DOCUMENT RESUME

ED 162 259 CS 004 451

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TITLE What Classroom Observations Reveal about Reading Comprehension Instruction. Technical Report No. 106.
INSTITUTION Bolt, Beranek and Newman, Inc., Cambridge, Mass.; Illinois Univ., Urbana. Center for the Study of Reading.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Oct 78
CONTRACT 400-76-0116
NOTE 94p.

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Assignments; Classroom Observation Techniques; *Classroom Research; Content Reading; Elementary Education; Interaction Process Analysis; Intermediate Grades; Observation; *Reading Comprehension; *Reading Instruction; *Reading Research; Social Studies; Student Behavior; *Teacher Behavior; *Teaching Methods
IDENTIFIERS *Center for the Study of Reading (Illinois)

ABSTRACT

Reading and social studies instruction in 39 third- through sixth-grade classrooms in central Illinois was observed in a study designed to determine whether elementary school classrooms provide comprehension instruction. Among the findings were that practically no comprehension instruction was seen but that comprehension assessment, usually carried on through interrogation, was common; that other kinds of reading instruction were not seen with any frequency; that in addition to being interrogators, teachers also appeared to be assignment-givers, spending a large part of the observed periods on giving and checking assignments; that sizeable amounts of time went to activities categorized as "transition" and "noninstruction"; and that teachers did not see the social studies period as a time to improve children's comprehension abilities, but instead were concerned about covering content and having children master facts. (The report discusses definitions and examples of comprehension instruction, notes differences between comprehension instruction and comprehension assessment, explains the categories used for teacher and student behavior, offers suggestions for future research, and reports the findings of the study in descriptive and tabular form.) (GW)

CENTER FOR THE STUDY OF READING

Technical Report No. 106

WHAT CLASSROOM OBSERVATIONS REVEAL ABOUT READING COMPREHENSION INSTRUCTION

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October 1978

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This research was supported by the National Institute of Education under Contract No. US-NIE-C-400-76-0116.

What Classroom Observations Reveal about Reading Comprehension Instruction

On April 1, 1976, the National Institute of Education issued a Request for Proposal (RFP) describing the need for a Center for the Study of Reading whose central concern would be comprehension. Why the Center seemed essential was described in the RFP as follows:

> A considerable, though not entirely adequate body of facts has been assembled about decoding but much less is known about the process of understanding written text. Researchers and practitioners, accordingly, have strongly urged the NIE to focus its attention and that of the field upon the problems of reading comprehension. (p. 2)

The RFP outlined application responsibilities this way:

> Application - The Center will identify and implement means by which knowledge gained from research relevant to reading can be utilized in developing and improving practices for informal and formal reading instruction. The Center will also be involved in identifying means by which basic research on reading and linguistic communication can be made more relevant to practical problems in improving the level of reading comprehension. (p. 5)

Apparent in the RFP were three assumptions that are especially pertinent for teacher education:

1. Reading comprehension can be taught.
2. Reading comprehension is being taught.
3. What is done to teach it is not as effective as comprehension instruction needs to be if reading problems are to be reduced.

As a veteran observer of elementary school classrooms, I was especially struck by the second assumption because frequent visits to schools have revealed almost no comprehension instruction. However, two facts could account for this. First, comprehension instruction never was the preselected focus for an observation and, second, the bulk of the observing was in primary grades. In one four-year study in which grades 1, 2, 3, and 4 were observed, comparisons of the last two grades with the first two prompted such conclusions as these:

> Classroom observations during the third grade year revealed a few other changes--none of a kind that would foster greater progress in reading. To cite an example, the amount of time given to reading instruction appeared to decrease, whereas the amount of time spent on written assignments increased. This was especially true for the best readers, who were now being given lengthy assignments. (Durkin, 1974-75, pp. 34-35)

> In summary, it could be said that the fourth-grade reading program continued to have basal readers, workbooks, and worksheets as its core. In addition, instruction continued to be de-emphasized in the sense that less time was spent on teacher-directed lessons, whereas written assignments continued to grow longer and to become more numerous. (Durkin, 1974-75, p. 42)

When the NIE contract for the Center for the Study of Reading was awarded to the University of Illinois, I decided to see what conclusions would be reached if middle- and upper-grade classrooms were observed for the purpose of finding, describing, and timing comprehension instruction. Such a study seemed central to the mission of the Center since it is impossible to improve instruction until what goes on now, and with what frequency, is known.

Pilot Study

What was uncovered in earlier classroom observations suggested categories for describing what teachers might do in the time scheduled for reading instruction. To find out whether they were realistic and exhaustive, a pilot study was undertaken during the 1976-77 school year (Durkin, 1977). Since "teach comprehension" was both an essential and important category, great care was taken to define it.

Review of the Literature

To begin, the literature was searched in order to see whether it provided guidelines for a definition, or included studies by others who had observed in classrooms to learn about comprehension instruction. Only one such study was found (Quirk et al., 1973a; Quirk et al., 1973b; Quirk et al., 1975; Quirk et al., 1976). Called "The Classroom Behavior of Teachers and Students during Compensatory Reading Instruction," the study involved 46 observers, 135 teachers (divided among grades 2, 4, and 6), 34 schools, and 21 cities. Although each class was visited nine times, only 15 minutes of coding took place per visit. With that kind of sampling, the researchers (Quirk et al., 1975, p. 191) found that teachers used the largest amounts of time in the following ways:

	Percent of Time
Management Instruction	30
Pronunciation and Word Recognition Activities	26
Comprehension Activities	12
Spelling	9
Nonreading Instruction	4

In concluding their report, the researchers say:

> Content categories could be combined in a number of ways to determine the percent of time that teachers spent in reading activities. If Content categories 1-4 (Comprehension, Pronunciation and Word Recognition, Language Structure, Reading Silently) are combined, this would indicate that the teachers spent 43 percent of their time in reading instruction activities. If Content categories 5 (Spelling) and 6 (Listening) are also included, the teachers spent 56 percent of their time in reading and reading-related activities (Quirk et al., 1975, p. 191).

Although this report appears to tell about instruction, the researchers' definitions of categories are not consistently confined to that focus. Further, because teachers and children are considered together, the definitions are often flawed by a lack of clarity. To illustrate, when "instructional activities" are discussed, comprehension is singled out as "those instances in which the teacher, students, or others in the classroom demonstrate understanding of what the students have read. It includes questions, statements, or actions such as defining a word, giving the meaning of a sentence, or interpreting a story" (Quirk et al., 1973a, p. 7). When examples of "comprehension activities" are cited in another report of the same study (Quirk et al., 1973b, p. 21), they include:

> Teacher asks for meaning of bluff.
>
> Teachers asks: "What words in the story helped you to see how the farm looked?"
>
> Teacher asks children to use parliament in a sentence.

All in all, the report helped neither with definitions nor with clearly stated information about classroom practices.

Another publication whose title suggested a comprehension-instruction focus was the report of the international study directed by Thorndike (1973). It was called Reading Comprehension Education in Fifteen Countries. In spite of the title, it is a comparison of comprehension test scores that led to such conclusions as "It must be confessed that the results of the study provide little guidance for the improvement of the educational enterprise" (Thorndike, 1973, p. 99).

A few of the many other publications that promised more help than they provided will be cited in order to show that efforts to locate a definition of comprehension instruction in the literature were fruitless.

In a chapter entitled "An Operational Definition of Comprehension Instruction," Bormuth (1969) makes interesting comments but offers no definition that is useful for classroom observations. Under the heading "General Definition of Comprehension," he says, "...comprehension ability is thought to be a set of generalized knowledge-acquisition skills which permit people to acquire and exhibit information gained as a consequence of reading printed language" (1969, p. 50). He continues, "Consequently, the content of comprehension instruction might be said to be the rules describing how the language system works to transmit information; and the tasks of research in reading comprehension instruction are (1) to enumerate these rules, (2) to develop teaching tasks for shaping children's behaviors in the manners described by these rules, and (3) to organize them into a systematic sequence for instruction by determining their relative complexities" (1969, p. 50). Offering no evidence to support the claim, Bormuth still maintains that "Comprehension is both one of the most important and one of the weakest areas of instruction" (1969, p. 48).

Another publication that sounded promising also omitted a useful definition. This was a chapter by Wardhaugh called "The Teaching of Phonics and Comprehension: A Linguistic Evaluation" (1969). Initially, Wardhaugh discusses problems related to definitions of reading (too vague, too all-inclusive, and so on); then goes on to assert that "no matter what else a definition of reading includes, it must recognize that there is a connection between English orthography and the phonological system of English; and, second, sentences have meanings that can be accounted for in terms of syntactic and semantic rules. The first of these claims will be discussed in connection with phonics instruction and the second, in connection with the teaching of comprehension" (1969, p. 80). Wardhaugh covers the latter in two pages, primarily through an analysis of sentences in order to show that "a reader must be able to relate ... the deep structure of a sentence ... to its surface structure..." (1969, p. 86).

