Based on the assumption that the conduct of an effective supervisory conference is analogous to effective teaching and that the assumptions made about effective teaching behaviors can also be made about supervisory behaviors, this paper develops and describes in detail a ten-category observation system for supervisory conferences, similar to the Flanders system, to be used in training supervisors. The supervisor training model outlined contains the following sequence: 1) A student teacher microteaches with the supervisor observing. 2) The supervisor confers with the student teacher while a "teacher of supervision" observes and codes the supervisory behavior. 3) The "teacher of supervision" reviews the supervisor-student teacher conference with the supervisor using the data collected and viewing a videotape of the conference. In the third step, individual supervisory skills which need development can be identified and practiced. In a teach-reateach microteaching situation, this sequence would be repeated twice. (RT)
INDIVIDUALLY PRESCRIBED SUPERVISORY TRAINING
PROTOCOLS BASED ON COMPREHENSIVE
ANALYSIS OF A TRAINEE'S CONFERENCE

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Symposium - "Researching and Developing New
Patterns of Supervisory Performance"
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A basic tenet of this paper is that the conduct of an effective supervisory conference is analogous to effective teaching and that the assumptions made about effective teaching behaviors can also be made about supervisory behaviors. Optimum pupil growth is the goal of teaching. While the supervisory process is also concerned with pupil growth, it focuses primarily on teaching behavior. A third perspective is the "teacher" of supervisors who is focusing on supervisory behaviors. This is the focus of this paper.

The relationship of these communicative events is shown in the diagram below:

In recent years considerable attention has been given to developing methodology to study teaching. This work has developed along several lines. Gage has called for a theory of teaching. He writes:

Teachers must know how to manipulate the independent variables especially their own behaviors, that determine learning. Such knowledge cannot be derived automatically from knowledge about the learning process. To explain the control the teaching act requires a science and technology of teaching in its own right. The student of educational psychology who complains that he has learned much about the learning process and learners, but not about teaching, is asking for the fruits of scientific inquiry, including theories of teaching.
A theory of teaching has not emerged but a number of investigators have developed concepts of the teaching process. Based on these concepts a variety of systematic observation instruments have emerged. In general these instruments can be classified according to their conceptual frame of reference. Nearly all of the instruments focus on classroom communication verbal and/or nonverbal. The verbal instruments fall into three categories: affective, cognitive, procedural or a composite of these.

The affective systems include how the teacher reacts to the feelings, ideas, and performance of the student while the cognitive systems consist of behavior of the teacher as he attempts to influence or induce thinking and the student's response to such attempts or his initiation of same.

In the affective area, the work of Anderson; Lewin, Lippit, and White; and Flanders are exemplary. The best known and most widely used system is the ten-category system of Flanders or some variation. The research of these investigators suggests a strong relationship between the way a teacher interacts with his class and the way members of that class will interact with one another. A number of studies (Amidon and Hough) have shown a relationship between the patterns of interaction in the classroom and the achievement of students.

More specifically, the Flanders system provides categories for classifying the verbal behavior of the teacher and resultant verbal behavior of the pupils. The ten-category system has two major divisions: statements which have a direct effect (minimizes a student's freedom to respond) and indirect effect (maximizes the student's freedom to respond) on pupil behavior.

The direct category is subdivided into lecturing, giving directions, and criticizing or justifying authority; and the indirect category is divided into accepting feeling, praising or encouraging, accepting ideas, and asking questions.
Operationally, an observer or a teacher using a tape recording of his own teaching categorizes the classroom verbal interaction every three seconds. The tallies are paired and recorded in a matrix which reveal patterns of teacher influence.

With the matrix before him, the teacher can assess his teaching strategy in terms of his own objectives and determine areas in which he wants to improve. (Amidon & Hough, 1967)

A study conducted by Blumberg suggests that these same factors are influential in supervision. In his study, 130 in-service teachers were asked to respond to open-ended questions concerning positive and negative occurrences in their relationship with a supervisor. The items which accounted for 80 percent of their responses were motivating factors dealing with recognition. They were:

1. Needs for teaching achievements to be recognized 41%
2. Needs to have one's personal and professional potential recognized 17%
3. Needs for status and public recognition 13%
4. Needs for sincere appraisal and help 9%

Emphasis placed on unfavorable factors was heavily skewed—three factors accounted for two-thirds of the total; namely:

1. Avoidance of hostile interpersonal criticism
2. Need for fair play
3. Need to count on supervisor for doing what he says he will do

In summary, what was required of the supervisor seemed to be rather direct recognition for a job well done and honest appraisal and help where it was needed.
The cognitive systems as they have developed are generally more complex both in the number and variety of categories and operational procedure. A variety of viewpoints or conceptual frameworks are represented by Aschner and Gallagher, Smith, Maccia and others. Operationally, the unit of discourse to be categorized also varies. Smith uses the episode and monologue; Bellack the pedagogical move; Aschner and Gallagher, the thought unit; and Davis and Tinsley the teacher's question.

