This document reports on a study that (1) investigated and tested interdisciplinary models of dialogue settings akin to the supervisory conference in student teaching, and (2) gathered information about the verbal behavior of university supervisors and supervising teachers during a student teaching conference. Data gathered from pairs of university supervisors and supervising teachers provided information concerning (1) the goals of dialogue groups in the various disciplines, (2) the differences and similarities between the educational model (tutoring) and the related disciplines of this study, (3) the models of the related disciplines to which the educational model is most similar, (4) the kinds of verbal behaviors used most often by the supervising teacher and the university supervisor, and (5) the significant differences in the verbal behaviors of the two supervisory groups indicative of a cleavage in the supervisory function. An extensive bibliography is included. (Author/LLR)
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TESTING INTERDISCIPLINARY MODELS OF DIALOGUE
SETTINGS FOR IMPROVING THE EFFECTIVENESS OF
SUPERVISOR'S VERBAL BEHaviors IN A SUPERVISORY CONFERENCE

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Specialists in the area of supervision have considered the supervisory conference one of the most frequent activities supervisors engage in but little is known as to what actually takes place. Thus, researchers and practitioners most recently view the supervisory conference as a significant vantage point from which to study supervisory behavior in a controlled contextual setting.

To obtain pertinent data one approach of this study was to examine a sample of selected verbal behaviors supervisors engaged in during a conference with a student teacher. The data from this sample would then be tested against the data provided from the other central purpose of this study: the development of models of dialogue groups similar to the supervisory conference found in the related disciplines. The results of this comparison would provide supervisors with at least three suggested alternatives for modifying their supervisory conference behavior:

1. they (supervisors) may choose to become more consistent in their supervisory behavior with the tested model (developed from the interdisciplinary models) found to be most closely related to the educational model.

2. they may choose to become more consistent in their supervisory behavior with the educational model developed from the research literature.

3. they may choose a newly formed conceptual model which may be more realistic and based on an emerging theory of supervision.
Two purposes for the study were formulated and developed within the context of the student teaching (professional clinical experience) process. One purpose was to investigate the research literature and develop models of other dialogue groups found in the interdisciplinary areas of speech and communication, psychiatry, sociology, and counseling and guidance. These models were then tested against the educational model: tutoring. It was assumed that the supervisory conference is a tutoring situation. Thus, the educational model has a sub-model, the supervisory conference. The following figure indicates the dialogue groups found in the related disciplines.

A MODEL OF THE DIalogue GROUPS IN FIVE DISCIPLINES
A second purpose of the study was to collect data about the verbal behaviors university supervisors and supervising teachers engaged in during a supervisory conference. A group of ten pairs of university supervisors and ten supervising teachers participated in the study. The frequency of use of selected verbal behaviors during a representative fifteen minute supervisory conference was recorded for each participant. The frequency of use of each verbal behavior by college supervisors and by supervising teachers was determined for each participant. The frequency of use of each verbal behavior by college supervisors as a total group and by supervising teachers as a total group was determined. Then the frequency of occurrence of the verbal behaviors was found for each pair of supervisors. An instrument was developed to record the following supervisory verbal behaviors either in the procedural or substantive areas: informing, interpreting, clarifying, summarizing, evaluating, basic, elaborating and challenging questions as well as listening behavior.

**SUPERVISORY VERBAL BEHAVIOR DATA-GATHERING INSTRUMENT**

**Informing:** telling, directly relating facts of observation, stating a series of items recorded from observation of a student teacher's teaching behavior

**Example:** I noted that three students were not called on throughout the lesson you taught.

**Interpreting:** to explain a concept or relationship between ideas about a lesson, to reason, to illustrate

**Example:** Asking questions of many students help to keep them on their toes during a lesson. The more you move around a classroom to reveal your physical proximity to the students, the quieter they become.
Clarifying: to restate something in order to make it more clear for the student, to group and arrange items in proper order, to reorganize statements made by the students.

Example: In other words, you are saying that the evaluation of a lesson is directly related to the objectives.

Evaluating: making statements that carry value judgments, such terms as right, wrong, correct, false, limitations, strengths, needs, positive, negative, and growth are simple terms that infer judgment.

Example: Your strengths seem to lie with your ability to communicate with children, however some needs are indicated in your planning and organizing of lessons.

Summarizing: tying together some loose elements for purposes of review or reinforcement, to collect and repeat key items that were separately stated earlier.

Example: It might be helpful to go back and quickly review the points we stated about writing objectives in behavioral terms.

Questions: Basic: asking for details of facts, using recall type questions for acquiring information of a simple nature.

Example: How much time did you spend planning your lesson?

Elaborating: asking for additional information, eliciting statements that provide needed background for more detailed information.

Example: Would you please tell me more about the reasons for selecting those slides for your lesson? And then what happened?

Challenging: eliciting statements that probe for the purposes of discovering reasons for something such as the selection of content for a lesson, also a statement that leads a student into a more complex thinking than simple recall, a deep thought question.
Example: Why did you prefer to ask open-ended questions rather than closed questions in your math class today?

Listening: any verbal expression by the supervisor that discloses he is truly professionally interested in the comments of his student teacher, including the expressions such as "aha", "uh ha", and "I see" as listening implications.