Journals for teachers were not overlooked in the search for a definition of comprehension instruction. The last example that will be cited of the many articles that offered more hope than help appeared in the Reading Teacher and was called "Improving Children's Comprehension Abilities" (Tovey, 1976). Without wasting many words, this article eliminated any chance of offering a definition by taking the position that "It appears that comprehension cannot be taught directly, but situations can be provided to facilitate and encourage the processing of print into meaning" (p. 289). The situations are described in the form of ten examples of "practical suggestions for involving children in successful reading experiences" (p. 289). They include (a) Help children select books they can read; (b) help children develop an understanding of the purpose and nature

of reading; and (c) encourage children to read high interest material. Almost all the suggestions can be summarized with the last one mentioned: "Motivate children to read, read, read!" (p. 291)

Finding little help in research reports and articles, I next consulted the Dictionary of Education (Carter, 1973), which had no entry for "comprehension instruction." Although one for "instruction" was found, it hardly provided clarification. The entry said, "In a precise sense, (instruction is) the kind of teaching that obligates the instructor to furnish the learner with some lasting direction and is accountable for pupil performances commensurate with precise statements of educational objectives" (p. 304).

The final attempt to get help from others was a letter to the IRA Committee responsible for developing a Dictionary of Reading Terms; but again, the effort was nonproductive. And so I began to reason out for myself the definition of comprehension instruction that would be used in the observational research.

Definition of Comprehension Instruction

Working out a definition can move in at least two directions. The first starts by equating comprehending with reading; it thus concludes by accepting as comprehension instruction anything that is done to help children acquire reading ability. Within this very broad framework, instruction concerned with such things as whole word identification, word meanings, and phonic and structural analyses belongs under the umbrella called "comprehension instruction." And this seems logical. After all, if the identification or meaning of too many individual words is unknown, problems with comprehension follow.

Although seeming to be logical, equating comprehension instruction with anything that helps children become readers has one obvious drawback. It makes comprehension instruction so global and all inclusive that it no longer is a separate entity. That is, as it becomes everything, it becomes nothing in particular. The loss of identity suggests another path for arriving at a definition. This one bypasses single, isolated words and puts comprehension instruction into a framework that only includes efforts (a) to teach children the meaning of a unit that is larger than a word, or (b) to teach them how to work out the meaning of such units.

Subsequent to arriving at a definition, I found a report by Golinkoff (1975-76) in which she discusses "the components of reading comprehension," which she lists as being:

Decoding

> Identifying individual words

Lexical access

> Having "a meaning for the printed word in semantic memory" (p. 633)

Text organization

> Extracting "meaning from units larger than the single word, such as phrases, sentences, and paragraphs" (p. 633)

As can be seen below, the definition of comprehension instruction selected for the observations is similar to what Golinkoff calls "text organization":

Comprehension: instruction

> Teacher does/says something to help children understand or work out the meaning of more than a single, isolated word.

Ideally, comprehension instruction has transfer value, thus will help children cope with the meaning of connected text not used in the instruction. This suggested another category for classifying what teachers might be expected to do:

Comprehension: application
Teacher does/says something in order to learn whether previous instruction enables children to understand the meaning of connected text not used in that instruction.

Examples of Comprehension Instruction

Before additional categories for teachers' behavior are mentioned, examples of what would be classified as "comprehension instruction" will be listed. (Ease with which they could be described briefly was the main criterion used for selecting examples.) They are given in order to clarify the definition still further. Such clarification is important since the value of the data to be reported is affected by the degree to which the definition is acceptable.

The first series of examples focuses on individual words but in the context of a sentence or more.

With explanations and sample sentences, teacher:

helps children understand the difference in the meaning of and and or.

calls children's attention to the meaning and importance of key words in written directions (e.g., each, if, all, underline, match).

helps children understand that certain words signal sequence (e.g., first, before, at the same time, later, meanwhile, ultimately).

Other comprehension instruction might focus on extracting meaning from single sentences or pairs of sentences. For instance:

Using a sentence like The little kindergarten boy was crying, teacher asks children to name everything it tells about the boy. Each fact is written on the board. Teacher next asks what the sentence does not tell about the boy.

Using pairs of sentences, teacher has children compare their content to see whether it is the same. Pairs might be something like:

Once home, she changed into her old clothes.
She changed clothes after she got home.

He was killed by the train at the crossing.
It was at the crossing that the train killed him.

With the help of suitable sentences, teacher explains the meaning of "appositive;" shows how appositives are set apart from the rest of a sentence with commas; and illustrates how they assist with the meaning of words.

Comprehension instruction with paragraphs (or more) might use procedures like the following:

Using a paragraph that describes a person, teacher asks children to read it and, as they do, to try to get a mental picture of the person. Once the person is discussed, the paragraph is reread in order to decide what details were omitted. Using additional paragraphs in a similar fashion, teacher encourages children to picture what is described whenever they read.

Asking a question that may or may not be answered in a given paragraph, teacher directs children to read it until they get to the answer. Children who think they found it are asked to give the answer and to tell why they think it does answer the question. Answers are also analyzed to see whether they can be shortened and still be correct.

Using a paragraph that contains a main idea embellished with supporting details, teacher asks children to read it in order to be able to state in a very few words what the paragraph is about. Responses are compared and discussed in order to select the best, which is written on the board. The children are then asked to reread the paragraph, this time to find all the details that have to do with the main idea. These are written below the

main idea in outline form. Once a number of paragraphs are analyzed in this way, teacher discusses the meaning of "main idea" and "supporting detail." Finally, other paragraphs are analyzed, some of which contain a main idea and supporting details, others of which only relate a series of details. Comparisons are then made between the two kinds of paragraphs.

Questions and Comprehension Instruction

Because of the close association between comprehension and question-asking, a few comments about the way teachers' questions would be classified are in order.

If what a teacher did with questions and answers was likely to advance children's comprehension abilities, it would be classified as "Comprehension: instruction." Some of the examples of instruction just listed include questioning of this type. On the other hand, if a teacher asked questions and did nothing with children's answers except, perhaps, to say they were right or wrong, that questioning would be "Comprehension: assessment," which is described below.

Comprehension: assessment

Teacher does/says something in order to learn whether what was read was comprehended. Efforts could take a variety of forms--for instance, orally-posed questions; written exercises; request for picture of unpictured character in a story.

Admittedly, the distinction being made between interrogation that is instruction and interrogation that is assessment is not what everyone would call "clearly apparent." This researcher's worries about possible vagueness ceased once classrooms began to be visited because observed questioning was very routine. Rarely, for example, was anything done with wrong answers except to say that they were wrong. Never did children have to prove or

show why they thought an answer was correct. Frequently, in fact, the emphasis seemed to be on guessing what the teacher's answer was rather than on recalling what had been read. All these characteristics explain why only six question-answer sessions were classified in the study as "Comprehension: instruction." All the rest were "Comprehension: assessment."

Additional Categories for Teachers' Behavior Related to Comprehension

Thus far, three categories for comprehension have been discussed: instruction, assessment, and application. The latter category, it will be recalled, is for practice carried on under a teacher's supervision. Practice in the form of written assignments was classified differently:

Comprehension: assignment
Teacher gives written assignment concerned with comprehension.

Earlier classroom observations indicated the need for a related category:

Comprehension: helps with assignment
Teacher helps one or more children with comprehension assignment.

If a teacher provided comprehension instruction, it was possible that s/he might review it later. This suggested another classification:

Comprehension: review of instruction
Teacher goes over earlier comprehension instruction.

Prior observations also pointed up the need for:

Comprehension: preparation for reading
Teacher does/says something in order to prepare children to read a given selection--for instance, identifies or has children identify new words; poses questions; relates children's experiences to selection; discusses meanings of words in selection.

The final category concerned with comprehension was identified during the pilot study when an observed teacher stopped children before they came to the end of a story in order to have them predict what the ending might be. In one sense, the teacher's behavior was "Comprehension: assessment" because the children's predictions reflected either comprehension or non-comprehension of what they had read. On the other hand, it could also be viewed as "Comprehension: preparation for reading" since the discussion of predictions was preparation for reading the final part of the story. Rather than force the behavior into an existing category, an additional one was established:

Comprehension: prediction
Teacher asks for prediction based on what was read.

To sum up, the categories used to classify teachers' behavior in relation to reading comprehension were eight in number:

Comprehension: instruction	Comprehension: help with assignment
Comprehension: review of instruction	Comprehension: preparation for reading
Comprehension: application	Comprehension: assessment
Comprehension: assignment	Comprehension: prediction

Categories for Other Kinds of Instruction

Even though the central concern was comprehension, other facets of instructional programs were also to be classified and timed. If it turned out that little was being done with comprehension, the additional data could show how teachers do spend their time.

That some of their time would go to phonics and structural analysis was assumed. Following the pattern used for comprehension, six more classifications were created:

Phonics: instruction	Structural Analysis: instruction
Phonics: review of instruction	Structural Analysis: review of instruction
Phonics: application	Structural Analysis: application

The category "Comprehension: preparation for reading" covers time given to word meanings prior to the reading of a given selection; however, it was thought that middle- and upper-grade teachers would plan additional instruction with meanings because of their obvious significance for comprehension. To describe their efforts, the following categories were selected:

Word Meanings: instruction
Word Meanings: review of instruction
Word Meanings: application

Because prior observations showed that beyond the primary grades, teachers give numerous written assignments, often at rapid rates, another decision was to deal with all assignments (with the exception of those for comprehension and study skills) under more general categories:

Assignment: gives
Assignment: helps with
Assignment: checks

The close connection between comprehension and study skills (e.g., outlining, paraphrasing an encyclopedia article, and so on) seemed to require separate categories for the latter:

Study Skills: instruction

Study Skills: review of instruction

Study Skills: application

Study Skills: assignment

Some Additional Categories

Almost immediately, the pilot study identified the need to account for the time when one activity shifts to another; when a teacher moves from working with one group to another; and so on. The selected category is described below:

Transition
Time required for changing from one activity to another or from one classroom to another; for waiting for children to get to the reading table; for waiting for them to get a book or find a page; and so on.

