DOCUMENT RESUME

ED 049 186 SP 004 808

AUTHOR Barbour, Chandler
TITLE Levels of Thinking in Supervisory Conferences.
PUB DATE 71
NOTE 17p.; Paper presented at AERA annual meeting, New York, 1971

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS *Cognitive Processes, *Conferences, Cooperating Teachers, Elementary School Teachers, Measurement Instruments, Reliability, Student Teachers, *Supervisory Activities, *Supervisory Training, *Teacher Supervision
IDENTIFIERS Aschner Gallegher Classification System

ABSTRACT

This study examined the cognitive behavior of supervising teachers and their student teachers working in a conference situation. A modified version of the Aschner-Gallagher classification system was used to code videotapes of conferences held by 15 elementary school teachers and their student teachers. Some of the 15 teachers had previously taken the inservice course Supervision of Student Teachers, and some had not. Results indicated that supervisors talked more than 55 percent of the time, and that they used the Routine category much more than student teachers. Very little higher level cognitive activity was exhibited by either supervisors or student teachers. It was also noted that the supervisors tended to set the trend in cognitive level and the student followed suit. Even in a hostile conference, the thinking levels of both subjects tended to be very similar. The teachers who had taken the inservice course Supervision of Student Teachers favored somewhat higher thought levels than those who did not, a difference that was significant at the .001 level. Among the implications drawn from these results is the recommendation that some type of training be provided for supervisors to make their supervising behavior more creative. (RT)

LEVELS OF THINKING IN SUPERVISORY CONFERENCES

CHANDLER BARBOUR

Department of Education

Towson State College

Paper presented at the American Educational Research Association
Annual Meeting: February 4 - 7, 1971
New York, New York

LEVELS OF THINKING IN SUPERVISORY CONFERENCES

This paper is a report of a pilot study focused on the cognitive behavior of supervising teachers and their student teachers working in a conference situation. The attempt was to get some basic information about the thought levels exhibited in conference situations and to check the feasibility of using a particular coding system in examining this behavior. The scope is limited but some interesting elements are available from this activity and the findings point toward the need for more serious investigation of this sort, the need to make decisions on what constitutes productive conferences and how to build toward these.

Background

Supervision is a popular activity and a considerable amount of general writing has been done on the topic of supervision of student teaching. Serious study of the conference between supervising teacher and student teacher has attracted few investigators and there appears to be need for in depth studies of the variables attendant to the conference, the styles of conference subjects and the efficacy of particular models of conferencing. Some basic work has been done at Teachers College (Columbia University) on conferencing models and the dynamics of supervisory conferences.

It seems timely that the facets of the conference be scrutinized and studied. It also seems to be high time that educators identified the procedures in conferences that are inimical to growth of the neophyte

and those that can foster his growth. This means the construction of models and protocol materials for supervisory work, the testing and refinement of these, and the development of adequate training programs (inservice work) that will render the skill to the supervising agents. There are a considerable number in schools and they have a profound effect on the education of the teachers in training.

This study is not addressed to all these major concerns but rather is an attempt to provide some basic information about the thinking levels of conference participants.

Specifically the investigator tried to find information on:

1. The profile of cognitive performance of supervising teachers and their student teachers (determined by the Aschner-Gallagher classification system as reported in James J. Gallagher Productive Thinking of Gifted Children. CRP No. 965, University of Illinois, 1965).

2. The relationship between supervising teacher behavior and that of the student teacher.

3. The difference between the cognitive behavior of supervising teachers who had experienced inservice training and those who had not.

An allied feature was to determine the applicability of a system (the Aschner-Gallagher classification system) to categorizing supervisory conference activity.

Procedure

A group of 15 elementary teachers and their student teachers volunteered for participation in the study. All were from the University of Maryland Teacher Education Centers. All had worked with student teachers and some had taken the inservice education course "Supervision of Student Teachers". Training in the course had been basically the same in all the Centers.

There was little difference in the amount of education background of the teacher subjects but there were some differences in classroom experience and work with student teachers. The range in classroom experience was from 3 to 17 years and work with student teachers ranged from 2 to 8 semesters.

Each couple was asked to conduct a conference about a recent lesson or an activity. There were no restrictions placed on style, content or procedure, however, subjects were requested to consider 15 minutes as a time allotment. The conferences ranged from 6 to 21 minutes. The conferences were held at the end of the semester when student teachers were near completion.

The conferences were taped with a one-half inch portable video tape recorder with only a technician present in the room with the conferring couple.