The Procedural area was identified with items relating to classroom management such as the grouping of children, seating arrangements, passing and receiving of instructional materials. Another item was lesson planning, the length of time used for preparation, and source of materials. Discussion of control or discipline of the students, discussion of children with behavioral difficulties and related remarks about students' parents were also included in the Procedural area.

The Substantive area deals directly with the academic content of a lesson such as the concepts, skills, or understandings developed during the course of a lesson. Teaching behaviors such as informing, interpreting, or questioning related directly to the lesson were Substantive. At points where students had difficulty in understanding concepts of a lesson and its application, these were also included as Substantive.

This data gathering instrument contains selected verbal behavior categories from the studies of specialists in teaching: Openshaw (48), Hughes (31), Barbour (100). Their verbal behaviors included informing, interpreting, clarifying, evaluating, summarizing, and basic and elaborating questions. The areas into which these verbal behaviors are
categorized entitled procedural and substantive were taken from Waimon (67). Challenging questions and listening were added to this to give the instrument more "coverage" of the verbal behaviors enacted in the supervisory conference. Michalak (104).

Scoring the instrument is achieved by having the recorders tally only the verbal behavior identified in the instrument. Even though other verbal behaviors may appear, they are not scored. Judgments on recording the behaviors are based on what is heard. Since one of the primary purposes is to examine the frequency of the occurrence of the verbal behaviors, one tally is made for each sentence of reasonable length. In some cases where sentences continue without a succinct conclusion and a different behavior is indicated, it was agreed that an additional tally should be given. For example, a supervisor might begin with informing, then move to interpreting what was informed and finish that statement by asking a challenging question. All three moves are recorded in that supervisory statement. Scoring the instrument is made simply by totaling the raw scores from the frequency of occurrence and changing them into simple percentages if desired. At first glance, the number of tallies indicates which categories were most frequently used. Michalak (109).

A sample worksheet serves to illustrate the data gathering instrument of this study.
Figure 2. VERBAL BEHAVIORS OF THE SUPERVISORY CONFERENCE

<table>
<thead>
<tr>
<th>VERBAL BEHAVIORS</th>
<th>PROCEDURAL</th>
<th>SUBSTANTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5Min.</td>
<td>5Min.</td>
</tr>
<tr>
<td>Informing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpreting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarifying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summarizing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions Basic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elaborating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total | Total |
The data from the research literature and verbal behavior instrument provided some tentative answers to the five questions of this study:

1. What are the goals of dialogue groups in the selected interdisciplinary (related disciplines) areas of this study?
2. What differences and similarities exist between the educational model and the models of the related disciplines?
3. What model of the related disciplines of this study is the educational model most similar to?
4. What kinds of verbal behavior are used most by supervising teachers and university supervisors?
5. Are there any significant differences in the verbal behaviors of the two supervisory groups that would suggest a cleavage in the supervisory function?

Figures 3 and 4 will assist in providing answers to the first three questions of the study. For internal consistency in testing the models, common elements were identified such as: **Purpose**, **Verbal Behavior**, **Leadership**, **Planning**, and **Setting**. These common elements found in each dialogue model of this study which are similar to the tutoring model (excluding **Verbal Behavior**) are illustrated in Figure 3. Verbal behaviors are illustrated in Figure 4.
COMMON CLASSIFICATION ELEMENTS OF DIALOGUE MODELS

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>TUTORING</th>
<th>SUPERVISORY CONFERENCE</th>
<th>GROUP DISCUSSION</th>
<th>PSYCHIATRIC INTERVIEW</th>
<th>SOCIAL WORK INTERVIEW</th>
<th>COUNSELING INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purposes: change in behavior</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Leadership: responsibility of the more experienced</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Planning: prior organization and strategies</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Setting: physically conducive and mentally secure</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**KEY:**
- x indicates a similar element
- _ indicates similarity in most cases but subject to occasional change

*Research Citations in Bibliography*

**Tutoring**
- Purposes - (90), (108), (98)
- Leadership - (36), (60), (56), (96)
- Planning - (92)
- Setting - (92)

**Supervisory Conference**
- Purposes - (63), (17), (25), (26), (34), (15), (87), (86), (47), (51), (27), (3)
- Leadership - (31), (23), (93), (93), (11), (87), (5)
- Planning - (44), (65), (93), (93), (83)
- Setting - (72), (86), (17)

**Group Discussion**
- Purposes - (35), (7), (34), (28), (4), (34)
- Leadership - (6), (88), (6), (7), (28), (34)
- Planning - (24), (4), (23)
- Setting - (31)
The purpose of each dialogue model as in the tutoring model is to effect a change in behavior. (This change in behavior, however, needs to be more rigorously tested and specified in further studies in terms of whether it is effected in cognitive, affective, or psychomotor terms, if it includes combinations of each and assuming these combinations do exist, to what degree does each contribute to behavior modification.)

In the dyadic relationship, the less experienced person is placed in the position of attempting to learn something, whether it be of an academic, personal or social nature. The intent, in most cases, is to help this person better cope with various problems he encounters and to make effective decisions about them.

