DOCUMENT RESUME

ED 150 157 95 TM 006 778

AUTHOR Brophy, Jere; And Others
TITLE Coding System for the First Grade Reading Group Study.
INSTITUTION Texas Univ., Austin. Research and Development Center for Teacher Education.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO UTR&D-R-75-2
PUB DATE Jan 75
CONTRACT NIE-C-74-0089; OEC-6-10-108
NOTE 104p.

EDRS PRICE MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS Check Lists; Class Management; Classroom Observation Techniques; *Codification; Effective Teaching; Elementary School Students; Elementary School Teachers; Feedback; Grade 1; Grouping (Instructional Purposes); Interaction Process Analysis; *Manuals; Primary Education; Questioning Techniques; Reading Achievement; *Reading Instruction; *Small Group Instruction; *Student Behavior; Student Teacher Relationship; Teacher Behavior; *Teaching Techniques
IDENTIFIERS *First Grade Reading Studies

ABSTRACT

The First-Grade Reading Group Study is an experimental examination of teaching behaviors and their effects in first-grade reading groups. The specific teaching behaviors of interest are defined by a model for small group instruction which describes organization and management of the class, and ways of responding to children's answers that are associated with achievement gains. The coding system was designed specifically for this study, although several categories were adapted from the Brophy-Good Dyadic Interaction Coding System. This system is to be used only in reading groups and only to measure public encounters between the teacher and individual members of the class. There are two kinds of forms used, a high-inference and a low-inference coding sheet; both are appended. On the high-inference sheet are check lists and rating scales describing various events which do not involve interactions between a teacher and a single child within the context of the reading group, i.e., teaching techniques, student behavior, or seating arrangement. The low-inference sheet is used to describe each step in an interaction between the teacher and an individual child within the context of the reading group. This involves both academic and behavioral interactions. (Author/MV)

The Research and Development Center for Teacher Education

UTR&D

The University of Texas at Austin

CODING SYSTEM FOR THE FIRST GRADE READING GROUP STUDY

Jere Brophy,
Linda Mahaffey,
Carol A. Greenhalgh,
Jane E. Ogden,
and Harry M. Selig

Report No. 75-2

Research and Development Center for Teacher Education
The University of Texas at Austin

January, 1975

The Research and Development Center for Teacher Education was established on the campus of the University of Texas at Austin in 1965 to design, build and test effective products [illegible] teachers for careers in the nation's [illegible]

A staff [illegible] than 100 [illegible] engaged in projects [illegible] basic research into effective [illegible] through development of special [illegible] training strategies to the development, implementation and evaluation of a [illegible] different [illegible] education program.

The Center's [illegible] Personalized Teacher Education Program [illegible] which demonstrates [illegible] success [illegible]

to the development of a large group of products which help education facilities become aware of student teachers' individual needs. The program also has produced products for student teachers' use to help them build on their strengths.

The completely modularized program is currently in field test and or use at more than a dozen important teacher education institutions nationally.

In addition to the PTEP, the Center also supports other projects in educational evaluation, development of strategies for implementing institutional change, and in consultation techniques for helping teachers plan individualized programs for children.

The Center's work is supported by the National Institute for Education and by the University of Texas System, as well as through contract research and development programs for public agencies.

This project was supported by the National Institute of Education Contract OEC 6-10-108, Research and Development Center for Teacher Education, and by Contract NIE-C-74-0089, Correlates of Effective Teaching. The opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by that office should be inferred.

INTRODUCTION

The First-Grade Reading Group Study is 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 (summarized in the appendix). 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 and Evertson, Note 1).

The principles in the instructional model were presented to a group of first-grade teachers who were asked to implement them in their teaching. A comparable group of teachers who did not see the principles were asked to teach as they normally did. Both groups are being observed, and information about their teaching is recorded with the use of the coding system described here. When observations are completed, the data will be correlated with the learning gains of the children to determine if the hypothesized relationships of teacher behaviors to child learning are observed.

The coding system used to collect this data was designed specifically for this study, although several categories were adapted from the Brophy-Good Dyadic Interaction Coding System (Brophy and Good, 1970). The coding system for the present study is a criterion-referenced measure, in that it focuses on particular behaviors of importance in this study. It is not intended as a system appropriate for every classroom study, although parts of it are applicable for general

use in the early grades. Its primary purpose is the collection of data to test a specific set of hypotheses, those derived from the instructional model.

This coding system is to be used only in reading groups and only to measure public encounters between the teacher and individual members of the class. There are two kinds of forms used, a high-inference and a low-inference coding sheet (see appendix). On the high-inference sheet are checklists and rating scales describing various events which do not involve interactions between a teacher and a single child within the context of the reading group. The low-inference sheet is used to describe each step in an interaction between the teacher and an individual child within the context of the reading group. This involves both academic interactions and behavioral interactions.

The first page is considered to be "high-inference" because most of the measures require an overall evaluation of events such as transitions, explanations, and overviews, while the "low-inference" coding sheet involves checking categories to describe every step taken in an interaction, without imposing judgment as to appropriateness or effectiveness. The latter is more descriptive than judgmental and inferential.

One and only one high-inference sheet is to be completed for each group observed. There is no limit to the number of low-inference sheets used, since these represent ongoing interactions which will vary in number and length. A new low-inference coding sheet should be started for each new group and for each change of context within a group. Both sheets may be used simultaneously, once a given low-inference sheet is started for a group.

The identification information at the top of the forms should be completed

for each page. This includes the names or code numbers of the teacher, school, reading group, date, start time and stop time of observation, coder's initials, and the number of children in the group. In addition, the low-inference sheet must contain the group order (such as "first seen out of three groups") and the academic context of the lesson (these categories are described in a later section).

Throughout the coding manual, in order to avoid confusion of pronouns, "she" will refer to the teacher, "he" to the student, and "she/he" to the coder.

Note: To facilitate understanding, it is recommended that readers first review the instructional model and study the coding sheets in the Appendix. Because the coding system is designed to measure teacher implementation of the instructional model given in the Appendix, the rationales underlying each aspect of the coding will be more apparent if readers are familiar with the model.

PART I:

Using the High-inference Coding Sheet

Information is recorded on this sheet about the following:

1. Attention-getting during transitions and in the reading group
2. The use of an overview to precede the lesson
3. Breaking up the group for academic reasons
4. The use of a student as a model
5. Appropriateness of seating
6. Demonstrations and explanations
7. Presentations of new words
8. Choral responses and group call outs
9. Undesirable questions

Time measures

The total time elapsed during coding is kept by noting the start time and stop time on the high inference sheet. The start time is the beginning of any transition to reading group, and the stop time is taken when the group is dismissed. (The stop time for the high-inference sheet will be the same as that on the last page of low-inference coding, but the start times will always be different, since some coding is done with the high-inference sheet before the low-inference sheet becomes applicable.)

Other time measures taken on this coding sheet are described in the section on attention-getting under the heading "Time elapsed before beginning of group lesson."

I: Attention-getting during Transitions and in the Reading Group

ATTENTION-GETTING TRANSITIONS: ____ yes ____ no

____ time to group
____ time to T.
____ beyond routine
____ no individ-corrective

____ 1. bell
____ 2. lights
____ 3. verbal
____ 4. Individ-routine after signal
____ 5. other _____
____ total number

____ 1. individ-routine
____ 2. group is signal
____ 3. other _____

% child attending 1 2 3 4 5
0% 100%

IN-GROUP: ____ yes ____ no

____ time to lesson
____ no. of indiv/ correct

____ 1. bell
____ 2. lights
____ 3. verbal
____ 4. individ-rout after signal
____ 5. other _____
____ total number

____ 1. individ-routine
____ 2. only indiv corrective
____ 3. other _____

% child attending
1 2 3 4 5
0% 100%

In this section, the coder indicates whether or not and how effectively the teacher used an attention-getting mechanism in either or both of two situations: the transitional period preceding a reading group and the beginning of a lesson once the reading group has assembled.

An attention-getting mechanism is defined as a signal delivered to an entire group (to the whole class for transitions to reading group or alternate activities, and to the reading group for in-group attention-getting). The signal is given to indicate that it is time to change activities (for transitions) or to pay attention in order for the reading lesson to begin (in-group activities). The signal does not deal with academic or social content, but is purely a procedural message. It may be verbal or non-verbal.

The transitional period is that time when the children are to move to the reading group from another activity or to begin an alternate activity while the teacher works with a reading group. It involves the entire class, although every individual may not move during every transition. When an attention-getter is used during this period, its meaning is to signal the children to move to the next activity for the next block of time. Examples of attention-getters for transitions are, "I'm ready for the Green group", and "Tigers, come read now while the Lions have center time and everyone else does seatwork." The use of such signals implies that the children know what to do when given such a cue.

The in-group signal focuses on a reading group that has just assembled. An attention-getting mechanism in this setting is a signal given at the beginning of the lesson (before teaching has actually started) indicating that

it is time to listen and pay attention. Examples are "May I have your attention now?" and "Ready, Tigers?"

The coder should indicate in each section (transitions and in-group) whether or not a signal has occurred by checking either "yes" or "no". Other items in this section further describe the attention-getter and its effectiveness.

Describing The Attention-Getter:

If the use of a general attention-getter is coded by checking yes in either or both of the situations, then one or more of the items listed below the yes should be checked by numbering their order of occurrence. If two things occur together (bell followed immediately by verbal signal), list both as "1", indicating that they occurred simultaneously or without any space in between for the children to respond. If two things occur with intervals between for children's response, list as "1" and "2". If a signal is given, then repeated later after the children have begun to respond (to remind them), then write "1,2" by the item. The idea is to keep track of the sequence of events, but to consider signals that were presented together in time as one occurrence.

The types of general attention-getters that may be used are the same for both transitions and in-group attention getting, and the list of alternatives repeated for each:

1. Bell: This includes any type of non-verbal sound, such as a bell, whistle, knock, clapped hands, etc.

2. Lights: This is checked if the teacher uses the room lighting in some way to get the children's attention.

3. Verbal announcement (verbal). This is checked if the teacher says anything to the entire group to the effect that they are to pay attention and either move or get ready for the lesson. The phrase spoken by the teacher should be noted in the blank if this item is checked. The content of such a verbalization is procedural, not academic or social, such as "Time for ..." or "Start putting away your games and go to your next center." This may occur with or without one of the other types of signals, such as bells or clapping.

4. Individual contacts following attention-getter (individ). This item cannot be checked without another item in the same section also being checked. It indicates that after a general announcement or signal, the teacher routinely contacted individuals or groups of individuals in the room to carry out the transition or get everyone's attention. This is routine, meaning that she does not contact individuals in order to correct them, but does this as part of a systematic effort to see that the appropriate actions are carried out. For example, the teacher might say to the entire group, "It's time to start reading group activities now. Start cleaning up what you are doing and I will come check you." She then makes a round of the room, seeing every child and then giving further directions as to where that child is to go. In other words, the teacher does not just make the announcement and expect the children to know where to go or does not expect them to go without some further instructions from her. These are not corrective contacts delivered only to those individuals not behaving appropriately.

They are routine and delivered as a matter of course to everyone or almost everyone, following a general announcement.

5. Other attention-getting mechanisms (other). This item is checked and the behavior described in the blank for any other type of attention-getting mechanism directed at the entire group in question which does not fit in any other categories described above.

If there is not any use of a general attention-getter, this is recorded by checking no in either or both of the two situations (transition and in-group). In addition, one of the following alternatives should be checked to indicate how the teacher did deal with transitions to reading group activities or getting attention once the children were in the group. The alternative ways of handling this when no general attention-getter has been used are different for transitions and in-group attention-getting.

Transitions: When no general attention-getter has been given, the alternatives for transition periods are:

1. Individual routine (indiv-routine). The teacher routinely (in a non-corrective fashion) contacts each student or group of students to tell them that it is time to change activities. She does not precede this with any general announcement. (If she did, the behavior would be coded as Yes, with individ-routine after signal checked.)

2. Group motion (group). This is applicable only for reading groups occurring after the first group is dismissed. In this case, the breaking up of one group serves as the only signal that a transition is about to take place. The children respond to this signal by changing groups automatically. The teacher does not expect to make individual contacts except as a corrective measure when some children do not follow

through on the signal.

3. Other non-general announcement (other). This category includes any other way in which the teacher signals the class that a transition is to take place without making a general signal to the entire group. The behavior should be described in the space provided.

In-group attention getting. When no general attention-getter has been given, the alternative ways to gain attention within the group before beginning the lesson are:

1. Individual routine (ind-routine). The teacher speaks to each child routinely before starting the lesson, but never makes a statement to the entire group that the lesson is about to begin. These individual contacts may be social in nature or academic as well as procedural (such as checking each child to see that materials are ready, asking about something personal, or checking on completion of assignments at a learning center before coming to group). These types of statements, however, do not have anything to do with the reading lesson per se. They are the teacher's way of letting each individual child know that she is about to begin.

2. Individual corrective (ind correct). This is checked when the teacher makes no statement to the whole group that the lesson is about to begin, but simply starts to teach. The only signals for attention are delivered to individuals who are not attending, and therefore the signals are corrective in nature, rather than routine, since not every child is contacted. If the teacher does not have to correct anyone, but still does not make a statement to the effect of "let's begin now," this item is checked.

3. Other non-general announcement in group (other). This category includes any other method used in the reading group to get attention that does not involve an announcement to the entire group or either of the two options listed above. The behavior should be described in the space provided.