Equally clear was the need for:

Noninstruction
Time given to chastisement; to waiting while children do assignments; to checking papers at desk while children do an assignment; to noninstructional conversation with one or more children; and so on.

Other categories not yet mentioned are in the total list that comprises Appendix A. Directions for using the categories (rather than definitions) are given in order to facilitate use of them by other researchers who may want to replicate the present study.

The Study

The primary reason for the observational study was to learn whether elementary school classrooms provide comprehension instruction and, if they

do, to find out what amount of time is allotted to it. On the assumption that there is less of it in the primary grades because of the concern there for decoding skills, middle and upper grades were selected for the observations.

Originally, only the reading period was to be observed. However, because the pilot study (Durkin, 1977) revealed such a dearth of comprehension instruction, a decision was made to observe during social studies, too. This decision was based on the assumption that even if teachers give little time to comprehension during reading, they could be expected to work on it during social studies since children's problems with content subject textbooks are both major and well-known. One further decision was to use for both reading and social studies the same list of categories for describing teachers' behavior. If it was insufficient for social studies (or for the reading period), the necessary categories could be added.

Three-Prong Focus

In order to look at comprehension instruction from a variety of perspectives, three sub-studies were done. One concentrated on fourth grade because it is commonly believed that at that level a switch is made from learning to read to reading to learn. A corresponding change from instruction in decoding words to instruction in comprehension would be expected. It is also at the fourth-grade level that content subjects begin to be taken seriously. All this, it was thought, made fourth grade a likely place to find comprehension instruction.

The second part of the research was a study of schools. In this case, grades 3-6 were observed in order to see whether individual schools differ in the amount of time they give to comprehension instruction, and whether various grade levels show differences.

The third sub-study concentrated on individual children in an attempt to see what instructional programs look like from a child's perspective.

In all three sub-studies, each classroom was visited on three successive days. This procedure was followed to allow for continuity and also to reduce the likelihood that teachers would only be seen on an atypical day. On the assumption that both the content and the quality of instruction varies on different days of the week, the three-day visits were scheduled so that all five days of the week would be included with equal frequency by the time the research terminated. On the assumption that the quality of an instructional program also varies at different times in the school year, observations began in early September and continued until mid-May.

Still more facets of the research were common to the three sub-studies. For instance, all the teachers knew beforehand that they were to be visited; more likely than not, therefore, at least some put forth their best efforts. Although each was asked to do exactly what s/he would do were there no visitor in the room, evidence exists that in at least one case the request was not followed. A teacher who was observed by this writer, and who had forgotten about the observation, was found at her desk working on report cards while the children were filling out workbook pages and ditto sheets. With the arrival of the visitor, she circulated around the room offering help to the children.

To be noted, too, is that whenever an administrator was contacted about the possibility of observing, a request was made to see the best teachers. While there is no guarantee that the best (which would have different meaning for different administrators) were seen, it is likely that the worst were not seen. Although each teacher knew about the observers' interest in reading, the special interest in comprehension instruction was never mentioned.

In many ways, then, what was seen should have allowed for a positive account of reading programs. As mentioned, the teachers knew they were to be observed, and the best teachers on a faculty were requested. Further, the recording and timing of behavior started not when an official schedule indicated a period was to begin but, rather, when it actually began. Since starting on time was uncommon, the selected procedure resulted in less time being assigned to "Noninstruction" than would have been the case had the recording adhered to the official schedule.[1]

Still one more relevant fact needs to be mentioned. Because observations could only be made with a teacher's permission, times when instruction might be reduced both in quality and in quantity were omitted from the observation schedule. Teachers and/or administrators did not permit visiting, for example, at the very beginning of the school year, or at the very end. Nor were teachers willing to be observed during the weeks that preceded Thanksgiving and Christmas. Even days like Halloween and Valentine's Day had to be omitted. All this is to say that what was seen should have been examples of fairly good instructional programs.

Observers

All the observations were made by this researcher and two assistants who had been prepared to be observers in a number of different ways. To begin, both had had elementary-school teaching experience; both had also taken reading methodology courses with this writer and had themselves taught

1. The common and sometimes large discrepancies between the amount of time officially scheduled for reading and the time spent on it indicate that researchers who are interested in examining the relationship between instructional time and reading performance must make certain that they deal with actual schedules, not paper ones.

an undergraduate course in reading. Before the observations started, time was spent on descriptions and illustrations of each category; directions for recording what was observed were carefully outlined, too.

When a teacher was the focus, records were kept under the following headings:

Time	Activity	Audience	Source

When each different activity began and ended was noted in the first column, which was also used to indicate how an activity was classified. The second column was for descriptions of each activity. Who was with the teacher at the time of an activity was named in the third column, while the fourth allowed for information about the source of an activity--for instance, a workbook or manual. Only the headings "Time" and "Activity" were used when a child was being observed.

Careful preparation may account for the total agreement in classifications made by the observers when four trial observations were done prior to the start of the study. Two problems were identified, however. With one observer, a consistent error in timing activities occurred during the first trial observation because, instead of marking the starting time of an activity to correspond with the concluding time of the previous activity, she skipped a minute. For example, if the categories "Transition" and "Comprehension: preparation" described two successive activities of a teacher, the first of which ended at 9:06, she erroneously noted the second as starting at 9:07 instead of 9:06.

The flow in the observer's reporting was unnecessarily detailed accounts of behavior. To remedy that, distinctions had to be made between what was essential and, in contrast, what could be recorded if time permitted.

Originally, a minute was considered the basic unit of time. However, as the observations proceeded, some activities were so brief as to require descriptions that used half minutes.

For all three sub-studies, every description and classification were checked by this researcher. Unclear descriptions or questionable classifications were discussed with the observer. Questionable classifications, which were uncommon, were resolved through discussions of the given behavior or--and this occurred more frequently--through the addition of categories. Added categories, all of which were used infrequently, included: Sustained Silent Reading (both teacher and children are engaged in silent reading); Diagnosis: checks (teacher looks over sheet on which notes about problems are written); Diagnosis: writes (teacher makes a notation about a problem or need).

Sub-Study One: Fourth Grade

In the study of fourth grades, reading was observed for 4469 minutes; social studies, for 2775 minutes. The 24 classrooms that were visited were in 13 different school systems in central Illinois. All the classes were taught by women, 7 of whom had aides. Six of the 24 classes were third-fourth grade combinations.

Class size in the observed rooms ranged from 11 to 32 children with a mean of 22.7. In 8 schools, interclass groupings were used when reading was taught; the remaining 16 had self-contained rooms. Only one school used interclass groups for social studies.

Findings for the Reading Period

The amount of time the 24 observed teachers spent during the reading period on instruction and activities concerned with comprehension and study skills is summarized in Table 1. As the table shows, less than 1 percent

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Insert Table 1 about here.

(28 minutes) went to comprehension instruction. At no time was study skills instruction seen. The observed comprehension instruction, found in 5 different classrooms, is described below.

Language of Poets (1 min.)
Teacher read aloud a page in a basal reader that dealt with the way poets use language in a special way--a "rich" way. The page pointed out that instead of saying something like "an apartment that is 150 feet high," the poet might say "an apartment halfway up the sky."

Main Idea (7 min.)[2]
Children and teacher listened to a tape that explained a main idea as "what a story is mostly about." Narrator talked about titles as being main ideas. Directed by the tape, children read aloud a poem from cards in order to see whether they could tell what its main idea was. Teacher stopped the tape, and children told what they thought the main idea was.

Meaning of Common Expression (2 min.)
Questioning the children about a story they just read, teacher asked, "What does 'Two wrongs don't make a right' mean?" One child gave vague explanation, so teacher added a better one. Further examples were mentioned by the children.

Extracting the Main Idea from Facts (14 min.)
Children were unable to tell in a few words what a series of facts in a basal reader selection was telling them, so teacher explained "main idea." She next posed questions about the five pages on which the facts had been related. Her questions and directions included: Why did the author put the ideas on pp. 116-120 in this story? What did we learn from those pages? What was the author showing us? Think about what you learned from those pages. Let's see if we can group the facts together and give them a name. That will be the main idea in all the facts.

2. All this instruction was from a tape. The teacher just listened. Ordinarily, her listening would have been classified as "Listens." However, since the tape dealt with comprehension instruction, her behavior was categorized as "Comprehension: instruction."

Analysis of Compound Sentence (4 min.)
Guided by a page in a basal reader, teacher mentioned that and and but are "Connecting words." Said they often connect words to make long sentences. Teacher then wrote on the board Pollywog sat in Mrs. Weaver's class and looked out the window and prayed for rain. Had children read the sentence aloud. Asked whether someone could say what one short sentence in the long sentence said. Child offered, "Pollywog sat in Mrs. Weaver's class." Teacher then asked for another short sentence. When a child offered, "Looked out the window," teacher reminded him to start with "Pollywog." Same reminder had to be given to another child when he suggested, "Prayed for rain" as being the third short sentence in the long one.

Even though each of the above episodes meets the requirements of "Comprehension: instruction," it should be noted that what was done (with the exception of the 14 minute episode) was not likely to be instructive for comprehension. Take the last episode as an illustration. In some ways, it had the greatest potential, but the teacher failed to relate what she was doing either to additional sentences or to comprehending in general. Instead, she followed the book; did neither more nor less than what it covered; then shifted to something else. Quick, unexplained shifts were exceedingly common in all the classrooms and may explain why the category "Comprehension: application" was not needed for the fourth grade observations.