The leadership element is viewed as significant in the tutoring model as it is with each dialogue model of this study. The similarity that exists between the tutoring model and the related models in the leadership element is that responsibility is placed upon the more
experienced person. This happens in almost every case with the exception of group discussion where the leadership function can readily change hands. Figure 3 points out this variation of the group discussion model.

In the planning element, the need for developing strategies and prior organization of the tutoring model is similar to the other related models except for the psychiatric interview as noted in Figure 3. This situation exists because the psychiatrist very often depends on the spontaneity of expression by the patient which is difficult to plan for. Therefore, highly structured planning is less desirable than it is in the tutoring model and the other dialogue models. All, ideally, strive for a physical environment that is comfortable and pleasant with a relaxed atmosphere and positive rapport established between the individuals.

A great deal of similarity exists between the tutoring model and other dialogue models in terms of verbal behaviors. Minor variations may be noted in Figure 4.


ELEMENTS OF VERBAL BEHAVIOR IN DIALOGUE MODELS COMPARED TO AUDIO TAPED SUPERVISORY CONFERENCES

<table>
<thead>
<tr>
<th>VERBAL BEHAVIORS</th>
<th>REPORTED FROM LITERATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AUDIO TAPED SUPERVISORY</td>
</tr>
<tr>
<td>Informing</td>
<td>3</td>
</tr>
<tr>
<td>Interpreting</td>
<td>3</td>
</tr>
<tr>
<td>Clarifying</td>
<td>2</td>
</tr>
<tr>
<td>Summarizing</td>
<td>1</td>
</tr>
<tr>
<td>Evaluating</td>
<td>2</td>
</tr>
<tr>
<td>Basic Questions</td>
<td>2</td>
</tr>
<tr>
<td>Elaborating</td>
<td>2</td>
</tr>
<tr>
<td>Challenging</td>
<td>2</td>
</tr>
<tr>
<td>Listening</td>
<td>3</td>
</tr>
</tbody>
</table>

Key: Frequency of occurrence from the literature:
- Frequently - 3
- Sometimes - 2
- Seldom - 1

Frequency of occurrence from the audio taped data:
- Frequently (above 12) - 3
- Sometimes (5-12) - 2
- Seldom (0-4) - 1

Figure 8.
Informing is frequently used in all models with the exception of the psychiatric interview in which it is seldom used. Interpreting is frequently used in each dialogue model. Clarifying is sometimes used in the tutoring model as compared to being frequently used in every other dialogue model. Summarizing is frequently used in the tutoring model with the group discussion and counseling interview using it sometimes, and the social casework interview seldom using it. Evaluating is frequently used in tutoring, the supervisory conference and
group discussion. It is used sometimes in the social casework interview and counseling interview but seldom in the psychiatric interview. Basic questions are frequently used in tutoring and each of the dialogue models. Elaborating questions are sometimes used in the tutoring model, however, they are frequently used in each of the other dialogue models. Challenging questions are frequently used in tutoring, the supervisory conference, and group discussion but seldom used in the psychiatric interview, social casework interview and the counseling interview. Listening is frequently used in the tutoring model as well as each dialogue model in this study.

There were some variations between the tutoring model and the related dialogue models not illustrated in the two figures. In tutoring, as in other related dialogue models, the emphasis was in dealing with the conscious behavior of the less experienced person. The psychiatric interview varies from tutoring and the other dialogue models by sometimes dealing with the subconscious as well as the conscious behavior of the less experienced person of the dyad. A slight variation may exist in the leadership element between the tutoring model and the supervisory conference model. It is possible for the student teacher in the supervisory conference to assume a peer relationship; he may look upon the supervisor as a partner or cooperative participant. Yet, the recent literature stresses a relationship of a specialist-student type. This latter type is in keeping with the tutorial view of the leadership function in the tutoring situation. Group discussion varies from tutoring chiefly in the range of purposes of the
group. Group discussion may be undertaken to deal with varied tasks as developing instructional objectives - and effecting decisions on community affairs. Also, the leadership role can change hands quite readily depending on the needs and the purposes of the group, as well as the way the members view the leadership function. This tends to be less the case in a tutoring setting. The psychiatrist model may vary from the tutoring model in that a psychiatrist may prior to effecting a change in behavior, deal with changing perceptions of a patient. The social casework interview offers the client an opportunity for emotional release as a central factor while in tutoring such is peripheral to the primary task of interaction. In the counseling-guidance model, the variation in emphasis tends to be on dealing with feelings of the client rather than on his cognitive development as is usually the case in tutoring. This approach in counseling and guidance tends to represent the client-centered method which appears to be the most popular method reported in the literature.

The main points to be noted in regard to the verbal behavior reported from the professional literature are that:

1. Summarizing is seldom used in the social casework interview.

2. Informing is seldom used in the psychiatric interview.

3. Evaluating is sometimes used in the social casework interview and counseling interview, but seldom is used in the psychiatric interview.

4. Challenging questions are looked upon as less desirable behaviors and are therefore, seldom used in the psychiatric interview, social casework interview and counseling interview.
Two procedures were used to help answer questions four and five of the study:

1. A histogram was constructed to compare the verbal behaviors of the total groups of university supervisors and supervising teachers. In this way, generalizations could be drawn regarding patterns of differences and similarities in their verbal behaviors in supervisory conferences.

