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ABSTRACT

Designed to present a workable system for first grade reading group sessions, this report contains a detailed explanation of 22 principles for managing small group instruction. The principles it describes reflect experience and research involving teachers and young children in small groups and fall into two major categories: organizing and managing the sessions and responding to children's answers. Under the first heading, the report discusses principles concerned with getting children's attention, introducing the lesson, calling on children, and meeting individual learning needs within the group. Under the second heading, the report examines what to do when children fail to respond or respond incorrectly, how to acknowledge correct answers, and how to give praise and criticism. (MM)

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AN INSTRUCTIONAL MODEL
FOR FIRST GRADE READING GROUPS

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The main objective of the CORRELATES OF EFFECTIVE TEACHING PROJECT is to expand the number of teaching principles based on documented findings from systematic classroom research. The problems and processes studied have been selected on the basis of observation and consultation with teachers and school personnel. Emphasis is on the study of the classroom to discover how these processes can be conducted to the greatest advantage of teachers and individual students.

One of the project's major efforts was a two-year study of teaching effectiveness involving the examination of the classroom behavior of teachers consistent in producing student learning gains.

Since 1974 three other major data collection efforts were initiated and completed.

(1) STUDENT ATTRIBUTE STUDY which looked at student characteristics and behaviors and their effects on teachers.

(2) FIRST GRADE READING GROUP STUDY, an experimental study designed to test the effectiveness of selected group management techniques in teaching reading.

(3) JUNIOR HIGH SCHOOL STUDY, a follow up on earlier work from the second and third grades of the influence of teacher characteristics and behavior on students' cognitive and affective gains.

Abstract

This report contains a detailed explanation of 22 principles for managing small group instruction. The model is based on several principles which research and experience suggested were associated with student learning gains. Seventeen first grade teachers agreed to implement the model exactly as contained in the report. These materials served as the "treatment" in the First Grade Reading Group Study. Data collected during this study were analyzed to determine the effectiveness of the 22 principles in producing gains in reading for first grade students.

Introduction

The First Grade Reading Group Study was an experimental examination of teaching behaviors and their effects in first grade reading groups. The specific teaching behaviors of interest are those defined by an instructional model for small group instruction as presented in this report. The model consists of several principles which previous research and experience had suggested as being associated with learning gains in children, especially work done in the Early Childhood Program of the Southwest Educational Development Laboratory (1973) and the Texas Teacher Effectiveness Project (Brophy & Evertson, Note 1).

Seventeen first grade reading teachers who agreed to implement the instructional principles were presented with the model exactly as it appears in this report. As such, these materials served as the "treatment" in the experimental study. Data collected during the study will be analyzed in order to further determine the effectiveness of the individual principles as well as the model as a whole. Initial analysis revealed that the teachers in the treatment groups (i.e., those who had received the instructional model as described in this report) had students with higher residualized reading test scores than did 10 teachers in a control group who were not given the instructional model (Anderson & Brophy, Note 2).

However, despite these positive results, we suggest that the present report be considered for what it is: material which served as the treatment

in an experimental study and which is still being examined in order to more clearly define the relationship between each principle and learning gains.

AN INSTRUCTIONAL MODEL FOR FIRST GRADE READING GROUPS

To the teachers:

This is a description of a system for small group instruction of young children (In this case for first graders in reading groups.) It does not discuss content or materials, but it provides guidelines for teacher management of reading group instruction. It is hoped that the systematic use of these principles will improve the planning and conduct of reading group sessions and benefit the children. A major underlying rationale for the system is that each child should receive as much individualized instruction as is possible in a group setting.

The principles discussed in the following pages flow from both experience and research involving teachers and young children in small groups. By combining them into an organized system to be used in the classroom, much more information can be gained about how to best teach small groups of young children.

The purposes of this project are to bring these principles together into a workable system and to teach teachers to use them if they are not already doing so. (You may recognize many of the principles as techniques which you already use.) After asking you to incorporate these suggestions into your teaching, we will examine the results in order to further evaluate the system and the principles. These findings then could be used in teacher education and teacher inservice programs if they show that certain techniques make a difference in children's learning.

You probably will find that many of the principles are more applicable at one time than another, depending upon which children you are teaching and what kind of lesson you are presenting. We have tried to provide a general

overview that can be adapted to the many different lessons and types of children with which the first grade reading teacher must deal. There is a special emphasis on dealing with shy, impulsive, and inattentive children and problems such as wrong answers and failures to respond. It is hoped that dealing with such situations in the suggested ways will make reading a more pleasant and productive experience for both the teacher and the children.

Your role in the study is central, because application of these principles involves teacher judgment based upon knowledge of individual children's needs as well as a feel for the group's needs. Specific examples have been provided but are not meant to serve as absolute prescriptions. Rather, we ask that the teacher learn the general principles, and then use them according to her best judgment about the situation and the children involved.

Please read the material and study it until you are comfortable with it and feel that you could conduct a reading group accordingly. A meeting will be scheduled at your school to discuss any questions and comments. There will be a short test administered at the end of the meeting to assure understanding of the principles. Any areas of misunderstanding that show up on the test will be discussed again, so that both you as a teacher and we as researchers can reach mutual satisfaction and agreement about procedures.