Total Number of Signals

The number of times a teacher utilizes a signal for transition or attention-getting should be entered as the total number located on the coding sheet below the list of attention-getters. This is a count of the total number of signals addressed to the entire group in question, not individual contacts. The number entered here represents both a series of several signals and also repetition of the same signal spaced in time. An example of a series is ringing a bell, waiting, shouting, ringing the bell again and shouting again, with intervals in between each signal for the children to act. (This represents a total number of five.) An example of repetition of a signal over time is ringing a bell three times with intervals between each. (The total number here is three.) To be counted as separate attention-getters, these signals must be spaced in time. That is, if two types of signals occurred together and were not repeated, they would be considered one signal. For example, ringing the bell and then simultaneously saying, "Time for the tigers" with no other signals represents a total number of one, even though two types of signals have been used.

When no attention-getters have been used, the total number is zero.

Time Elapsed Before Beginning Of Group Lesson

There are two time measures taken during the transitional period, and one taken when the group has assembled. These three measures are recorded to the nearest half-minute.

During the Transition, these intervals are timed:

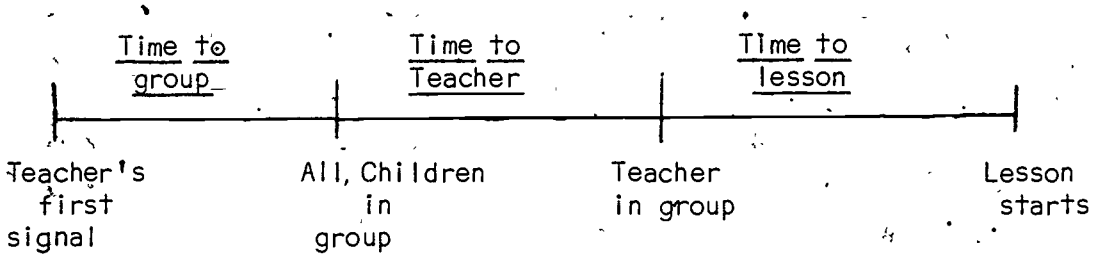
1. Time to group. This is the time from the first indication the teacher gives that a reading group is to begin until all of the children in the reading group are assembled. If the teacher uses a general attention getter, start timing as soon as she gives the first signal (for instance, when she rings a bell). If she contacts children individually instead of using a general signal, start timing when the first child is contacted. Stop timing when all the children in the reading group are assembled, regardless of how chaotic the rest of the classroom is or where the teacher is.

2. Time to teacher (Time to T.). This interval begins when time to group ends. It is the time beginning when all the children are assembled in the reading group until the teacher arrives in the group. Start timing as soon as the last child reaches the group, and stop timing as soon as the teacher arrives to stay. If the teacher arrives before or at the same time as the last child, the time noted is 0. If there is a gap between the time the last child arrives and the time the teacher arrives, enter the time in the blank marked Time to T, and then decide if that time gap was routine or beyond the teacher's control. If the

teacher is going around the classroom giving assignments to the children not in the group, correcting children who are misbehaving, or doing something else routine, check routine. If she is late to the group because a child gets sick, she gets a message from the office, or something else occurs over which she has no control, check beyond. When the group and teacher have assembled, the last pre-lesson time is measured:

3. Time to lesson. This item measures the interval beginning with the teacher's arrival in the group and ending when the lesson begins. The beginning of the lesson is defined as the first academic content delivered to the group as a whole. The interval measured just before this point includes activities such as passing out books, making sure children have the right materials, and getting the children's attention. If the teacher starts teaching as soon as the last child arrives in the group, then the time to lesson is 0. The end of this time interval marks the beginning of the time recorded for response opportunities on the low-inference sheet.

This time-line summarizes the time variables noted on the high inference sheet:



Number of Individual Corrective Contacts

The items listed in each section as no. of individ-corrective are frequencies of corrective individual contacts the teacher has with the students. Such contacts are used to get the students to give directions, either to move to a reading group or an alternate activity during a transition period or to pay attention once in the reading group so that the lesson might begin. As in the previous two items, transitions and in-group attention-getting efforts should be considered separately.

During transitions, count the number of different students contacted (not total contacts) because they were not moving appropriately during the transition. These contacts may be verbal or non-verbal (such as a shove or a pointed finger) and must be related to the desired transition. Any social, academic, or routine procedural contacts occurring during this period should not be counted. Note only the behavioral contacts directed at the behavior specified by the attention-getter which involves moving students to the reading group or to alternate activities. These corrective contacts are only tallied here and are not recorded in the low-inference behavioral section.

Once the children are in the group, count the number of individual children contacted because they were not paying attention at the beginning of the group before the lesson had actually began. These contacts must be non-routine and may be made by the teacher at any time after the children have assembled in the reading group and prior to the beginning of the lesson. They may be verbal or non-verbal and must be related to getting the group under way. These corrective contacts are only tallied here and are

not recorded in the low-inference behavioral section. Later attention-getting contacts that occur during the course of the lesson are recorded in the low-inference behavioral section and are not tallied here.

Per Cent Children Attending

A five-point scale labeled % child attending appears for both the transitional and the in-group situations. These two scales are completed for each reading group observed.

Each scale measures that percentage of the total group involved (either entire class or reading group) who reacted appropriately to the teacher's initial demand for transition or attention within the group without requiring repetition of a signal or individual corrective contacts. These items are to be completed regardless of the method used by the teacher to gain the students' attention. If the children were expected to respond to a general attention-getter (bell, lights, etc.), then this item measures the percentage of children who did respond to the initial signal appropriately. If the teacher made routine individual contacts after which the children were expected to respond as directed, then the scale measures the percentage of children who responded without further instructions. If the teacher made no general signal or routine individual contacts but still expected attention, then the scale also measures the percentage of children responding appropriately.

For each situation (transition and in-group), choose the point on the appropriate scale that most accurately reflects the percentage of children in the group under consideration (whole class for transitions and read ng group for in-group attention-getting) who respond to directions as expected:

1. no children attend as expected without repetition of the signal or corrective contacts

2. 25% of the children attend without repetition of the signal or corrective contacts
3. 50% of the children attend without repetition of the signal or corrective contacts
4. 75% of the children attend without repetition of the signal or corrective contacts
5. 100% of the children attend without repetition of the signal or corrective contacts

2: The Use of an Overview to Precede the Lesson

OVERVIEW:

content: ___1. no instr. content ___2. mech ___3. specific content
motiv: ___1. neg ___2. none ___3. nonspec. pos ___4. specif. pos. ___5. both

voice: ___1. neg ___2. bore ___3. neut ___4. pos ___5. gush
effect: ___1. neg ___2. bore ___3. neut ___4. pos ___5. excitement

The teacher may or may not present a statement at the beginning of the lesson that serves as an overview. An overview is defined as any statement in the future tense which prepares the children for what is to come in the lesson (such as, "Today we will..."). The overview is examined for its instructional content (if it informs the children about what they are going to do) and its motivational content (if it tells the children about how they will like or value the content of the lesson.) The set of items labeled content refers to the instructional aspect just described and the

items labeled motive are used to describe the motivational aspect. The sets of items labeled voice and effect further describe the overview when it occurs.

The instructional content of an overview is defined as statements about the activities in which the children will participate during the lesson. There are three items which describe the specificity of the instructional content of the lesson. The coder should complete the item by checking the appropriate number. One and only one item of these three must be checked for each reading group observed:

1. No instructional content (no instr content). This is checked if there was an absence of an overview with instructional statements.
2. Only mechanical content (mech). This item is checked if the teacher says something about the future events of the lesson, but only mentions the mechanics involved, such as "Today we will read the next story." or "Today we will do exercises 3 and 4." When this item is checked, it indicates that the teacher did not say anything about the actual content to be learned.
3. Specific content to be learned (specific content). This item is checked when the teacher says something about the actual content to be learned, either in addition to or instead of something about the mechanics involved. (If the teacher includes both mechanical content and specific content in her overview, only specific content is checked.) Examples of such overviews are "Today we are going to learn what happened to the people in the story." "Today we are going to review the vowel sounds." "Now we will learn some exceptions to the rule we

studied yesterday."

The motivational content of the overview is the extent to which the teacher presented a purpose for the lesson before beginning. This is defined as a statement by the teacher and is not to be implied from the tone of the voice, facial expression, etc. One and only one of the following items must be checked for each group observed. The item that most appropriately describes the motivational content in an overview statement:

1. Negative expectation (neg). The teacher says that the task is unpleasant, that the children will not understand, that not many children are expected to get it, that the task is a punishment for something else, etc. The message of the overview is that the task ahead is not desirable. (Examples: "We have to learn this rule, and the sooner we get started the sooner we will be finished", "I told you that if we didn't get this story read yesterday, we would have to finish it today, so here we are, and we have to read it.", and "We are going to review our vowel sounds today, but I don't think all of you will be able to say them.")

2. No purpose mentioned and no expectation of enjoyment or boredom mentioned (none). The teacher says nothing about the expected reaction to the lesson or the reason for doing it. There might be an instructional overview given without any motivational statements made, such as "Today we are going to learn a sound that the letter a makes. Open your books, etc." If no statements are made as to reasons for the lesson or future advantage or disadvantage expected, then this item is checked.

3. Non-specific positive (non-spec pos). In this case, the teacher makes a positive statement to the effect that the children will enjoy the lesson, that it is fun, etc., without specifiying why it will be fun or why it is worthwhile. An example is "Today we will learn a new rule about A, and you will be so glad to know it!"

4. Specific positive (spec pos). In this case, the teacher makes a statement which explains to the children why they will enjoy or value a lesson's content. Examples are "Today we will learn some new sounds for vowels, and then you will be able to write some new words and read them." or "Today we will finish the story about the Hollis family and then you will know what happened to them after they..."

5. Both nonspecific and specific positive statements (both). This item is checked when both of the above two kinds of statements are presented. The teacher both mentions that the children will enjoy, like, value, etc. a lesson, and also mentions specific reasons as to why the lesson is being taught, such as telling the children what they will be able to do with it. An example is "Today we will learn two new sounds for e. You will really like what we will do, because after you learn those sounds, you can play a new bingo game."

The item labeled voice describes the tone of the teacher's voice in giving an overview. Therefore, it is completed whenever an overview statement, whether instructional or motivational in content, is given. When neither has been given, the coder should leave this item blank.

The item is an evaluation of the expectations conveyed by the teacher's voice regardless of the content, and therefore should be scored as independently as possible from the above two items. The point which most closely corresponds to the attitudes conveyed by the voice should be checked.

1. Negative expectations conveyed (neg). The teacher implies disgust, frustration, or anger in anticipating the lesson.
2. Boredom and disinterest conveyed (bore). The teacher communicates disinterest in the lesson, but is not hostile or angry about having to teach it.
3. Neutral attitude conveyed (neut). The teacher's voice does not express any expectation whatsoever, neither positive nor negative, as to the outcome of the lesson.
4. Positive expectations conveyed (pos). The teacher's voice implies interest and positive expectations concerning the outcome of the lesson.
5. Gushy enthusiasm conveyed (gush). The teacher's attitude is so enthusiastic and eager that it appears to be exaggerated and "gushy."

The item labeled effect measures the level of enthusiasm apparent in the children as a result of the teacher's overview. When neither an instructional nor motivational overview statement is made, this item should be left blank. The coder can judge the children's motivational level by observing facial expressions, gestures, and verbalizations. This is a measure of the highest point on the scale reached by at least half the group, therefore only one category may be checked:

1. Negative reactions (neg). At least half of the children indicate that they would rather not do the lesson and do not expect to enjoy it. They seem to anticipate a hard time and are dreading or fearful of the experience.

2. Boredom and disinterest (bore). At least half of the children appear bored and while they are not looking forward to the task, they are not fearing and dreading it either.

3. Neutral reaction (neut). At least half of the children do not reveal how they feel, either positive or negative, and apparently have no particular expectations.

4. Positive expectations exhibited (pos). At least half of the children show interest in the lesson and are attentive and somewhat excited, though not to the extreme. Children here might smile, laugh, look at a display or picture with interest, etc.

5. Excitement expressed by children (excite). At least half of the children are very excited and eager, to the point of waving their

hands, rushing for books or materials, rocking in their chairs, etc.

3: Breaking Up The Group For Academic Reasons

____ 1. done
____ 2. needed, not done
____ 3. not needed, not done

____ 1. high taught, dismissed
____ 2. highs dismissed w/o teaching
____ 3. low dismissed
____ 4. other _____

Expectations communicated:

1 2 3 4 5

neg to low — no differential expectations

These items reflect the coder's opinion as to whether or not the group should be broken up for academic reasons, whether or not this was actually done, and, if so, how it was carried out.

The group should be broken up when there are large differences in rate of learning the objectives within the group. If there are one or more children who are learning rapidly and at the same time there are one or more children who are having difficulty, then the group would probably function more efficiently and the two groups of children would be better served by breaking up the group for that particular lesson. The coder must make a judgment as to whether the differences in learning rate are large enough to warrant this action. The group is considered to be broken up when one or more children are sent away because of differences in learning speed or ability, and the rest remain in the group with the teacher.

The first three items in this section are used to describe whether this occurred or should have occurred. One and only one of these must be checked for each group observed.