Aschner and Gallagher is one of the more popular systems. Based on Guilford's theories of the intellect, this system contains five major categories (1- cognitive memory, 2- convergent thinking, 3- evaluative thinking, 4- divergent thinking, 5- routine) and 47 sub-categories. Operationally each statement or question is categorized. The amount of discourse falling into each category can be summarized and examined.

White, Radtke and Berman (Leeper 1969) have suggested that supervisors engage teachers in activities designed to help teachers develop nine thought processes: perceiving, imagining, analyzing, patterning, re-defining, predicting, judging, developing, fluency, and elaborating.

The foregoing discussion has attempted a brief interface of the development of systematic observation instruments for analyzing teaching and research on teaching with similar developments and research on supervision.

The remainder of this paper is devoted to a brief rationale for and a presentation of a comprehensive observation system for the supervisory process.

Investigators such as Heidelbach and Canfield et. al. have attempted to look at supervisory conferences as they are presently conducted to identify variables and components of supervisory behavior.
Heidelbach in analyzing the verbal behavior of cooperating teachers in conferences with student teachers developed a tentative model for analysis of supervisory behavior.

From typescripts of nine supervisory conferences of six cooperating teachers he found that the verbal interaction fell into two categories--operational and substantive. The table below illustrates the composition of the supervisory conferences in terms of verbal behavior. The percentage of total verbal behavior is shown for each category.

<table>
<thead>
<tr>
<th>Operational Categories</th>
<th>PERCENT-Total Verbal Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focusing behaviors - calls attention to or denotes substantive area to be discussed</td>
<td>16%</td>
</tr>
<tr>
<td>Descriptive behaviors - ordering the phenomena of the substantive area</td>
<td>67%</td>
</tr>
<tr>
<td>Prescriptive behaviors - prescribing the nature of teaching behavior that did will or might occur</td>
<td>17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substantive Categories</th>
<th>PERCENT-Total Verbal Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Teacher Teaching Behavior</td>
<td>18%</td>
</tr>
<tr>
<td>Cooperating Teacher Teaching Behavior</td>
<td>11%</td>
</tr>
<tr>
<td>Generalized Teaching Behavior</td>
<td>7%</td>
</tr>
<tr>
<td>Characteristics of Children</td>
<td>31%</td>
</tr>
<tr>
<td>Content</td>
<td>14%</td>
</tr>
<tr>
<td>Instructional Material</td>
<td>6%</td>
</tr>
<tr>
<td>The Conference</td>
<td>.96%</td>
</tr>
<tr>
<td>The Lesson</td>
<td>5%</td>
</tr>
<tr>
<td>Student Teaching Experience</td>
<td>2%</td>
</tr>
<tr>
<td>Special Teachers</td>
<td>.91%</td>
</tr>
<tr>
<td>Non-codable</td>
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</tbody>
</table>
Canfield Low and Mullin used learning principles as a frame of reference to study supervisory behavior. The study showed that student teachers were able to analyze and discuss their teaching behavior in terms of the selected principles to make commitments to implement these principles and to implement many of the commitments in subsequent teaching sessions. The significance of this study was the demonstration of the value of a planned supervisory conference which began with a real concern using an agreed upon system of analysis and closing with plans for future action.

The aforementioned studies suggest a need for systematic observation instruments that provide objective feedback on supervisory behavior. Such information on supervisory behavior can provide a focus for supervisory training sessions. In this way supervisory training conferences like supervisor-teacher conferences can begin with the trainer and trainee sharing a common frame of reference. At this point it should more nearly approximate a team approach to analyzing behavior, agreeing on procedures to modify those aspects of the supervisory behavior which are incongruent with the goals.

A Supervisory Training Model

The analysis system and supervisory training model proposed here were piloted with a group of eight supervisors, curriculum specialists, and administrators from a tri-county area surrounding Washington, Pennsylvania.

In general the supervisory training sessions were based (prescribed) on the analysis of data collected using the systematic observation instrument presented later in this paper. The sequence was as follows:

Round 1 - A student teacher taught in a micro-teaching format with a supervisor (trainee) observing.
Round 2 - The supervisor (trainee) held a conference with the student teacher. A "teacher of supervision" observed and coded the supervisory behavior.

Round 3 - The supervisor-student teacher conference was analyzed by the teacher of supervision, and the supervisor, using the data collected and viewing a videotape of the supervisory conference. The degree of congruence between the goals of the conference (teacher behavior change) and the supervisory behavior was determined and deficiencies noted. To modify the supervisory behavior to effect congruence a brief skill development session was conducted.

Round 4 - The student teacher retaught the micro lesson a second time, with the supervisor observing.