When reviewing the tapes the subjects all noted that they were satisfied with the conferences and all but one supervising teacher noted that the VTR had not inhibited the discussion. Most expressed interest in analyzing their conferences and evidenced willingness to do more tapes. It is felt that the tapes are fairly accurate renditions of the conference behaviors of the supervising teachers involved.

Instrument

The instrument used to categorize the supervisory behavior was the Aschner-Gallagher classification system developed and refined by Mary Jane Aschner and James J. Gallagher. It has been used in projects that considered thinking levels of verbal behavior of gifted children. The system appeared well suited in describing the behavior of two people discussing a topic.

Some modifications were made in the system. These were mainly condensations in the secondary categories to make a smaller number of categories. Slightly different interpretations have been placed on the secondary categories of Factual Recall, Translation and Association. These interpretations make it more useful for supervisory situations.

In summary it appears that the system is a good one to use with designating thought levels in conferences of this type. It was shown to be useful in getting information and efficient use can be made with this in conjunction with the VTR. All felt that the combination was worth continued exploration.

Coding Procedure

The investigator trained 4 persons in the use of the Aschner-Gallagher classification system.

There were some initial problems in attempting to analyze certain behaviors and it was necessary for the coding teams to thrash out agreements on particualr clichés that seem to permeate supervisory conferences. For instance, the coding team determined that clichés as, "I think things went well today.", were better placed in the Routine category under Structuring or Verdict rather than under Evaluative thinking for they seemed to be used to start conversation off rather than for any real assessment intention.

Another decision had to be made for supervisor statements that were the reiteration of long held beliefs. These dogmatic statements seemed to be simply expressions of bias and, therefore, were put into Factual Recall in the Cognitive-Memory category. Occasionally some qualified for explaining behavior (Convergent Thinking).

Coders worked in teams of two and used the following procedures:

1. Coded directly from the VTR monitor onto the coding sheets.

2. Followed the interaction until a problem or confusion occurred. The VTR permits quick halts, back-ups, and replays to the point where any item of interaction can have considerable discussion.

3. Reviewed the tallies normally about 3 times in each minute of taped conference.

4. Came to agreement on the items tallied before moving on. (This made coding rather long... about 1½ hours were needed for each tape.)

This was a satisfactory process and the most difficult item in coding, as far as primary categories were concerned, was determining when a new thought unit began as one speaker continued in a monologue.

After 20 hours of training (discussion and practice) the coders reached close to .90 reliability in categorizing the thought units in primary categories. This showed the feasibility of using the coding scheme and the adaptability of the VTR direct coding as a fairly simple and efficient means of processing the information observed.

As far as gaining reliability on secondary categories the teams did achieve factors of .70 and .71. This is less than desired and further training is indicated before permitting analysis of the tapes by separate teams to take place.

With the present study the results from one team were used and on some of these the other team supported by sharing the results of their work. Basically the results are the consensus of the A team.

Results

Table 1 gives the results of the 15 conferences. These are the totals for the supervising teacher and the student teacher behaviors coded in the primary categories. Figure 1 shows the results in proportional values.

