Comments: (Please specify ...)

S3 - All... I liked the clarity with which they were writ-
ten. Instead of reading whole book, theory was writ-
ten in easily written and readable papers.

S6 - Three... Unit on Cogan.

5. <u>With regard to the topics covered, was the sequence of presenta-
tion satisfactory?</u> (See last page for sequence of topics.)

Yes, completely satisfactory   8

Mostly satisfactory   2

Somewhat satisfactory   0

Not very satisfactory   0

No, completely unsatisfactory   0

<u>Please suggest any changes in the sequence that would seem more
logical to you and explain why.</u>

       S2 - Yes... Quite logical.

       S3 - Mostly... Yes, after I had experienced the whole se-
quence I could see how it all fit. The first unit on
Microteaching was in a way a turn-off by my assump-
tion of the other units all following the same. I
came to learn that there was freedom and leeway in
style and many other components that I have found
necessary in supervision that were necessary and
presented.

       S8 - Yes... Since I knew little of the M-T concept the
general concepts presented followed sequentially in
my opinion.

6. <u>Were there any units in the manual that presented too much mater-
ial (information)?</u>

All four of the units presented too much material   0

Three of the units presented too much material   0

Two of the units presented too much material   1

One of the units presented too much material   2

None of the units presented too much material   6

(No response)   1

<u>Please specify and explain which units, if any, presented too much.</u>

       S3 - None... But, not enough time again for discussion
and practicing some of the concepts presented more
in depth.

Q # 6.   (Cont'd.)

        S6 - Two.

        S9 - One... I found Reading B particularly laborious.
            Also E.

        S10 - One... I found that the readings in Unit 2 not overly
            interesting because their length prevented me from
            "getting into them." It may have been a bad week for
            me, or something, but I never got much out of them,
            even later on.

7. Were there any units that presented too little material?

All four units presented too little material   0

Three units presented too little material   0

Two units presented too little material   0

One unit presented too little material   0

None of the units presented too little material   10

Please specify and explain which units, if any, presented too little.

        S9 - None... The lessons themselves seemed to make their
            points well. The readings seemed laborious, par-
            ticularly B.

8. Where there any topics you feel should have been covered more intensively?

yes 8   no 2

If yes, please elaborate.

        S1 - Yes. I would have liked to discuss a little more
            the similarities and differences of "The Inventory
            of Events" and Flanders' theory.

        S3 - Yes. If you allow more time for sharing and prac-
            ticing.

        S4 - Yes. a) Collecting data b) More information on
            how to critique the supervisor.

Q # 8.   (Cont'd.)

      S5 - Yes.   Developing a directive vs. non-directive style. How to be one of those.

      S7 - Yes.   Some of the reading needed to be discussed.

      S8 - Yes.   I would have liked more material on the individualization of microteaching.

      S9 - Yes.   A group discussion on adapting M-T (as in Lesson 1) to a person's particular situation would have been of benefit to me.

      S10 - Yes.   Readings A and B presented some important information which I feel all of us could have gotten more out of if we had spent some time discussing them, e.g., questioning techniques.

9.   Were there any topics that could have been covered less intensively?

    yes___1___   no___9___

    If yes, please elaborate.

      S2 - No.   Appropriate elaboration.

      S5 - Yes.   The whole supervision cycle: I don't feel we had to do as much role playing as we did.

10. Do you have any suggestions for topics that should have been covered in this training program for M-T supervisors but were not?

    yes___1___   no___8___   (No response)___1___

    If yes, please explain.

      S3 - Yes.   Maybe more looking at stages new teachers and interns or pre-interns go through with the supervisor in developing what they can become.

      S8 - No.   I really don't know enough yet about the total process.

11. Do you think four sessions of two-and-one-half hours each are sufficient to cover the material presently included in the program?

    yes___7___   no___3___

Q # 11.   (Cont'd)

If not, please explain or make suggestions.

   S3 - No.   Refer to comment in previous questions.

   S4 - Yes.   But I sure was exhausted.   That's a great
     deal of pressure being videotaped, role playing,
     etc.

   S8 - Yes.   One or two times I felt a little rushed, but
     only by 15 or so minutes.   Maybe 5 sessions would
     allow for a more flexible schedule.

  *S9 - No.   I'd rather see 5 two-hour sessions.   The ses-
     sions were intensive and long, perhaps more so be-
     cause they started at 4:00!

   S10 - No.   Not really.   I think another session could have
     gotten to some points and information some of us
     would have liked to discuss out of the readings.

12. Generally, did you find that the readings each week were informa-
  tive and pertinent to the upcoming units?

All of them were   3

Most of them were   2

Some of them were   3

Few of them were   2

None of them were   0

Please specify any that were not useful and explain why.

   S2 - All... They provided good preparation.

   S4 - Some... One of the last readings which was all dis-
     cussion between S. and T. was very boring.   Also,
     the article written by some prof. at Harvard, I think,
     little to apply.   Reading D - wordy.

   S5 - Most... Reading D - much too wordy and philosophical.

---

*This answer checked between yes and no.   Counted as a "no" although
total hours in program remains same.

Q # 12. (Cont'd.)

        S7 - Some... I'm not sure.

        S8 - Some... Miltz's was good for me. Reading B was a good review. Reading D (Cogan's) was hard to follow.

