This paper is a preliminary report of a small research project undertaken to follow up some observations of Head Start classes. The project, which is in the early stages of developing procedures and techniques, hopes to investigate the preliminary observation that teachers' verbal responses to children have the function of ending a child's thinking rather than extending it. Some of the research related to children's intellectual development which has come from studies of mother-child interaction will be applied to the classroom process. If research indicates a need for improvement of teacher's verbal responses, it is hoped that techniques will be developed to make this possible. Related research confirms hypotheses that certain characteristics of adult verbal behavior are crucial aspects of the child's environment and that teachers do differ in their speech styles. Project plans are to analyze transcripts of teachers' classroom speech in terms of function (effect it will leave on the child) and message (actual information carried). The methods for classifying functions and messages are not yet perfected. The project hopes to determine an optimum level for different types of verbal behavior by teachers and to study situational determinants of teachers' speech. (MH)
VERBAL BEHAVIOR OF PRESCHOOL TEACHERS

A Very Preliminary Report*

Lilian G. Katz, Ph.D.
University of Illinois, Urbana

Presented at the Annual Meeting of the
National Association for the Education of Young Children
Salt Lake City, Utah, November, 1969

*The research reported herein is supported by a grant from the Research Board of the University of Illinois, Urbana, Illinois
VERBAL BEHAVIOR OF PRESCHOOL TEACHERS

The purpose of this paper is to present a preliminary report of a small research project we are conducting at the University of Illinois on the verbal behavior of Head Start teachers in their classrooms.

We are still developing our procedures and techniques. So today I just want to share with you some of our thinking, and some of our preliminary hunches.

This project was undertaken in order to follow up some of the observations we had made in Head Start classes. As we observed in classrooms, it began to appear to us that a very large proportion of teachers' verbal responses to children had the function of ending a child's thinking, rather than extending it! From this greatly oversimplified dichotomy, we began to raise more questions about teaching young children. We continued to make observations in classrooms and identified many episodes of interaction in which teachers seemed to us to miss opportunities to encourage children to extend their ideas, their insights, their lines of reasoning, and what we generally refer to as information processing activities. Perhaps an example will clarify what sorts of observations I mean:

We watched a group of children working with clay at a table. The children were making snow-men. One child said to another 'That ain't no good.' The child who was criticized said to the teacher, who had been standing close by watching, 'Teacher, look what I done!' Her response was 'That's fine.'

We began to ask, what alternative ways could she have responded? How could she have encouraged the children to analyze and extend their "discussion"? What responses could the teacher have made which would have had the effect of engaging the children in some kind of information processing, in the kind of thinking which would give the children the opportunity to "search" and "sort" their own already available experience, to encode their perceptions and feelings, and to communicate them to others?

Thus the first basic question for the research project became: to what extent do teachers in their classrooms put children in situations in which they are required
to search, sort, decode, encode their own already available experience? This is what we meant by "extending" the child's thinking.

A second basic idea behind this research was to transpose some of the research related to children's intellectual development which has come from studies of mother-child interaction. If the research findings issuing from mother-child interaction suggest that given maternal behavior patterns are associated with differences in children's intellectual performances, then possibly they contain some implications for teacher behavior patterns.

A third idea underlying this research project was to generate some practical techniques with which to help teachers to improve their verbal behavior along the lines suggested by our research findings--assuming, of course, that there would be findings indicating that improvements are necessary.

Finally, a fourth consideration in undertaking this project grew out of our experience with reviewing the recent research literature on teachers in preschools. At the time we submitted our proposal for funding, we had found no studies of Head Start teachers' verbal behavior--in spite of the great interest in children's verbal behavior and language development. However, since that time we have seen Carla Berry's work, which we will discuss later.

**Some Related Research**

No doubt you are all familiar with the work of Robert Hess and Virginia Shipman and their colleagues at the University of Chicago on maternal teaching styles. The Hess group studied mother-child interaction in a laboratory setting, and identified interesting social class differences in maternal teaching styles (Hess and Shipman, 1966). They concluded from their work that mothers whose maternal teaching styles are poor (along several dimensions) should be helped to improve and refine such styles if they are to help their children realize more fully their intellectual potentials. Since the Hess findings are similar to those reported more recently by Bee (in press), I will describe more fully the results of this latter work.
Helen Bee examined social class differences in the quality of mothers' verbal interaction with their children in a laboratory setting. She reported that middle class mothers gave their children more information, and gave less specific suggestions to their children than lower class mothers. Middle class mothers more often told their children what they were doing correctly versus what they were doing wrong. Bee also noted social class differences in the total amount of interaction between mothers and their children. In terms of teaching style, middle class mothers more often let children work at their own pace, offered many structuring suggestions on "how to search for solutions to the problem," told children what they were doing correctly, and did not focus on failures. There is a suggestion in Bee's report of a teaching variable similar to our "ending/extending" dichotomy. For example, Bee distinguishes between making "imperative" statements versus "interrogative" statements, and she suggests that the interrogative style is more likely to provoke thought, and stimulate the child to make verbal responses than the imperative style.