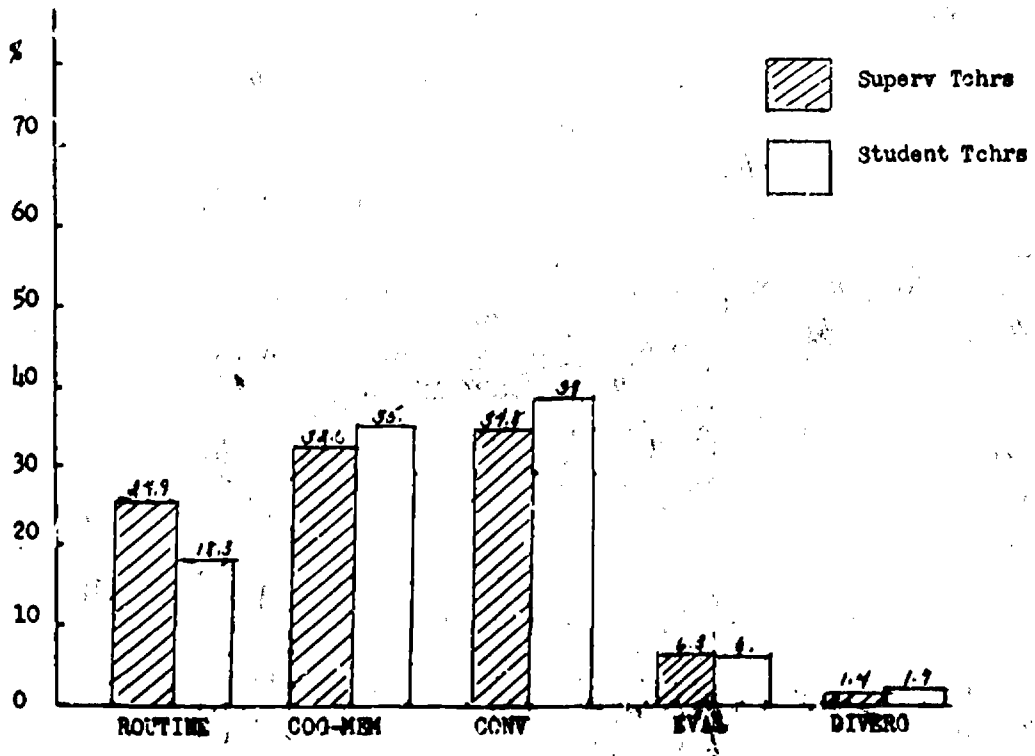
TABLE 1

Frequency of Thought Units in Supervisory Conferences (Primary Categories)

	ROUTINE	COG-MEM	CONV	EVAL	DIVERG	
Supervising Tchrs	225	294	314	57	13	903
Student Teachers	124	235	264	41	12	676
Totals	349	529	578	98	25	1579

$X^2 = 10.40$

FIGURE 1



The immediate impression one gets is that activity is concentrated in the Routine category and the two lower level categories of the thinking levels. When one considers the proportions of behavior in the four thought levels (excluding the Routine) the result is 90% in the first two categories (Cognitive-Memory and Convergent).

Five conferences contained no Evaluative or Divergent behavior by the supervising teachers and in seven conferences the student teachers did not register any Evaluative or Divergent thinking. In only one conference was there a high degree of interaction in these upper two categories.

For all conferences the interaction between students and their supervising teachers was similar. When supervisors tended to exhibit Cognitive-Memory type thinking then students did also, and in the several cases where higher order thinking was exhibited by the supervising teacher then it was reciprocated by the student teacher. This is not startling to anyone acquainted with typical teaching situations. The teacher (supervisor in this case) tends to set the trends in the activity and students follow suit. An interesting note is that even in the hostile conference the thinking levels of both subjects tended to be very similar.

Supervisors tend to use the Routine category much more than student teachers. This is not surprising for the supervisors seem to do more managing, structuring, agreeing, etc. than the students are called on to do. On the other hand students seemed to use the Cognitive-Memory and Convergent Thinking categories in larger proportion than their supervising teacher simply because their answers to questions and requests were frequently extended or drawn out.

To determine the degree of similarity, beyond inspection, of thought levels for the supervising group and the student teacher group a total of

all behaviors of supervisors and students was made (see Table 1). A chi-square test k independent samples was made to determine likeness of the groups. The value found shows that there is some difference in the groups (a X^2 of 9.49 was required to show a difference at the .05 level). When Routine was dropped from the Table and just the four levels of thinking were considered then the chi-square was .657. This low value points to reasons for not considering the groups different.

As has been noted, talk was dominated by the supervisors. In many conferences the supervisor talk was over 60%. In only one situation was there a reversal with the student teacher making nearly 60% of the total talk. For all conferences the proportion of supervisor talk is over 57%.

Supervisors also seemed to start episodes. Of the 105 episodes engaged in by the subjects only two were initiated by student teachers. Evidently the students wait to be cued or led in conference situations and do not look on this as a means of utilizing the supervising teacher as a resource person in the conference situation.

The third question considered related to the impact that certain inservice education courses may have had on the conferencing behavior of supervising teachers. The courses had been offered to the teachers in the Teacher Education Centers of which these subjects were part.

The inservice course, "Supervision of Student Teachers", included the following features:

Undergraduate program in education curriculum
Behavioral objectives
Planning and assession with student teachers
Evaluation of student teaching
Introduction to analysis of teaching
Introduction to modification procedures in
teacher education (micro-teaching and simulation)
Communication skills
Conference skills

Participants had experienced this course either during the current year or in the preceding year.

The following table contrasts the thought levels of the teachers who had the course and those who had not. Figure 2 shows the proportions in graph form.

The two groups compare closely in teaching experience, work with student teachers and education background.

One can observe by inspection that those that had the inservice work do favor somewhat higher thought levels than those without. Tenuous as it is from the small samples this does indicate that some difference in the two samples is extant.

A chi-square on these renders a value of 2.440. This permits the conclusion of a significant difference at the .001 level. One can then conclude that the groups are different in the scores registered. The difference shows in the propensity of the Course group to exhibit more higher level and less lower level thinking.