**KEY FOR VERBAL BEHAVIOR IN THE HISTOGRAM**

1. INTERPRETING-SUBSTANTIVE
2. INFORMING-SUBSTANTIVE
3. LISTENING-SUBSTANTIVE
4. INFORMING-PROCEDURAL
5. INTERPRETING-PROCEDURAL
6. LISTENING-PROCEDURAL
7. CHALLENGING QUESTIONS-SUBSTANTIVE
8. BASIC QUESTIONS-SUBSTANTIVE
9. EVALUATING-PROCEDURAL
10. BASIC QUESTIONS-PROCEDURAL
11. EVALUATING-SUBSTANTIVE
12. CHALLENGING QUESTIONS-PROCEDURAL
13. CLARIFYING-PROCEDURAL
14. CLARIFYING-SUBSTANTIVE
15. ELABORATING QUESTIONS-SUBSTANTIVE
16. ELABORATING QUESTIONS-PROCEDURAL
17. SUMMARIZING-SUBSTANTIVE
18. SUMMARIZING-PROCEDURAL
Figure 5

VERBAL BEHAVIOR CLASSIFICATIONS

FREQUENCY

0 20 40 60 80 100 120 140 160 180 200

= UNIVERSITY SUPERVISOR

= SUPERVISING TEACHER
General patterns that emerge from this presentation suggest that both groups of supervisors use these verbal behaviors most: interpreting-substantive, informing-substantive, listening-substantive, informing-procedural, and interpreting-procedural. Both groups are very low in elaborating questions-procedural, summarizing-substantive, and summarizing-procedural. University supervisors and supervising teachers appear almost equal in challenging questions-substantive, basic questions-procedural, and evaluative-substantive.

It may be noted that in listening-substantive and listening-procedural, these university supervisors spent three to four times as much time in these behaviors than did the supervising teacher's group. Supervising teachers engaged more frequently in informing-procedural and interpretive-procedural verbal behaviors than did university supervisors.

Even though elaborating questions-substantive was low for both groups, the university supervisors asked them more than three times as often as the supervising teachers.

University supervisors asked twice as many basic questions-substantive than did supervising teachers.

In identifying combinations of verbal behavior, the data show that the substantive area is the common element in the first three verbal behaviors which were interpretive-substantive, informing-substantive, and listening-substantive. This is borne out by the recording of 794 occurrences for the first three behaviors which represented the types most frequently used by the total group of supervisors.
The next three categories of verbal behaviors: interpretive-procedural, informing-procedural, and listening-procedural, contained a common procedural element and was used the next most frequently by the total group of supervisors. There were 694 occurrences recorded in this area.

The data indicate that both groups of supervisors engaged most often in interpreting, informing, and listening behaviors. They seldom or never used summarizing-substantive and summarizing-procedural behaviors.

It may be noted that university supervisors as a group engaged in more verbal behavior (1141) than did the supervising teachers (824). The supervising teachers engaged in informing-procedural, interpretive-procedural, and basic question-procedural more often than did university supervisors. The latter employed each of the other fifteen verbal behaviors more often than did the supervising teachers.

2. To answer question five of this study, the next approach was to gather and categorize the data into frequency distribution figures which compared each university supervisor with his paired supervising teacher in selected verbal behaviors in their conferences with the same student teacher. Thus, trends in differences and similarities could also be noted between the supervisory pairs in conference with the same student teacher, as an individualized approach. A Chi-Square Test was used to determine if significant differences existed between them on each verbal behavior that by inspection, seemed to merit such statistical treatment.
Figure 6 provides a summary of data from the Chi Square Test for significant difference between each supervisory group. This figure includes the general tabulated data from each group.

### Data from Chi-Square Test for Significant Differences Between Verbal Behaviors of University Supervisors and Supervising Teachers

<table>
<thead>
<tr>
<th>Verbal Behavior</th>
<th>( \chi^2 )</th>
<th>.05 Level</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informing-Procedural</td>
<td>.20</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Informing-Substantive</td>
<td>.80</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Interpreting-Procedural</td>
<td>.74</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Interpreting-Substantive</td>
<td>.20</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Clarifying-Procedural</td>
<td>.26</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Clarifying-Substantive</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Summarizing-Procedural</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Summarizing-Substantive</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Evaluating-Procedural</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Evaluating-Substantive</td>
<td>.94</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Basic Questions - Procedural</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Basic Questions - Substantive</td>
<td>.20</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Elaborating Questions - Procedural</td>
<td>av1</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Elaborating Questions - Substantive</td>
<td>.56</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Challenging Questions - Procedural</td>
<td>av1</td>
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<td>acc.</td>
</tr>
<tr>
<td>Challenging Questions - Substantive</td>
<td>.20</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Listening-Procedural</td>
<td>.94</td>
<td>3.8</td>
<td>acc.</td>
</tr>
<tr>
<td>Listening-Substantive</td>
<td>.22</td>
<td>3.8</td>
<td>acc.</td>
</tr>
</tbody>
</table>

**Key:**
- av1: all values identical
- acc.: accepted
To help establish significant difference levels in verbal behavior between supervisory groups, a Chi-Square Test was used. The null hypothesis can thus be tested if question five of this study is restated in null form: there are no significant difference in the verbal behaviors of the listed types between the supervisory groups studied.