1. The group was broken up (done). This should be checked when the group is divided for academic reasons in any way, including the retention of only one student for tutorial assistance.
2. The group should have been broken up but was not (needed, not done). This item indicated that, in the coder's opinion, the academic objectives could have been better met for that lesson by dividing the group. This opinion is based on large differences in individual learning rates that day, so that at least one member of the group was either very far ahead of the rest of the group or very far behind.
3. The group did not need to be broken up and was not (not needed, not done). This is checked whenever the group was not broken up for academic reasons and did not need to be, in the coder's opinion, because everyone in the group was learning at a similar rate.

If done is checked, then the other items in this section must be considered. The first four items refer to the way in which the group was broken up, and the five-point rating scale labeled expectations communicated is used to assess the teacher's attitude as conveyed to the children.

How The Group Was Broken:

If done is checked, then the coder must indicate how the division occurred by checking one of the options listed below:

1. Higher achieving students taught to the end before dismissing (high taught). This is checked if the teacher completed the objective with the higher achieving children before dismissing them, or made sure that they had indeed learned the material before dismissing them.

At least two children remain in the group so that coding continues.

2. Higher achieving students dismissed without being taught to the end of the lesson (high dism). The teacher dismisses the higher achieving students without checking them for having learned the objective. Instead, she focuses attention on the other students and dismisses the students who have learned more quickly because they simply were not needed in the group any longer, or because the teacher believes that the higher achieving students can learn the lesson on their own. The teacher sends these students away without completing the lesson objective with them, although she goes further with the two or more children remaining.

3. Lower achieving students dismissed (low dism). The students having difficulty with the objective are dismissed and the higher achieving students remain for further group instruction. (At least two children are retained and coding continues.)

4. Other ways of breaking up the group for ability differences (other). This item is checked for any other way in which the group may be broken up that is not listed above. The reason should be noted in the blank. The most likely example would be the retention of a single child for additional tutoring. (Such an interaction is not coded, since the response opportunities are available to only one child.)

Expectations Communicated in Breaking Up The Group:

This is a measure of the appropriateness of breaking up of the group in terms of the teacher's communication of differential expectations to the

The coder must judge this from the teacher's language as well as from her tone of voice and facial expressions.

The coder should mark the point on the scale which most appropriately describes the dismissal in terms of expectations communicated.

1. Negative expectations conveyed to lower achievers while higher achievers are praised in direct comparison. The teacher conveys disgust or anger at the slower children.
2. The teacher conveys differential expectations and is condescending but not hostile, to the lower achievers while supportive of the higher achievers.
3. The teacher is not critical or condescending to the lower achievers but lets the group know that differences in abilities were the reason that the group was broken up.
4. The teacher tries not to let the children know that ability differences were the reason, but still communicates in some way that she is pleased with the high achievers without communicating similar pleasure to the others.
5. The teacher handles the situation without any fanfare and does not communicate any differential expectations.

4: The Use Of A Model

MODEL:

__1. group __2. broken __3. None

Feedback:

__1. acknowledgement
__2. few specifics
__3. moderate specifics
__4. frequent specifics
__5. always specific feedback

Expectations communicated:

1 2 3 4 5

praise — limits comments
model — about different
crit. — abilities
others

These items measure when and how a child is used as a model for other children. The teacher is probably using a model if she starts spending an extended period of time getting answers from a student who apparently has not been having trouble and who can give her correct answers most of the time, when several other children in the group are having obvious problems with the material. The apparent purpose is to have the model answer questions correctly so that the other children can see how this is done. The teacher may use two or three children, but to be considered as a model, the number should represent a small portion of the group (approximately one third or less).

The coder should indicate if the model was used when a group was intact or after a group was divided. If the teacher used a model both when the group was intact and when it was broken up because of ability differences, then both items 1 and 2 can be checked. At least one of the following three items must be checked for each group observed:

1. The teacher uses a model with the group intact (group). The group has not been broken up because of ability differences, and the teacher uses the model with the entire group present.
2. The teacher uses a model after the group has been broken up because of ability differences (broken). In this case, the group has been broken up and the children who have achieved more rapidly have been sent away except for one or two who remain in the group to serve as models.
3. No use of model (none). There is no apparent use of a model at any time.

When one or both of the first two items has been checked, the sets of items labeled Feedback and expectations communicated must be completed.

Feedback Used With Model

This item measures the teacher's use of specific feedback when using a model. Whenever a model is used, one of these options must be checked.

The teacher's feedback may range from simple acknowledgement of correctness through frequent use of specific process feedback regarding what is correct about an answer and the process used to arrive at the answer.

This rating scale measures the amount of specific process feedback given to a model when he is answering questions in front of the group. The coder should mark the option which most appropriately describes the teacher's feedback to the model.

1. The teacher does not give any feedback beyond acknowledgement (acknowledgement). She says "right" or gives non-specific praise ("good") but never elaborates on what specifically is right about the model's answers.
2. The teacher gives little specific feedback as to process and reasoning (few specifics). The teacher may occasionally comment on a process involved, but the majority of his comments on the model's answers are non-specific, and very few mention any process or reasoning.
3. The teacher gives a moderate amount of specific feedback (moderate specifics). The teacher makes specific process comments on some of the model's answers, but only about half of her feedback is specific.
4. The teacher makes frequent use of specific feedback (frequent specifics). Most of the teacher's comments are specific as to process but there

are still several instances of non-specific acknowledgement.

5. The teacher always gives specific process feedback to the model (always specific feedback). All or practically all of the teacher's comments on the model's answers are specific and process in nature.

Expectations Communicated With Use Of Model

This item describes differential expectations that may be communicated to the model(s) and other children by the praise and criticism meted out by the teacher during the model's answers. A rating of the expectations communicated must be made whenever a model is used.

The degree to which a teacher magnifies differences between the model(s) and the rest of the group, praising the model and criticizing the others, should be noted on this five point scale. The scale points are as follows:

1. The teacher praises the model and in an invidious manner, makes overt comparisons between the model's ability to master the objective and the inability of the others to do likewise.
2. The teacher praises the model's ability and, although she implies that the other students should do as well, her remarks are not obviously disparaging.
3. The teacher praises the model extensively but does not make any disparaging comments about the others.
4. The teacher's use of praise of the model is limited but she does display pleasure in that person's ability apart from the answers given.
5. The teacher limits her use of praise for the model and contains almost all of her comments to the answers. She makes no comparisons in student ability.

5: Appropriateness Of Seating

SEATING:	Teacher-Inapp 1	2	3	4	5 App	☐ Bynd
☐ N/a T.	Child- 1	2	3	4	5	☐ Bynd
☐ n/a Ch.						

Appropriate seating is determined by considering the relative placement of the teacher and children. The children should be subject to minimal visual distraction from the rest of the class and the teacher should be in a position to monitor not only the reading group but also the rest of the class that is otherwise unsupervised. The most likely example of such an arrangement is for the group to be placed in a corner with the children facing the walls and the teacher with her back to the corner. If the group is arranged in this way, or in a comparable configuration, then the number 5 would be circled on the seating scales for both the teacher and the children. Even with an appropriate arrangement, however, the coder must check to be sure that the teacher's view is unobstructed by bookshelves, etc. If the teacher's view is obstructed and she cannot see an area of the classroom where other children are working unsupervised, then the teacher's position does not fit the criteria of complete appropriateness.

Deviations from appropriate seating are defined in terms of percentage of the class not monitored (for the teacher) or the percentage of the group subject to visual distraction (for the children.) For the teacher's scale, a score of "1" indicates that the teacher could not monitor any of the other children in the class, while "3" indicates that she could see 50% of the children, while "5", of course, represents monitoring of 100% of the class, which is appropriate seating. For the children's scale, a score of "1"

indicates that 100% of the children in the group could see other children in the classroom or equally distracting stimuli, "3" indicates that 50% of the children could be distracted in this way, while "5" represents none of the children subject to visual distraction when seated as the teacher directed.

Possible seating arrangements may be limited by the classroom size or shape, so that a teacher may be unable to have appropriate seating. For example, in an L-shaped room, the only place for a group to sit might be in the area that is partially shut off from the rest of the class by walls. No matter how the teacher places the children and herself, there will be no way that the teacher can adequately monitor both the group and the rest of the class at the same time. Therefore, after judging an arrangement as inappropriate to some degree (less than 5 for either the teacher or the children) the coder should consider how easily the teacher could correct the problems to fit these criteria without making major changes in the room, such as knocking down walls. If the teacher cannot correct the situation simply by rearranging the children within the space given, then the situation is considered to be inappropriate due to factors beyond the teacher's control. In this case, the space next to the Bynd should also be checked.

There are also situations which make these items inapplicable for either teacher or child:

1. If a group is conducted in a room by itself and there are no other children for the teacher to monitor, then n/a T (not applicable for teacher) should be checked and no rating of the appropriateness of the teacher's seating should be made. N/a T. should also be checked when the teacher of the reading group is not responsible for

the rest of the children because another adult is with them in another part of the room. If only some of the children are being supervised by another adult, then the coder should only be concerned with the teacher's ability to monitor those that are unsupervised and the appropriateness of her position as it enables her to do so.

2. If there are no other children in the classroom at the time of the group, the n/a Ch (not applicable for children) should be checked and no rating of the appropriateness of the children's seating should be made. If the out-of-group children are in the same room as the group but are supervised by another adult, the group can still be distracted by out-of-group activities. In this situation, n/a T. should be checked, but the seating arrangement for the children should be rated on the five point scale. When n/a Ch is checked, no appropriateness rating of student seating is made.

6. Demonstrations and Explanations

For each new activity undertaken by the reading group, the coder must make a decision as to whether or not a demonstration/explanation was needed and/or occurred.

1. occurred
2. needed/not occur
3. not needed/not occur
4. repetition of demo

Suffic:
1. p.
2. b. av.
3. av.
4. a: av.
5. ex.

Checks for feedback:
1. question
2. repeat
3. demonstr
4. starts les
5. none (wb).

Children's Comprehension:
1. 0%
2. 25%
3. 50%
4. 75%
5. 100%
6. Can't rate

A demonstration or explanation has occurred when the teacher specifically tells the children how to go about doing an activity in which they must apply knowledge by going through some procedure, such as completing a workbook exercise that involves picking words that begin with a certain sound. An explanation of this procedure would include the steps of looking at pictures of words, thinking about the beginning sounds, and then underlining them if they are appropriate. An explanation is purely verbal; a demonstration would use some prop, such as the workbook or flannel board, with the teacher actually going through the procedure step by step. The coder, however, is not asked to make this distinction on the coding sheet. Hereafter, "demonstration" will apply to both kinds of instructions.

If a demonstration does occur, the coder must indicate that it occurred, then make a rating as to the sufficiency, feedback, and child comprehension of the demonstration. If a demonstration does not occur for an activity, then the coder must rate whether or not a demonstration was needed, whether or not the teacher checked for feedback, and how well the children comprehended the task without further instructions. If a demonstration does not occur, the coder should not make a mark in the area marked "sufficiency".

There is room on the coding sheet for five demonstrations or repetitions of demonstrations. As the first activity begins, the coder makes a mark in one of the first four rows in the column headed by the number "1". The coder then procedes down that same column to mark the sufficiency, feedback and child comprehension for that activity.

The description of the second activity's demonstration is completed in the column headed "2" and so on.

The first four items indicate whether a demonstration was needed and/or occurred. For each activity for which a demonstration could be given, the coder should check one of these four alternatives:

1. Occurred. A demonstration occurred regardless of whether or not the coder felt it was necessary.
2. Needed/Not Occur. A demonstration was needed but did not occur. In the coder's opinion, the children needed instructions but did not receive them.
3. Not needed/Not Occur. A demonstration was not needed and did not occur. The children were familiar with the activity and did not need to have it explained to them.
4. Repetition of demo. This indicates a subsequent demonstration following an unsuccessful demonstration.

To determine whether or not a demonstration was necessary, the coder should consider the nature of the activity (whether it asks the children to do a task for which the procedure must be explained, such as a workbook or feltboard activity as opposed to reading in the readers or answering questions in the group asked by the teacher about content, word recognition, etc.). The coder must also consider the class's previous experience or apparent previous experience with the task. That is, if the coder feels that the group has obviously done an exercise enough to know the directions, then the teacher does not need to explain the procedure each time the children do the activity. This is a subjective judgment, since the coder will not actually know what has taken place in the days she/he was not coding. It can be determined by the teacher's statements or the children's apparent

readiness to do the activity. However, even if there is an indication that the task is not new, if the children seem to be confused about how to do something, and appear to need instructions on a procedure, then the coder may decide that demonstration of instructions is necessary for that group that day. When in doubt, the coder should assume that a demonstration is not needed.

It may happen that a teacher demonstrates or explains an activity and for some reason the children do not understand and require another demonstration. This may or may not be a reflection on the sufficiency of the demonstration. A teacher may complete such a demonstration, then check the children for feedback or attempt to start the lesson and find that some of the children understand. If she then repeats the demonstration, the coder should rate the original demonstration, then begin a new column by checking Repetition of demo and proceed to rate the second demonstration for the same activity. The same procedure is used if a teacher begins an activity assuming the children understand how to do it, but discovers in the course of the activity that the children do not understand the instructions, so she backs up and explains. In this case, the coder should have one column headed by Needed, Not Occur with a description of the feedback and initial child comprehension, and a second column headed by Repetition of Demo, followed by a description of the sufficiency, feedback, and child comprehension of the demonstration. The Repetition of Demo column is used whenever an activity which has already been coded in the "Demonstration/Explanation" section is re-explained by the teacher.

Rating The Sufficiency of a Demonstration

The second type of information coded for a demonstration is it's sufficiency. Considering the clarity and organization of a demonstration, the coder should rate it at one of the five points indicated between poor and excellent.