        S9 - Few... They were interesting, but I got a lot more out of the unit presentations. I just couldn't lock into B and E. Seemed repetitive somehow and even though I read it over several times, I could not tell you what I got out of them.

        S10 - Few... Readings in Unit #2, especially Goldhammer, bogged me down. I guess I just didn't like the readings.

13. <u>In general, did the three videotapes serve as helpful demonstrations for their respective units?</u>

They were very helpful   <u> 5 </u>

They were mostly helpful   <u> 3 </u>

They were somewhat helpful   <u> 2 </u>

They were not too helpful   <u> 0 </u>

They were not at all helpful <u> 0 </u>

<u>Please comment on any you felt were not helpful.</u>

        S2 - Mostly... I might have felt more comfortable with viewing <u>more</u> video.

        S3 - Somewhat... Maybe more tapes giving other examples would be beneficial.

        S4 - Somewhat... The last one was boring - no need to repeat old videotape first.

        S5 - Mostly... The videotape on directive - non-directive could have incorporated more obvious models of each method.

14. <u>Of the written exercises, which was (were) the most useful one(s)</u>
<u>and for what reasons?</u>

S1 - All of them reinforced main points.

S2 - The one about supervisory style.

S3 - There really wasn't time for me to do my written
exercises properly. Therefore I did not gain much
from them.

S4 - Last one. More applying what you learned than the
others.

S5 - I enjoyed the exercises on classifying helping skills.
I feel this will help me in my dealing with interns.

S6 - (No response.)

S7 - (No response.)

S8 - I liked writing about my supervisory approach/style.
I also liked the practice critiques.

S9 - The ones in Unit 4 were definitely most helpful to
me.

S10 - The first one, because in discussing the problems,
my group gave me some good ideas as to how I could
overcome them.

15. <u>Of the group exercises, which was (were) the most useful and why?</u>

S1 - The readings, because they were definitive and con-
cise. [Manual units are probably being referred
to.]*

S2 - Having the opportunity to critique others.

S3 - All of them had value. I liked the idea that we all
had chances to practice in various roles. The exer-
cise of looking at supervision styles and skills and
identifying was good - only we needed more of it.

S4 - I don't think I can answer this.

---

*Brackets mine.

Q # 15.   (Cont'd.)

S5 – The first session where we did critiquing was the
most helpful because it was the first exposure.
It seemed overworked towards the end of the course.

S6 – Teaching and supervising exercise. It actually put
me in both roles. Helped in receiving criticism
and feedback from others.

S7 – Supervising our fellow teachers in role playing
situations.

S8 – The practice M-T lessons and critiques.

S9 – Using the teaching and critiquing unit. (Teaching
each other, critiquing.)

S10 – The actual "Microteaching" exercises because I got
to see some great mini-lessons which could be adapted
for my own classroom. The exercises which required
me to "supervise" made me realize how difficult it
is to do a good job for the "teacher."

16.   Optional question. Do you have ideas for any alternative exercises
or activities that would improve the program?

S4 – Possibly more discussion.

S8 – Instead of having trained teachers teach a lesson,
get a couple of brave undergrads to do some lessons.
Or get some folks to simulate some lessons that need
work in specific skills so the re-teachings would
really be challenging.

S9 – Not really.

S1 – No.

S10 – More time could be spent on setting up and running
the equipment.

17.   Did any of the four sessions seem more successful than the others?

yes__2__   no__7__   ? __1__

If yes, check the session(s) and explain why you think so.

Q # 17. (Cont'd.)

       S2 – No. They were all valuable.

       S3 – ?

       S6 – Yes. Session I and II – actually did teaching and
            received supervision. Session IV – discussion of
            directive and non-directive approaches.

       S8 – Yes. Sessions III and IV.

      S10 – No. They all seemed to be helpful to me.

18. Did you get the opportunity to supervise and critique someone's
     teaching at least once during the four class sessions?

     yes __7__   no __2__   (No response) __1__

19. Have you tried out any aspects of the program in any way within
     your own professional situation (outside of this class)?

     yes __7__   no __3__

     If yes, please describe.

       S1 – Yes.

       S2 – No, but I plan to.

       S3 – Yes. I am doing supervision daily and weekly with
            interns and pre-interns.

       S4 – Yes. With my intern. She chose skills for me to
            observe. Used non-directive approach in critique.

       S5 – Yes. Pre-observation: I discuss beforehand with
            my intern.

       S6 – Yes. Supervising interns and pre-interns.

       S7 – Yes. Modified 5 techniques with my intern.

       S8 – Yes. I have modified my questioning approaches and
            become less of a "shot gunner."

       S9 – No, not yet.

      S10 – No. Not really, not yet, because of my own time
            constraints. I have a hard time finding sufficient
            opportunity to work effectively with my intern (yet).

20. <u>In which of these modes do you think the program would work best?</u>

<u>No. Times Checked</u>

A) A group using it alone.   <u>0</u>

B) A group using it with a "coordinator" (one
who coordinates activities, makes arrange-
ments, and moves things along but does not
actively participate in exercises or dis-
cussions).   <u>1</u>

C) A group using it with a "resource person"
(one who facilitates but also partici-
pates in a somewhat non-directive way;
provides information and clarification
occasionally).   <u>7</u>

D) A group using it with an "instructor"
(one who facilitates but also actively
<u>leads</u> in exercises and discussions in a
somewhat directive way).   <u>5</u>

[Some subjects checked 2 or 3 of the
choices above rather than only one.]