Round 5 - A follow-up conference was held between the student teacher and the supervisor, with the teacher of supervision observing and coding the supervisory behavior.

Round 6 - The supervisor and teacher of supervision held a follow-up conference.

The sequence of events is graphically presented on the following page.
SUPERVISORY TRAINING MODEL

Student
Teacher
MICRO
TEACHING

Supervisor
OBSERVES
& CODES

Student
Teacher
PLANS
RETEACH

Teacher of
Supervision
CONFERENCE

Teacher of
Supervision
OBSERVES
& CODES

Teacher of
Supervision
CONFERENCE

FEEDBACK

ANALYSIS

TRAINING
SESSION

Student
Teacher
RETEACHES

Supervisor
OBSERVES
& CODES

Teacher of
Supervision
CONFERENCE

Teacher of
Supervision
FOLLOW-UP
CONFERENCE

Teacher of
Supervision
OBSERVES
& CODES
Comprehensive Analysis System for the Supervisory Conference

Since many supervisors are presently familiar with the Flanders Interaction Analysis system, it seemed desirable to use the same format when developing a system for analyzing supervisory behavior.

By maintaining the ten categories and then sub-dividing them to incorporate cognitive and procedural aspects of the supervisory conference, we have preserved the reliability and validity developed by Flanders and, at the same time, provided for the inclusion of cognitive and procedural data for a more comprehensive analysis as the situation may warrant.

The specific categories in the following system were derived from the work of White, Radtke and Berman, Aschner and Gallagher, Simon and Bayer Blumberg, and from observations of supervisor-teacher interaction.

There are several sub-categories that distinguish the degree of emphasis. For example, note in category 2 that emphasis is placed on differentiating between general and specific praise. This follows such findings as mentioned earlier by Blumberg whose study stressed the importance of honest, sincere use of praise by a supervisor.
## SYSTEM FOR ANALYZING SUPERVISORY CONFERENCES

### Categories for Interaction Analysis

1. **ACCEPTANCE OF TEACHER FEELING:**
   - a) Reflecting
   - b) Accepting
   - c) Clarifying
   - d) Assuring

2. **PRAISE/REWARD/REINFORCEMENT**
   - a) General compliment without criteria
   - b) General compliment with criteria
   - c) Specific compliment without criteria
   - d) Specific compliment with criteria
   - e) Approval
   - f) Specific compliment contingent to the behavior

3. **ACCEPTANCE/USE OF TEACHER IDEAS**
   - a) Reflecting
   - b) Accepting
   - c) Clarifying

4. **ASKING QUESTIONS**
   - a) Factual recall
   - b) Describing
   - c) Perceiving
   - d) Justification for behavior
   - e) Evaluating the teaching/learning
     - Specific
     - General
   - f) Inferring
   - g) Interpreting
   - h) Analyzing

5. **INFORMATION/OPINION**
   - a) Descriptive feedback
   - b) Inferential feedback
   - c) Evaluative feedback
   - d) Suggestions based on theory/research, etc.
   - e) Suggestions based on experience
   - f) Prompts contingent to the behavior
   - g) Suggestions based on other teachers' practices
<table>
<thead>
<tr>
<th>SUPERVISOR TALK</th>
<th>DIRECT INFLUENCE</th>
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<tbody>
<tr>
<td>6. <strong>GIVING DIRECTIONS</strong></td>
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<tr>
<td>a) Procedural in conference</td>
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<td>b) Cueing performance</td>
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<tr>
<td>c) Focusing attention on videotape performance</td>
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</tbody>
</table>

| 7. **CRITICISM** | |
| a) Disapproval without criteria | |
| b) Disapproval with criteria | |
| c) Disapproval on authority | |

| TEACHER TALK | |
| 8. **TEACHER RESPONSE** (CONVERGENT) | |
| a) Yes, no, ok, etc. | |
| b) Agreeing with supervisor | |
| c) Describe performance | |
| d) Factual recall | |
| e) Indifference | |

| TEACHER TALK | |
| 9. **TEACHER RESPONSE** (DIVERGENT) | |
| a) Inferential description of behavior | |
| b) Proving analytical reason for behavior | |
| c) Providing subjective reason for behavior (rationalizing) | |

| TEACHER TALK | |
| 10. **SILENCE & CONFUSION** | |
| a) Observing videotape without comment | |
| b) Silence in a discussion | |
| c) Miscellaneous/Non-codable | |

* There is NO scale 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.
# Interaction Analysis Matrix

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<tr>
<td>Total</td>
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<td>4</td>
<td>49</td>
<td>77</td>
<td>13</td>
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</tbody>
</table>

Matrix Total
From the research studies referred to earlier, it was implied that a better approach to conference planning occurred when the student teacher was involved from the beginning. Therefore, it should be emphasized that the analysis system be learned in the early stages of supervisor training.