INTRODUCTION

The instructional model is based on two general principles concerning children's learning in small groups:

1. It is desirable to have a balance between a.) an efficient group structure in which the pace is rapid enough to maintain interest and attention, and b.) a group structure which helps the teacher to make sure that learning is taking place for every child.

2. It also is desirable that children learn to respond to every teacher question, but without feeling anxious about having to make a response.

Accomplishing either of these goals requires teacher judgment at many points in the lesson. How fast should questions be paced to keep attention and yet not lose anyone? How long can you wait for a response from an individual without losing the attention of the rest of the group? When should you end a child's response opportunity if he might know the answer but seems afraid to say anything? How long should a child be urged to respond before such encouragement creates embarrassment and anxiety?

Specific answers to these questions cannot be prepared in advance, since the situation is different for every child and every question. However, the system of principles outlined below can be used as a framework within which the teacher, who knows the children, can make decisions.

The principles are presented below in a brief list. In the next section they are discussed in greater detail, along with the rationales and background information related to them. The system is divided into two major components: 1) organization and management; and 2) teacher responses to children's answers.

In order to avoid confusion of pronouns, "she" will be used to refer to the teacher and "he" will refer to the student.

OVERVIEW OF THE PRINCIPLES

1. ORGANIZATION AND MANAGEMENT

GETTING THE CHILDREN'S ATTENTION

1. The teacher gets everyone's attention before starting the lesson.
2. The children sit with their backs to the rest of the class while the teacher faces the class.

INTRODUCING THE LESSON

3. ~~The teacher introduces the lesson with a brief overview.~~
4. The teacher presents new words clearly.
5. After presenting new words, the teacher has the children repeat them.
6. A demonstration or explanation precedes the children's attempts to do the work.

CALLING ON CHILDREN

7. The teacher should work with one child at a time, so that everyone is checked and receives feedback.
8. The teacher should call on children in order rather than randomly.
9. Occasionally the teacher should question a child about another child's response (to keep everyone alert).
10. The teacher should minimize calling on volunteers.
11. The teacher should discourage call outs and should emphasize that each child is responsible for the question asked of him.
12. The teacher should avoid rhetorical questions, answering her own questions, or repeating questions. These confuse the children.

MEETING INDIVIDUAL LEARNING NEEDS WITHIN THE GROUP

13. At some point, the teacher must decide if the whole group can meet the lesson's objectives. If she decides they can, she should hold the group together, making sure that everyone masters each step before moving on to the next step.

14. If the teacher decides that everyone cannot meet the objective, the students who can do so should be taught through to the end and then dismissed, so that the teacher can spend more time with the other children.

15. An exception to the above occurs when the teacher wants to use a student who has mastered the objective as a model for the others. Here, she may retain one or more such students in the group in order to carry on a dialogue.

16. If some of the children do not succeed in meeting the objectives before lesson time is up, arrangements should be made for extra tutorial help.

11. RESPONDING TO CHILDREN'S ANSWERS

The teacher's feedback to children's answers depends on 1) the type of question (whether it requires memory or reasoning), 2) the pace of questioning (whether rapid for drill or slower for more thoughtful questions), and 3) the child's answer (correct, incorrect, "I don't know," or no response).

WHEN THE CHILD DOES NOT RESPOND

17. After asking a question, the teacher waits for the child to respond and also sees that other children wait and do not call out answers. During rapid pacing, she waits a few seconds and gives the answer. During the more slowly paced parts of the lesson, the teacher should wait for an answer as long as she feels that the child is thinking and will answer,

but not so long as to embarrass the child or lose the other children's attention.

If the child does not respond within a reasonable time, the teacher should indicate that some response is expected by probing ("Do you know?"). She should then simplify (see #19) according to the type of question.

WHEN THE CHILD'S ANSWER IS INCORRECT

18. The teacher should indicate that the answer is wrong, and then follow simplification procedures outlined below for the two types of questions.

SIMPLIFICATION PROCEDURES

19. The appropriate simplification procedure is determined by the type of question.

- a. If the question deals with factual knowledge that cannot be reasoned out, the teacher should give the answer to the child and then move on.
- b. If the question is one that the child could reason out with help, the teacher should provide clues or simplify the question. If the clues still do not help the child, he should be given the answer. The teacher should never ask another child to supply the answer.

WHEN THE CHILD IS CORRECT

20. The teacher should acknowledge the correctness, and make sure that everyone else heard and understood the answer.

PRAISE AND CRITICISM

21. Praise is important but should not be used indiscriminately. Praise thinking and effort more than just getting the answer, and make praise as

specific and individual as possible.

22. Criticism should also be as specific as possible and should include specification of desirable or correct alternatives.

PART I: ORGANIZATION AND MANGEMENT

GETTING THE CHILDREN'S ATTENTION (Principles 1 and 2)

It is important to catch and maintain the children's attention at the beginning of the lesson.

1. The teacher should use a standard and predictable signal to get the children's attention. The use of this technique should lead to quicker and easier transitions with little time wasted in getting a group started. It is useful in two situations. The first is the transition from general class activities to the reading group (and alternate activities), and the second situation is getting everyone's attention when you actually begin the reading group.