<u>Please give reasons for your choice.</u>

        S1 - D.

        S2 - D. To ensure continuity and appropriate pacing, to
             clarify and be available to answer questions.

        S3 - C and D. I gained more when you were actively in-
             volved. [referring to coordinator]* I do think the
             program has a tremendous amount of material to cover.
             I'm sure it would depend on how knowledgeable a per-
             son is when they come into the program as to the
             amount that could be absorbed and covered each time
             (by oneself, with the group, or with a facilitator
             or instructor.)

        S4 - D.

        S5 - C. I feel all involved should be involved actively,
             including the coordinator.

---

*Brackets mine.

Q # 20. (Cont'd.)

S6 - C. I believe the way we operated our program was more in keeping with C. I felt very comfortable with it.

S7 - C. Most people will respond better to a directive leader.

S8 - B, C, and D. I think B, C, and D are reasonable ways to present this material. I would strongly consider the type of group. For example: inexperienced college sophomores use D. For an in-service group of teachers C or B would be more appropriate.

S9 - C. I think a facilitator is necessary. We tended to get bogged down without you, Louise. We did need clarification and some extra direction at times and it was helpful when you gave it to us.

S10 - C. I found that this was the way you [coordinator]* "ran" the course and I enjoyed it very much. You did a good job getting us going and being there when we needed you.

21. How did you perceive Louise's role?

No. Times Checked

A) Coordinator   6

B) Resource person   9   [Several Ss checked more than one choice.]

C) Instructor   1

Comment:

S1 - B.

S2 - A, B, and C. All. Louise assumed each role as appropriate to the situation, which varied frequently.

S3 - A and B. Louise took care of the physical aspects of the program, materials and scheduling. She was there physically and sharing of herself at times and giving information and clarification at times, but not enough. (But, time wouldn't allow more.)

---

*Brackets mine.

Q # 21. (Cont'd.)

        S4 - A and B.

        S5 - A and B.

        S6 - A and B. Louise did an efficient job. Was well organized. Provided feedback and clarification when necessary. I thought she did a very fine job.

        S7 - B.

        S8 - A.

        S9 - B. See last comment.

        S10 - B. I already said it in number 20.

22. In looking at the overall program, and in light of its purpose as a training program for supervisors of Microteaching, would you say it was

Very successful   5

Successful   4

Moderately successful   1

Unsuccessful   0

Very unsuccessful   0

Comments:

        S3 - S... I'm sure we all gained from it and will be better helpers because of it.

        S9 - S... A lot was presented. Maybe more practice of M-T skills is necessary. The 4 weeks was so intensive, I feel I will be utilizing these skills a lot, but then the "fallout" will continue and as it does, my perspectives will be in greater order.

23. Did you enjoy participating in this program?

yes 10   no   0

Q # 23. (Cont'd.)

Comments:

        S2 - Yes. Very much. I liked the structure.

        S4 - Yes. I enjoyed the other members of the class a great deal. Could be threatened if different group of people participated.

        S8 - Yes. The most substantial session in the entire 2-semester seminar.

        S10 - Yes. Great!

24. What was the most valuable aspect of the program for you?

        S1 - The readings.

        S2 - Working with other in-service teachers.

        S3 - Refer to previous pages.

        S4 - Learning the system of microteaching.

        S5 - Being exposed to a supervision model.

        S6 - Teaching and supervising.

        S7 - (No response.)

        S8 - The readings and discussions.

        S9 - Sharing with other group members. Having a chance to teach and be critiqued. Having a chance to critique a peer.

        S10 - Seeing the process on videotape and then going through it myself.

25. List the strengths of the program.

        S1 - The reinforcement in different ways.

        S2 - The organization and follow-through by Louise.

        S3 - Refer to previous pages.

Q # 25. (Cont'd.)

        S4 – Simple to understand. Overlearning [practice]* took
            place.

        S5 – The organization of it. The sequencing of skills.

        S6 – Videotapes. Role playing.

        S7 – (No response.)

        S8 – The organization; the videotapes for clarifying; the
            coordinator.

        S9 – Well designed units, clear, to the point.
            A good leader (you!)
            Good chance to take turns in the M-T process.

      S10 – Good use of A-V materials; good reading; Louise;
             good topic.

26. <u>List the weaknesses of the program.</u>

        S1 – None.

        S2 – (No response.)

        S3 – Refer to previous pages.

        S4 – More awareness of people's sensitivity to role play-
            ing, taping, etc. Some were very long sessions and
            we should have had more flexibility built into the
            program when this happened.

        S5 – Too much critiquing and role playing.

        S6 – Operating equipment.

        S7 – (No response.)

        S8 – The time squeeze at certain point; more discussion of
            theory.

        S9 – A lot crammed into four weeks. Re-think the suppor-
            tive readings to each unit.

      S10 – Time schedule (I hate working right after school,
             through my regular dinner hour.)

---

*Brackets mine.

27. <u>If you had the opportunity to make changes in any aspect of the program (manual, readings, tapes, film, exercises, procedures, organization, etc.) what would those changes be?</u>

S1 - More discussion of similarities and differences of overlapping skills.

S2 - (No response.)

S3 - Refer to previous pages.

S4 - Videotapes - ones that are more alive.

S5 - I'm not sure what activities could be incorporated, but there needs to be a variety of activities rather than all role playing.