Criteria for a clear and organized demonstration are as follows:

1. The teacher uses specific words so that all relevant labels are presented.
2. The teacher speaks in a slow, distinct manner.
3. Certain aspects of the task are emphasized that are more important or difficult and therefore need special attention.
4. All relevant steps are included and are mentioned in the order in which they should occur.

An excellent demonstration meets all of the criteria listed above. A poor demonstration meets none or almost none of them.

Checking For Feedback To A Demonstration

These items indicate whether or not and if so, in what manner, the teacher checked the children for understanding of instructions after an explanation was given. It is also used to describe how she found out if the children understood what to do when she did not give an explanation. The coder should indicate which type(s) of checks for feedback occurred:

1. Question. The teacher asks if the children understand or if they have any questions. It is up to the children to respond.

Otherwise there is no clarification. This category is checked when the teacher makes a statement such as, "Do you all remember how to mark the right answers in your workbooks?" or "Do you understand?" It is up to the children to formulate questions about what they do not understand.

2. Repeat. The teacher asks a child or children to repeat the directions back to her, or asks the children some question(s) about the instructions.

3. Demonstr. The teacher has a child or children do the task or part of the task while she is watching. This may or may not also involve verbalization of the instructions, but if the child is asked to do the task, it is checked here rather than in the first two categories.

4. Starts les. The teacher starts the lesson without intentionally asking the children for feedback, but since she keeps the children in the group and goes through the lesson with them, she inevitably gets feedback as to whether or not they understand the instructions.

5. None (wb). This item is checked if the teacher has not done anything to check for the children's understanding. This usually occurs when, immediately after a lesson is explained, the children are sent away from the group to do the lesson with no checks for feedback at that time.

It is possible for combinations of the first four to occur for one demonstration, but a check for None (wb) excludes consideration of the other four items.

Children's Comprehension Of Instructions

These items measure the children's comprehension of the instructions whether or not a demonstration was given. This is a subjective judgment by the coder based upon their performance on the task if the coder sees this. If the children are assigned seatwork activities, the coder may not see their performance and therefore may not be able to rate their comprehension. In this case, check Can't rate in the comprehension column. Can't rate will often be checked in conjunction with None in the feedback column, indicating that the children were not in contact with the teacher when they worked on the lesson and so neither the coder nor the teacher at that time can estimate how well the children understood the instructions.

If the coder does observe the children working, she/he must decide if any inadequate performance is due to a lack of a skill or a misunderstanding of instructions. If the child cannot perform a task even after having had the directions clarified, then the problem may more likely be due to a lack of skill and the demonstration should not be penalized. However, if the instructions are made clearer, and the child's performance improves, then the instructions were probably not clear enough to begin with and the children's comprehension of instructions should not receive a high rating.

The scale points are:

1. None (0%) or almost none of the children understood the instructions for the task

2. 25% of the children understood the instructions for the task
3. 50% of the children understood the instructions for the task
4. 75% of the children understood the instructions for the task
5. 100% of the children understood the instructions for the task
6. Can't rate. The children were sent out of the group to work so their understanding of the instructions is not apparent to the coder.

7: Presentation Of New Words

These items record several aspects of the ways new words or letters can be presented to the reading group. New words or letters are defined as relatively new symbols which the children will be asked to use in some way in the lesson to follow.

Five sets of checklists must be considered in coding the presentation of a new symbol. Within each of the first three checklists, one option must be checked for each new word. Each checklist is independent of the others, and any combination of circumstances is possible.

NEW WORDS:	1	2	3	4	5	6	7	8	9	10
1. begin										
during										
2. give										
child										
3. phonic										
context										
both										
neither										
1. choral										
indiv										
2. all										
some										

1. When the word is presented: at the beginning of the lesson (begin) or during the reading turn when encountered (during). If the teacher says the word or has a child say it before the activity of the lesson actually starts (such as reading a story), then before should be checked. If the teacher does not see that the word is said before the lesson starts but instead waits until the child comes across it, then during is checked. The teacher may point out that a new word is present before the lesson, but unless the word is actually pronounced and read before the reading of the story, then it is scored as during.
2. Who first says the word: the teacher gives it (give) or the child has to figure it out (child). If the teacher gives a new word to the children without attempting to have them figure it out, then give is checked. If the teacher tries to have the children sound out the new word or otherwise figure it out, either with or without clues from the teacher, then child is checked. Even if the teacher eventually has to give a new word to the children, if she tried beforehand to have them figure it out, then child is checked.
3. How the word is presented: with phonics clues (phonic), context clues (contxt), both in combination (both), or neither (neither). Clues may be given when the teacher gives a word and explains how to recognize it, calls on a child and tells him the clue, or calls on a child and directs him to figure out certain aspects of the word. Phonic clues (phonic) focus on something

about the word's sound ("Look at the first letter and say the sound." "It rhymes with boat.") Context clues (contxt) tell something about the word's meaning, focus on pictures, or figure out meaning from other words in the sentence. ("Look at the picture and think what word makes sense here." "Read the rest of the words and think what words might go here."). The category of both is used for clues which mention both phonics and context. (For example, "Look at the beginning and ending sounds, and then think what word with those sounds makes sense there.") The category of Neither is checked if the teacher has given the word without any explanation or has asked a child to read it without giving him any clues. Nothing is ever mentioned about word attack skills which could be applied. (For example, "This new word is right.") This would also be the case if a child could read a new word without clues and the teacher affirmed his answer without any explanatory feedback.

If the teacher has the children repeat a new word after it has been presented, then the coder should proceed down the column to complete items 1 and 2 below the dark line, which have to do with the manner in which the word was repeated. If the teacher does not have the children repeat a new word, items 1 and 2 below should be left blank.

1. Choral (Choral) vs. individual (individ) repetition. If the teacher has the children repeat the word in groups of two or more children, then choral should be checked. If the teacher has individuals say the word, check indiv. If the teacher

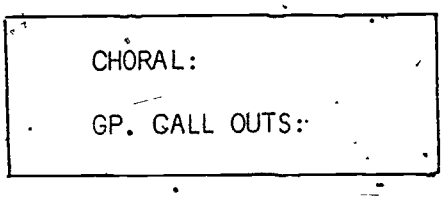
mixes these methods for the same word, check the method used with the most children.

2. All of the children repeated the word (all) vs. some of the children repeated the word (some). If the teacher asks each child in the group to say the word, whether individually or in a group, then all should be checked. If only some of the children are asked to repeat the word, then some should be checked. For each word, only one of these options can be checked.

8: Choral Responses and Group Callouts

These two items are used to tally responses made by more than one individual at a time and are, therefore, not coded on the low-inference sheet.

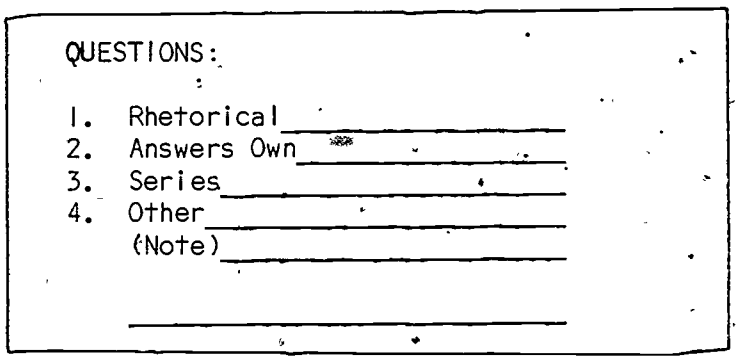
Choral Responses. This item measures the frequency of choral responses requested by the teacher. Whenever the teacher asks two or more children to respond in unison, it should be tallied here. This category includes repetitions ("OK Class, repeat after me...") and other group recitations ("All together now, what are the vowels?")



Group Call Outs. This item is a tally of all the times two or more children call out an answer that is accepted by the teacher. If one child of the group who called out receives individual recognition, it is coded

on the low inference sheet as an individual call out. If, on the other hand, a teacher addresses a question to the group which an individual child could answer, but instead several children call out the answer, then it is counted as a group call out. The distinguishing factor between choral responses and group call outs is that choral responses are asked for by the teacher and "orchestrated", often by preceding her questions with statements such as "Class," or "All together-". Group call outs, on the other hand, are potential individual response opportunities that fail to be so because several children call out the answer.

9: Undesirable Questions



These items are frequencies of various types of undesirable questions. A question is undesirable if it confuses the children because it calls for unreasonable answers or gives the children ambiguous clues about their responsibilities to respond.

The frequency of occurrence of each type of question should be kept by making hash marks in the space for each type of question.

1. Rhetorical questions are questions asked for effect only, with the answer being apparent from the question. (An example is,

"Isn't it a beautiful day outside?" when it obviously is.) However, an easy question with an apparent answer is not necessarily rhetorical, since the teacher may be asking a legitimate academic question with a guarantee of success. A rhetorical question is more of a conversation "filler" and does not call for any kind of skill or reasoning beyond realizing the teacher's intent and agreeing with her tone of voice.

2. Answers own questions. This category is checked if the teacher asks a question and then answers it herself. This may occur when a teacher answers her own question without giving the students an opportunity to do so, or when she addresses a question to the class in general and gets no response, so she simply gives the answer. In either case, the children sit passively. If a teacher calls on a particular child to answer, then this is coded as a private response opportunity and not recorded here, even if ultimately the teacher has to provide the answer. The discriminating factor in marking Answers own is that none of the children are in any way involved in answering the question.

3. A series of questions occurs when the teacher asks two or more different questions in a row without waiting for an answer. The questions may all have the same answer, but their phrasing is such that they could be considered separate questions to someone who did not know that answer.

4. Other. This category should be checked and the question

described if, in the coder's opinion, the teacher has asked a question whose phrasing makes it undesirable, as defined above, that cannot be coded in any of the above three categories.

Part II

Using the Low-Inference Coding Sheet

On this sheet is recorded more specific information about teacher-child interactions. There are two types of situations appropriate for coding: public response opportunities and behavioral contacts. Nothing is coded for social, procedural, or private interactions of any kind. (A private interaction is one involving a single child and the teacher away from other children, so that no one is questioned or listened to but the one child at that time. This is distinguished from a public situation in which, although the teacher may deal with one child at a time, other children are listening and could participate at any time.)

Time measures

Coding on this sheet begins when the teacher starts the reading lesson. This corresponds to the end of the time interval described as Time to lesson on the high-inference sheet. At this point, the coder should enter the beginning time of the lesson (start time) on the first page of low-inference coding. This is necessary in order to compute total time used for coding on the low-inference sheet. When the group is dismissed, the time should be noted as stop time on the last sheet of coding. Within a set of coding sheets, various intervals of time may be noted by using the start and stop times for each page of coding to determine amounts of time used for each lesson context. (See lesson contexts below.)

If the teacher leaves the group at any time during the lesson, the time should be measured to the nearest half-minute and entered under Teacher out at the top of the low-inference coding sheet being used at that time. If the

reason for leaving the group is beyond the teacher's control (a child gets sick, the phone rings, a messenger comes) rather than being a routine matter (disciplining other children, getting materials, checking seatwork), then check Bynd for that time.

Lesson Contexts

For each coding sheet, one of the five lesson contexts should be checked. Whenever the lesson activity shifts to a new context, a new coding sheet should be started, but different activities within the same contexts may be continued on the same sheet (although noted as different activities for the Demonstration ratings on the high-inference sheet if applicable.) The start and stop time for each context should also be noted at the top of the coding sheet.

1. Non-workbook, slow-paced response opportunities (Slow, No WB). The predominant activity is teacher-questioning and child-answering and the pace is slow. The children do not have workbooks or worksheets on which they do exercises, and a child's only opportunity to respond is to teacher questions. The children are not reading stories from a reader, although other reading activities can be involved, such as reading words on cards or vocabulary lists.) This is considered the most conservative category, and is therefore to be checked when the coder is unsure of the context or can not decide between this and another category.

2. Workbook or worksheet activities (WB). This activity is evidenced by every child having some materials to work with. These may be workbooks, mimeo sheets, blackboards, bingo cards, etc. The distinguishing feature of this activity is that each child has something in front of him on which to make responses,

regardless of whether the teacher is also asking for public response opportunities. Therefore, even if a child never is coded for an interaction he still has probably performed some activity during the lesson. This is in contrast to the first situation described above, in which an absence of lines coded for a child would indicate that the student never had a chance to apply a skill and receive personal feedback. In this context, also, there may be many private work contacts which will not be coded as response opportunities because they were not questions asked for the whole group to hear. This context is checked when the teacher is presenting an assignment in a work book or worksheet to be done after the group. The time for the explanation is recorded for this context whether or not any response opportunities occurred, since the setting does not necessarily exclude response opportunities.

3. Drills (Drill). This activity consists of a series of fast-paced questions and answers without the use of a workbook or worksheet. The distinguishing feature of this activity which sets it apart from the first category (Slow, no WB) is its pace. This is obviously fast, with the teacher going rapidly from child to child. Usually, there is little feedback beyond acknowledgement. Examples of such activities are word recognition drills. This is to be distinguished from a sequence of word recognition questions at a slow pace when the teacher is giving each child a few seconds to "think" and frequently offering clues and process feedback. If the coder cannot decide if the pace is rapid enough to place it into the Drill category it should be considered as an example of Slow, no WB instead. That is, items classified here are unquestionably fast-paced.