Interpretation

In the Teachers College studies (Margaret Lindsey and Associates, Inquiry into Teaching Behavior of Supervisors in Teacher Education Laboratories, Teachers College Press, 1969) several investigators looked for evidence of "commitment-making" by the student teachers. This process seemed to hold a key to productive conferences. It would seem that commitment-making would be closely associated with higher level thinking. Where do these commitments come from when there is little evidence of the Evaluative or Divergent thinking in conferences such as those noted in this study?

TABLE 2

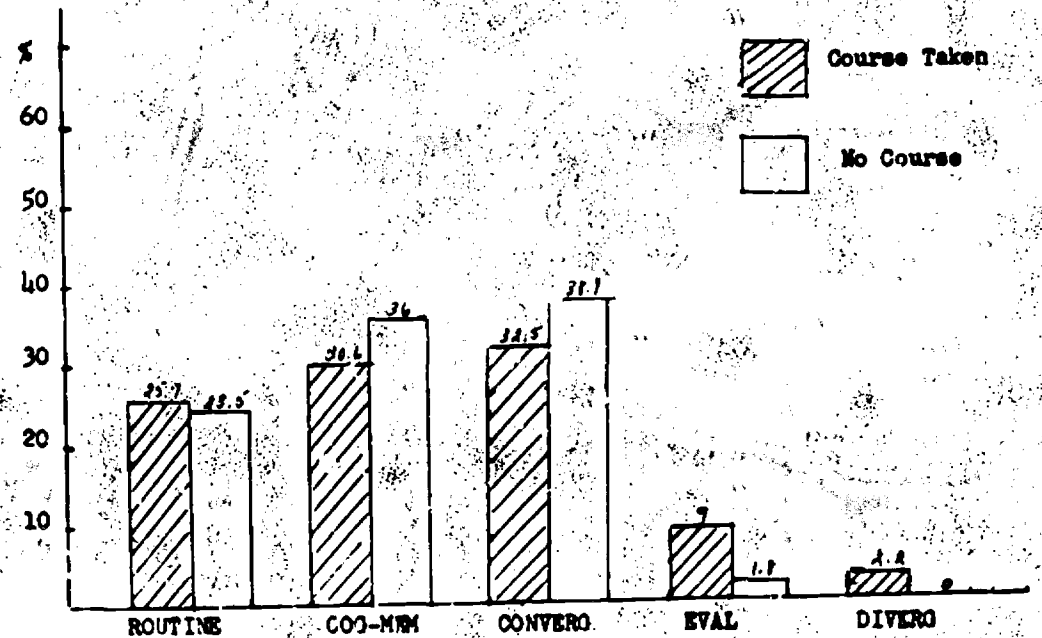
Comparison of supervising teachers Regarding Inservice Course Work

	Routine	Cog-Mem	Conv	Eval	Diverg	Total
Course Taken (N - 10)	148	176	187	51	13	575
No Course Taken (N - 5)	77	118	127	6	0	328
Totals	225	294	314	57	13	903

χ^2 28.40

P .001

FIGURE 2



Taba and Associates (Hilda Taba, Samuel Levine and Freeman Elzey, Thinking in Elementary School Children, CRP No. 1574, San Francisco State College, 1964) did some pioneer work in identifying patterns and strategies that seemed to result in "lifting" thinking of children or helping to maintain a focus for children's thinking. The key seemed to be whether or not the teacher had a cognitive map to guide discussion in a productive fashion toward a climax. The up and down character and erratic jumps from level to level seemed questionable. This probably has implications for conference sessions. Supervisors need a cognitive map to guide the interaction. This did not seem true in conferences considered here--they had up and down patterns. Most likely people need training in how to develop "maps" and how to recognize these when they are operating.

It appears that these 15 conferences focused largely on certain items that the conferring parties wished to talk about. Most of the time was spent in recalling, clarifying, making statements or explaining material in their experience. It is an inalterable fact that over 63% of the total thought units were in the two lower levels and 90% of the total when the Routine is excluded.

Little time is used in the two higher level categories. Only about 8% of the time and only 10% when Routine is dropped. The few excursions into this higher level process are brief--one isolated thought unit frequently. It is in these categories where there is least amount of reciprocation when the other party responded.

All this may indicate that experience in this Evaluative or Divergent type of dialog is not great and that conferring parties find it difficult to operate at this level.

Of course if people think of conferences as discussions where the cooperating teacher gives out ideas and information and the students respond to questions about facts and features of the classroom that come up in the teaching, then the action is most likely to stay at the lower levels.

How far can conferences of that type proceed though? What real substance is accomplished? How can commitments be fashioned?