S6 - Some of the manuals were too detailed and lengthy. Some information could be condensed and not lose its content.

S7 - (No response.)

S8 - Get the manual published in decent print and get the units bound.

S9 - Using a 5th week (2 hours each). Either discuss additional readings or skip them.

S10 - I think I'd leave it alone.

28. <u>Do you see this program as a valuable one for groups such as yours (cooperating teachers)?</u>

Yes, extremely valuable   5

Valuable   4

Somewhat valuable   1

Not particularly valuable   0

No, it has no value for our type of group   0

<u>Comments:</u>

S3 - Yes... Helping teachers gain skills to be more effective and consistent in the skills necessary as a cooperating teacher.

Q # 28.   (Cont'd.)

S5 - Somewhat... We need to become exposed to a variety
of supervision methods but do not need to role play
as much because we are all experienced teachers and
role playing at this point is superficial.

S8 - Yes... Additional techniques are always valuable.

S10 - Yes... It's great if you have the facilities and
equipment to run it well, much as you did.

29. <u>What other groups, if any, do you see this program serving</u>?

S1 - Interns, pre-II's.

S2 - Supervisors of any sort (of interns, administrators,
etc.)

S3 - In schools-with staffs, helping them to be able to do
critiquing of each other.

S4 - Administrators.

S5 - People who are supervisors and have been out of the
classroom for yours and need a "refresher" course.
Example: college supervisors and ADMINISTRATION!

S6 - (No response.)

S7 - (No response.)

S8 - Interns. For interested parents.

S9 - Administrators. Team workers (education, social work,
Business).

S10 - Interns and pre-interns could easily benefit from
the program also.

30. <u>Did being members of a "family group" rather than a "stranger
group" influence in any way the effectiveness of this program?
("Family group" is defined as people working together in the same
school or school system.</u>)

Yes, very much so   6

Much of the time it did   0

Q # 30.   (Cont'd.)

About half of the time it did ___0___

Not to any significant extent ___2___

No, not at all ___0___

(No response checked) ___2___

Comments:

S3 – (No response checked.) For me it was not a main
     factor for effectiveness. I feel I could have gotten
     as much out of it in any group. We actually did
     little together. Maybe there was more of a comfort
     level for some.

S7 – Yes... When doing the role playing processes, we were
     more open, etc. because of our "family group."

S8 – Yes... I felt more secure doing my M–T lesson, but
     I also think people (friends) were less likely to
     criticize my lessons.

S9 – Not significant... I don't think it would really
     matter to me.

S10 – (No response checked.) I'm not sure, because I'm
      not sure we were really a "family." I know the
      others, but not in any real "strong" sense. Those
      from the same school knew one another but may have
      done the exercises more "honestly" (?) with strangers.

31. In critiquing colleagues, I felt

	No. Times Checked
Quite comfortable	1
Comfortable	4
No particular effect	0
Uncomfortable	4
Very uncomfortable	1
(No response)	1

Q # 31. (Cont'd.)

[One S. checked 2 responses: C. & U.]

<u>Comments</u>:

        S2 – Q.C. The atmosphere was non-threatening.
            Great job, Louise! This is the best part of our
            course work yet!

        S5 – U. The lessons were naturally good as we are exper-
            ienced teachers and I found it difficult to be an
            effective supervisor.

        S6 – C. It didn't matter whether I knew the person or
            not, since the critique was based on skills we were
            learning to implement.

        S7 – ? I didn't.

        S8 – C. and U. I really saw few things that would be con-
            sidered glaring weaknesses. However, I think I would
            be less likely to really "supervise" a colleague.
            Part of that is my own level of self-confidence.
            Thank you!

        S9 – C. Although this particular style of critiquing had
            a few new twists, I spend a lot of time working with
            teachers, observing, giving feedback, etc. That may
            have contributed to my comfort level.

        S10 – V.U. This was the most difficult phase of the pro-
            gram. It seemed to me that it showed how "weak" I
            was in this important area. I have a long way to go
            in being the "facilitator" I would like to be.

---

*Brackets mine.

TRAINEE STATEMENTS ON SUPERVISORY STYLE

Responses to Writing Assignment in Unit Four:

Write a brief statement describing your own supervisory style as you see it. Tell what it is, what its advantages are, whether you see any need to modify it in any way, and why.

Subject 1: My style tends to be non-directive. However, after participating in this course I feel there is a strong need for flexibility in terms of style. Depending on the maturity level (emotional, awareness, experience, etc.) of the teacher being supervised I would probably try to use both.

Subject 2: I perceive my supervisory style as being on the Directive side of the Directive - Non-Directive continuum, although I have a lot of reservation about defining my style in either way. I tend to feel comfortable with most interns in a more Directive way, however, because I feel that this style aids people who have a less clear picture of what their performance has been. My experience has been that most interns seek (either directly or by inference), as well as expect, direction from a supervisor, at least at the outset of the relationship.

  I also see it as important to become less Directive as the intern-supervisor relationship develops, so that the intern has the opportunity to become more reflective upon his/her own performance, and become more responsible for diagnosing individual needs.

  In terms of modifying my style I would have to say that I tend to jump in and fill gaps in discussions by verbalizing myself, and a goal of mine is to allow for more input from student teachers by 'waiting out' silences rather than filling them with my own observations or comments.