Used with noticeable frequency, on the other hand, was the category "Comprehension: assessment" (17.65 percent). Teachers' questions dominated here. Only the questions depicted in the comprehension-instruction episodes just described, however, had the potential to be instructive. With the rest, the concern was to see whether children's answers were right or wrong. Although no attempt was made to count or classify questions, a generous use of literal ones was very apparent. Most questions were taken from basal manuals.

Except for questions, manuals were rarely used. How little manuals appeared to affect instructional programs is reflected in the small amount

of time spent on preparing children to read something (5.53 percent). The typical preview consisted of very brief attention to new vocabulary followed by the posing of two or three questions that were never written. This meant that the children could not refer to them before, while, or after they read. It also meant that they may have been forgotten not only by the children but also by the teacher. This is suggested by the fact that questions raised before a story was read were not repeated when the story was discussed.

While it is true that manuals were visible with surprising rarity, workbooks and ditto sheets appeared everywhere in great numbers. Their omnipresence is reflected in the amount of time teachers spent on activities connected with assignments, which is summarized in the next table, Table 2. "Comprehension: assessment" appears in Table 2 because the assessment was of assigned reading.

Insert Table 2 about here.

The category "Assignment," it will be recalled, covers all assignments excluding those for comprehension and study skills. As Table 2 shows, the three dimensions of the category account for 14.35 percent of the teachers' time.

Inspection of Table 2 may raise a question about the possibility that "Comprehension: help with assignment" and "Assignment: help with" obscure assistance that was instruction. If so, the answer is "no." The help in both cases was with the mechanics or directions for an assignment, not with features that could be instructive. Mechanics and directions caused problems for children because, all too often, numerous assignments were given at the same time; or the preparation for doing them was insufficient; or the directions were unclear.

Data in the next table, Table 3, show that the observed teachers did not neglect comprehension instruction because they were too busy teaching other things.

Insert Table 3 about here.

Prior to the study it has been assumed that, by fourth grade, fairly sizeable amounts of time go to structural analysis instruction because, by then, complicated-looking derived and inflected words appear frequently in materials. Also assumed was that word meanings receive special attention because the same materials show generous use of words not likely to be in fourth graders' listening-speaking vocabularies. Table 3 points up that neither assumption was correct.

To describe how the observed teachers did spend their time, Table 4 lists all the categories showing total percentages of 4 or more. Three categories in Table 4 have not yet been mentioned but, combined, they

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Insert Table 4 about here.

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consumed almost 31 percent of the teachers' time. The three are "Noninstruction," "Transition," and "Listens: to oral reading."

"Noninstruction" describes the times when a teacher was doing such things as chastising; talking about something that had no academic value (e.g., a bus schedule); doing nothing while the children worked on assignments; or correcting papers at her desk. The largest contributor to the 10.72 percentage figure shown for "Noninstruction" was "correcting papers at desk." Frequently they were math papers. While this writer was surprised at the frequency with which teachers were willing to sit at their desks

correcting papers while an observer was in the room, it is possible that they would have been there with even greater frequency if a visitor was not present. This is suggested by the fact that more correcting went on when the research assistants were observing then when this writer was the observer.

The category "Transition" accounts for time required to get ready for, or end, an activity. From the teacher's perspective it refers to waiting. (If something other than waiting was observed, the teacher's behavior was not called "Transition.") From the children's perspective, transition time went to finding a book; walking to or from the reading table; finding a given page; and so on. One of the things that became noticeable in the course of observing is that schools with interclass groupings for reading are noticeably inefficient. That is, large amounts of time are consumed by waiting, getting attention, and settling down.

The other category in Table 4 that has not yet been mentioned is "Listens to oral reading." This covers time spent on "round robin" reading. Although this writer's earlier observations in primary grades showed it to be much more common at those levels, the 9.76 percent figure in Table 4 indicates that it persists into fourth grade.

That round robin reading is common when social studies is taught will be shown when the social studies data are reported.

Social Studies Programs

Earlier visits to classrooms established both general and specific expectations for what would be found when reading was observed. In contrast, the lack of prior observations of social studies allowed for nothing more

than conjecture. The following assumptions about what might be observed seemed logical:

1. The reading ability of some children is sufficiently poor that they cannot read social studies textbooks.

2. Because of these deficiencies, teachers supplement the prescribed textbook with easier materials.

3. Social studies periods are viewed not only as a time to cover content but also as an opportunity (a) to teach children how to read expository materials, and (b) to teach such study skills as outlining, scanning, and varying rate of reading to suit purpose.

The one assumption that turned out to be correct is the first. The others were naive or, at best, unrealistic for such reasons as the following. All the observed teachers saw the social studies period as a time to cover content; as a time to have children "master the facts." Nothing that was observed indicated that distinctions were made between important facts and trivia. If it was in the book, it was important.

Concurrently, no teacher saw the social studies period as a time to help with reading. Children who could not read the textbook were expected to learn the content from round robin reading of the text by better readers, and from films and filmstrips.

Just as few provisions were made for poor readers, so too was very little done to challenge able ones. Instead, social studies was a time for whole class work. As was true of the reading period, considerable time went to written assignments, many of which caused major problems for poor readers. Although workbooks were less common for social studies than

they were for reading, ditto sheets were equally common. Prepared by the teachers themselves, many of the sheets were difficult to read because the material was overly crowded or the ink was too light. Both flaws account for some of the time allotted to "Assignment: helps with."

The more specific data that will be reported for social studies both support and amplify these more general observations. They are based on 2775 minutes of observing.

Findings for the Social Studies Period

Data in Table 5 single out categories pertaining to comprehension and study skills. Especially surprising is the little time that went to pre-

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Insert Table 5 about here.

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paring children to read a chapter. Before the study it had been taken for granted that teachers spend considerable time preparing children by giving attention to terms whose meanings and pronunciations are likely to cause problems; by sketching what a chapter will cover; and by posing questions designed both to motivate and to guide the reading. The figure of 1.73 percent (48 minutes) for "Comprehension: preparation for reading" is evidence of this being another unrealistic assumption.

Questions posed for assessment purposes were common during the social studies period. This is reflected in the 8.25 percent figure listed in Table 5 for "Comprehension: assessment." The vast majority of the questions focused on facts, many of which were trivial, some of which are no longer "facts." That social studies, as it was being taught, has little to do with children's current lives was underscored in practically all the classrooms.

The next table, Table 6, lists categories with the largest percentages

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Insert Table 6 about here.

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of time allotted to them. The list reinforces the importance--as this is measured by the amount of time teachers spend on them--of assignments. As was mentioned, problems with assignments explain the sizeable amount of time (11.5 percent, or 318 minutes) shown for "Assignment: help with."

The amount of time for "Listens" (almost 11 percent) is largely accounted for by the use of films and filmstrips to cover content. Whenever a teacher listened to such aides, her behavior was described as "Listens." Since one reason for the films and filmstrips was to help slower children, two other categories ought to be in Table 6, but the little time consumed by them do not warrant their inclusion. I refer to "Listening: preparation" (0.86 percent) and "Listening: check" (2.64 percent). If a teacher did something to prepare children for a film or filmstrip, her behavior was called "Listening: preparation." If a subsequent effort was made to find out what children learned from the aide, it was called "Listening: check." Because so much of the narration for the films and filmstrips moved quickly and included many terms not likely to be familiar to the children, the little time spent in preparation was both surprising and disappointing. Even more disappointing was the time spent watching films whose content was either obsolete or no longer relevant to what was being studied.

Sub-Study Two: Grades 3-6

The second part of the research focused on schools, grades 3-6. In each of the 3 schools that participated, 4 classes covering the grade 3-6 range were observed. None of the fourth grades was in Sub-Study One.

The 12 observed teachers divided between 10 women and 2 men. (In all the discussion, teachers will be referred to as "she" in order to minimize the possibility of identifying anyone.) Two teachers had aides but only for reading. All 3 schools, however, had remedial reading and learning disability teachers; in all 3, therefore, considerable traffic in and out of classrooms was common.

Class size ranged from 17 to 28 children with a mean of 21.9. In 3 rooms (grades 3, 4, 6) social studies was not being taught when the observations took place, so science was observed instead. In 3 rooms, inter-class groupings were used for social studies; in 4, they were used for reading. Reading was observed for 2174 minutes; social studies and science, for 1119 minutes.

The three schools in Sub-Study Two were in central Illinois and were selected for the following reasons. One was very traditional; the second had the reputation of being "open"; and the third was in a school system that had made a special effort to improve its reading program during the year prior to the observations. The choices, it was thought, offered the possibility that both good and varied instructional programs would be found. Such was not the case.

Prophetic Findings

The first class observed for Sub-Study Two was a fourth grade. What was seen and heard turned out to be strikingly similar to what was observed in all subsequent classrooms. Some of the details of the three days of observing, therefore, will provide a background for the report of the data concerned with how the grade 3-6 teachers spent their time.