Figure 6 presents the data subjected to the Chi-Square Test for significant differences between university supervisors and supervising teachers in types of verbal behaviors employed in supervisory conferences with student teachers. Eighteen categories of verbal behaviors and their Chi-Square levels are indicated with those attaining the .05 level of confidence accepted under the null hypothesis. It will be noted that, in all cases, the values of Chi Square reveal that no significant differences in types of verbal behaviors were significant at the .05 level.

In the Appendix are included the comparison of the frequency of occurrence data in terms of units of variation between each supervisory pairs in conference with the same student teacher. Also, only slight variations between the two supervisory groups, in using a particular verbal behavior, indicate a tendency toward similarity in conferencing; great variations between them indicate a lack of similarity in their use of that particular verbal behavior in conferences.
SUMMARY

One of the central purposes of this study was to investigate and test interdisciplinary models of dialogue settings akin to the supervisory conference in student teaching. These models were formulated from dialogue settings found in the following related disciplines of speech and communication, psychiatry, sociology, and counseling and guidance. They were then tested against the educational model, tutoring. It was assumed that the supervisory conference is a submodel of the tutoring model.

The other central purpose of the study was to gather information about the verbal behaviors university supervisors and supervising teachers engaged in during a student teaching conference.

A group of ten pairs of university supervisors and supervising teachers participated in the study. The frequency of use of selected verbal behaviors during a representative fifteen minute supervisory conference was recorded for each participant. The frequency of use of each verbal behavior by college supervisors and supervising teachers was determined. Then the frequency of occurrence of the verbal behaviors was found for each pair of supervisors. An instrument was developed to record the following supervisory behaviors either in the procedural or substantive areas: informing, interpreting, clarifying, summarizing, evaluating, basic questions, elaborating questions, challenging questions, and listening.

The data provided tentative answers to the five questions of this study.
1. **What are the goals of dialogue groups in the various disciplines?**

   The stated purpose of all dialogue groups is to bring about a change in behavior by the less experienced members of the dyad. In the dialogue group of each of the disciplines, the less experienced member is placed in the position of attempting to learn something either of an academic, personal, or social nature. Each of the dialogue groups are established to help their members better cope with various problems they encounter.

2. **What differences and similarities exist between the educational model and the related discipline of this study?**

   - The major similarities between the educational model, tutoring and the related disciplines are as follows:
     
     a. The main purpose is to effect a change in behavior
     
     b. The leadership role is usually the responsibility of more experienced person in the dyad.
     
     c. Planning for prior organization and strategies is emphasized.
     
     d. The setting is to be both physically and mentally conducive to good rapport.
     
     e. The verbal behaviors used in the models are much the same

   - The related models differ from the tutoring model in these ways:
     
     a. The subconscious behavior of the patient is considered in the psychiatric interview
     
     b. A peer or cooperative participant relationship may be formed in the supervisory conference
c. In group discussion, the leadership role may change hands often, depending on the needs and purpose of the group as well as the way they view the group. Also, the group discussion may undertake tasks that may vary from instructional objectives to making decisions on community affairs.

d. The social casework interview offers the client an opportunity for emotional release.

e. The counseling interview deals with the feelings of the client rather than on cognitive development.

f. Verbal behaviors such as evaluating and challenging questions are seldom used in the psychiatric interview, social casework interview, and counseling interview. Informing is seldom used in the psychiatric interview and summarizing is seldom done in the social casework interview.

3. To what models of the related disciplines of this study is the education model most similar?

The education model which is represented by tutoring was similar to the social casework interview. (After examining the professional literature on tutoring and the supervisory conference, it can be concluded that the supervisory conference is a sub-model of the tutoring model.)

4. What kinds of verbal behaviors are used most by the supervising teacher and the university supervisor?

A. University supervisors engage in interpreting-substantive, informing-substantive, and listening-substantive verbal behaviors most frequently. Supervising teachers engaged in informing-procedural, interpreting-procedural, and challenging questions-substantive verbal behaviors most often. Both groups of supervisors engage most frequently in informing and interpreting behaviors in the supervisory conferences. Verbal behaviors less frequently used were clarifying, elaborating questions. A seldom used verbal behavior was summarizing. It can be concluded that either group of supervisors were not consistent in the use of types of verbal behaviors that have been recommended by specialists in the field as most desirable for use in a supervisory conference.
3. University supervisors, as a group, spend three to four times more in listening behaviors than do supervising teachers. However, individual supervisors are accountable for much of the difference.

C. As a total supervisory group, university supervisors engaged in more verbal behaviors than did supervising teachers.

D. The two most frequently used verbal behaviors the university supervisors engaged in, interpreting and informing, were in the substantive area and the two most frequently used verbal behaviors supervising teachers engaged in, interpreting and informing, were in the procedural area. This suggests that the two verbal behaviors most frequently used by university supervisors focused on the content of the lesson and the teaching behavior of the student teacher while supervising teachers dealt with such things as classroom management, control of children, and peripheral matters.