Subject 3: I see myself both as a directive and non-directive supervisor. I do more sharing and giving of the positive at first, which is difficult many times for a person to do for themselves. Then as a trust relationship is built and the intern or pre-intern gains self-confidence I change more to the indirective method. At this time the helpee is more able to self-critique and I am there as a resource and clarifier.

Subject 4: Since the beginning of this course and another course I'm taking on supervision, I've become more aware of how to begin to critique my interns. Previously it was most informal and involved a great deal of information and also, we honestly did not do much critiquing because it was difficult to find the time to view a lesson. I now have a better understanding on how to approach a lesson and

feel much more confident. One of my major concerns is how to deal with the interns that you constantly need to repeat the assignment to and those who you've gone over the lesson exactly and they fail to do what was asked of them. Many thanks for making me more aware of different techniques that can be used in critiquing.

Subject 5: I try to use a pre-observation, observation, conference style of supervision. In the pre-observation I cover three areas; what is your lesson? What specifically do you want me to look at? I specifically will look for . . . . During the observation I write down data, rather randomly, about the specifics mentioned in the pre-observation plus teaching strategies I observe. The conference is a discussion time and this is where I hope to grow stronger. I hope to use more of the helping skills rather than just use "this is what I saw" and "this is what you should do." I give a written report to my intern after each conference which indicates strengths, weaknesses, and a log of certain children's needs.

Subject 6: I see my supervisory style with my pre-intern as being more directive. Not that I feel it is negative, but I feel I spend more (time) identifying areas that need improvement. Pre-intern is given opportunity for input as to critiquing her own lessons. Maybe she should be going more into depth in analyzing her lesson. I believe this will come as skills are developed. As far as my interns are concerned I am definitely more non-directive as long as I see growth and development taking place.

Subject 7: I am more directive in my supervisory role. I supervise two pre-interns and 2 interns. I am able to attempt some non-directive stuff with my interns because I am able to spend more time with them. I believe that the teacher will learn more and retain more from a non-directive or joint approach. This past semester I have tried to make a transition from directive to non-directive. I am having difficulty in this transition. I am more comfortable in the directive style. I realize that most people will learn more through the non-directive style.

Subject 8: I have (use) a directive style. When I supervise formally I develop a list of specific points that relate to the goals set by the teacher. I usually relate my opinions and reactions pretty authoritatively. The advantages of this style for me is that my critiques are more organized and sequential. Also I can direct the critique towards the points I feel are most important. I would like to modify my style, though. My critiques come across rather "all-perfect" and "beyond-reproach." An improved dialogue between my intern and myself would be good. If I could ask more probing questions and learn more about successful alternative strategies my critiques would probably be a better mix of the directive and non-directive approaches.

Subject 9:   I see myself using a mixture of both "Rogerian based" and
directive supervision. My major focus initially is usually more open-
ended, and non-directive. My goals at the outset are to build a rela-
tionship with the individual and to get a sense of which approach would
be best for the person. Then, since I am well-versed (as a counselor)
with both models, I can generally feel comfortable utilizing either
(and I usually utilize both). My style as a supervisor really reflects
my style as a counselor. I feel that the roles mesh fairly easily.
Modifications I could make are probably many. Of particular note,
though, is my own impatience and rather demanding nature. I can be
"non-directive" for just so long - and then, usually, I will "gently"
become quite specific. Perhaps at these times, I cover too much too
fast - out of my own need to pull things together and "make things
happen." When I do get "directive" I am usually aware of giving a lot
of support, help, etc., so that the goals, once agreed upon, are met
with success by the individual.

Subject 10:   If it is possible to describe my potential "supervisory
style," I would say that it was as a "non-directive" facilitator of
learning. I find the non-directive easier on both the supervisor and
on the teacher. I most sincerely feel the need to experiment with the
methodology in an attempt to make it more a "part of me." I am far
from comfortable with the role of a supervisor at this point in my car-
eer.

APPENDIX H

Matrices: Unit Questionnaire Criteria

UNIT CRITERIA MATRICES

CRITERION #1

Unit I

Question No.	1	2	3	4
yes	9	10	8	8
no	0	0	0	0
not sure	1	0	2	2
(no ans.)	0	0	0	0

(left margin: Answers)

Unit II

Question No.	3	4	5	9	13
yes	7	9	10	9	7
no	0	0	0	0	1
not sure	2	1	0	1	2
(no ans.)	1	0	0	0	0

(left margin: Answers)

Unit III

Question No.	2	3
yes	9	9
no	0	0
not sure	0	1
(no ans.)	1	0

(left margin: Answers)

Unit IV

Question No.	2	4	10
yes	10	10	8
no	0	0	0
not sure	0	0	2
(no ans.)	0	0	0

(left margin: Answers)

GPE

Question No.	4
All four were	9
Three...	1
Two...	0
One...	0
None...	0

(left margin: Answers)

CRITERION #2

Unit I

Answers	Question No.	5
	yes	8
	no	0
	not sure	1
	(no ans.)	1

Unit II

Answers	Question No.	7	12
	yes	9	10
	no	0	0
	not sure	1	0
	(no ans.)	0	0

Unit III

Answers	Question No.	6	10
	yes	9	8
	no	0	0
	not sure	1	0
	(no ans.)	0	2

Unit IV

Answers	Question No.	7	8
	yes	7	8
	no	1	1
	not sure	2	0
	(no ans.)	0	1

GPE

Answers	Question No.	13
	very helpful	5
	mostly...	3
	somewhat...	2
	not too...	0
	not at all...	0

CRITERION #3

Unit I

Question No.   6

Answers		
yes	8
no	0
not sure	2
(no ans.)	0

Unit II

Question No.   6

Answers		
yes	10
no	0
not sure	0
(no ans.)	0

Unit III

Question No.   5

Answers		
yes	8
no	0
not sure	0
(no ans.)	2

Unit III cont'd

Question No.   11

Answers		
a) too rushed	1
b) enough time	6
c) no strong feeling	1
d) (no ans.)	2

Unit IV

Question No.   6

Answers		
yes	10
no	0
not sure	0
(no ans.)	0

GPE   NA

Question No.