**Changing Supervisory Behavior**

The following matrix was derived from an hypothetical coding of a supervisory conference. As a teacher of supervision and a supervisor review the matrix, a number of possible discourses could ensue. Let us suppose that the teacher of supervision after certain opening remarks asks the supervisor:

- **Teacher of Supervision**: "Is there a particular element of your conference that you want to discuss today?"

- **Supervisor**: "I notice from row 3 (category of acceptance) I didn't follow the teacher's comments (row 9) with acceptance but continued to talk—there seems to be more 9-5 and 9-4 sequences than anything else."

The above observation by the supervisor provides the focus for the conference, and the training session can begin.

The supervisory training session used in the model piloted in Washington, Pennsylvania consisted of the supervisor and teacher of supervision participating in a discussion centered on a topic of interest. In this discussion, the teacher of supervision presented an affirmative side to a topic. The supervisor's role was to accept the teacher of supervision's favorable comment prior to his presenting a statement to the contrary.
This interaction usually lasted ten minutes—long enough for the supervisor to successfully utilize the acceptance technique, category 3.

**Example No. 2:**

During a supervisory conference, a teacher becomes very defensive. Aware of this defensiveness, the teacher of supervision can help the supervisor discover, from the data, he did not give the teacher an opportunity to explain the circumstances fully. On occasion, the supervisor interrupted the teacher’s talking, evident from the tape feedback and the small percentage of silence found in the matrix.

The teacher of supervision can then engage the supervisor in a training session to lessen the defensiveness.

**Teacher of Supervision**

"Since you have noticed instances in which you presented ideas of your own when it might have been better to build on those of the teacher, let us practice the ability to reflect, category 3.

**Example of Reflection**

**Teacher of Supervision**

"Respond to the following statement of a teacher." 'I noticed six or seven students weren't paying attention in class.'"

**Supervisor**

"You feel there were several students who weren't involved in today's lesson."

**Teacher of Supervision**

"Very good! Let's try another."
### Example of Acceptance

<table>
<thead>
<tr>
<th>Teacher of Supervision</th>
<th>&quot;Respond to the following in an accepting way. 'I should have called on one or two in the group attempting to gain their attention.'&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>&quot;That sounds like a good idea--hoping to pull them into the lesson.&quot;</td>
</tr>
</tbody>
</table>

### Example of Clarification

<table>
<thead>
<tr>
<th>Teacher of Supervision</th>
<th>&quot;Respond to the following by clarifying this teacher statement. 'The present chapter is a very difficult one and perhaps we should stay on it the remainder of the week.'&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>&quot;Are you saying you plan to postpone introducing the new unit until they have this one better in hand?&quot;</td>
</tr>
</tbody>
</table>

### Example No. 3:

From an objective analysis of the supervisory conference it is observed by both the supervisor and the teacher of supervision that the supervisor does not go beyond the factual recall level of questioning.

During a training session, the supervisor observes examples of levels of questioning (category 4) from a perceptual model on videotape. The supervisor is then provided time to compose several leading questions for each of the eight sub-categories by a written response.

Follow-up of the next supervisory conference would confirm the supervisor's ability to ask higher-level questions.
Example No. 4.

During a supervisor-teacher of supervision conference, a supervisor scanning a matrix commented he was surprised to see he discussed with a student teacher only 50 percent of the time during the video playback. The supervisor felt he needed to increase that discussion time. Thus, he set his own goal for the subsequent conference; i.e., an attempt at increasing the amount of supervisor talk during video tape playback.

Similar supervisory training sessions could focus on pausing to allow a teacher time to reflect on his behavior, decreasing the amount of criticism, increasing the amount of teacher talk, and accepting a teacher's feelings. The training format provides a systematic approach to training supervisors.

Audio or video recording enables the supervisor and teacher of supervision to code the conference together.

As supervisors and teachers of supervision commence their analysis, they will concentrate on ten general categories. As the supervisory and training sessions continue, the sub-categories are incorporated into the analysis process.

The general rules and methods for coding as described in "The Role of the Teacher in the Classroom" (Amidon and Flanders, 1967) are to be followed.
BIBLIOGRAPHY


Lewin, Kurt, Ronald Lippitt, and Ralph White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates."


Davis, O. L., Jr. and Drew C. Tinsley, "Cognitive Objectives Revealed by Classroom Questions."


Maccia, George S., "Hypothetical Thinking in Education."


White, Mary Lou Usery, Muriel Radtke, and Louise M. Berman, "Supervision: Focus on Thinking."


Canfield, James K., Arlene F. Low, and Robert E. Mullin, "Principles of Learning as the Basis for Analysis of Teaching Behavior in Tutorial Sessions with Student Teachers."

Heidelbach, Ruth, "The Cooperating Teacher as Teaching Tutor."