5. Are there any significant differences in the verbal behaviors of the two supervisory groups that would suggest a cleavage in the supervisory function?

A. There were no significant differences in the various kinds of verbal behaviors of the two supervisory groups. There were, however, differences among individuals who formed a supervisory pair. In some cases there was a great variation between the supervising teacher and the university supervisor. This might suggest that supervising teachers and university supervisors perceive the supervisory function or the needs of the student teacher differently.

B. If the sample was expanded, patterns indicate that significant differences in verbal behaviors may exist between university supervisor and supervising teacher with both the same, and with different, student teachers.

Although evidence from the Chi Square Test indicated no significant differences in the selected verbal behaviors of the two supervisory groups, examination of the units of variation (found in the figures in the Appendix) suggest differences between each supervisory pair working with the same student teacher that merit further consideration.
1. Supervising teachers and university supervisors view their tasks working with student teachers differently in working with the same student teacher.

2. Each supervisor working with the same student teacher may perceive him (student teacher) differently.

3. A systematic plan that might reflect some consistent behavior pattern working with the same student teacher was not evidenced.

4. Individual supervisors having different perceptions about the same student teacher as revealed by their verbal behaviors may contribute inconsistencies in the student teacher's perceptions.

Implications

Assuming that verbal behavior patterns were similar would this tend to also indicate a duplication of effort? To lessen the possibility of incongruency in verbal behaviors and/or duplication of effort by supervisory pairs, another consideration should be noted. The tasks of supervisors should be differentiated.

Increased utilization of supervisory personnel in teacher training might occur if the notion developed by this study were further tested—that university supervisors train supervising teachers in tutoring skills that would be implemented as supervising teachers engage in a conference with student teachers. The tutoring model along with the supervisory conference verbal behavior model found in the Michalak (104) study can provide several parameters for obtaining baseline data in the initial research phase.
Recommendations for Future Research

Inevitably there is a lag between the most recent research and theorizing on one hand and the publications or results on the other. This study represents a view of the four dialogue models drawn from available sources. Much recent work is not yet in print. Indications are that the less sophisticated person is becoming more mature and perceptive and ready to take a more active role in the dyadic relationship. He may be more ready, both emotionally and intellectually, to grasp new concepts, understandings, and responsibilities regarding his own welfare. Thus, the person in the leadership position must more readily share his responsibility with the less experienced person by facilitating and guiding rather than controlling, directing, and manipulating. This outlook might represent present views about the tutoring situation.

Relating this position to the supervisory conference indicates that some researchers and theorists presently take an opposite view from the traditional model presented earlier. If supervisors desire to change and become more consistent in their conferencing behaviors with student teachers, they should study the latest work of these theorists. This could lead also to the student teacher engaging in more cognitive tasks regarding the study of his teaching behavior. He may become more of an equal of the supervisor both emotionally and intellectually. He will be a learner who assumes a greater share of the responsibility for his own professional growth.
In the "new" conference setting the professional growth of the student teacher may be enhanced by having his ideas rigorously tested in a non-threatening environment where his status is not at stake.

CONCLUSION

Testing models and analyzing elements of models containing verbal behavior patterns are not intended to be conclusive. They can only carry greater significance if placed with other variables such as non-verbal behaviors and are tested in a global or total contextual setting. To clarify, by isolating selected pieces of behavior for examination and making projections from them about human behavior is limiting and grossly inaccurate. However, if the evidence is placed along with other variables and subsequent testing is done on a longitudinal basis, patterns for predicting trends of behavior may be measured in more accurate terms. Therefore, patterns of verbal behavior ought to be included with other variables to determine whether or not a supervisor is congruent and consistent in his conferencing behavior.

It is hoped that continuous examination of supervisory conference behavior will contribute to the development of a more valid research base in supervision.
APPENDIX

Data presented in Figure 6 of paired supervisors indicate only slight variations between supervisory pairs D and G in informing-procedural behaviors. Greater variations in order of magnitude exist between supervisory pairs I, A, E, J, C, F, and B. The first pair of supervisors, I, had the greatest variation, sixteen occurrences. It should be noted that university supervisors E and J did not use informing in the procedural area.

Figure 7 indicates slight variations, no more than four occurrences, among supervisory pairs J, D, A and H in informing-substantive behaviors. Supervisory pair E varied greatest in this behavior, twenty-two occurrences. They were rather closely followed by supervisory pairs C, B, F, and G for whom the variation ranged from nineteen to fourteen occurrences.