To begin, the fourth grade teacher was clearly an assignment giver, not an instructor. It was in her classroom that the first of many examples of "mentioning" (as opposed to instructing) was seen. One minute of her time went to contractions, followed by two minutes for the sounds that three digraphs record. At first, the brevity and also the abrupt, unexplained shift in focus were puzzling. Quickly, though, an explanation was forthcoming in the form of workbook assignments dealing with contractions and the three digraphs. (The most apparent example of "mentioning" occurred later in a third grade. In 22 minutes--again this preceded workbook and worksheet assignments--the teacher attended to: bats; syllabication; various sounds for ea; limericks; new vocabulary; homographs; syllabication (again); and the suffix -teen.)

Although "mentioning" seemed designed to allow children to complete written assignments, it was often insufficiently thorough to achieve that end. This is why the category "Assignment: help with" was used with some regularity; why "Noninstruction" often had to do with chastisement; and why many interruptions occurred when a teacher was with a sub-group of the class.

The importance assigned to getting assignments done was also apparent in the first classroom visited and in all others as well. With the fourth grade teacher it first became noticeable when she skimmed over several topics, the last of which was prefixes. The children seemed puzzled about them; however, instead of amplifying what she had said, the teacher suggested, "Do this first (referring to the prefix ditto sheet) while they're still fresh in your mind."

In all the observed rooms, completing assignments and getting right answers seemed much more significant to teachers than concerns like, Do the children understand this? Will what I'm assigning contribute to reading ability? Lack of attention to the second concern must have been exceedingly common because a large number of assignments had little or no significance for reading. With the fourth grade teacher, the lack of attention may have accounted for her altering an assignment in a way that made it less significant than it originally was. The assignment was a workbook page that listed a number of sentences, all taken directly from a basal story that the children were about to read. The task was to number the sentences in an order that matched the sequence of events in the story. When making the assignment, the teacher suggested to the children that they copy the number of the page on which they found each sentence; then the page numbers would show the sequence. "That way," she commented, "you'll be sure to get the page right."

Making certain that there is enough time for written assignments (regardless of their value) also affected what the teachers did. This became apparent during the first observation when the teacher was working with the poorest readers. What she was doing (attending to new words; discussing the meanings of some; posing questions about the story that was to be read) seemed essential. Nonetheless, she rushed. Why she hurried was explained with her own comment: "I want all of you to get two workbook pages done by ten o'clock." And while the children completed them, the teacher just waited. Waiting while a class worked on assignments was common in the observed classrooms and accounts for some of the time called "Noninstruction."

While the reading period in the fourth grade was closely similar to what was to be seen in other classrooms, what took place when social studies was taught turned out to be an even better predictor of what was to come.

To begin, the fourth grade teacher used one social studies textbook with the entire class. Again, round robin reading by the more able children was used to communicate the content of a chapter to the less able readers. As in other classrooms, the oral reading was often poor. Children stumbled over hard-to-pronounce terms; read in a monotone; and were often difficult to hear.

Intermittently, what was read was discussed. Frequently, the focus of a discussion was the meaning of a word:

Teacher: Who can tell us what a continent is?

Child: A really big place with states and countries and stuff.

Teacher: Could anybody give us another description?

Child: It's a large land mass.

Teacher: Fine. Good.

How seriously teachers take textbooks definitions (even when children do not understand them) was displayed many times but never as graphically as in the fourth grade being discussed. In this case, the word was group. The teacher asked for an example of a group, so one child proposed, "A fight." "When we find out the four reasons that make a group," the teacher responded, "you'll see that a fight isn't a group." The next volunteer was more successful; he offered, "When you're on a bus in Chicago." Now the response was, "Once we read about the rules of a group, that will fit."

Supplementing discussions like these were written assignments that posed large numbers of literal questions about a chapter. As in Sub-Study One, the children who could not read the text could not read the dittoed questions not only because the words were difficult but also because the teacher's cursive writing was hard to decipher or--as was also true in Sub-Study One--the ink was too light.

With a program like the one just depicted, the potential for discipline problems is great. In the fourth grade being described, the teacher was strict; thus her room was generally quiet. But in others, noise was both frequent and loud and accounted for frequent use of the category "Noninstruction" to describe chastisement.

How all the categories were (or were not) used when grades 3-6 were observed will be reported now.

Findings for the Reading Period

Sub-Study Two was done to see whether attention given to comprehension instruction might vary from school to school, or from grade to grade.

When data from the three participating schools are compared, similarities rather than differences emerge because, as Table 7 points up, two schools gave no time to comprehension instruction while the third spent a total of 4 minutes on it. The 4 minutes of instruction were found in one

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Insert Table 7 about here.

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fourth grade and occurred on two different days. Descriptions of what this teacher did will explain why the category "Comprehension: application" was never used. They will also illustrate the sudden, unexplained shifts in

focus that were referred to earlier and that were so characteristic of all the observed classrooms.

Similes: Grade Four (2 min.)
Teacher asked child to read top part of page in basal reader, which told how it is possible to describe something by comparing it to something else. Teacher explained that a comparison is called a simile, and wrote simile on the chalkboard. On the same page, three examples of similes were listed (e.g., "The skinny old cat looked like a stringy, wet mop.") Three children took turns reading one aloud. (This was followed by a sudden shift to new vocabulary in a story the children were about to read.)

Homographs: Grade Four (2 min.)
Using a basal reader manual, teacher wrote lead, wind, record, and close on the chalkboard. Pointed to lead and said, "The pencil has lead in it. Lead me to school. Sometimes it says 'lead' and sometimes 'lead.'" Used same procedure with the other three words; then commented, "These are called homographs. You have to look at the rest of the sentence to know how to pronounce these words." (This was followed by a sudden shift to syllabication in words like part-parted, and clean-cleaned.)

As with the teachers in Sub-Study One, those in Sub-Study Two rarely used manuals except for the post-reading interrogation that was heard everywhere (see Table 7). While the teacher just referred to was an exception in her use of manuals, she appeared to use them without ever asking, What is the purpose of this? The result was brief and shallow instruction.

Shallowness also characterized procedures used to review comprehension instruction. One such procedure occurred in the same fourth grade that provided the two samples of comprehension instruction; the other was in a third grade. Both are described below.

Figurative Lanuage: Grade Four (1 min.)
Using a basal reader manual, teacher asked children, "What does 'Blind as a bat' mean?" Child explained. Teacher commented, "Remember? We call that figurative language. What does 'strong as an ox' mean?" Child responded. (This was followed by sudden shift to the use of alphabetical order with encyclopedias.)

Literal/Figurative Meanings: Grade Three (2 min.)
Teacher and children were discussing story in basal reader. Teacher called their attention to the words "drew near to the edge." Asked, "What is the figurative meaning of those words? We've talked about figurative meanings before." Child explained. Teacher then asked, "What about its literal meaning? What do those words mean just as they are? Remember, that's the literal meaning." Child explained. (Teacher left reading table to write names of mischievous children on chalkboard. Upon returning, asked questions about the story.)

The assignments that dealt with comprehension (see Table 7) generally focused on cloze exercises or on questions that pertained to content that was as short as a paragraph or as long as a workbook page, which means they looked very much like items in standardized reading tests. Other assignments categorized as "Comprehension" were connected with basal reader selections. With these, children did such things as answer questions; match partial sentences on one side of a workbook page with partial sentences listed on the other side; arrange sentences in sequential order; match items; explain the meanings of idiomatic expressions; and so on.

Since, as Table 7 demonstrates, not much was done with comprehension or study skills (except to interrogate and give assignments), a logical question is, How did the teachers spend their time?

To answer, all the categories were ranked according to the percent of time assigned to them. The six most frequently used for each school were compared in order to see whether any appeared on all three lists. Four categories did, and they are listed in alphabetical order in Table 8. The introductory comments for the report of Sub-Study Two explain why these four qualify for such a listing.

Insert Table 8 about here.

Combined, the data in Tables 7 and 8 prompt the question, Whatever happened to instruction? To answer, data concerned with instruction are listed in Table 9. While some of the percentages in Table 9 are surprising, others are not. Data for the three dimensions of "Assignment," for instance,

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Insert Table 9 about here.

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are hardly unexpected; for, from the beginning of the observations until they ended in May, the central role played by assignments was obvious everywhere. In this respect, third grade classes seemed more like fourth grades than like the second grades that have been visited for other research (Durkin, 1974-75). If this is correct, it suggests the possibility that teachers teach in grades one and two; then, when children are able to do some independent reading, they switch to assignment giving and interrogation.

One of the reasons for Sub-Study Two, it will be recalled, was to see whether changes occurred from grade to grade insofar as comprehension instruction is concerned. Since such instruction was practically nonexistent, no meaningful comparison is possible.

What was found when social studies was observed in the three schools will be reported next.

Findings for the Social Studies Period

As was mentioned before, in 3 of the 12 classrooms (grades 3, 4, 6) social studies was not being taught when the observations took place; thus, science was observed instead. As it happened, in all 3 of the classrooms, science time was spent on experiments followed by discussions. Because reading did not enter into any of the activities, only what was seen and heard during social studies will be reported.

Table 10 summarizes what was observed insofar as comprehension is concerned. If nothing else, the data--or the lack of data--require attention to the question, What was going on during social studies?

Insert Table 10 about here.

To answer, the procedure followed for the reading-period data was repeated. That is, all the categories were ranked according to the percent of time assigned to them. The six most frequently used for each school were compared to see whether any appeared on all three lists. In this case, only two categories did: Noninstruction (which was at the top of all 3 lists), and Transition (which was close to the top on all 3). Three categories appeared on two of the lists: Assignment: helps with; Discussion; and Listens.