CRITERION #4

Unit I

Question No.	7
yes	10
no	0
not sure	0
(no ans.)	0

Answers

Unit II

Question No.	8
yes	9
no	1
not sure	0
(no ans.)	0

Answers

Unit III

Question No.	9
yes	9
no	1
not sure	0
(no ans.)	0

Answers

Unit IV

Question No.	5
yes	9
no	1
not sure	0
(no ans.)	0

Answers

GPE

Question No.	4
All four units...	9
Three...	1
Two...	0
One...	0
None...	0

Answers

CRITERION #5

Unit I

Question No.	8	9	10	11
yes	5	10	7	10
no	0	0	3	0
not sure	5	0	0	0
(no ans.)	0	0	0	0

Answers

Unit II

Question No.	10	14
yes	7	9
no	0	0
not sure	3	1
(no ans.)	0	0

Answers

Unit III

Question No.	4	7	12
yes	10	7	8
no	0	1	0
not sure	0	2	1
(no ans.)	0	0	1

Answers

Unit IV

Question No.	9	12
yes	10	6
no	0	0
not sure	0	3
(no ans.)	0	1

Answers

GPE

Question No.	14*	15*

Answers

*(See comments in compilation of GPE questionnaires, Appendix G.)

CRITERION #6

Unit I

Question No.	12
too easy	0
easy	1
appropriate	9
difficult	0
too difficult	0
(no ans.)	0

Answers

Unit II

Question No.	15
too easy	0
easy	0
appropriate	10
difficult	0
too difficult	0
(no ans.)	0

Answers

Unit III

Question No.	14
too easy	0
easy	0
appropriate	10
difficult	0
too difficult	0
(no ans.)	0

Answers

Unit IV

Question No.	13
too easy	0
easy	0
appropriate	10
difficult	0
too difficult	0
(no ans.)	0

Answers

GPE   NA

Question No.	

Answers

CRITERION #7

Unit I   NA

Question No.	
yes	
no	
not sure	
(no ans.)	

Answers

Unit II

Question No.	1	2
yes	9	6
no	0	0
not sure	0	2
(no ans.)	1	2
	Rdg. A	Rdg. B

Answers

Unit III

Question No.	1
yes, all helpful	6
no, none...	0
some not...	3
(no ans.)	1
	Rdgs. C, D, E

Answers

Unit IV

Question No.	1
both F and G useful	5
only G useful	3
not sure	1
(no ans.)	1
	Rdgs. F, G

Answers

GPE

Question No.	12
All informative	3
most...	2
some...	3
few...	2
none...	0
	Rdgs. A-G

Answers

CRITERION #8

Unit I

Question No.	15*	Comments	Total
modifications: number	3	2	5
modifications: kind	3	1	4

(Answers)

Unit II

Question No.		Comments	Total
modifications: number		5	5
modifications: kind		4	4

(Answers)

Unit III

Question No.	Comments	Total
modifications: number	16	16
modifications: kind	7	7

(Answers)

Unit IV

Question No.	16*	Comments	Total
modifications: number	1	5	6
modifications: kind	1	3	4

(Answers)

GPE

Question No.	8*	10*	16*	27*	Total
modifications: number	8	1	3	7	19
modifications: kind	2	1	3	7	13

(Answers)

*(See comments in compilations of GPE and unit questionnaires for these questions--Appendix G.)

CRITERION #9

Unit I

Question No. 13* 14* 15*

Answers

(See also Table 13-1.)

Unit II

Question No. 11   16* 17* 18*

Answers		
yes	10	
no	0	
not sure	0	
(no ans.)	0	

(See also Table 13-2.)

Unit III

Question No. 15* 16* 17*

Answers

(See also Table 13-3.)

Unit IV

Question No. 3 14* 15* 16*

Answers		
yes	10	
no	0	
not sure	0	
(no ans.)	0	

(See also Table 13-4.)

GPE

Question No. 24[+] 25[+] 26[+]

Answers

(See also Table 14.)

*(See comments on usefulness in
  compilations of all four unit
  questionnaires--Appendix G.)

[+](See comments in compilation of
  GPE questionnaire--Appendix G.)

CRITERION #10

Unit I NA			Unit II NA	
Question No.			Question No.	
	yes			yes
Answers	no		**Answers**	no
	not sure			not sure
	(no ans.)			(no ans.)

Unit III			Unit IV NA	
Question No. 13			Question No.	
	yes	9		yes
Answers	no	1	**Answers**	no
	not sure	0		not sure
	(no ans.)	0		(no ans.)

GPE		
Question No. 19*		
Answers	yes	7
	no	3
	(no ans.)	0

*(See also comments for
this question in GPE
compilation--Appendix G.)