The number of interpreting-procedural behaviors engaged in by the supervisory pairs is illustrated in Figure 8. Supervisory pair B had the most variation, twenty-two occurrences, and supervisory pair H had the least variation, one occurrence. Supervisory pair H was in the group that used this behavior five or fewer times along with six other supervisors. Quite clearly, university supervisor B used this behavior almost twice as often as any other supervisor. The range between university supervisor B and university supervisors E and J and supervising teacher D was forty-seven occurrences. Two university supervisors, E and J, and one supervising teacher, D, did not use interpreting-procedural.
Figure 9 illustrates the number of interpreting-substantive behaviors engaged in by the supervisory pairs. Supervisory pair E had the most, seventy-one occurrences. Supervisory pairs I and H had the least variations, two and three respectively. In a group of ten supervisors, only three supervisory pairs, A, H, and I, used this behavior ten or fewer times. Supervising teachers A, B, C and H had three or less occurrences. University supervisor E distinctly revealed the use of this verbal behavior almost three times as often as any other supervisor. The variation between university supervisor E and supervising teacher B and H was ninety occurrences.

The number of evaluating-procedural behaviors engaged in by the supervisory pairs is shown in Figure 10. Supervisory pair B was found with the most variation, nineteen occurrences. In a group of fourteen supervisors, seven supervisory pairs used it five or fewer times. As a total group, the variation of each supervisory pair was only a difference of four or less occurrences with the exception of supervisory pair B. University supervisor B used this verbal behavior almost twice as often as any other supervisor. Supervisory pair C, supervising teachers B, F, and G, and university supervisors E and J did not use evaluating-procedural. The range between university supervisor B and university supervisors C, E, and J and supervising teachers B, C, F and G was nineteen occurrences.

Figure 11 illustrates the number of evaluating-substantive behaviors engaged in by the supervisory pairs. Supervisory pairs D and E had the most variation, nine occurrences each. The least occurrences
having a variation of four or less were had by supervisory pairs A, B, F, G, H and I. A group of sixteen supervisors used it four or fewer times with two supervisory pairs in the group, C and J, not using this behavior during the taping. University supervisor B and supervising teacher A did no evaluating-substantive. The range between university supervisors B, C, and J and supervising teachers A, C, and J was only eleven occurrences.

The number of occurrences in Figure 12 are basic questions-procedural behaviors engaged in by the supervisory pairs. Supervisory pairs G and J had the most variation, six occurrences each. The next least variation was supervisory pair I showing only two occurrences. In this group, fifteen of twenty supervisors used it five or fewer times with six supervisory pairs in this group. Supervisory pairs C and H had no variation in occurrences. Supervisory pair C, university supervisors E and J, and supervising teachers D and G did not ask basic questions-procedural. University supervisor A shows using this behavior slightly more than any other supervisor by only two occurrences.

Figure 13 illustrates the number of basic questions-substantive behaviors engaged in by supervisory pairs. The most variation was had by supervisory pair I at eleven occurrences. Supervisory pairs B, D, F, H and J had the least variation at once occurrence each. Eight supervisory pairs of eighteen supervisors who were A, B, C, E, F, G, H, and J used it five or fewer times. There was no variation of occurrence for supervisory pairs A and C. University supervisor I used this behavior at least twice as often as any other supervisor. The
range between university supervisor I and university supervisor C and supervising teachers B, C and G was fourteen occurrences.

The number of challenging questions-procedural behaviors engaged in by supervisory pairs is illustrated in Figure 14. Supervisory pair B showed the most variation, seven occurrences. The least variation was shown by supervisory pairs F and G, at no variation, and H next with one occurrence. Sixteen supervisors used it four or fewer times with five supervisory pairs in the group. Supervisory pairs A, C, E, university supervisor J, and supervising teacher B did not ask challenging questions-procedural. The range between university supervisor B and supervisory pairs A, C, E, university supervisor J, and supervising teacher B was seven occurrences.

Figure 15 illustrates the number of challenging questions-substantive engaged in by the supervisory pairs. Supervisory pair D had the most variation with fourteen occurrences. Supervisory pairs A and H showed the least occurrences with three and two respectively. Ten supervisors used it four or less times with four supervisory pairs in this group. Supervisory pairs B, C, F and G had zero occurrences in variation. Supervising teacher D used this behavior more often than any other supervisor, twenty-five occurrences, with the closest university supervisor, J, at nineteen occurrences. The range between supervising teacher D and supervisory pairs B and C and supervising teachers A and E was twenty-five occurrences.

The number of listening-procedural behaviors engaged in by supervisory pairs is illustrated in Figure 16. Supervisory pair B had the
most variation with thirty-six occurrences. Supervisory pairs E and J had the least variation, no occurrences, with supervisory pairs F and H next at one occurrence. Thirteen supervisors used it less than five times with five supervisory pairs, D, E, F, I and J in this group. Two supervisory pairs, E and J, supervising teacher D, and university supervisor E did no listening-procedural. Quite clearly, university supervisor B used this behavior more than twice as often as any other supervisor. The range between university supervisor B and supervisory pairs E and J and supervising teacher D and university supervisor F was forty-seven occurrences.

Figure 17 illustrates the number of listening-substantive behaviors engaged in by the supervisory pairs. Supervisory pair G had the most variation, twenty-three occurrences. Supervisory pair B had the least variation, one occurrence. Nine supervisors used it five or fewer times with only one supervisory pair in the group, B. Supervising teachers A and F did no listening-substantive. The range between university supervisor D and supervising teachers A and F was twenty-six occurrences.