While data for social studies are based on a smaller amount of observation time and show less of a pattern than did data for the reading period, they still indicate that teachers in grades 3-6 do not perceive social studies as a time to add to reading comprehension abilities even though some children in every classroom cannot read the assigned textbook.

Sub-Study Three: Individual Children

How teachers spend their time during the reading and social studies periods was the concern of Sub-Study One and Sub-Study Two. In contrast, Sub-Study Three examined what individual children do. As with the two other studies, the primary purpose of Sub-Study Three was to learn whether time is spent on activities likely to add to reading comprehension abilities.

Only three children were observed in Sub-Study Three in order to allow for extensive data on each one. They were in grades 3, 5, and 6. Fourth grade was skipped since it was the sole focus of Sub-Study One.

Criteria for selecting subjects reflected the interest in collecting data from fairly good instructional programs. They also reflect what has been learned over the years during visits to classrooms: (a) instructional programs in reading are geared to children reading on grade level; and (b) girls, as a group, seem more interested in school activities than boys, as a group. Consideration of all these factors accounted for the decision to observe average readers, two of whom would be girls. The 3 subjects were selected arbitrarily from average readers during trial observations in their classrooms. The girls were in grades 3 and 6; the boy, in grade 5. Neither the subjects nor their teachers (all of whom were described by administrators as being among the best on their faculties) knew that individual children were being studied. This meant that an observer spent time in a room even when she learned upon arrival that a subject was absent. (Such time does not enter into any of the reported data.) To do otherwise might have revealed the nature of the study and, in turn, prompted the teacher to be more consciously aware of the subject than would have been the case under normal circumstances.

All other aspects of Sub-Study Three were like Sub-Study Two and Sub-Study One. Each classroom was visited on three successive days; the days were selected to cover all five days with equal frequency; and the observations were done from September until May.

None of the 3 classrooms in Sub-Study Three was in the other two studies. Each was in a different city, all located in central Illinois.

Categories for Describing Children's Behavior

Once decisions were made about categories for describing a teacher's behavior in Sub-Study One and Sub-Study Two, most categories for a child's

behavior followed automatically. For instance, the 12 categories pertaining to comprehension and study skills were as follows:

Answers aloud: comprehension assessment

Listens to:

- comprehension instruction
- comprehension instruction review
- comprehension application
- comprehension preparation
- comprehension assessment

Listens to:

- study skills instruction
- study skills instruction review
- study skills application

Writes:

- comprehension assessment
- comprehension assignment
- study skills assignment

Under Writes, "comprehension assessment" refers to times when a child is writing something as a result of the teacher's interest in learning whether assigned reading was comprehended. The same classification also refers to the many times that subjects were observed using SRA Reading Laboratory materials; specifically, when they were writing answers to comprehension questions about material they had just read. The category "Writes: comprehension assignment" was used whenever a subject was engaged in a written exercise that depended upon comprehension--for instance, filling in blanks in a cloze exercise; pairing strings of words to make sentences; and so on.

All other categories for Sub-Study Three are in Appendix B. Again, directions for using them (rather than definitions) are given in order to facilitate replications of the study.

Instructional Programs for Reading

To make the data that will be presented more meaningful, thumbnail sketches of the three classrooms will be given first.

The third grade had 24 children who were divided into 5 groups for reading. For some of the observations, a student teacher was present. During the year, the third-grade subject used two third-grade basal readers. The teacher's work with her group was very traditional: basal stories were read and discussed, and written assignments from workbooks and ditto sheets followed. A sizeable number of written assignments had to do with cursive writing. In fact, 10.27 percent of the time the subject was observed went to cursive writing practice.

The fifth-grade subject was in a grade 4-5 classroom and worked in a fifth-grade basal reader. His class, numbering 25 children, also had 5 reading groups. The teacher met with each twice a week at which time numerous assignments were made that typically included some for spelling. The latter practice is reflected in the fact that of the time the fifth grader was observed, 16.35 percent was spent on spelling assignments that were of two types: (a) writing words a given number of times followed by writing sentences that included the words; and (b) completing pages in a spelling workbook that gave as much attention to phonics as it did to spelling. Children in this room were also expected to complete specified numbers of SRA Reading Laboratory exercises as part of their written work.

The school attended by the sixth-grade subject used interclass, "homogeneous" groups for reading, which, according to the teacher, eliminated the need for further grouping when reading was taught. During the reading period, therefore, whole class (N=22) work dominated, much of it written

assignments. (In this school, a "clerical assistant" was available to run off ditto sheets.) While the children did assignments, the teacher sometimes worked at her desk correcting papers and recording grades. Some of the work done by the children was SRA Reading Laboratory exercises, which were unpopular. The teacher knew this but said that the one year she eliminated them, standardized reading test scores dropped.

Findings for the Reading Period

The first, quick glance at all the data for the 3 subjects marked them as being listeners and, second, doers of written assignments. The more detailed analysis presented in Table 11 supports the initial impression; it also indicates that very little reading went on except for what was required to do assignments. As can be seen in Table 11, adding the categories "Noninstruction" and "Transition" accounts for the bulk of the time

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Insert Table 11 about here.

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the subjects were observed. ("Noninstruction" was used when subjects walked aimlessly about the room; sharpened their pencils; stared out the window; chatted with another child; were chastised; and so on.) The sizeable amount of time assigned to "Noninstruction" for the fifth-grade subject correctly reflects his lack of interest in doing written assignments. Although he seemed to like reading books (see Table 11), he did whatever he could to avoid assignments. His "delaying tactics" resulted in chastisement, which helps to account for the large amount of time assigned to "Noninstruction" for him.

In contrast, the girls in third and sixth grades started assignments promptly and saw them through to completion. At times, the sixth grader

almost seemed compulsive about getting assignments done. While others in her class took advantage of "free reading," she would work on assignments that were not due for several days.

The next table, Table 12, singles out data for comprehension and study

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Insert Table 12 about here.

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skills. As is shown there, comprehension assessment continues to loom large; comprehension instruction remains insignificant. What was done with the 13 minutes spent on comprehension instruction is described below.

Idiomatic Expression: Grade Three (1 min.)
During round robin reading, teacher stopped oral reader to ask about the meaning of "Take me or leave me." Child who responded said it meant, "You can take me with you or leave me here. I don't care which." Teacher then commented about the fact that "some expressions just don't mean what they sound like word by word." Told children what the expression meant. Asked whether that meaning made sense in what was being read aloud. Children said it did. (Round robin reading coninued.)

Interrogative Sentences: Grade Three (8 min.)
To prepare the entire class for a ditto-sheet assignment, teacher stated that certain words at the beginning of a sentence mean a definite answer is expected. Said two such words are Where and When. Asked class for another example. One child suggested Who. Teacher then asked if anyone could name still more. What and Why were volunteered. Teacher asked, "What about How? Class discussed How. Next, teacher listed on the board the following words, commenting that they mean a "yes" or "no" answer is required: Can, Is, Does, Do, and Are. Teacher reminded class to watch for all these words in their reading, and to think about what they ask for. (Directions for completing the ditto sheet followed.)

Skimming to Find Key Words: Grade Five (2 min.)
One child read aloud a paragraph from a basal reader that discussed skimming as a way to find "key words." Following that, teacher mentioned that by glancing down a page, one can pick up key words. Directed children to look at the next page in their books and asked, "What key words tell you that the mountain men were in constant danger?" Individuals named the words; teacher praised them. (Round robin reading resumed.)

Inferential Questions: Grade Five (1 min.)
After directing children to read a story in a basal reader and to write answers to the questions at the end of it, teacher asked children to look at the

questions. Said that not all the answers would be found directly in the story, and that this meant they would have to think about what they read because not all the answers were given right on a page. (Silent reading of the story came next.)

Meaning of Stage Directions: Grade Six (1 min.)
In preparation for reading a play and, later, performing it, teacher asked class if they could figure out the meaning of the directions given for various sound effects. Asked what "Evil theme, up and under, out" might mean. Nobody answered. Teacher next asked for meaning of "Evil theme." One child explained. Teacher said that "up and under, out" meant "it gets louder, then fades away." Teacher added that putting the two meanings together would give a meaning for the whole thing. One child explained what the directions meant. (Assignments for reading the play followed.)

Inspection of Table 12 shows that 2 of the 3 subjects in the Sub-Study Three spent a little time listening to study-skills instruction (27 min.), and to a review of it (37 min.). As the table points up, most of the listening was done by the third-grade subject. In the third grade, both the instruction and the review were concerned with use of the glossary that was in the children's basal readers. In the sixth grade, the study-skills instruction was preparation for a workbook assignment and focused on using the card catalogue in a library.

On the assumption that the 3 subjects would be listening to still other kinds of reading instruction, categories had been selected for phonics, structural analysis, and word meanings that parallel those used to describe teachers' behavior in Sub-Study One and Sub-Study Two. Data for these categories are listed in the next table, Table 13. The paucity of data shown there again points out that comprehension and study-skills instruction were not being neglected in favor of other kinds.

Insert Table 13 about here.

Time spent on written assignments for phonics, structural analysis, and word meanings is listed in Table 14. Because practically all observed assignments came directly from commercially-prepared materials, the best ex-

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Insert Table 14 about here.

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planation for data concerned with assignments is "That's what came next in the book." That diagnostic teaching exists in reading was not verified in this or the other 2 sub-studies.