CRITERION #11

Unit I

Question No. 11

Answers		
	yes	10
	no	0
	not sure	0
	(no ans.)	0

(See Compilation of Unit I
questionnaires for two comments
on need for group discussion--
Appendix G.)

Unit II

Question No.

Answers		
	yes	
	no	
	not sure	
	(no ans.)	

(Two comments noting need for
group discussion. See compila-
tion of Unit II questionnaires
--Appendix G.)

Unit III

Question No. 8

Answers		
	yes	9
	no	0
	no opinion	0
	(no ans.)	1

(See also three comments
related to discussion in
Compilation of Unit III
questionnaire--Appendix G.)

Unit IV

Question No.

Answers		
	yes	
	no	
	not sure	
	(no ans.)	

(See also one comment on dis-
cussion in compilation of
Unit IV questionnaire--
Appendix G.)

GPE

Question No.

Answers	

(See twelve comments sprinkled
throughout GPE compilation related
to need for discussion--Appendix G.)

CRITERION #12

Unit I   NA

Question No.

yes	
no	
not sure	
(no ans.)	

Answers

Unit II   NA

Question No.

yes	
no	
not sure	
(no ans.)	

Answers

Unit III   NA

Question No.

yes	
no	
not sure	
(no ans.)	

Answers

Unit IV

Question No.   11

yes	8
no	0
not sure	0
(no ans.)	2

Answers

GPE   NA

Question No.

Answers

APPENDIX I

Matrices: GPE Criteria

GPE Matrices

Criterion #1

Answers		
Question No.	1
Yes, all was relevant	4
Most was...	6
Some...	0
Not much...	0
None...	0
(no answer)	0

Criterion #2

Answers		
Question No.	2
All suff. repeated	7
Most were...	3
Some...	3
Too few...	0
None...	0
(no answer)	0

cont'd

Criterion #2 cont'd

Answers		
Question No.	3
All rec'vd too much	0
Most...	0
Some...	0
Few...	4
None...	6
(no answer)	0

Criterion #3

Answers		
Question No.	5
Yes, satisfactory	8
Mostly...	2
Somewhat...	0
Not very...	0
No, unsatisfactory	0
(no answer)	0

Criterion #4

Answers		
Question No.	6
All four...too much	0
Three...	0
Two...	1
One...	2
None...	6
(no answer)	1

Criterion #4 cont'd

Answers		
Question No.	7
All four...too little	0
Three...	0
Two...	0
One...	0
None...	10
(no answer)	0

GPE

Criterion #5

Question No.	8	9
Yes	8	1
No	2	9
(no ans.)	0	0

Answers

Criterion #6

Question No.	10
Yes	1
No	8
(no ans.)	1

Answers

Criterion #7

Question No.	11
Yes	7
No	3
(no ans.)	0

Answers

Criterion #8

Question No.	17
Yes	2
No	7
(no ans.)	1

Answers

Criterion #9

Question No.	18
Yes	7
No	2
(no ans.)	1

Answers

Criterion #10

Question No.	20*
A – alone	0
B – w/ coordinator	1
C – w/ res. pers.	7
D – w/ instructor	5
(no ans.)	0

Answers

cont'd

Criterion #10 cont'd

Question No.	21*
A – coordinator	6
B – resource pers.	9
C – instructor	1
(no ans.)	0

Answers

*Some respondents checked 2 or 3 choices rather than one.

GPE

Criterion #11

Answers	Question No.	22
	Very successful	5
	Successful	4
	Moderately...	1
	Unsuccessful	0
	Very unsuccessful	0
	(no ans.)	0

Criterion #12

Answers	Question No.	29*

*(See comments in compilation of GPE--Appendix G.)

Criterion #13

Answers	Question No.	30
	Yes, very much so	6
	Much of the time	0
	About half the time	0
	Not significantly	2
	No, not at all	0
	(no ans.)	2

Criterion #14

Answers	Question No.	28
	Yes, extrem. valuable	5
	Valuable	4
	Somewhat...	1
	Not particularly...	0
	No value	0
	(no ans.)	0

Criterion #15

Answers	Question No.	31**
	Quite comfortable	1
	Comfortable	4
	No effect	0
	Uncomfortable	4
	Very uncomfortable	1
	(no ans.)	1

**One respondent checked 2 responses: Comfortable and Uncomfortable.

APPENDIX J

Coordinator's Instructions

COORDINATOR'S INSTRUCTIONS

for

Microteaching Supervision Program

Background Information

The Microteaching Supervision Program (M-TSP) has been developed
to train experienced professional educators in the techniques and
method of microteaching and clinical supervision with an emphasis on
positive interaction skills. It is designed to be basically self-
instructional and therefore the group trainees should require only
minimal assistance, and that mostly of a technical nature, from the
coordinator. The coordinator should endeavor not to function as a
discussion leader, resource person or instructor. Rather, the duties
and responsibilities of the coordinator should include mainly the
following:

-- Provide materials and equipment needed for each session

-- Arrange for appropriate physical facilities for each
   session

-- Briefly introduce main topic for each session

-- Distribute materials and activate equipment at appropriate
   times during sessions, e.g., hand out readings, show
   videotapes, etc.

-- Clarify manual instructions for exercises, activities and
   assignments when necessary

-- Guide groups through the schedule of activities called for
   in the manual in order to keep them moving along at a
   reasonable pace

-- Act as timekeeper for activities that have time limits

-- Operate, or assist in the operation of, video equipment

-- Administer pre- and post-tests and five questionnaires.