4. New reading in texts (New reading). This category is checked when the children are examining a new story for the first time. This is a story, not just single word identification exercises or display-board work. The children are asked to read the story, usually silently, and they may be asked to read aloud or to answer comprehension questions. Questions occurring after the story or before it but related to it are considered part of this activity and so are coded in the same context as any reading. If the lesson shifts to another activity such as a workbook activity even though related to the story, then the coder should go to a new page, note the new context, and continue coding.

5. Rereading in texts (Rereading). This activity involves the children reading a story which they obviously have read before. Their experience with the story can be determined usually by what the teacher says. If it cannot be determined that the children have seen the story before, then the activity should be considered New reading, as discussed above. Again, any questions related to the story are coded in the same context as the reading, but if the lesson switches to a qualitatively different activity, then a new page should be started.

Response Opportunities

A response opportunity is a teacher-initiated, public, academic demand made on a single child in the reading group setting after the lesson has started. This part of the coding system is therefore used only to record information about teacher-initiated academic interactions with individual children. It does not include any child-initiated work contacts, except for call-outs and volunteering in response to a teacher question, nor does it include social, procedural, private work-related or out-of-group contacts.

RESPONSE OPPORTUNITIES

SELECTION										QUESTIONS									ANSWERS				FEEDBACK												
Initial					Subs					Read				Non-read															Term			Sust			
ORDER	PRE	NVOL	VOL	CALL	CONT	ERROR	COMM	TURN	END	REP	RdCHC	WdREC	WdATT	PERS	CHOIC	PROD	COMP	INTRP	CORR	INC	DK	NR	NOFB	EMPH	PRCS	PRAIS	CRIT	SPEC	GA.	AO	CALL	NEWQ	RPT	CLUE	GIVE

Each line of coding in this section must contain a child's number, the type of selection, the type of question, and the response of the child. In addition, any teacher feedback beyond mere acknowledgement should be noted by checking the appropriate types of feedback.

Child Number (CHD#)

Every child should have been assigned a unique number, and when an interaction involving the child occurs, the number should be entered in the column labeled CHD#. If the child is a male, record it under Male (M), and if a female, under Female (F). The rest of the coding of an interaction involving that child occurs on the same line as the number. When an interaction involves more than one line of coding, the child's number must be repeated on every line.

Types of Selection

The categories listed under the heading of "Selection" describe how the child was chosen to answer a question. A distinction is made between initial selection, (Initial), the way in which the child was first chosen to interact with the teacher, and subsequent selection, (Subs), the reason that the child continues to have interactions with the teacher after the first of a series. Types of initial selections are Preselect (PRE), Ordered turns (ORDER), Non-

volunteer (NVOL), Volunteer (VOL), and Call out (CALL). The types of subsequent selections are Continue (CONT) and Error Correction (ERROR).

Initial Selection

The most important distinction to be made here is between selection based on order of seating and random selection based on other cues. When the selection is made according to order of seating, the teacher is going from one end of the group to the other, asking each child in turn the next question, with only occasional deviations from this order. The actual words used in selecting the child may be identical when such Ordered turns (ORDER) are used and when one of the other four methods of selection are used. The main difference is that Ordered Turns (ORDER) follow a pattern based on seating, and the other types of selection do not. Therefore, the coder must not only listen to what the teacher says but also notice any general pattern of selection. Until such a pattern is discernible, the coder should use a category besides ORDER. After coding several lines as other categories and then realizing that they follow the seating pattern, the selection types can then be changed to ORDER.

Ordered Turns (ORDER). This category is checked when the teacher selects a child on the basis of his seating position because she is using a pattern in her selection such as going from one side of the group to the other. The teacher may or may not name a child before asking a question, but both the selected respondent and the rest of the group could know who will answer the question before it is asked because the teacher is obviously using some kind of a pattern based on the group's seating position. However, for Ordered turns (ORDER) to be

applicable, that pattern must be apparent to the children in the group. Therefore, even if it is apparent to the coder that the teacher is selecting the children in the same order again and again, if this pattern is so complex that the children do not recognize it (as would be the case if the teacher was asking every third child, for example) then Ordered Turns (ORDER) should not be checked. The important point to remember when coding ORDER, therefore, is that the children are aware of the pattern and know who will be called on next, whether that child is named before the question is asked or not.

Ordered turns (ORDER) is also checked when the children are reading assigned parts in a story if they automatically know who will read next because the character's names or pictures are listed.

Preselect (PRE). This category is checked if the teacher names a particular child before asking a question, and is apparently not selecting the child because of his seating position in the group. The important thing to remember about coding a Preselect (PRE) is that everyone in the group knows who will have to answer before the question is asked. Another important point is that before the respondent was named, he did not know that he was going to be called upon.

An Ordered Turn (ORDER) is therefore to be distinguished from Preselect (PRE) in that, when Ordered Turns are being used, the children know before the child is named who will have to answer the next question, while in Preselect, the children do not know who will answer the question until the teacher designates a child.

Example: T: Paul, what was the name of the boy in the story?

P: George. (This would be coded as PRE unless it was part of an ordered pattern.)

Nonvolunteer (NVOL). This category is checked whenever the teacher asks a question, then calls on a child who has not volunteered to answer and who is not previously designated to answer it because of his seating position. Nonvolunteer (NVOL) may be checked whether or not other children in the group have volunteered to answer the question. The important points to remember are that the child has not offered to answer the question, the child is not expected to be ready to answer the question because of his seating position, and the teacher gave no indication before asking the question as to who would be chosen to answer.

When the coder is not sure whether to code Preselect (PRE) or Nonvolunteer (NVOL), she/he should code Nonvolunteer (NVOL).

Example: T: What was the name of the boy in the story?

Paul does nothing to indicate he wants to answer, and he is not sitting in a position that is to be called on next.

T: Paul, you answer that.

Volunteer (VOL). This category is checked whenever the teacher calls on a child who has indicated by raising his hand that he wants to answer a question. The teacher selects the child because he has volunteered and not because he is sitting in a position to be called upon next. Therefore, the important point to remember in coding Volunteer (VOL) is that the child called upon has indicated a desire to answer the question, and this desire was influential in having the teacher call upon him, regardless of where he was sitting.

If uncertain about whether to code Volunteer or Nonvolunteer, check Nonvolunteer.

Example: T: What was the name of the boy in the story?

Paul raises his hand.

T: All right, Paul, you answer that.

Call Out (CALL). This category is checked whenever a child answers a question when he has not been designated by the teacher to answer that question (either by his seating position or by having been named by the teacher) and his answer is accepted by the teacher. An important point to remember when coding Call Out (CALL) is that the teacher must respond to the content of the child's answer. If she only corrects the child for his calling out behavior or ignores it completely but does not respond to the actual content of the answer, then no entry should be noted in the Response Opportunity section, but the event should be noted in the Behavioral Contacts section of the coding sheet. If the teacher responds to the academic content of the answer but also comments on the calling out behavior, then note the interaction in both sections. (Refer to the discussion of call outs under Behavioral Contacts.)

The Call Out (CALL) category is used only to describe individual call outs in which the teacher responded to the individual child who called out. If the teacher asks a question which is answered by more than one child calling out at once, and the teacher then responds to the content of that answer without giving any individual feedback or acknowledgement, then the interaction is not noted here. Instead, the event should be noted under the heading of Group Call Outs on the high-inference coding sheet.

When unsure whether to code Call out or Volunteer, check Volunteer.

Subsequent Selections

One of the five categories described above is checked every time a child begins a codable academic interaction with the teacher. If the interaction requires more than one line of coding, every line after the first for that child should have

selection indicated by checking either Continue (CONT) or Error Correction (ERROR). A check in one of these two columns indicates that the child and teacher continue to interact without being interrupted for more than a short answer by another child's response opportunity. Once another child does interact with the teacher and the teacher does not immediately return to the first child to continue a question or reading turn, one of the initial selection categories must be checked again the next time the first child is called upon.

Continue (CONT). This category represents a continuing interaction with a different demand than that described in the preceding line of coding. For example, the teacher might have asked a question which was answered correctly, and then asked another related but different question to the same child. Another case might be the child not knowing the answer to the preceding question and the teacher giving him the answer and then asking a new question. Therefore, this category may be checked regardless of how the child performed on the immediately previous demand. The important criterion for checking Continue (CONT) is that the new question represents a different demand on the child. It does not represent an effort to improve a previous response, even though the two questions may be related in content.

Error Correction (ERROR). This category is used to indicate an interaction which is being continued for the purpose of improving a previously unsatisfactory response. Therefore the demand on the child is essentially the same as that of the previous line of coding, even though the form of the answer may be changed slightly to serve as a clue to the desired answer, as when a Word Recognition (WdREC) question is missed and the teacher gives a clue by asking a Word Attack

(WdATT) question. Even though the form of the question has been changed, the purpose is still to get the child to answer the previous Word Recognition question.

The following dialogue presents examples of the different types of subsequent selection:

T: What is this word?

P: Bell. (INITIAL SELECTION OF SOME SORT)

T: Good, Paul. Do you know what this word is too?

P: Tell. (CONTINUE coded for this line.)

T: And this one?

P: Horse. (CONTINUE)

T: No, it's house. Try one more.

P: That's ant. (CONTINUE)

T: No, Paul. Look at the last sound. What does this letter say?

P: d-d-d-d-d. (ERROR CORRECTION of miscalled word and)

T: So what is the word?

P: And. (ERROR CORRECTION, since the teacher is still trying to get an improved response from a previously incorrect answer.)

Continue (CONT) will always be checked when the previous line shows New Question (NEW Q) in the section for Sustaining Feedback. It will also be checked when a reading turn is being coded, and an interaction has just taken place and been completed about an incorrectly called or unknown word and the child has returned to reading the text. In this case, New Question (NEW Q) will not have been checked on the previous line.

Error Correction (ERROR) will always and only be checked when one of the other types of sustaining feedback has been checked on the previous line, either

Repeat (RPT), Clue (CLUE), or Give by clue (GIVE). Refer to the section for Feedback for a discussion of these categories.

Comments

The category labeled COMM for Comment is checked whenever the teacher asks a child about another child's answer in any way other than asking him directly to supply an answer which the first child has not provided. A Comment (COMM) would be coded if the teacher asked the child for his opinion of the answer, whether he thought it was right or wrong, whether he can add to it (without implying that the first answer was wrong and the child should correct it) or simply to repeat it. Therefore a complete line of coding for this situation would include the child's number, the type of selection, a check under Comment (COMM), the type of question being asked to the child (not necessarily the same as the question he is being asked about), and his answer, along with any feedback. Remember that if the first child has answered incorrectly, and the teacher asks the second child for the answer, it is not noted in the Comment (COMM) column and is instead considered an Ask other (AO) type of feedback to the first child. See the discussion of Ask Other in the section on Feedback.

Examples: "Robert, what do you think of Richard's answer?"

"Sue, can you add anything to that?"

"Michele, was that right or wrong?"

"Daniel, what did Kevin just say?" (This would also be noted as an Emphasis (EMPH) on the previous line. See the discussion of Emphasis in the Feedback section.)

Reading Turns

Two columns labeled TURN and END are located on the coding sheet before the Question section. Like the Comment (COMM) column, they are used to indicate that

a particular kind of situation (a reading turn) is being coded, and therefore serve as additional checks on a line for which all other pertinent categories are also checked. That is, TURN and END do not substitute for any other categories, but are coded in addition to them.

A reading turn is defined as an extended series of single response opportunities in which a child is asked to recognize and say a series of words or letters. The most common format for this is the basal reader, when a child is asked to read one or more lines in a story, but the situation also includes reading from a letter list or word list in a workbook. These demands are considered series of response opportunities because the child is being asked to answer several Word Recognition (WdREC) questions in a row. This is to be distinguished from a demand to read a single word, then a new question to read the next, then an additional request for the next, etc. Calling on a child for a reading turn conveys the expectation that he will read more than one word until a specified limit or until he is stopped by the teacher.

In order to keep from coding every word in a reading turn as a single question, even though each word is essentially a response opportunity, the two columns, TURN and END, are used to note when a turn is taking place, and only interactions with the teacher involving some single words (usually those missed or not known) are recorded. This means that all words called correctly by a child in a reading turn and not commented on by the teacher are not represented as single lines of coding, as they would be if they were presented as separate questions, one at a time.

When a child is called upon to read for a reading turn, the coder should note the child's number and type of selection and then wait until an interaction with the teacher occurs or the turn ends with no mistakes and, therefore, no interactions involving single words.

If No Errors Occur During A Turn

If the turn ends with no errors being made, the coder should check END to denote the End of Turn, and then mark Word Recognition (WdREC) as the type of question, and Correct (CORR) as the answer. Then the feedback beyond acknowledgement given to the turn as a whole should be noted on the same line as the check for END. If the teacher says nothing to the child, and goes onto the next person to read, then No Feedback (NoFB) should be checked. The only other categories applicable for feedback to the End of Turn (END) are the first five after No Feedback: Emphasis (EMPH), Process (PROS), Praise (PRAIS), Criticism (CRIT), Specificity (SPEC), and New Question (NEW Q). The rest of the feedback categories are applicable only to interactions about single words, not to the turn as a whole.