We have also been stimulated by Marion Blank's work, and the tutorial program she has developed for preschool children (Blank and Solomon, 1968, 1969). In this program her aim has been to teach the child "to use language so as to organize thoughts, to reflect upon situations, to comprehend the meaning of events, and to choose among alternatives" (Blank and Solomon, 1969, p. 47). Blank sees the disadvantaged child's learning difficulty as reflecting a failure to develop a symbolic system which permits him to see the plentiful stimuli already available in a coherent, logical, and predictable framework. The idea behind the tutorial program is to help the child to organize his world on a more systematic basis, and the results of the program have been quite positive.

Soon after we began exploring the problems of studying teacher verbal behavior, we learned about the work of Carla Berry (n.D.). Dr. Berry studied the speech styles...
of four preschool teachers using the Cognitive Stimulation Coding Categories
developed at the University of Chicago Head Start Evaluation and Research Center.
The study was an outgrowth of the work of Robert Hess and his associates on the
cognitive environments of preschool children mentioned above.

Dr. Berry recorded and transcribed the speech of the teachers, and broke it
down into grammatical meaning units. The units were analyzed according to three
basic codes (describing cognitive content, number of participants in the episode,
and the context in which it occurred), and a large number of subcodes. The complex
analyses are very difficult to summarize, and indicate convincingly how complicated
a task it is to describe the verbal behavior of teachers in their classrooms.

Berry's data indicated that her four teachers were different from each other in
the way they expressed cognitive as well as control oriented speech. However, these
differences are difficult to make generalizations about. The results also suggested
that teachers use the large formal group settings in their classrooms as the major
occasions for making cognitive statements. Such occasions also tended to press the
teachers into making a high proportion of controlling statements. Dr. Berry's data
do not support the notion that teachers in preschools for disadvantaged children
make use of all and every occasion to exhibit cognitive statements.

The research related to our initial question seemed to say that certain
characteristics of adult verbal behavior are crucial aspects of the child's
environment, and that teachers do differ in their speech styles. From Marion Blank's
work, we get the suggestion that the quality of verbal behavior we are looking for,
i.e., teacher responses which "extend" the child's thinking, most profitably can be
achieved in one-to-one tutorial sessions, and from Berry's work we learn that the
major portion of cognitive teacher talk occurs when she addresses the children in
large groups. We are hoping to refine our understanding of the teachers' classroom
behavior, although it is fair to say, at this point, that it promises to be a
difficult and frustrating task.
Preliminary Plans for the Research

At present our plan is to examine the transcribed speech of teachers in terms of its functions. Here we are using the term functions to describe the effect the behavior can be expected to have on the child. We are unable to classify the functions according to the teachers' own intentions; rather we will ask as outside observers, what do we think is the function of the given verbal episode? Very likely a teacher will have intended a function that the observer cannot reliably infer.

A second dimension of interest to us is: what are the messages in the verbal episode? It is difficult to define message as distinct from function, and we hope that our construction of these two dimensions will become clear from our experience with the data. However, it is possible that the function of a teacher's verbalization might be to "extend the child's thinking," while the message to the child may be that the teacher wants to get the child's opinion about some event.

Related to this second dimension is a third one, namely, what messages are being given at what level? We have been led to describe teacher's talk on at least two (oversimplified) levels: implicit and explicit. Here is an example of the kinds of data we are trying to work with:

Picture this scene in a Head Start classroom. The children had just finished picking up the play materials and small equipment. They then sat around the teacher on the rug. She pointed to the block shelf nearby, noting that the blocks had been thrown into it in disorderly fashion.
Teacher (to group): 'Is that the way we put the blocks away?'
Children: They nod 'yes.'
Teacher: 'You think it looks very nice and neat?'
Children: They nod 'yes.'
Teacher: 'You think so? You like it?'
Children: They nod agreement.
Teacher: 'We'll have to talk about that. Later I'm going to fix it the right way.'