The coordinator should be fully familiar with the contents and
training components of the program. He should know the manual particu-
larly well. The manual contains the procedures, exercises and activi-
ties of the program in sequence and should be followed closely. It
will be necessary for the coordinator to get the trainees started in

the activities, help with dividing into groups, see that activities and exercises remain within reasonable time limits, move groups on to their next activities, and generally see to the efficient conduct of the program without intruding into it in any substantive way.

Overview of Materials, Equipment and Facilities

For each training session, the following are required:

-- Unit manuals and accompanying readings for each trainee

-- Unit questionnaires for each trainee

-- Appropriate demonstration film or videotape for each session

-- 16mm projector and wall screen (for Session One only)

-- One videotape recording system (VTR) for each group of 5-7 trainees

-- One blank videotape for each VTR system

--*One large group meeting room accommodating 16-20 persons and a VTR system

-- Small group meeting rooms accommodating 5-10 persons and a VTR system; equipped with chalkboard (Microteaching exercises will take place here.)

-- Small conference areas where small groups may adjourn while teacher-supervisor conferences take place.

First Session

(No VTR equipment is required at this session. Instead, a 16mm projector and wall screen are needed.)

The following materials are needed for Unit One:

-- Introductory letter to Amherst-Pelham Teachers (orientation information)

-- Participants' Data Form

_____

*This room can be equipped with folding dividers in order to convert it to the smaller meeting rooms required for microteaching.

-- Pre-test

-- Unit One manual (including Introduction to Manual and Outline of Topics Covered in Program)

-- Film: <u>Teaching Skills: An Introduction to Microteaching</u>

-- Readings A and B

-- Unit One Questionnaire

Distribute introductory letter describing purpose of the study. Answer questions. Emphasize that the M-TSP program is the subject of the study, not the trainees as such.

Distribute Participants Data Form to be filled out and returned immediately. Explain that the purpose of this form is to provide information on the professional nature of the group that is testing the M-TSP program.

Distribute Pre-tests. Explain that trainees should respond to the best of their knowledge but should not guess at answers. Instructions at the top of the page should be followed. There is no time limit, but trainees should understand that the session will not begin until all tests are returned. Names should be written at the top.

Distribute the manual for Unit One and ask the group to begin reading. From this point on, the manual will prescribe the sequence of activities and exercises and the showing of the film. The coordinator should question the trainees to see if they have all reached the point in the manual where the film is introduced. Following the screening, trainees should return to the manual and continue.

Proceed according to the manual, making an effort to keep the group members together as they move through written and small group exercises.

Distribute Readings A and B for home reading.

Answer questions about the assignment.

Distribute Unit One questionnaire, have them filled out anonymously and returned.

Second Session

The following are required for Unit Two:

-- VTR equipment

-- Unit Two Manual

-- Videotape #1: Individualizing Microteaching: Identifying the Needs of the Teacher

-- Readings C, D and E

-- Unit Two Questionnaire

Distribute the manual for Unit Two and ask group to begin reading. Proceed through the unit's activities and exercises in sequence according to the manual instructions. Play the videotape at the designated point in the manual. The coordinator should ask whether trainees have all reached that point and are ready to view the tape together. Following the showing, trainees should return to the manual and continue reading.

Proceed as in Unit One, i.e., upon completion of the manual work, distribute home readings, answer questions about the assignment, and have Unit Two Questionnaire filled out anonymously and returned.

Third Session

The following are required for Unit Three:

-- VTR equipment

-- Unit Three Manual

-- Videotape #2: Five Stages of Microteaching Supervision

-- Readings F and G

-- Unit Three Questionnaire

Distribute the manual for Unit Three and proceed according to manual instructions as in previous sessions. Be prepared to clarify directions for Exercise D. Urge small groups to adhere closely to the suggested timeline in order that they reach the re-teach stage at approximately the same time. The coordinator should see that the

switch of teachers (accompanied by their supervisors) to a new group of pupils is accomplished efficiently, allowing the re-teach to begin without delay.

Fourth Session

The following are required for Unit Four:

-- VTR equipment

-- Unit Four Manual

-- Videotape #3: <u>Directive and Non-Directive Supervision</u>

-- Role-play cards for game, "Pin the _ _ _ _ on the Supervisor"

-- Unit Four Questionnaire

-- General Program Evaluation

Distribute the manual for Unit Four and proceed according to the manual as in previous sessions. Following the showing of the videotape, allow the whole group to discuss and compare how they checked off the chart in the manual exercise during the viewing.

Organize the group for the culminating activity--the role-playing game--and distribute the role-play cards to the partners. Keep game moving along and be sure that players remember to give the rationales for their ratings.

Answer questions about assignments.

Distribute Unit Four Questionnaires and have them filled out anonymously.

Remind trainees that the post-test will be administered at the follow-up session one week later.

Distribute the General Program Evaluation, a final questionnaire, to be completed at home during the week. A cover letter explains the purpose and gives instructions.

Follow-up Session

Collect the General Program Evaluation questionnaires. Be sure trainees' names are written on these.

Distribute post-tests. Instructions at the top of the first page should be followed. Names should be written at the top of this page also. Allow enough time for all trainees to complete the tests, then collect.

Thank the trainees for their participation in the study and for implementing and giving reactions to the M-TSP PROGRAM.