Instructional Programs for Social Studies and Science

The total time spent observing social studies in the third grade was only 547 minutes. The brevity reflects the short period set aside for it (30 minutes), which, on occasion, was shortened still more or omitted entirely.

Social studies in third grade proceeded primarily through whole-class discussions that were highly effective because of the teacher's skill in leading them. Themes came from the textbook, of which there were 10 copies. The 10 were used only for their pictures and diagrams. Supplementary materials entered into special reports given by individual children.

The dominant role played by discussions is reflected in the 319 minutes (58.32 percent of the observed time) assigned to the category "Listens to: discussion." It also helps explain why the third-grade subject spent so little time reading.

In the fourth-fifth grade room, science was taught in the first semester; social studies, in the second. Science topics, suggested by the textbook, were developed through experiments, discussions, good films, and written reports by children, some of which were read aloud. The oral reading,

combined with the film presentations, accounted for 201 minutes (17.34 percent of the observed time) being assigned to the category "Listens to: oral reading." (Whenever a subject watched a film, his/her behavior was called "Listens to: oral reading.") Round robin reading of the science textbook was observed, too. (A child's participation in round robin reading was labeled "Follows oral reading.")

Many supplementary materials were in the fourth-fifth grade classroom for both science and social studies. For the latter, the teacher and the school librarian worked together to match materials with the children's reading abilities. In social studies, supplementary ma[illegible]ials were used primarily for writing reports and answering questions di[illegible]tributed by the teacher.

The sixth-grade teacher's often-expressed negative feelings about the prescribed textbook may explain why the social studies period in her room rarely began on time and why, on occasion, it was shortened or omitted in favor of something else. The routine for social studies was round robin reading of a chapter followed by the distribution of questions--as many as 40 or more--that were composed by the teacher and called "Study Guide." Written answers were required because "writing answers helps them remember the important details." The children were also expected to write summaries of newspaper articles that were of interest.

For the sixth-grade subject in Sub-Study Three, 36.01 percent of the observed time was spent on some kind of writing activity. While she and others wrote, the teacher often sat at her desk correcting papers, recording grades, and helping individuals who came to her with questions about an assignment.

As can be deduced from the three brief overviews of programs, none of the teachers in Sub-Study Three saw social studies or science as a time for helping with reading. Again, covering content was the goal. For the most part, two of the 3 covered it in ways that seemed to be of interest to the children. All 3 teachers worked hard. At times, however, they seemed to work at the wrong things. This was especially characteristic of the one in sixth grade.

Findings for the Social Studies and Science Periods

Since teaching children to be better readers of content subject textbooks never entered into any of the observed activities, the data in Table 15 are not unexpected. The 16 minutes that went to study-skills instruction in

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Insert Table 15 about here.

---

the third grade was carried on in the school library during the social studies period and concentrated on how to find a book in the catalogue and on the shelves. In the fourth-fifth grade classroom, study skills instruction included 6 minutes of attention to how to take notes from reference materials in preparation for writing a science report, which was followed the next day by 3 minutes of review and 4 minutes of application practice. Later in the year, when social studies was being taught, the fifth-grade subject received 2 minutes of individual instruction in how to use an index to learn where information about American Indians might be found.

A Summary

The primary reason for the research described here was to learn through classroom observations of reading and social studies whether elementary

schools provide comprehension instruction. Social studies was included on the assumption that comprehension instruction is required by the difficulty of social studies textbooks. Grades 3-6 were selected for the observations on the assumption that more comprehension instruction would be found there than in grades 1 and 2.

Major findings of the research are listed below.

1. Practically no comprehension instruction was seen. Comprehension assessment, carried on for the most part through interrogation, was common. Whether children's answers were right or wrong was the big concern.

2. Other kinds of reading instruction were not seen with any frequency either. It cannot be said, therefore, that the teachers neglected comprehension because they were too busy teaching phonics, structural analysis, or word meanings.

3. In addition to being interrogators, teachers also turned out to be assignment-givers. As a result, time spent on giving, completing, and checking assignments consumed a large part of the observed periods. Sizeable amounts of time also went to activities categorized as "Transition" and "Noninstruction."

4. None of the observed teachers saw the social studies period as a time to improve children's comprehension abilities. Instead, all were concerned about covering content and with having children master facts.

Before the data are discussed, limitations of the research will be recognized.

Limitations of the Research

One possible limitation lies with the amount of time spent observing. For the three sub-studies for both reading and social studies, the total time was 17,997 minutes or 299.95 hours. Of the total, 175.62 hours focused on teachers, while 124.33 hours went to the study of individual children. Whether this amount of time is enough to produce an accurate picture of classroom practices is debatable. What can be stated with certainty is that it was the maximum allowed by funds supporting the research.

With that limitation, time still could have been spent differently. Less time in each classroom, for instance, would have allowed for a larger number of different classrooms. Or, instead of focusing on both teachers and children, all the time could have gone to teachers. The problem is that every variation has its own limitations. Since the observed classrooms were so strikingly similar, it also is possible that all such variations would yield data very much like what have been reported.

Admittedly, the similarity of classrooms may relate to the fact that all the participating schools were in central Illinois, which raises a question about the possibility of one location allowing for a representative sample of classrooms. Based on consulting work in a great variety of locations, the contention is made here that the classrooms in the research are more like than different from classrooms in other parts of the country. Only research of the future can confirm or deny such a contention. Meanwhile, confirmation comes from some existing reports, only a few of which will be mentioned.

Austin and Morrison (1963) reported on their extensive contacts with schools in The First R. Among what they call "undesirable trends" are the following:

> . . .comprehension drills which scarcely begin to probe into the child's understanding of factual information; the absence of any sustained teaching of reading skills appropriate for children in the intermediate grades; . . . reading skills in the content areas neglected or never taught. (p. 3)

In Behind the Classroom Door, Goodlad and Klein (1970) made the following observations:

> We are forced to conclude that the vast majority of teachers in our sample [158 classrooms in 67 schools in 26 school districts] was oriented more to a drive for coverage of certain material than to a reasonably clear perception of behavior sought in their pupils. (p. 78)
>
> . . . classroom programs were remarkably similar from school to school, regardless of location and local realities. (p. 78)
>
> . . . telling and questioning were the predominant characteristics of instruction in our sample of classrooms. (p. 79)
>
> . . . we were struck with the dullness, abstractness, and lack of variety in the learning fare. (p. 80)
>
> Textbooks and workbooks dominated the teaching-learning process. (p. 81)
>
> Seatwork assignments were common to large numbers of children . . ., the slow hardly ever completing the assignment. (p. 82)

Goodlad and Klein also raise a question, one that the research being reported in this article frequently prompted:

> Is some stereotype of schooling built into our culture that it virtually shapes the entire enterprise, discouraging or even destroying deviations from it? (p. 91)

One more report will be mentioned, this from the Educational Products Information Exchange Institute (1977), better known as EPIE. In addition to pointing out that 95 percent of what is done in classrooms can be attributed to commercially-prepared materials, the report also makes such comments as:

> There is a sameness about the most-used materials and a diversity about less widely used materials. (p. 22)
>
> Virtually no relationship existed between a teacher's willingness or lack of willingness to reuse the materials and that teacher's perception of how well students performed with the materials. (p. 23)

One more possible limitation of the present study will be mentioned--one that plagues any researcher who attempts an observational study for it pertains to questions like: Were all activities accounted for? Were they described accurately and categorized correctly? Was the categorization consistent over time? If different individuals had been the observers, would the data be the same? In response, all that can be said is what was mentioned earlier: every effort was made to ensure that all such questions would have a positive answer.

Discussion

Before the present study was undertaken, it had been assumed that at least some of the time, teachers adhere to a sequence like the following when they are teaching reading: instruction, application, practice. The data that were collected, however, do anything but support that assumption. Instead, they portray teachers as being "mentioners"; assignment givers and checkers; and interrogators. They further show that mentioning and assignment giving and checking are characteristic whether the concern is for comprehension or something else. Just as comprehension instruction was slighted, therefore, so too were all other kinds.

Another assumption not supported by the research pertains to basal reader manuals. Since prior observations by this researcher in grades 1 and 2

showed teachers using manuals almost as if they were scripts for teaching, it had been assumed that teachers in the present study would use them with considerable frequency. That was not the case. Instead, manuals were usually consulted only when a teacher wanted to learn what the new vocabulary for a story was and, secondly, when questions were needed after the story was read.

When attention did go to new vocabulary, it was brief. Typically, each word was identified once; and the meanings of some were mentioned. That the skimpy attention created problems for poor readers was verified whenever round robin reading followed because when these children read, new words were rarely recalled.

Once a story was read, manuals were consulted again--this time for questions. Whether the type of interrogation that was observed closely mirrored manual suggestions is not known. If it did, manuals need to be altered in ways that will encourage teachers to carry on the kind of probing that not only tests comprehension but also develops it.

Whereas the influence of manuals was less than what had been expected, the overwhelming influence of workbooks and other assignment sheets was unexpected. As was mentioned, it had been taken for granted prior to the study that there would be--in fact, should be--some written assignments to provide for practice. But the thought that they would constitute almost the whole of instructional programs was never entertained. Nonetheless, that was the case.

In one room in particular, ditto sheets literally ran the program. It was there that the vast number of ditto masters supplied by basal reader

publishers was revealed. If even some had been selected as a means for remedying a problem or providing needed challenge, the abundant number of assignments would have been easier to accept. What was observed, however, pointed to indiscriminant use that resulted in what has to be called "busy work." Unfortunately, a concomitant result is the equation of reading with doing exercises.