If conferences are to have substantial outcomes then it is more than likely that a considerable amount of interaction will be needed in the higher levels of the system. This means a change in conference style, of course, and would mean that the conferencing partners see this act as a chance to weigh, speculate, justify and hypothesize about the teaching act especially as it affects the beginning teacher. In this type of conference there is little room for bias, doctrine, harangues or "giving out" information. There would have to be more than just polite exchange of information in the conference which permits little learning on anyone's part and perhaps promotes more frustration on the part of the supervising teacher when she suspects that she is not effecting change.

Some basic work in identifying patterns and models for supervisory conferences has been done by Brown, Hoffman, Heidelbach and Kimsey (see Lindsey reference). Implementation of these would be an excellent direction to follow.

It seems that if new changes came about involving work at the higher levels that the student teachers would reciprocate. There is strong evidence here that student teachers follow the cues and leads of the supervising teacher. It seems reasonable that if supervising teachers

developed skills in asking questions in these levels that students most likely would be able to follow. They did, after all, follow the level of the supervising teacher 70% of the time. In fact they did much better in following than did the supervisors in "picking up and following leads made by student teachers.

The other finding of this study is that the supervising teachers who had a course in supervision demonstrated different behavior and more activity at higher thought levels. Of course all teachers had experienced some inservice work in the Centers by seminar sessions, association with the coordinator and from the materials made available. However it appears that a greater impact is made on the functioning of the supervisor when he is enrolled in a course and completes the requirements of that course.

This may well indicate that the best road to follow in upgrading the functioning of the supervising teachers is to have more intensive inservice.

It will be remembered that the demonstration of higher level thinking by the "Course-taken" group was not strong. This should not be considered a standard in all likelihood. Inservice work in this area could well be more potent than the course on general supervision of student teaching. That course did not deal with conference strategies or specific work on leads, responses, and reaction modes. It did not deal with "lifts" in discussion or how to maintain discussion at higher levels. These are topics that probably will have to be put together into a package and injected into the program in some structured way.

Summary

In summary it appears that the conferences of this selected group of supervisory teachers:

1. tended to be overwhelming in the Cognitive-Memory and Convergent categories of thought levels where statement making, explaining, telling and clarifying are predominant.

2. behavior of the student teachers seem to reflect that of the supervising teacher.

3. that persons who have an inservice course in supervision tended to show somewhat stronger use of higher levels in thought and somewhat less use of lower levels of thought.

In addition, the coding system used appears to be a viable one to apply to this type of activity and can be used reliably with a VTR recording of the conference interaction.

Implications

The study points to a need for more study to be completed in this area.

1. The present study needs to be refined and extended to include larger groups of conferencing parties. This could determine more accurately the general behavior of supervisors and their students.

2. Some type of training, input or reorientation is needed for supervisors if their supervising behavior is to become more creative. A good start would be with models such as those developed at Teachers College.

3. Particular training programs probably should be developed that will focus on conferencing strategy. These should be evaluated to see what effect they might have on the cognitive functioning of supervisors and their students.

4. The affective dimensions of the conference will need to be examined carefully. There is most likely a strong association between the cognitive and affective behavior in conferences.

5. Studies of confusion, hostility and avoidance in conferences need to be undertaken to determine the impact and effect on other dimensions. These certainly affected the results of some of the conferences in this study.

6. Definite programs for developing strategies in conferencing need to be developed so that supervisors and their trainers have protocol materials for bringing about change.

Bibliography

Gallagher, James J., Aschner, Mary Jane and Jenne, William. Productive Thinking of Gifted Children in Classroom Interaction. CEC Research Monograph. Washington D.C.: Council for Exceptional Children, NEA, 1967.

Gallagher, James J. Productive Thinking of Gifted Children. CRP No. 965. Urbana, Illinois: University of Illinois, 1965.

Heidelbach, Ruth. "The Development of a Tentative Model for Analyzing and Describing the Verbal Behavior of Cooperating Teachers in Conference with Student Teachers." Unpublished Ed.D dissertation, Teachers College, Columbia University, 1967.

Kimsey, Theodora Randall. "The Work of One College Supervisor with Cooperating Teachers in Off Campus Schools: An Analysis of Conferences." Unpublished Ed.D. dissertation, Teachers College, Columbia University, 1969.

Lindsey, Margaret and Associates. Inquiry into Teaching Behavior of Supervisors in Teacher Education Laboratories. New York: Teachers College Press, 1969.

Michalak, Daniel. "An Exploratory Study of Supervisory Verbal Behaviors in a Student Teacher Conference." Unpublished Ed.D dissertation, Wayne State University, 1968.

Taba, Hilda, Levine, Samuel and Elzey, Freeman. Thinking in Elementary School Children. CRP No. 1564. San Francisco: San Francisco State College, 1964.