Upon inspection of the data, the verbal behaviors clarifying-procedural, clarifying-substantive, elaborating-questions-procedural, elaborating-questions-substantive, summarizing-procedural and summarizing-substantive did not merit further treatment due to the large number of supervisors who were unable to meet the minimal criteria of four occurrences or more.
INFORMING - PROCEDURAL

(UNITs OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[12 \ 6 \ 9 \ 1 \ 10 \ 7 \ 2 \ 6 \ 16 \ 9\]

![Graph showing frequency of supervisory conferences]

- **Figure 6**

- **E** = UNIVERSITY SUPERVISOR
- **S** = SUPERVISING TEACHER
- **A** = BOTH
INFORMING-SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

Figure 7
INTERPRETING - PROCEDURAL

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

12  22  8  18  14  5  15  1  10  13

\[ \text{FREQUENCY} \]

\[ \text{SUPERVISORY CONFERENCES} \]

\[ \square = \text{UNIVERSITY SUPERVISOR} \]
\[ \bigcirc = \text{SUPERVISING TEACHER} \]
\[ \triangle = \text{BOTH} \]

Figure 8
INTERPRETING-SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[ z = (3.2 \times 4.) + 14. \]

\[ t = \frac{1}{2} \times \text{SUPERVISORY CONFERENCES} \]

\[ \text{S} \]

\[ = \text{UNIVERSITY SUPERVISOR} \]

\[ \Omega = \text{SUPERVISING TEACHER} \]

\[ \Delta = \text{BOTH} \]

\[ \text{Figure 9} \]
EVALUATING - PROCEDURAL

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

Figure 10

- UNIVERSITY SUPERVISOR
- SUPERVISING TEACHER
- BOTH

Figure 10
EVALUATING - SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[
\begin{array}{cccccccccc}
A & B & C & D & E & F & G & H & I & J \\
48 & 44 & 40 & 36 & 32 & 28 & 24 & 20 & 16 & 12 \\
\end{array}
\]

\[\text{FREQUENCY}\]

\[\text{SUPERVISORY CONFERENCES}\]

\(\Box = \text{UNIVERSITY SUPERVISOR}\)

\(\circ = \text{SUPERVISING TEACHER}\)

\(\triangle = \text{BOTH}\)

Figure 11
BASIC QUESTIONS - PROCEDURAL

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

SUPERVISORY CONFERENCES

□ = UNIVERSITY SUPERVISOR
⊙ = SUPERVISING TEACHER
△ = BOTH

Figure 12
BASIC QUESTIONS - SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[
\begin{array}{cccccccccc}
0 & 1 & 0 & 1 & 4 & 1 & 4 & 1 & 11 & 1
\end{array}
\]

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
& A & B & C & D & E & F & G & H & I & J \\
\hline
FREQUENCY & 48 & 44 & 40 & 36 & 32 & 28 & 24 & 20 & 16 & 12 & 8 & 4 & 0 \\
\hline
\end{tabular}

Figure 13

\[\square = \text{UNIVERSITY SUPERVISOR}\]

\[\Diamond = \text{SUPERVISING TEACHER}\]

\[\triangle = \text{BOTH}\]
CHALLENGING QUESTIONS - PROCEDURAL

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[ 0 \quad 7 \quad 0 \quad 3 \quad 0 \quad 0 \quad 0 \quad 1 \quad 4 \quad 6 \]

- Frequency
- Supervisory Conferences

- = UNIVERSITY SUPERVISOR
- = SUPERVISING TEACHER
\Delta = BOTH

Figure 14
CHALLENGING QUESTIONS - SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

0 0 0 14 7 0 0 2 4 4

FREQUENCY

SUPERVISORY CONFERENCES

= UNIVERSITY SUPERVISOR
○ = SUPERVISING TEACHER
▲ = BOTH

Figure 15
LISTENING - PROCEDURAL

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

A = UNIVERSITY SUPERVISOR
○ = SUPERVISING TEACHER
△ = BOTH

Figure 16
LISTENING-SUBSTANTIVE

(UNITS OF VARIATION BETWEEN SUPERVISORY PAIRS)

\[ \begin{align*}
14 & \quad 1 & \quad 11 & \quad 21 & \quad 4 & \quad 10 & \quad 23 & \quad 11 & \quad 6 & \quad 12 \\
\end{align*} \]

- \[ - 45 - \]

\[ \begin{align*}
14 & \quad 1 & \quad 11 & \quad 21 & \quad 4 & \quad 10 & \quad 23 & \quad 11 & \quad 6 & \quad 12 \\
\end{align*} \]

\[ \begin{align*}
\text{FREQUENCY} & \quad 48 & \quad 44 & \quad 40 & \quad 36 & \quad 32 & \quad 28 & \quad 24 & \quad 20 & \quad 16 & \quad 12 & \quad 8 & \quad 4 & \quad 0 \\
\text{SUPERVISORY CONFERENCES} & \quad A & \quad B & \quad C & \quad D & \quad E & \quad F & \quad G & \quad H & \quad I & \quad J \\
\end{align*} \]

\[ \begin{align*}
\text{\& = UNIVERSITY SUPERVISOR} \\
\text{\& = SUPERVISING TEACHER} \\
\text{\& = BOTH} \\
\end{align*} \]

Figure 17
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