A standard and predictable signal is one which the children can learn to recognize quickly because it is repeated daily with the same meaning. For example, the teacher might ring a bell every day to signify that it is time to move to the first reading group, or she might give a consistent verbal signal, such as "It's time for Tigers!" If the signal is clear and consistent, the children do not have to stop each time and decide what to do; they can respond quickly and automatically. The teacher should decide upon the signal early in the year and the children should be allowed to practice responding to the cue.

Once the children are in the group, the teacher should again use a consistent recognizable signal indicating that the lesson is about to begin and that the children should pay attention. For example, she could use a phrase every day such as "Attention, children." Again, by consistently using the same signal the children learn more easily when lessons are starting, and the teacher will spend less time getting the group organized.

In either situation, if some children do not respond to the signal, the

teacher should remind them individually of what is expected. However, the teacher should be careful not to interrupt the appropriate behavior of the other children or reward the unattending child with too much attention (by shouting, scolding loudly, etc.). Instead, the teacher can tap or softly call the names of those who are not attending. If this still does not lead to the desired behavior, the teacher should quietly and quickly explain the meaning of the signal and make sure that the child follows through. It is important that the teacher remain consistent and firm in her demands that the children respond to the signal.

2. Once in the group, the children should be seated with their backs to the rest of the class while the teacher is facing the class. This is a preventive measure in that the children in the group are less likely to be distracted by other activities if they face the teacher and have their backs toward the rest of the class. Also, the teacher can supervise both the small group and the remainder of the class at the same time in this position.

INTRODUCING NEW MATERIAL (Principles 3,4,5, and 6)

The introduction should prepare the children for the lesson by getting their attention, teaching new material and new terms before applying them, and making sure that the children know what to do when they are asked to make responses.

3. The introduction should contain an overview of what is to come in order to mentally prepare the children for the presentation. This does not have to be elaborate (In fact, it should not be). A sentence or two will do, such as "Today we are going to learn about a sound the letter a makes." Such an overview should contain a statement about the content to be studied. It may or may not be expressed in terms of a behavioral objective (as in, "At the end of the lesson, you will know about two different sounds for th"). The overview may also mention something about the purpose of the lesson, especially if this is likely to motivate the students. For example, the teacher may say, "Today we are going to learn about words with two vowels side by side. When you know about this, you will be able to read a lot of new words that you could not before, like boat, and seat, and sal."

If the lesson will involve changing activities at some point (and especially if the teacher anticipates breaking up the group to work with certain children, as discussed in Principles 13 and 14), it may be useful to give the children a preview of the sequence of events. (for example, "Today we will talk about some words like through, rough, and although. They sound different but they look a lot alike. After we talk about them for awhile, some of you will go do work-book exercises, some of you will go to the listening center, and some of you will stay and talk with me."). This prepares the children for a future transition, and it also lets them know in advance that several different activities will take place. The children then will be expecting these directions when

they are repeated later.

The purpose of overviews such as these is to prepare the children by helping them to organize their thinking and focus on the task at hand. It is important for them to learn that the world of school and its demands (specifically reading) is a reasonable and orderly one. One step toward helping them learn this is always to prepare them before making demands on them, and then to follow that plan accurately so that their expectations of the lesson are fulfilled.

4. It is also at the beginning of the lesson that new words and sounds should be presented to the children, so that they can use them later when they are reading or answering questions. Introduction of new words may be accomplished in several ways, depending upon the words, the children, and the teacher. Words that do not follow phonics rules and cannot be sounded out by the children should be said clearly by the teacher. Words that could be sounded out by the children may be presented as questions to them, along with whatever other clues may be helpful. Or, if the teacher prefers, these words also could be given to the children by her. The important thing is that these new words are spoken in some form at the beginning of the lesson. The teacher should see that they are distinctly pronounced and pointed to, explained, or otherwise focused upon. This technique lets the children know what to expect, so that they can read without anticipating totally unfamiliar words. They can be looking for them, and their learning of the words will be reinforced when they see them again.

5. When new words or sounds have been presented, the teacher should have the children repeat them until they can say them satisfactorily. Having them repeat the words or perhaps make up sentences with them gives them practice in reading and saying new words before they are called on to read them in context.

It is also a relatively easy task, so that children who are shy about responding will find this first demand less frightening than a more complicated question.

6. After moving into the lesson, but before asking the children to use new material or undertake new tasks, the teacher should present a demonstration and/or explanation of any new activity. A good explanation includes a step-by-step description of the processes involved, given in simple, clear language that the children can understand. The teacher should gear the explanation to the children's experience and level of understanding. For example, if the task was to find pictures whose names started with the same sound as the name of the letter just studied, the teacher might say, "Show me all the pictures whose names begin with the /b/ sound." But if the children had never performed this task before and were not familiar with the skills involved, this might be a poor explanation. A better approach would be to break the task into each step and explain sequentially.

For example, with a readiness group that had never before tried this task, the teacher might say (after an overview and presentation of the letter sound being studied), "First look at this letter, b. What sound does it make?" (Child responds.) "Say the sound to yourself. Now look at this picture. What is the name of the picture?"..."Say the name to yourself. What is the first sound in that name?....Is that the same sound as the sound of this letter?" If the children could answer each of these questions, the teacher could present the next picture with fewer questions. For example, she might say, "Now look at this picture and say the name to yourself. Listen to the first sound. Is the first sound the same as the sound of this letter?" Later, this could be further shortened to "Look at this picture and tell me if the first sound in its name is the same as the sound of this letter." Eventually, the children

could be given the explanation presented first above ("Show me all the pictures whose names begin with the /b/ sound.").