If Errors Occur During A Turn

If mistakes occur during the turn, the coder should check TURN to denote that the interaction coded on that line occurred during a Reading Turn, then check Word Recognition (WdREC) to indicate the type of question, then check either Incorrect (INC), Don't Know (DK) or No Response (NR), depending on how the error occurred. (Refer to the section on Answers for definitions of these situations.) The rest of the line should then describe the teacher's reaction to the mistake, in the same manner as the categories would be used to describe an interaction.

involving a single word recognition question in a non-turn situation. If the teacher uses one of the last three kinds of sustaining feedback (RPT, CLUE, GIVE) in an effort to improve the child's response and help him figure out the word, then the next line of coding will show the child's number, Error Correction (ERROR) for selection, TURN to indicate that the interaction is occurring during a turn, and the type of question that is asked to the child to improve his response. (This will be another Word Recognition question unless the teacher asks for a different answer such as the beginning sound, the first letter, etc. This would be recorded as a Word Attack question. Another change from Word Recognition might occur if the teacher rephrases the question into a Reading Choice (RdCHC) concerning the word in question. Other question categories are also applicable. The rest of this line then records the child's answer to the second question and the teacher's feedback. The interaction may then be continued for as many lines as necessary until the child gets or is given the word. When the interaction concerning that word is ended, the coder should drop back to the next line, note the child's number, check Continue as the type of selection, and wait until the child either finishes the turn or another interaction about a single word occurs.

If another interaction about a single word does occur, the coder would treat it in the same way. When the child finishes reading and all interactions about single words have been completed and coded, the coder should start a new line, note the child's number, check Continue (CONT), and then check END to denote the End of Turn. Then the question type is automatically Word Recognition and the Answer is Incorrect to indicate that the child did not read correctly all the way through, (or possibly No Response if the child did nothing when called upon to read in which case the selection would be an Initial type). The rest of

the line describes the feedback given by the teacher to the turn as a whole, again using one of the first six categories of feedback or New Question (NEW Q) if something beyond acknowledgement is given, but never using one of the last seven categories (except for New Question). These are only used to describe interactions about single words or questions.

In summary, the coding of a reading turn includes one or more lines of coding with the child's number on every line. A type of initial selection is noted on the first line and all other lines have either Continue or Error Correction checked for the type of selection. (This is true even if the turn is interrupted for another child's comment or answer, after which the first child resumes reading. The coding for the second child would have an Initial Selection and no check for TURN.) The last line of coding for a reading turn will have a check under End of turn and the rest of the line describes the turn as a whole. Any other lines included in the coding of a reading turn will have checks under TURN category and will describe interactions with the teacher about single words. Therefore, TURN and END may not be checked on the same line.

If a child finishes reading and then is asked comprehension questions about his reading, TURN and END are no longer used, since they are checked only on lines that describe the actual act of reading. If a child finishes reading and then is asked questions about the story, and then resumes reading the next paragraph, then the line denoting the End of the Turn (END) should occur at the very end of the last passage of reading. If comprehension questions interrupt the reading, then the coding sheet would reflect a series of lines (assuming interactions occurred in the first part of reading) with TURN checked, then lines without TURN checked and some Non-reading Question categories checked, and then a resumption of TURNs being checked (again assuming interactions occur) and

finally an END line, reflecting the reading involved in the turn, not the performance on the comprehension questions. If the child read completely correctly, then was asked Comprehension questions, then again read correctly, the coding would appear as a series of Comprehension questions followed by a line marked END and a description of feedback to the reading turn as a whole.

Types of Questions

The nine categories for "questions" are divided into two major classes: Reading demands (labeled Read on the coding sheet) and Non-reading Questions (labeled non-read.). The categories under Read have to do with demands placed on the child to read a word, letter, or identify a sound or component of a word. The purpose behind such demands is to have the child focus on the process of reading, of labeling arbitrary symbols and/or their components.

Non-reading questions (Non-read) include any other demand that does not focus on the act of reading for its own sake. This is likely to include demands that call on memory of labels or events other than that involved in word and letter identification.

A line of coding must have one and only one check in a "question" category.

Reading Questions:

Repetition (REP). This category is checked whenever the teacher has the child repeat a word which has just been read to him. It does not include requests for repetition that involve extended recitation of something such as a nursery rhyme. It only includes brief requests to repeat a word or short series of words for which a visual demonstration is present and immediately after the teacher has said the word(s) so that the child can read them by repeating. Since it is included in the categories listed under Read, it should

only be used when the child is repeating a word for the purpose of reading it (i.e., looking at the written symbol and saying it, even though it has just been given to him.)

Examples: "This word is tigers. Say tigers."

"That letter is an h. Can you say H?"

"This letter makes the snake sound, s-s-s-s-s-s. Make that sound with me."

Reading Choice (RDCHC). This category is checked when the child is presented with a discrete set of four or fewer alternatives to be used in identifying a word, letter, or sound. The alternatives may be listed in the question, or the question may be in the form of a "yes-no" choice. Again, since the category falls under the general heading of Read, it should only be checked when the purpose behind the question is to get the child to associate a label with a word, letter, or sound and this is done by making the question a choice. In order to be a true choice for the child, the alternatives should be made easily apparent. A question such as, "Find all the objects in the room starting with the "r" sound" is not, therefore, a Reading Choice (RDCHC) question. But "Which of these four pictures has a name that starts with the "r" sound?" does clearly define the choice to be made by presenting the alternatives to the child all at the same time.

Workbook questions that become response opportunities should usually be coded as Reading Choice (RDCHC) unless the coder can be certain that another category applies.

Examples: "Is this word dog or cat?"

"Is this word Dog?"

"Is that a b, p, q, or d?"

"Do you hear a "t" sound?"

"Clap if these two words start with the same sound."
(The child has the choice of clapping or not clapping.)

Word Recognition (WdREC). This category is checked whenever a child is asked to look at a written symbol, whether a letter or a word, and attach a label to it as a whole. It does not involve sound identification, which is considered in the next category, Word Attack (WdATT). This category is concerned only with whole-unit labeling. It can be used for single interactions, in which a child is asked to identify only a single word or letter at a time before receiving feedback, or it can be used in conjunction with the Reading Turn and End of Turn (END) categories to describe any interactions which take place during a reading turn.

Examples: "What is this word?"

"What is this letter?"

"Read the first four lines."

Word Attack (WdATT). This category is checked whenever the teacher asks a question about reading which involves a). sounds of words and letters and/or b). the process of breaking a word or letter down into its components. This includes any kind of sub-unit analysis after the whole word or letter has been presented either visually or auditorally. This includes questions asked about phonics and sounds involved in words or letters, and it also includes questions about letter-by-letter analysis of a word once the word has been presented as a whole. The category also includes questions about the process of word analysis.

Examples: "What is the first sound you hear in dog?"

The child is attempting to read the word tree, and the teacher says, "What are these first two letters?"

"How did you know that word was cat and not cot?"

"What are some sounds that this u can make?"

"What's alike about cat and hat?"

"This word is hat. If we change this letter, what's another word we could make?"

Non-reading Questions:

Personal Questions (PERS). These questions are asked for the purpose of eliciting a child's own personal experience or opinion as it relates to the academic topic. When such questions are asked for non-academic reasons, such as socializing, they are not coded.

There are not any "correct" answers, per se, although Personal (PERS) questions may be evaluated for their appropriateness. Personal questions can be identified by their open-ended nature in that there is no one right answer, and their personal nature, in that the answer depends on each individual child's experience and/or feelings. The child does not have to apply any other criteria than his own memory or perferences, and he does not have to supply justification or reasoning for his answers.

Examples: (when relevant to lesson topic):

"Have you ever ridden on a train?"

"Do you have a pet?"

"Would you like to have a dog like Pug?"

Non-reading/Choice (CHOIC). The form of Non-reading Choice (CHOIC) questions is the same as that for Reading Choice (RdCHC) demands. The only difference is that the content deals with something besides the actual act of reading words or letters or hearing sounds. Again, four or fewer alternatives must be presented to the child specifically, such as asking him to choose a picture from a limited collection rather than asking him to look

at all the objects in the room and find something.

Examples: "Was the boy in the story happy or sad?"

"Is that a comma or a period?"

"Is this a picture of a camel?" [but "Is this a picture of something that begins with the "k" sound?" would be Reading Choice (RdCHC)].

Product (PROD). In this category are included questions that require the child to reproduce from memory some fact, label, or understanding to which he has been exposed previously, with the exceptions of 1) recognition of words, letters, and sounds and 2) any questions about comprehension of material that has just immediately (in the reading group setting) been read by the child or which he has just heard read. However, questions about stories read on the previous day or earlier and being reviewed are coded in this category.

Examples: "What is this picture?"

"What was the name of the story we read yesterday?"

"What is a shovel used for?" (assuming they have not just read the answer in the story.)

"Tell me something about Christmas."

"In our reading yesterday, what did we find out about the moon?"

"What do you have to do in a fire drill?"

"Make up a sentence with the word here."

Comprehension (COMP). This category is checked whenever the teacher asks questions about a story which the child has just read or heard read in the group. The expected answer must be something which the child could know by having heard the story, and therefore requires nothing beyond memory. If the coder is unsure about whether the children have just read the story

or if they are being reviewed from a previous lesson, the question should be coded as Product rather than Comprehension, since Comprehension is limited only to factual questions which can be answered from a story which the child has just heard or read.

Examples: (Assuming that all of these questions could be answered by remembering occurrences in a story just read.)

"What does Ben want to do?"

"Why do the boys want to go to the zoo?"

"What did Nancy tell her mother?"

Interpretation (INTRP). Interpretation questions require the child to make predictions, evaluations, or interpretations based on story content or other facts known to the child. In order to answer such questions, the child must go beyond the factual information, and therefore cannot rely on memory alone to answer the question. He must apply some criterion and reasoning process to generate an appropriate answer. The answer usually does not have any one precise right answer and the child may be asked to justify his reasoning.

If the coder cannot determine if a question is one of Interpretation or Comprehension, Product, or Choice, the most appropriate of the latter three should be coded.

Examples: "Why is there a cage around the Tiger Pit?"

"Do you think she did the right thing in running away from home?"

"What do you think will happen to Ben and Kurt?"

"How do Ben and Jack feel about this?"

(It is assumed in all of the above that the children have not been given the answers previously.)

Types of Answers

Every line of coding must have one and only one category checked in this section.

Correct (CORR). This category is checked if the teacher indicates correctness, or, in the absence of any teacher acknowledgement, if the coder can determine that the child's answer is acceptable, appropriate, and/or correct. For some Personal and Interpretation questions a single correct answer is not apparent and the child should be judged for the appropriateness of this response as indicated by the teacher or determined by the coder.

Within reading turns, Correct (CORR) refers to correct word calling.

Incorrect (INC). This category should be checked when the child's response is incorrect or inappropriate. When an answer does not fall neatly into either the Correct (CORR) or Incorrect (INC) category, the coder should attend to the teacher's reaction and the thrust of her feedback. If she responds mainly to the correct part of the answer, then code it as Correct (CORR). If she is mainly concerned with the incorrect part of the answer, then code Incorrect (INC). If no such decision can be made and the coder is unsure, the answer should be considered Correct (CORR).

Within reading turns, Incorrect (INC) refers to miscalled words. The child has attempted to read the word but did so incorrectly.

I Don't Know (DK). This category is checked whenever the child does not attempt an answer but instead responds by stating that he does not know the answer or that he needs help. The child does not answer, but does give an overt indication that he has heard the question and realizes that he does not know the answer.

In reading turns, this category indicates that the child has stopped on a word and has turned to the teacher for help, thus admitting that he does not know the word and is not attempting it.

No Response (NR). This category is checked when the child does not answer the question and also does not indicate that he does not know the answer. The child may either appear to not have heard the question and therefore does not give any reaction or the child may respond non-verbally in some way such as ducking his head, or any other behavior that indicates that he is not willing to answer the question and is also not willing to admit that he does not know the answer.

In reading turns, a No Response occurs when a child stops on a word, does not attempt to say it, and does not ask for help.

Teacher Feedback

Following the child's answer or lack of response, the teacher may either do nothing, essentially ignoring the child, or she may acknowledge the answer without any substantive feedback by simply saying that it was correct or incorrect, or she may also praise, criticize, and/or give some other more substantive kinds of feedback. If the teacher only acknowledges the correctness or incorrectness of an answer, the coder does not record anything under the teacher feedback section. The absence of a check in this section means routine acknowledgement such as "Right," "Yes," "No," "Wrong," etc. If anything besides routine acknowledgement occurs or if the teacher simply ignores the child's answer, it is coded in the appropriate category as defined below.

There are essentially two kinds of feedback which may be given to a child when he has made an incorrect response. These are Terminal feedback, which has the effect of ending the child's response to that question, and Sustaining feedback, in which the teacher's feedback maintains contact with the same child by requesting another response from him. In addition to the

types of feedback included under these two major categories the teacher may also give praise, criticism, and/or process feedback. She may also give Emphasis to the answer with or without additional substantive feedback.

These four categories may be double coded with any other categories appearing under the Terminal or Sustaining headings. However, any categories within either of those two headings may not be coded with each other, with the single exception of a New Question (NEW Q) following some terminal feedback.

No Feedback (NoFB). When the teacher neither acknowledges the correctness or incorrectness of an answer, this category is checked to indicate that the teacher has essentially ignored the child's answer. This category is also coded when the teacher gives an ambiguous response to the child, such as repeating the child's answer in a questioning tone of voice without ever letting the child know what she thinks. This might usually occur in situations where the teacher is asking for an opinion, a guess, or a prediction, and the teacher's reaction is not easily judged by the child. However, if the teacher indicates any kind of acceptance or rejection of the answer, even if only a nod or "Okay," this category should not be checked. It is used only to indicate that the teacher left the child "hanging," so to speak, and did not give him any acknowledgement as to the correctness or incorrectness of the answer. If this column is checked, then no other items in the teacher feedback section are applicable with the exception of Emphasis by repetition and New Question (NEW Q).