We tried to determine what are the functions of the teacher's behavior in this episode. Perhaps to instruct children in routines or neatness. We asked then, what are the messages being transmitted in the episode? We were obliged to think in terms
of messages being transmitted at two levels. The explicit message seemed to be "I am interested in your opinion about this event," but the implicit message was "you completed the task improperly."

At our present stage of development, we are working with these categories of functions:

1. Orientation--to obtain attention.
2. To obtain routine behavior (related to classroom routines).
3. To obtain performance--giving learning directions.
4. Transmitting information about routines.
5. Transmitting information related to learning.
6. Clarifying aspects of the environment--giving explanations.
7. Soliciting the child's ideas, information--personal.
8. Soliciting the child's ideas, opinions, knowledge, perceptions which are not personal or related to his person.
9. Affirming the child's conduct--approving his behavior.
10. Affirming the child's performance--related to learning.
11. Affirming the child's ideas, information, feelings, etc.--personal.
12. Affirming the child as a person.
13. Indeterminate (cannot classify the response according to any of the above categories).

Full definitions of which responses fit into which categories remain to be formulated.

We are trying to distinguish between those classroom events which pertain strictly to management and daily routines from those which pertain to the larger environment about which the child is learning. Similarly, the distinction between conduct and performance is one that we hope will be useful. By 'conduct' we think of teacher's comments about a child conforming to requests for sitting still, and putting things away, etc. By performance, we have in mind comments the teacher makes about the child's achievements, his work and play, and other activities related to his growth and learning. The term "affirmation" is similar to what is usually called "approval." However, there are various ways of affirming a child not included in the typical use of the term "approval." Sometimes a teacher will express agreement with a child, a child's statement, or repeat what he has said for the benefit of another child in such a way as to confirm or affirm him.
In terms of our original hunches about the "ending/extending" dichotomy, the functional categories of greatest interest to us are those in which the teacher is 'soliciting information from the child,' whether the information is personal or about nonsubjective events. When the teacher says to a child "You were sick yesterday...that's why we didn't see you" with an interrogative inflection, she is soliciting personal information. When she is saying "The flower needs water, doesn't it?" she is (perhaps) soliciting information describing events which are not unique or subjective to the child involved in the episode.

As you will see from your own observations, classifying the functions and messages of teacher talk is a very complex task, and we are a long way from being able to do justice to it.

From the little exploratory work we have completed so far, the frequency with which these different types of functions or messages occur seems to be something like this: the most frequent type of function is "transmitting routine directions or information." After this category comes "transmitting information related to learning or not related to routines," "affirming the child as a person," and "affirming the child's conduct." All other categories seem to occur infrequently, and the "soliciting" categories seem quite rare.

At this point we should mention that another question of this line of thinking has raised is how much of the "soliciting" type of verbalizations is good for young children? It is not difficult to imagine that a teacher would take this idea of extending a child's thinking so seriously that she might be pumping him incessantly. A consequence of such incessant "extending" teacher maneuvers might be that the children would avoid interacting with her! In other words, there is probably some optimal level of interrogation which, while it stimulates the child to extend his ideas, it also allows him to withdraw when he needs to collect his thoughts or to rest. At this point we do not really know what proportion of teacher talk (of any kind) is best for the young child.
We are also interested in learning more about the situational determinants or constraints on the teacher's verbal behavior. A preliminary analysis we made of our own data indicated that the activity which we labeled "special activity" was more likely to be associated with "extending" talk than other activity periods. Situational determinants seem also to emerge from Berry's work.

I think that what we are looking for is very much like the "professional response" described by Helene Weaver* of the Tucson (Marie Hughes) Early Education Staff. Mrs. Weaver defined the "professional response" as the teacher responding to the child in such a way as to lead him to further exploration, not to cut off the child; "the teacher responds in such a way as to invite the child to recall previous experience, to predict in terms of these, to plant a seed in the child's mind, to compel the child to categorize, to think about his response, to reflect, to become descriptive and specific, to strengthen the meaning that words and phrases have for him."

We are hoping to find out how much this is done in Head Start classes, and perhaps how to help teachers to become more resourceful in their verbal interactions with young children, but we have a very long way to go in our search.

References

Bee, Helen, et al., Social Class Differences in Maternal Teaching Strategies and Speech Patterns, Developmental Psychology, in press.