Therefore, the criteria for a good demonstration or explanation involve checking the children for their level of understanding and then, if necessary, either expanding on the explanation by breaking it into steps or shortening it by leaving out a few steps at a time. The teacher's choice depends upon the children's responses at any point in the explanation.

After the explanation or demonstration, the teacher should move quickly to having the children do the task themselves. Children in this age range need concrete personal experience to learn concepts or skills, but they also need guidance to point out the most important features of the task. Having the children perform the task in the group not only helps them learn it, but also allows the teacher to check them for understanding of the instructions before they are released to work on their own or expected to respond correctly in a more rapidly paced group session.

CALLING ON CHILDREN (Principles 7,8,9,10,11, and 12)

Calling on children involves distributing response opportunities to individuals while at the same time keeping the entire group alert.

7. The teacher should work with one individual at a time in having the children practice the new skill or apply the new concept, making sure that everyone is checked and receives feedback during the lesson. (Feedback is discussed below in principles 16 through 21.) In this way, the teacher can monitor the progress of each group member. This means that excessive use of choral responses is not desirable.

8. The teacher should use a pattern (such as going from one end of the group to the other) for selecting children to take their turns reading in the group or answering questions (as opposed to calling on them randomly and unpredictably). For example, the teacher can start with the child to her immediate left, then the child to his left, and so on around the circle, questioning each child or asking for reading.

This is suggested because the children will always know when to expect a turn and will not feel anxiety about being called on unexpectedly. This is especially important with young children who feel uncertain about having to perform in school, and it also will help to control overeager students who frequently call out answers, wave their hands, and engage in attention-seeking activity because they think it will lead to a turn to read or respond. Both shy, non-responsive children and attention-seeking, overeager ones will know when their turn is coming and will not spend the rest of time feeling anxious or trying to get attention. The teacher must remain firm in her use of this procedure and not skip a shy child to yield to a handwaver, except in the situations discussed below.

9. In order to keep each member of the group alert and accountable at all times between turns, the teacher occasionally should question a child about a previous response from another child (for example, "Bill, how do you feel about John's idea?" or "Do you have anything to add to that?") Thus, each student should know that he may be called upon at any time, not just during his turn. He must therefore remain attentive and listen to the other children. However, two precautions should be taken when using this technique. First, when a child is questioned about another's response, the demand made on the child should be an easy one for him. That is, if he was listening and paying attention, he should be able to answer the question without difficulty. For some children, such demands are as simple as asking for a repetition or opinion. Other children might be asked to comment on the correctness of the answer or to expand upon it (but only if the teacher feels this is within their capabilities).

If harder demands are made than a child can fulfill with this type of questioning, the advantage of reducing anxiety by using a predetermined order (as discussed in principle 8) will be lost. If all of the out-of-turn questions are simple for each child, they will not learn to fear them. Instead, they will be rewarded for paying attention and listening, and they will get an extra opportunity to give a correct answer.

As a second precaution, the child should be helped to realize that the purpose of such questioning is to get his opinion or input, not to put down or "correct" another child. The teacher can serve as a model through her responses by treating wrong answers as a reason to teach, not to criticize.

The use of these two principles should create a desirable balance between predictability, which helps reduce anxiety and/or attention seeking behavior, and continuous alertness within the whole group.

10. Calling on volunteers should be primarily restricted to parts of the lesson in which children are contributing personal experiences or opinions. However, when the objective of the lesson is to teach some content or skill, it is important that every child be called upon and expected to respond. This can best be accomplished by using ordered turns and occasionally questioning children out of turn to keep them alert.

11. When call outs occur, the teacher should remind the child that everyone gets a turn and that he must wait until his turn to answer. It is important not to be overly critical, however, especially if the call out demonstrates enthusiasm in a child who usually does not exhibit it. Nevertheless, all children should learn that when one child is asked a question, he is responsible for the answer, and others are not to call out the answer or "help."

If a child persists in calling out despite repeated reminders, the teacher must determine why he is doing so. Her later reactions then are determined by the reason for the behavior. For example, if the calling out primarily seems to be to get attention, the teacher should make sure that her responses are not reinforcing the behavior by paying attention to it. Reminders can be delivered impersonally to the child, without looking at him or seeming to speak directly to him. (thus not rewarding him with attention), or the teacher can totally ignore the student's call outs and only respond to answers given during his turn.

Another reason for repetitive call outs might be that the child is impulsive and has little self-control. In this case, the teacher may help the child become aware of his behavior so that he can begin to control it.

It is important that the teacher never accept a called-out answer. Call outs should be ignored or should result in a reminder that everyone is

expected to wait his turn or raise his hand and be called on by the teacher. In contrast to this response to call outs, the teacher should be sure that she does respond positively to answers given during a child's turn. (In the case of a typically non-responsive child who does make a rare call-out, the teacher should not lose the opportunity to reinforce the response, while gently reminding the child if she can that it would be better to answer during his turn. Otherwise, however, the teacher should not accept the answers called out.)