Emphasis (EMPH). This category is checked whenever the teacher does something to insure that the answer just given by a child was heard by the others. This can be done by having the teacher repeat the answer, having the child repeat his own answer, or by having a second child repeat the answer.

This should be checked after the end of a reading turn (END) when the teacher has the child re-read the passage for any reason, rather than coding the reading turn for a second time.

Process Feedback (PRCS). This category is checked whenever the teacher reviews the processes used to arrive at an answer or gives an explanation as to what was wrong with an answer. The important thing to remember about Process Feedback is that the teacher goes beyond simply giving, affirming, or repeating an answer and somehow provides an additional explanation to the child about that answer.

Examples: "That word is bake. You can tell that because when there is an e after a single consonant, the other vowel is usually long."

"Yes, that's a period and not a comma, because it is at the end of the sentence, and periods are marks that go only at the ends of sentences, and commas are marks that never go at the ends of sentences."

"Yes, Ben probably is unhappy. You can tell by the way he holds his head and shuffles his feet."

Praise (PRAIS). Praise is checked whenever the teacher communicates a positive evaluation to the child of his answer beyond simply acknowledging the correctness of it. This may be done by complimenting the child either by verbalizing ("Good," "Wonderful," "Far out") or by any other gesture or expression conveying a positive evaluation beyond acknowledgement of correctness such as an exaggerated smile, clapping her hands in a delighted manner, or enthusiastically hugging the child. It is important to remember that any teacher reaction coded as praise must be in response to the child answer, not just a spontaneous expression of affection by the teacher for the child. If the teacher rather perfunctorily says words such as "Good," or "Fine," it is also coded as praise,

even though it is not necessarily enthusiastically or warmly delivered. In other words, if the teacher says anything or conveys in any way that she is pleased with the child's answer and/or performance, then it is coded as praise.

Criticism (CRIT). Criticism can be considered the opposite reaction of praise. It is a communication from the teacher to the child of a negative evaluation of the child's answer beyond simply acknowledging incorrectness or undesirability of the answer. It may be obvious verbal criticism ("You're stupid," "You're not thinking today," or it may be a non-verbal gesture or expression of disgust, anger, or frustration by the teacher for the child's answer. An example of a non-verbal expression would be the teacher grimacing in response to a child's answer or shaking her head with a deep, exaggerated frown. To be coded here as Criticism (CRIT), the reaction must occur to the child's answer, but may also reflect on the intellectual ability, motivation, or work habits that went into producing that answer.

Specificity (SPEC). The category of specificity is double coded with either praise or criticism. That is, it cannot be checked unless one of these two categories has also been checked, although either of them can be coded without the use of the specificity category. The meaning of Specificity depends on whether Praise or Criticism has occurred.

When Praise has been given and coded, Specificity is checked if the statement defined the behavior that is praised. The teacher must state specifically what it was about the child's answer or answering behavior that she is praising.

Examples: "That is good because you thought before you spoke."

"I liked the way you spoke up so clearly."

When Criticism has occurred and been coded, Specificity can be checked only if the teacher has defined the desired alternative behavior.

Example: "You're not thinking today. Remember, before you answer, stop and think about that rule."

"You're not using any expression in reading that. Remember to sound just like you were talking to your friends when you read that part."

Terminal Feedback

The following three categories are considered types of terminal feedback. Whenever they occur, the teacher is essentially ending that child's response opportunity for that question by somehow getting the answer from another child or giving the answer herself. Therefore, the child who has just answered does not continue to answer that same question, although the teacher may ask the same child a new question.

Give Answer (GA). This category is checked whenever the teacher supplies an answer to a child who has answered either incorrectly, "I don't know," or no response. It is not used after correct answers with initial selection, although it is possible to give an answer after a correct answer for an Error correction selection.

Another important point to remember about this category is that the teacher is the one who is supplying the answer, not another student.

Ask Other (AO). This category is considered after an initial selection leading to an incorrect answer, an "I don't know" response, or no response. It is checked whenever the teacher asks another child to supply the correct answer, rather than supplying the answer herself. In so doing, she is terminating the first child's response opportunity for that particular question.

Call Out (CALL). When the teacher asks a question to a designated respondent, and another child calls out the answer or makes some substantive comment before the teacher can give any feedback to the first child, and if

the teacher responds to the content of the called out answer or comment, then, Call out (CALL) is checked for the type of feedback. The teacher is essentially letting the answer or comment that was called out by the other child serve as feedback to the first child. However, unless the teacher or the first child uses the called out answer or comment in this way, it cannot be checked here.

If the teacher responds to the child who called out by accepting his answer, the next line of coding should describe this by noting that child's number, call out (CALL) as the type of selection, and then the rest of the interaction as it occurred. If the teacher responded to the call out with some behavioral comment, it should be noted under Behavioral Contacts.

Sustaining Feedback

The next four types of feedback are considered sustaining feedback. They are distinguished from terminal feedback in that, by giving these kinds of feedback, the teacher is requiring the child to continue responding, either to the same question or to a new one.

New Question (NEW Q). This category is checked whenever the answer to the question just asked has either been given by the child or supplied by the teacher or another child, and the question is no longer open to further attempts at answering, and the teacher sustains with the child by asking a new and different question. The difference between this type of sustaining feedback and the next three types described is that this type does involve a new question to the same child because the last question has somehow been answered. The next three types involve sustaining the same question in an attempt to improve some previous response. Whenever New Question (NEW Q) is

checked, the next line of coding should have the same child's number and Continue (CONT) checked as the type of selection.

Repeat question (RPT). This category is checked whenever the teacher either repeats a question verbatim, or asks some kind of a prodding question. It is also checked if the teacher in any way indicates that she is still waiting for an answer. The important point to remember about Repeat (RPT) feedback is that the teacher is not supplying any additional information beyond the original question, and therefore not giving any clues to the answer; but is also not eliciting any other kind of answer beyond that requested by the original question. This feedback simply indicates to the child that the teacher is waiting for a response. (Therefore it often occurs after a No Response (NR)by the child.)

Examples: "Do you know?"
"Can you answer that?"
"Well?"
"John?"

Rephrase/Clue (CLUE). This category is checked whenever the teacher gives the child a clue that could conceivably direct his thinking to the right answer. However, the child's arriving at the correct answer is not guaranteed by the clue itself. In other words, the teacher is not giving away the answer by providing the clue, but is doing something that could help the child think of the answer by himself. This occurs only after an initial Incorrect (INC) answer, a "Don't Know," (DK), or a No Response (NR). It can be coded on the same line as "Correct" if that line represents an "Error Correction." That is, you can answer a clue-question correctly, then be asked another question which also serves as a clue to the original question.

Feedback that falls into this category may be one of two kinds. The teacher may give clues that are essentially rephrasings of the original question and therefore will lead to the same answer desired in the original question.

Another type of rephrase/clue (CLUE) is a new question that is asking for a different answer than the original question, but which, when answered, will help the child arrive at the answer to the original question. An example of a Rephrase/clue (CLUE) for the question, "What was the name of the boy in the story?" might be "Its the same as the name of someone in our group," or "It starts with an R." This would be an example of the first type of Rephrase/clue (CLUE) just described. An example of this kind of feedback using a new question for this same original question might be "Well, what was his brother's name?" In both cases, the teacher is not giving away the answer, but is giving the child clues which may help him arrive at the answer by himself.

Rephrase/Give (GIVE). This type of feedback is recorded whenever the teacher simplifies the question to such an extent that the child is almost guaranteed to answer the question correctly. Therefore, it accomplishes essentially the same purpose as the Rephrase/clue (CLUE) feedback, except that the probability of the child using the clue to arrive at the correct answer is increased to almost certainty. The teacher may accomplish this in several different ways, and the coder must make a decision as to whether or not the teacher is essentially giving the answer to the child with easy clues or is giving clues that do not make the answer obvious.

Therefore, the difference between a CLUE and a GIVE is a matter of degree of simplification. If the coder is uncertain about which category a clue falls into, then Clue should be coded.

Examples: "His name rhymes with candy but starts with an R."
"Well, i[illegible] a comma or a worm?"
After the [illegible]ild has hesitated on reading tree, the teacher says "It's th[illegible]g tall thing outside the window with leaves on it." or says s[illegible]y, "T-r-r-r-r-e-e-e," fading away before actually saying the word.

Results of Sustaining Feedback

The two columns labeled IMP and UNIMP are to be considered every time and only when a Repeat (RPT), Clue (CLUE), or Give (GIVE) has been coded. In other words, this section is completed whenever there is sustaining feedback which attempts to improve the child's response. Therefore, the next line of coding will have the child's number repeated and Error Correction (ERROR) checked for selection.

When this situation has occurred, the coder should decide if the sustaining feedback of the teacher did indeed improve the child's response. An improvement is defined as changing a No Response (NR) into anything else; and changing an Incorrect (INC) response or a Don't Know (DK) response into a Correct response. If an improvement occurred as a result of the sustaining feedback, then Improvement (IMP) should be checked on the same line as the check for the type of feedback. Therefore, the indication of Improvement (IMP) should correspond to the answer described in the next line for which Error Correction (ERROR) has been checked. If no improvement in the child's response occurred because of the feedback, then No Improvement (NOIMP) should be checked on the same line as the check for the sustaining feedback.

No checks should appear in these two columns when there has not been a check in one of the last three columns of Sustaining feedback (RPT, CLUE, GIVE.)

Behavioral Contacts

CHD # M	CHD # F	BEH #	PRAISE	IGNOR	MGMT	WARN	CRIT	NVINT	SPEC

This section of the coding sheet is used to record certain information about behavioral contacts between the teacher and child. Behavioral contacts are defined as non-academic occurences which concern the child's classroom behavior and its appropriateness for the academic setting. The behavioral section is not used to record any procedural, routine contacts, such as asking a child to pass out books or to turn in his paper when he has not been told before. Instead it records only corrective contacts (the child was not behaving appropriately for the circumstances) or praiseworthy behavior (the child was behaving so appropriately that the teacher calls his and others' attention to it.) Like response opportunities, only public behavioral contacts are recorded.

In coding behavioral contacts, within the group, the coder should enter the child number (CHLD#) in the appropriate column (M for males, F for females), then enter a number describing the behavior of the child which resulted in the teacher reaction, then a check under one and only one of the six columns which describe the teacher reaction to that child behavior. In addition, the Specificity category should be considered when a teacher reaction has been checked, although it will not occur on every line.

When an out-of-group contact occurs, instead of noting the child's unique number, the coder should write '998' under the M column under Child Number (CHD#). This is true whether the contact concerned a single child or more and

whether the sex of the children involved was male or female. There will never be a 998 under Female (F). Out-of-group contacts may only be shown for behaviors 11-14. [Note: This is simply a coding convention to facilitate data tabulation.]

The in-group child behaviors discussed below are all inappropriate in nature except for #10, Praiseworthy. Therefore, all of the in-group behaviors with this exception must be coded along with a corrective teacher contact of some sort.

The teacher's reactions to be described below are either favorable (Praise), non-existant (Ignore) or corrective (Management, Warning, Criticism, or Nonverbal Intervention). Therefore, only corrective teacher feedback can follow inappropriate in-group behaviors as defined in the first nine child behavior categories, and only Praise can follow a child behavior of Praiseworthy. The only in-group child behavior which may be recorded with an Ignore teacher reaction is a Callout unaccepted.

When out-of-group contacts occur, any teacher reaction is applicable, with the exception of an Ignore following a teacher-initiated contact.

For each line of coding of a behavioral contact, only one child behavior number may be entered, and only one category of teacher reaction may be checked. If a teacher corrects a child for more than one kind of inappropriate behavior at the same time, use the behavior number of the more outstanding deviation from appropriateness. For example, if a child was slumping and also staring outside, and the teacher reprimanded him for both, then the behavior to be noted would be the inattention, since this is generally more inappropriate (not paying attention at all) than slumping (paying attention but not sitting up straight.)

Child Behaviors

The behaviors and their numbers listed at the top of the coding sheet are to be used to describe the children's actions which instigate reactions from the teacher. The first ten apply only to children being observed in the group at that time.

In-group Behaviors

1. Call out unaccepted. This category is used to describe callouts by a single child when the teacher did not accept their academic content. Her reaction instead was either to ignore (IGNR) the child's behavior or to deliver some behavioral comment on it. The important feature of Call out unaccepted is that it was made by an individual child and the teacher did not accept the academic content of it. Call outs in this case are of interest only if they occurred in response to a question just asked by the teacher or in response to another child's answer. That is, they somehow interrupt the question-answer-feedback sequence that is described in the "Response Opportunities" section. This means that spontaneous comments by children when the teacher is not questioning them as a group (such as during a time when all children are supposed to be working on workbook activities in the group) are not relevant for coding. Also, any comments that are irrelevant to the question being asked at that time are not included in this coding. Only call outs that pertain to the academic interaction that is going on at that time between teacher and a child and that interrupts (or could interrupt) that interaction are of interest for coding.

2. Call out accepted. This category is used to describe call outs which were accepted by the teacher for their academic content but were also responded to behaviorally. If the call out was accepted but not responded to behaviorally

in some way, no entry is made in the 'Behavioral Contacts' section. For this category, Ignore (IGNOR) can not be coded, since by accepting the academic content of the call out, the teacher could not ignore it. Praise (PRAIS) is also inapplicable. The same criteria for determining a codable call out situation just described under the heading of Call out accepted are also relevant here.

3. Individual inappropriate. This category is used to describe any behavior by a single child which is not disruptive to the rest of the group but which is responded to by the teacher in some way. Only corrective types of teacher reaction are possible here, and so Praise (PRAIS) and Ignore (IGNOR) cannot be coded. The most typical example of Individual inappropriate behavior is lack of attention to the lesson, such as staring away from the group out the window, sleeping, etc. Such misbehavior also excludes those individual behaviors described in other categories below.

4. Social talk. This category is used to describe inappropriate interactions between two or more students in the group. It may or may not be disruptive to other children in the group, and it may or may not be friendly in nature. Since it describes an inappropriate behavior noticed by the teacher, the categories of Praise (PRAIS) and Ignore (IGN) are not applicable here.

5. Private Disturbance. This describes behavior by one individual child in the group that is disruptive to the other children. It is to be distinguished from Individual Inappropriate behaviors by the criterion that it could disturb someone besides the teacher (although the other children are not likely to exhibit irritation). Examples of disruptive behavior might be swinging feet and kicking the chair loudly, talking to oneself loudly, or standing on top of the chair and dancing. Again, Praise (PRAIS) and Ignore (IGN) are not applicable as categories of teacher reactions.

6. Posture. This category describes any inappropriate behavior related to sitting straight, spacing oneself from the other children, facing the right direction (except when the child was originally in the right place and has turned around to attend to something in the room--this would be an example of individual inappropriate behavior), or anything else which primarily has to do with positioning oneself appropriately for the reading group. Many of these contacts will come at the beginning of the group, although there may be reminders to "sit up straight" throughout the lesson. Any category except Praise and Ignore (IGN) is applicable here.

7. Materials. Any behaviors related to the inappropriate use of school materials in the group is described here. This includes holding books, using or not using markers in reading, cleaning transparencies, holding pencils or crayons, turning pages, etc. Any category except Praise and Ignore (IGN) can be used to describe the teacher's reaction to such behaviors.

8. Contraband. This category includes any use of inappropriate materials in the group, such as toys, chewing gum, candy, other school work not pertinent to reading, etc. It is therefore to be distinguished from Materials in that the latter describes the inappropriate use of school-related materials, while Contraband refers to the use of inappropriate materials. Therefore, Praise and Ignore are not applicable as teacher reactions for this category.

9. Other in-group. This category is used to describe other behaviors that do not fit into the categories described above in #1-8, which lead to some corrective teacher contact.

10. Praiseworthy. This is a catch-all category for any behavior which is praised by the teacher for its appropriateness and goodness. Therefore, Praise

(PRAIS) is the only category of teacher reaction which is applicable for behaviors described in this category. Remember that any behavior classified here must be a behavior, that is, not an answer or mental process which is more appropriately described in the "Response Opportunities" section.

Out of Group Behaviors

The next four categories describe contacts by the teacher with children outside the group at that time. Two distinctions must be made here: contacts may be either child-initiated or teacher-initiated, and they may be either brief or long.

This results in four classes of out-of-group contacts:

11. Child initiated brief (C init brief)
12. Child initiated long (C init long)
13. Teacher initiated brief (T init brief)
14. Teacher initiated long (T init long)

Child-initiated vs. Teacher initiated. A contact is considered to be child-initiated if the teacher does not respond until a child or children approach her to deliberately get her attention. The reason for such approach may be academic, procedural, or personal. A teacher-initiated contact occurs when the teacher notices and speaks to a student who has not tried to get her attention by approaching her first. Therefore, the teacher interrupts the lesson herself.

When any contact results in the teacher leaving the group, it should be noted at the top of the coding sheet and her absence timed. When this occurs, there should be no line of coding in the behavioral section, since the time the teacher is out of the group will automatically be considered a long out-of-group contact.

Brief vs. long contacts. A brief contact is one in which the teacher responds to the child with a few words or a non-verbal response, and only takes a second or two to do this. Her reaction does not detract from her conduct of the lesson. A long contact is one in which the teacher takes more than a few words to answer the child. Examples of brief reactions would be the wave of a hand, 'Go back to your seat,' "No," "That's fine," "Okay." Examples of long reactions would be "No, I have told you never to bother me up here when I'm teaching reading," "Put your work in the basket when you're finished," "Sharon, if you don't settle down, I'm going to keep you after school."

The coder should remember when observing child-initiated contacts that she/he is recording the length of the teacher's reaction, not the length of time that the child is around the teacher, unless the teacher reacts to the child by stopping the lesson and listening for several seconds.

Teacher Reactions

Praise (PPAIS). This category is checked whenever the teacher responds favorably to a child's behavior and lets him know by complimenting him that she is pleased. The only categories of child behavior which are applicable here are Praiseworthy (PW) for in-group contacts and the four out-of-group contacts.

Examples of Praise (PPAIS) are "I like the way Dan is sitting up today and paying attention," "Sandra, you're working so well today. I haven't seen you talk once." "Good, you're remembering to use your marker today," and "You really paid attention when I rang the bell, Dick."

Ignore (IGNOR). This category is used whenever the teacher's reaction is to ignore a child and say nothing to him about a behavior which she most likely was aware of. It is only used to describe the teacher's reactions to out-of-group child-initiated contacts and the first category of inappropriate in-group behaviors, Call out unaccepted. When the coder feels that a call out was obviously heard by the teacher but not responded to, she/he should use this category. But if the coder is unsure if the teacher heard the call out or not, then it should not be coded. That is, the only call outs of interest are those which are obvious enough to get the teacher's attention and could easily be ascribed to the correct child because they were clear and loud enough.

Management, (MGMT) Warning, (WARN) and Criticism (CRIT). These three categories are used to describe verbal corrective contacts by the teacher. They differ in the degree of irritation and anger and threats and punishment expressed in the reaction. Management (MGMT). This is the mildest form of correction. It is delivered in a calm, unirritable tone of voice and does not convey any threat of punishment. Warning (WARN). This category of correction is identifiable by a tone of irritation and perhaps an implied or stated threat of punishment in the message. Criticism (CRIT). This is the most extreme form of correction. It is identifiable by either an angry tone of voice or the delivery of punishment of some sort. If the teacher somehow punished a child by taking any actions because of his behavior, then the reaction should be considered Criticism (CRIT), even if it was delivered with a pleasant tone. Examples of this might be putting the child's name on the board to stay after school, sending him to the time-out corner, or telling him that he has lost playtime privileges. In addition, any correction delivered by shouting at the child, berating his character, and being generally nasty should be considered Criticism.

An example of distinctions might be:

"Please sit down and get back to work." delivered in a calm manner. (Management)

"Janet, if you don't get back to work right now, you can't go out to recess." (Warning)(regardless of voice tone)

"Sharon, get back to work," delivered in an irritable tone. (Warning)

"Kelly, you're the worst worker in this class. I don't know what I'm going to do with you." (Criticism) (regardless of tone)

"Lee, your name is going down on the bad workers list." (Criticism) (regardless of tone)

"Charlie," shouted angrily across the room. (Criticism)

"Charlie," said in an irritable tone, implying, "If you don't...." (Warning)

"Charlie," said quietly, calmly. (Management)

Nonverbal intervention (NVINT). This category is used for corrective contacts which are delivered by gestures and/or expressions without the use of words. Examples might be shaking a finger, tapping someone to get attention, putting one's finger to mouth to indicate "shhh", putting hands on waist and looking like one is about to blow up, and shaking the head. This category may be used for any child behavior except Praiseworthy, since it only is concerned with behaviors which need correction.

Specificity (SPEC). This category is to be double-coded with one of the other teacher reaction categories, with the exception of Ignore (IGN). It is similar in meaning to the Specificity category used in the "Response Opportunity" section. When used with Praise, it indicates that the teacher stated what behavior she was praising. When used with any of the corrective categories, it indicates that the teacher defined an alternative behavior which would be acceptable.

Examples: "I like the way you're sitting up so straight."

"Don't bother me in reading group. Sit down until I have a chance to come and check your work."

"Sue, turn around in your seat and concentrate on your book instead of talking to Bill."

Reference Notes

1. Brophy, J. & Evertson, C. The Texas teacher effectiveness project: Presentation of non-linear relationships and summary discussion. (Res. Rep. 74-6). Austin, Texas: Research and Development Center for Teacher Education, 1974.

References

Brophy, J. & Good, T. The Brophy-Good dyadic interaction system. In A. Simon and E. Boyer (Eds.). Mirrors for behavior: An anthology of observation instruments continued, 1970 supplement, Volume A. Philadelphia: Research for Better Schools, Inc., 1970.

Southwest Educational Development Laboratory. Bilingual Kindergarten Program, Inservice Manual, Volume I. Austin, Texas: National Educational Laboratory Publishers, Inc., 1973.

Footnotes to Authors

The authors wish to acknowledge and thank Carolyn M. Evertson, Linda E. Harris, W. John Crawford, and Carol E. King for their contributions to the design of the coding system, and Kathy Maisto-Carbone, Gwen Newman, and Sidney Weaver for manuscript preparation.

APPENDIX A

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 mangement; 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

I. 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.

II. 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 embarass 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.

APPENDIX B

-HIGH INFERENCE SCALES

ATTENTION-GETTING TRANSITIONS: ____ yes ____ no

____ 1. bell
____ 2. lights
____ 3. verbal _____
____ 4. individ-routine after signal
____ 5. other _____
____ total number

____ 1. individ-routine
____ 2. group is signal
____ 3. other

____ time to group
____ time to T.
____ beyond routine
____ no individ-corrective
% child attending 1 2 3 4 5 (0% – 100%)

IN-GROUP: ____ yes ____ no

____ 1. bell
____ 2. lights
____ 3. verbal _____
____ 4. individ-rout after signal
____ 5. other _____
____ total number

____ 1. individ-routine
____ 2. only indiv corrective
____ 3. other _____

____ time to lesson
____ no. of indiv/ correct
% child attending 1 2 3 4 5 (0% – 100%)

OVERVIEW:

content: ____1. no instr. content ____2. mech ____3. specific content
motiv: ____1. neg ____2. none ____3. nonspec. pos ____4. specif. pos. ____5. both

voice: ____1. neg ____2. bore ____3. neut ____4. pos ____5. gush
effect: ____1. neg ____2. bore ____3. neut ____4. pos ____5. excitement

BREAKING UP THE GROUP:

____ 1. done
____ 2. needed, not done
____ 3. not needed, not done

____ 1. high taught, dismissed
____ 2. highs dismissed w/o teaching
____ 3. low dismissed
____ 4. other _____

Expectations communicated:
1 2 3 4 5
neg to low — no differential expectations

MODEL:

____1. group ____2. broken ____3. none

Feedback:
____1. acknowledgement
____2. few specifics
____3. moderate specifics
____4. frequent specifics
____5. always specific feedback

Expectations communicated:
1 2 3 4 5
praise model, crit. others — Limits comments about different abilities

SEATING: Teacher- 1 2 3 4 5 ☐ Bynd (In – App)
☐ n/a T: Child- 1 2 3 4 5 ☐ Bynd
☐ n/a Ch.

DEMONSTRATION/EXPLANATION

1. occurred
2. needed/not occur
3. not needed/not occur.
4. repetition of demo

1 2 3 4 5

Suffic 1. p.
2. b. av.
3. av.
4. a. av.
5. ex.

Checks for feedback:
1. question
2. repeat
3. demonstr
4. starts les
5. none (wb)

Children's Comprehension:
1. 0%
2. 25%
3. 50%
4. 75%
5. 100%
6. Can't rate.

NEW WORDS: 1 2 3 4 5 6 7 8 9 10

1. begin during
2. give child
3. phonic context both neither
1. choral indiv.
2. all some

Teacher
School
Group
Date
Start Time
Stop Time
No. in group
Coder

CHORAL:

GP. CALL OUTS

QUESTIONS:
1. Rhet ____
2. Ans.Own ____
3. Series ____
4. Other ____
(note) ____

Teacher ______________ Group ________ Time start ______ Page __ of __

School ______________ Date ________ Time stop ______ Coder ______

No. in group ________ ____ of ______

CONTEXT:
____ 1. slow, no WB
____ 2. WB
____ 3. Drill
____ 4. New reading
____ 5. Rereading

Teacher out:
1. ______ Byd ____
2. ______ Byd ____
3. ______ Byd ____

Child behaviors:
1. Callout unaccepted
2. Callout accepted
3. Indiv inapp
4. social
5. private disturb.
6. posture
7. materials
8. contraband
9. other in-group
10. praiseworthy

OUT-OF-GROUP
11. C init brief
12. C init long
13. T init brief
14. T init long

RESPONSE OPPORTUNITIES

CHD # M F	SELECTION Initial: ORDR	PRE	NVOL	VOL	CALL	Subs: CONT	ERROR	COMM	TURN	END	QUESTIONS Read: REP	RdCHC	WdREC	WdATT	Non-read: PERS	CHOIC	PROD	COMP	INTRP	ANSWERS: CORR	INC	DK	NR	FEEDBACK: NoFB	EMPH	PRCS	PRAIS	CRIT	SPEC	Term: GA	AO	CALL	Sust: NEWQ	RPT	CLUE	GIVE	RESULTS: IMP	NoIMP

BEHAVIORAL CONTACTS

CHD # M F	BEH #	PRAIS	IGNOR	MGMT	WARN	CRIT	NVINT	SPEC