The purpose of this principle is to not only help maintain control but to teach children to listen to others and not to interrupt.

12. The teacher should avoid rhetorical questions, asked for effect with no answer expected, or leading questions ("Wasn't that funny?"). Other questioning patterns to be avoided are answering her own questions ("Why did the farmer go to town? To buy a pig, of course!", without waiting for an answer) and repeating questions ("Why did the farmer go to town? What did he want to do? Why did he go?", again without waiting for an answer). These kinds of questions tend to confuse the children and will also make it more difficult to teach them that each teacher question demands an answer. When the children are always asked questions that can be dealt with and have sensible answers, they are more likely to form the attitude that school demands are reasonable and can always be answered eventually.

When rhetorical or leading questions are asked frequently, the children may learn that an answer is not expected or that it can be figured out from the tone of the teacher's voice (as in "Wasn't that funny?" or "Don't you feel sorry for poor old Nobbin?"). If the teacher frequently answers her own questions without pausing for an answer, the children may be confused and not see the connection between the different expressions of the same question. To them, the above example ("Why did the farmer. . .? What did he want? Why

did he go?") might appear to be several questions at once, which could confuse some first-graders.

Instead, good questions for this age group should be short enough for the children to hold in their memory while thinking about the answer. They should elicit some mental activity beyond second-guessing the teacher (responding to her tone of voice rather than the content of the question), and they should have answers which make sense to a young child who cannot think abstractly or juggle too many concepts at the same time. By consistent use of reasonable questions, the teacher can help promote in her students the idea that school tasks are reasonable and within their capabilities.

MEETING INDIVIDUAL LEARNING NEEDS WITHIN THE GROUP (Principles 13,14,15, and 16)

Meeting each individual's learning needs may involve breaking up the group, using another child as a model, and arranging for tutorial help.

13. At some point during the lesson, the teacher must make a fundamental decision about whether the group as a whole can or cannot meet the lesson's objectives. If there are large individual differences in the rate of learning, keeping the group together might mean spending too much time with those who are having difficulty. When this is not the case and the group as a whole can meet the objectives, the teacher should keep the group together, concentrating her attention at each step on the slowest members, working with them until they master the step before proceeding to the next one. In this fashion, all of the children will achieve at least the minimal objectives of the lesson.

14. If the teacher decides that the group as a whole cannot reach the objectives at the same time because of large individual differences in comprehension of the material, she should proceed differently. Those students who already know the objectives or who are learning rapidly and easily should be taught through to the end of the lesson and then dismissed from the group to work independently or engage in some approved self-chosen activity such as completing workbook assignments. Meanwhile, the teacher should continue to work with the rest of the group until all children master the objectives, perhaps dismissing them one by one as they do.

The teacher should be careful to avoid negative statements regarding the children who remain for extra help. The children who have mastered the lesson should be dismissed without fanfare and without calling attention to the fact that they have succeeded. Similarly, the remaining children should not get the impression that they have failed or done something wrong because

they remain in the group. One way to handle this situation might be to let the group know in advance, perhaps in the introduction, that they might have different activities to complete after reading group. When the time comes to split up the group, the teacher could dismiss those who have mastered the objectives with instructions to complete a workbook activity or go to a learning center, for example. She could then continue with the remaining children, either with the original lesson plans or with another activity such as those suggested in the teacher's manual for children with individual needs. If the children ask why they are staying behind, the teacher should answer positively ("Everyone has different work to do. This is your work for today.").

15. Sometimes the teacher may wish to use one or more children who have mastered the objectives to serve as models for the others. This may be done with the group intact, or the teacher may dismiss all but the models and the children who need extra help. Sometimes, children having difficulty attaining objectives may benefit more from observing interactions between the teacher and students who already understand the process than they would from being questioned themselves. For example, the teacher might be teaching the difference between the sounds of words like tape and tap (to present the idea of a final e making the vowel sound long). The teacher might ask a child who does not understand this concept to read pairs of words, then give him the answers each time with an explanation. But doing this repeatedly for several pairs of words may prove frustrating for both child and teacher. Thus, it may make more sense for the teacher to keep children who have mastered the objectives in the group in order to carry on a dialogue or demonstration with them and provide a model for the other children. She can then turn her attention back to the others after they have had additional opportunities to see and hear the answer and explanation modeled several times.

An advantage of using models is that children often pay attention to and imitate peers whom they respect and like. Therefore, the teacher should be careful to help the model maintain the respect and friendship of his peers, and to prevent any resentment which might arise if the situation is mishandled. In particular, the teacher should not make the other children look bad while making a good example of the model(s). * Instead of saying something like, "Janet's so smart. She knows the rule," the teacher should contain her comments to the answer itself, not the students' abilities. When commenting on a model's answer, the teacher should be specific about what was correct and why, since this helps the other students to focus on the important aspects of the problem ("That's right, you looked at that last letter to see if it was an e before you said the word.")

16. If one or more children still do not succeed in meeting the objectives within the time available for the lesson, provision should be made for tutorial assistance. This might come from the teacher herself or from peers who have mastered the lesson's objectives. In any case, students who fail to meet objectives should receive extra help, and must not be allowed to fall progressively behind. As stated in principle 14, such assistance should be given in a positive manner so that the children do not get the impression that they have failed or done something wrong. The suggestions in the teacher's manuals can, of course, be used for activities. When the teacher's time is limited, parent volunteers or older students might serve to help these students:

PART II: RESPONDING TO CHILDREN'S ANSWERS

The previous section dealt with group management practices. The second part of the system is concerned directly with the teacher's role in dealing with individual students within the group. The teacher has two major responsibilities in an academic exchange with the child: she must present the question, and then respond to the child's answer with feedback of some sort. The following principles focus primarily on the latter.

Three distinctions will now be considered in turn, and then will be used to explain how the teacher decides what kind of feedback she will give. These distinctions are types of question, types of learning and appropriate pacing, and types of child answers.

Questions

There are two basic types of questions. The first is a question that calls for a short, factual answer. These often deal with matters of fact which one either knows or does not know. Answering such questions requires remembering information. Thus, it is not possible to "think them out." Questions of this sort usually start with who, when, what, and where and might entail supplying labels or dates, or reading sight words. For example, when asked "What shape is this?" a child either does or does not recall the name. Generally, he cannot be helped with a clue.

The second kind of question can be reasoned out. This includes some who, what, when, and where questions that ask for more than a label (such as a question about story content.) This type of question also includes how and why questions which do not have short factual answers. Examples are, "Why do Eskimos wear warm clothes?" and "How can you tell when it is time to get

up?" Giving the children clues can help them to reason or remember answers to these questions. For example, a clue to the Eskimo question might be, "Would you wear a bathing suit in the snow?" Then after a response, "Why not?"

These two different types of questions make different demands on the child. Purely factual or labeling questions call on memory alone, while other questions also may call on reasoning processes.

Types of Learning and Appropriate Pacing

Different types of learning will require different strategies in pacing the speed of questioning. The distinction to be made here is between 1). demands for rote memory suitable to drill and 2). questions requiring reasoning which cannot be answered automatically. Examples of rote learning are recognition of sight words and recitation of the multiplication tables. The children are expected to respond quickly to such questions without having to stop and think. Reasoning demands ask a child to apply a process (such as a word attack skill) or give an answer which requires some thought, such as memory of story content or an opinion. In general, rote learning is more easily accomplished with a rapid pace, while demands requiring more thinking should be presented with a slower pace. The teacher must decide what demands she is making of her children, and then set the pace which will best meet the objective.

In a rapidly paced lesson, the teacher moves quickly from child to child. The purpose of such a pace is to provide each answer many times, so that the children can learn through rapid repetition to recognize words, letters, etc. on sight "automatically." The child learns to do this from hearing and seeing repeatedly the association between the question and answer.

A rapid pace can be maintained when short feedback is given rather than elaborate feedback. The teacher waits only two to three seconds for a child to respond. If there is not a response, the answer is given and the teacher moves on. Appropriate feedback during rapid pacing is further discussed in principles 17, 18, and 19.

A slower paced lesson is one in which the teacher spends more time with each child and each question and gives more extensive feedback. This type of pace is suitable for demands requiring reasoning or use of new skills. In these situations the child learns by doing the process or by seeing it done and explained. For example, learning to sound out new words with certain combinations of sounds is a more complex process than the simple associative learning of common words as described above. This second type of learning often requires explanations and the process of getting an answer is usually more important than the answer itself. The feedback to be used in a slower-paced lesson is also discussed in more detail in principles 17, 18, and 19.

Type of child answers

Children's answers may be classified as (1) mostly or all correct, (2) mostly or all incorrect (we include in this category the answer "I don't know," which indicates a lack of knowledge), or (3) no response at all. Each of these situations requires a different response from the teacher, depending on the demands of the question and the capability of the child.

The rest of the principles are based on the premise that any child's response can be turned into a pleasant learning experience by the teacher. Therefore, wrong answers and "I don't know" statements are not undesirable in themselves. They can be used to promote learning when handled well.

However, a failure to respond is not desirable, and the child should be encouraged to respond in some way, even if to say "I don't know." It is then the responsibility of the teacher to leave the child with a good feeling about having responded, even if it was only to listen to the correct answer and repeat it.

The rest of the principles discuss teacher feedback to different types of child answers. Types of questions and types of pacing are discussed under each category. A summary of appropriate use of feedback appears in chart form following the discussion of principles 17, 18, 19, and 20.

WHEN THE CHILD DOES NOT RESPOND

17. When the teacher asks a question or gives a direction, she should wait for the child to respond, and also see that the rest of the group waits and does not call out answers. The length of time spent waiting for an answer depends on what kind of pace the teacher wishes to keep up. When the group is moving through rapidly paced questioning (such as drilling on sight words), she should wait only a few seconds and proceed by giving the answer herself if the child does not respond. However, when the pace is slower, the teacher should continue to wait for a response for as long as the child looks like he is thinking about an answer and may come up with one. However, she should not wait so long that the group's attention is lost or the situation becomes anxiety-producing for the child. The teacher must decide on the spot what is the optimal wait-time.

If the teacher is unsure about whether a child is still thinking about a problem or whether he is completely stumped, she should ask him ("Do you know?" "Can you do it?") and then proceed on the basis of the child's response.

If the child says he does not know or cannot do it, the teacher should refer to the discussion of "When the child is wrong or does not know" (Principle 17).

If the child still does not respond within a reasonable time during slower paced questioning, the teacher should provide help, by simplifying the question by degrees but always attempting to get some response (see strategies for simplifying questions below). If necessary, she should at least get a "yes-no" answer to the question "Do you know the answer?" By making sure to get an overt verbal response to every question she asks, she will gradually condition the children to respond to every question.

If the child still doesn't respond, or if he finally responds incorrectly or says "I don't know," the teacher should follow procedures for simplifying as discussed below, in #19.

A child who persistently requires encouragement to respond will probably require some tutorial assistance and should probably receive fewer and easier group demands until he is more willing and able to respond.

WHEN THE CHILD IS INCORRECT OR DOES NOT KNOW THE ANSWER

18. Wrong answers and "I don't know" statements should not be met with negative reactions by the teacher. If the child responds incorrectly, the teacher should first tell him that the answer is not right. She can do this by using such phrases as "No, that's not right" delivered in a non-critical voice, or she can acknowledge that the answer was partly right or that the child was using the right process but misapplied it or didn't complete it: "That's good; you remembered to think about those beginning and ending sounds, but the word isn't right--it doesn't make sense there." In pointing out that the answer is wrong, the teacher should be as specific as possible

about what was wrong.

When the child has answered incorrectly, the teacher should follow the simplification procedures outlined in the next section. These are the same procedures to be used with a non-responsive child, usually after the teacher has elicited at least a statement of "I don't know" from him.

SIMPLIFICATION PROCEDURES

19. After attempting to get a response or acknowledging that an answer is wrong, the teacher has two options for simplifying the question. She may give the correct answer to the child, or she may rephrase the question and give clues.

a. If the question deals with a matter of fact, so that the response cannot be reasoned out, the teacher must give the child the answer. She should not ask another child to provide it. Calling on others in this way can create bad feelings and over-competitiveness. Also, this may convince the children that if they do not respond or don't try to answer correctly, the teacher will eventually go on to someone else. Staying with the child until an answer is established and attempting to elicit some acceptable response from him will instead teach the children that they must listen, think, and respond.

Providing the answer to the child can be done in several ways. If the pace is rapid, the teacher should give the answer and move on, perhaps occasionally having a child repeat the response. If the pace is slow, the question can be restated in a form which simply calls for agreement, repetition, or choosing between alternatives. For example, the question "What punctuation mark is this?" can be simplified to "Is it a comma or a period?" Here, the child only has to make a choice. If the choice is still too difficult,

one of the options can be made more apparent, such as "Is it a comma or a question mark?" An extension of this is to make one of the alternatives so ridiculous that the child not only enjoys it but sees that the correct choice is obvious ("Is it a comma or a worm?"). The child might also be given the opportunity to make a yes-no choice by questions such as "Is it a comma?"

Another strategy for simplifying factual questions which leads almost certainly to a correct response is to give the answer and ask the child to repeat it. For some children, repetition may be the only demand to which they can comfortably respond at first.

Giving the answer to the child in the form of a simplified question to which he can respond enables the child to succeed. This is particularly important for children who are anxious about responding or who seldom get a right answer. With children who generally reply quickly and correctly, it usually is not necessary to always provide a success experience, especially when the questioning is rapidly paced and the teacher knows that the child will not react negatively to being told the right answer.

b. If the question is such that the child can be expected to figure it out if given help, the teacher should give clues or rephrase the question in a way that guides the child's thinking in the right direction. If the clues do not help and giving the answer is necessary, the teacher should give it herself rather than call on another child for it.

One way to rephrase a question might be to break it down into a sequence of related questions. For example, in reviewing a story from the day before, the teacher might ask, "How did Tom make the bread?" If the child could not remember all the steps, the teacher could break it down into, "What did he do right after he decided that he wanted to make it?" Then, after an answer,

"What did he do after he got home from the grocery store?", etc.

Another example of breaking a question down into sequential steps might be in helping a child sound out a new word. ("What is the beginning sound?" [response], "What do you know about those vowels in the middle?" [response], "Read the rest of the sentence. What word makes sense there that has the sounds you just read?")

Another way to rephrase a question, especially a "why" question, is to help the child focus on relevant aspects of the situation. For example, if the question was, "Why is there a railing around the Tiger Pit?", the teacher might say, "Well, if there was no railing around the cage, what might happen if the tiger decided to take a walk?". Or she might ask, "What would happen if the tiger got out of his cage?", and then, after answers, "When the rail is there, can the tiger get out of his cage?"

Sometimes, rephrasing of the question into simpler language may be sufficient to help the student. For example, "Name me some reasons that Tom and his family were eager to get started," might be more easily understood as "Why did Tom's family want to go?"

Simplification, therefore, involves breaking a question down into a simpler form that helps the child direct his thinking to the right answer. With questions requiring reasoning or application of a skill, the methods of simplification can be more complex and extensive than the methods described above (under heading 19 a) for factual questions.

If simplification of reasoning questions does not help the child get on the right track, the teacher should supply the answer, along with an explanation of the thought process involved in figuring it out ("You have to say the beginning sound, then the end sound, then look to see if you know anything about the letters in the middle. Then think what word has those sounds and makes

sense there.") Again, in supplying the answer to a child, the teacher should try to finish with a question or response demand that the child can handle successfully, especially if the child is shy or apprehensive about responding.

WHEN THE CHILD IS CORRECT

20. If the child answers correctly, the teacher should acknowledge it. This can be done briefly by a nod, by repeating the answer, or by verbal indication of agreement, such as "right", "okay", etc. Praise may or may not be appropriate, and is further discussed in principles 21 and 22 below. After acknowledging a correct answer, the teacher should make sure that the rest of the group has heard and understood. If the others did not hear, she should have the child repeat the answer more loudly. The teacher might also repeat the answer herself and paraphrase it, although she should not get into the habit of following every answer with repetition, since the children may stop listening to one another's answers. Sometimes she should ask another child to repeat the answer, as discussed in principle 9.

Teacher Responses to Children's Answers: Summary

This chart summarizes principles 17, 18, 19, and 20. The teacher bases her choice of feedback on the type of question, the pace, and the child's answer.

<u>TYPE OF QUESTION</u>	<u>PACE</u>	<u>CHILD'S RESPONSE</u>	<u>FEEDBACK RESPONSE</u>
<u>Factual</u> (child cannot be helped to figure out the answer if he does not know)	Rapid	No response	Teacher (T.) waits only a few seconds, gives the answer and moves on.
		Incorrect or mostly incorrect	T. says that the answer is incorrect, gives the correct answer and moves on.
		Correct or mostly correct	T. acknowledges that the answer is correct. She makes sure all have heard the answer and moves on.
	Slow	No response	T. waits longer for a response (as long as the child seems to be thinking about it), then she simplifies it to get some overt verbal response, and deals with the verbalization as correct or incorrect.
		Incorrect or mostly incorrect	T. tells the student the answer is incorrect, simplifies the question by giving a choice or gives the answer and lets the student repeat it.
		Correct or mostly correct	T. acknowledges the correctness and makes sure all have heard.
<u>Reasoning</u> (child can be helped to figure out the answer).	Slow	No response	T. waits for a response as long as the child seems to be thinking about it, simplifies the question to get some verbal response, then deals with the verbalization as correct or incorrect.
		Incorrect or mostly incorrect	T. tells the student the answer is incorrect or partly correct, comments on the process where appropriate, then simplifies the question.
		Correct or mostly correct	T. acknowledges that the response is correct, comments on the process where it is appropriate, and makes sure all have heard.

PRAISE AND CRITICISM

21. Praise is an important aspect of teaching and should be used regularly but not indiscriminately. When used sincerely, it can reinforce desired behaviors and favorably influence the children's attitudes about themselves and school. The teacher should take care to praise the child's effort and/or thinking processes used in arriving at an answer, not just the answer itself. The teacher should use a variety of praise statements rather than rely on a single stock phrase, and should avoid praising too frequently lest her praise become taken for granted. During rapidly paced portions of the lesson it is probably best to avoid praise altogether, and instead confine responses to confirming students' answers and repeating the correct answers. When the pace is slower and students are called upon to demonstrate newly learned or more difficult skills, the teacher should begin praising more frequently.

Praise should be specific and individualized for each student. By being specific in her praise, the teacher can help the student focus on appropriate behaviors to be repeated. (This also helps make other students aware of what aspect(s) of the response were correct.) By making praise contingent on individual progress, the teacher can help each child see and appreciate his own progress (rather than praising only behaviors which some children have mastered and others have not). In other words, individual progress rather than group norms should be the basis for praise of individual students.

For example, a child who usually gives up easily on new words but who, one day, does sound out a word should be told, "Mary, that was good; you looked at the word and then sounded it out by yourself." However, a child who consistently sounds out new words but needs to work on pausing at the end of sentences could be praised for doing the latter: "Good, John, I liked the way you waited after the

periods." In these examples, both Mary and John were praised for specific behaviors which indicated progress for them. By specifying the behaviors in these ways, the teacher gave more information to the children than if she had just said, "Good, Mary" or "Good, John."

22. Children who blurt out answers, call out answers out of turn, respond impulsively, or continue to respond the same way time after time regardless of the question should be corrected, but correction should come in the form of criticism combined with specific positive instructions about what was wrong and what should have been done. ("Don't just guess, think about the problem first before you try to answer." or "Don't pick out another activity now. The bell has just rung and remember, that means it's time for you to go to reading group.") Criticism alone, without the additional provision of positive, prescriptive information about what to do instead, will be of little use to the child and may be harmful if it makes him inhibited or resentful.

Reference Notes

1. Brophy, J. & Evertson, C. The Texas teacher effectiveness project: Presentation of nonlinear relationships and summary discussion. (Res. Rep. 74-6). Austin, Texas: Research and Development Center for Teacher Education, 1974 (ERIC No. ED 099 345).
2. Anderson, L. & Brophy, J. An experimental investigation of first grade reading group instruction. (Res. Rep. 76-3). Austin, Texas: Research and Development Center for Teacher Education, 1976.

References

Southwest Educational Development Laboratory. Bilingual kindergarten program, Inservice manual, Volume I. Austin, Texas: National Educational Laboratory Publishers, Inc., 1973.