In every classroom, certain children did the busy work promptly--in fact, in very business-like ways. Meanwhile, others did whatever they could to avoid it. Whether a lack of interest or a lack of ability accounted for their resistance could not be discerned. What could were the discipline problems and chastisement that ensued.

Still one more point must be made about assignments because it pertains to comprehension. It is the fact that their sizeable number often meant that several days intervened between the time a story was read by children and the time their teachers queried them about it. With the delay, it was impossible to ascertain whether the questions were assessing the ability to comprehend or the ability to recall what had been comprehended.

Since what was observed both for reading and for social studies was very different from what is recommended in such sources as reading methodology textbooks, it is only natural to wonder what influenced the observed teachers to do what they did. Apparently, some source of influence is both great and widespread because of the close similarity of their procedures.

The heavy reliance on workbooks and ditto sheets forces consideration of the possibility that "Do what is easy" is a significant source of influence. Still, it has to be assumed that some of the observed teachers were

conscientious professionals who did what they did because they think that is the way to conduct school. Ask such teachers what they do and they would say "Instruct."

Other conscientious teachers may have done what they did because they think that is what is expected of them. That there may be some administrators and parents who believe that the quality of an instructional program is directly related to the number of completed assignment sheets cannot be overlooked. After all, isn't this evidence of "back to basics"?

Knowing what does influence teachers is mandatory, if their behavior is to be changed. And everything uncovered in the research indicates that it must be changed if only to reduce the boredom and irrelevance that were so pervasive when classrooms were observed. Even if what was seen produces good readers--or at least successful test-takers--change still would be recommended to overcome the monotony of observed practices.

Since class size in the observed rooms averaged 23 children, small classes do not seem to be an automatic solution. The fourth grade with an enrollment of 11 students demonstrated this as the teacher went about doing what others did who had 28 or 29 students. More specifically, she used one basal reader with two sub-groups who read it in round robin fashion. While both groups completed workbook assignments, she corrected spelling and math papers. The social studies period showed whole-class work that relied on round robin reading of the textbook.

Providing teacher aides is not an automatic solution either--at least it wasn't in the 7 observed classrooms that had aides. Instead of using them in ways that would facilitate individualized instruction and practice, the

teachers often had them doing things like correcting workbooks. The result was more checking, not better teaching.

It also seems clear from the research that adding to teachers' knowledge of what constitutes good instruction will not be sufficient to bring about change. Take the case of comprehension instruction as an example. Admittedly, not nearly enough is known about it. It still is a fact, nonetheless, that many of the procedures likely to improve comprehension and that are mentioned in all the reading methodology textbooks (and probably in all the reading methods courses) were never seen. Nor were what some consider to be taken-for-granted procedures for preparing children to read chapters in content object textbooks. Since it seems safe to say, then, that the observed teachers knew more than they used, teaching them still more is not apt to alter how they spend their time when, presumably, they are teaching reading.

Suggestions for Future Research

To say that more needs to be learned about reading programs is not meant to exaggerate what is presently known. As Goodlad (1977) correctly observes, "There is only one honest answer to the question, 'What goes on in our schools?' It is that our knowledge is exceedingly limited" (p. 3). According to a review of research by Rosenshine (1978), augmenting that knowledge will not be accomplished by asking teachers what they do because "teacher reports are never significantly correlated with systematic observer data on the same behavior" (p. 167).

Even though all this points directly at the need for more observational studies, such a recommendation is made with hesitation because it never

seems to be taken seriously. Several years ago, for example, an editorial in Reading Research Quarterly by Farr and Weintraub (1975-1976) also confirmed the need to know more about "the classroom realities of teaching reading;" but that hardly led to teachers' being beseiged with requests from researchers to study their programs. The present study suggests that more than just researchers ought to be making such requests. Clearly in need of accurate information about "the realities of teaching reading" are authors and publishers of basal reader materials; authors of reading methodology textbooks; and professors of reading methods courses.

If observational studies are done and reveal classroom practices like those described in this report, identifying what influences teachers to do what they do becomes crucially important. However, even if the added portrayals of classrooms are more positive, such identification still is important if the better practices are ever to become common practices.

Not to be forgotten are other problems and questions raised by the present research. One has to do with the fact that in every observed classroom, there were children who were good readers. If their teachers are not teaching, how did such children acquire their ability? And this raises an even more fundamental question: Is reading comprehension teachable? Or, to phrase this differently, if the observed teachers had been found giving time to procedures that we think represent comprehension instruction, would their students be better comprehenders than they are now? We don't know.

Nor, apparently, do we know how to help children who are not making it insofar as reading is concerned because they, too, were seen in every observed room. Since reading ability still is a requirement for full

participation in classroom activities, such children are "outsiders" as early as third and fourth grade. To see them was disquieting. In schools where Title I, learning disability, and reading remedial teachers were almost tripping over each other, it was also puzzling.

While public criticism of our schools is often exaggerated or even unfounded, anyone willing to spend time in classrooms will come away convinced both that problems exist and that solutions are neither obvious nor simple.

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Table 1 Percentage of teachers' time spent on comprehension and study skills during the reading period

Behavioral Categories	Percentage of 4469 Minutes
Comprehension: instruction	0.63
Comprehension: review of instruction	Not observed
Comprehension: application	Not observed
Comprehension: assignment	2.13
Comprehension: help with assignment	5.46
Comprehension: preparation for reading	5.53
Comprehension: assessment	17.65
Comprehension: prediction	0.25
Study Skills: instruction	Not observed
Study Skills: review of instruction	Not observed
Study Skills: application	0.43
Study Skills: assignment	0.16

Table 2 Percentage of teachers' time spent during the reading period on activities connected with assignments

Behavioral Categories	Percentage of 4469 Minutes
Comprehension: assignment	2.13
Comprehension: help with assignment	5.46
Comprehension: assessment	17.65
Study Skills: assignment	0.16
Assignment: gives	4.72
Assignment: helps with	6.94
Assignment: checks	2.69
Total	39.75

Table 3 Percentage of teachers' time spent during the reading period on various types of reading instruction, review, and application excluding comprehension and study skills

Behavioral Categories	Percentage of 4469 Minutes
Oral Reading: instruction	Not observed
Oral Reading: application	0.43
Phonics: instruction	0.36
Phonics: review	0.18
Phonics: application	2.17
Structural Analysis: instruction	0.20
Structural Analysis: review	0.18
Structural Analysis: application	2.44
Word Meanings: instruction	0.43
Word Meanings: review	0.09
Word Meanings: application	2.10
Total	8.58

Table 4 Categories for the reading period with largest percentages of time allotted to them

Behavioral Categories	Percentage of 4469 Minutes
Comprehension: assessment	17.65
Noninstruction	10.72
Transition	10.47
Listens: to oral reading	9.76
Assignment: help with	6.94
Comprehension: preparation for reading	5.53
Comprehension: help with assignment	5.46
Assignment: gives	4.72

Table 5 Percentage of teachers' time spent on comprehension and study skills during the social studies period

Behavioral Categories		Percentage of 2775 Minutes
Comprehension:	instruction	Not observed
Comprehension:	review of instruction	Not observed
Comprehension:	application	Not observed
Comprehension:	assignment	0.86
Comprehension:	help with assignment	1.77
Comprehension:	preparation for reading	1.73
Comprehension:	assessment	8.25
Comprehension:	prediction	Not observed
Study Skills:	instruction	Not observed
Study Skills:	review of instruction	0.50
Study Skills:	application	0.32
Study Skills:	assignment	0.18

Table 6 Categories for the social studies period with largest percentages of time allotted to them

Behavioral Categories	Percentage of 2775 Minutes
Assignment: help with	11.50
Transition	11.21
Listens	10.95
Comprehension: assessment	8.25
Discussion	7.89
Listens: to oral reading	7.75
Noninstruction	7.71
Review: oral	5.44
Assignment: gives	3.64
Assignment: checks	3.39

Table 7 Percentage of teachers' time spent on comprehension and study skills during the reading period

Behavioral Categories	School No. 1 (694 min.)	School No. 2 (670 min.)	School No. 3 (810 min.)
Comprehension			
instruction	not observed	0.60	not observed
review of instruction	not observed	0.15	0.25
application	not observed	not observed	not observed
assignment	2.74	3.13	0.99
help with assignment	not observed	2.54	1.11
preparation	2.89	4.78	0.86
assessment	7.06	16.87	17.28
prediction	not observed	not observed	not observed
Study skills			
instruction	not observed	not observed	not observed
review of instruction	not observed	0.60	1.11
application	not observed	not observed	0.37
assignment	not observed	not observed	not observed

Table 8 Percentage of teachers' time spent during the reading period on four types of behavior frequently found in all three schools

Behavioral Categories	School No. 1 (694 min.)	School No. 2 (670 min.)	School No. 3 (810 min.)
Assignment: help with	12.39	11.49	22.22
Comprehension: assessment	7.06	16.87	17.28
Noninstruction	34.87	16.12	13.70
Transition	7.92	10.75	8.27

Table 9 Percentage of teachers' time spent during the reading period on various types of reading instruction, review, application, and assignments

Behavioral Categories	School No. 1 (694 min.)	School No. 2 (670 min.)	School No. 3 (810 min.)
Phonics			
instruction	not observed	0.45	not observed
review of instruction	not observed	not observed	0.12
application	3.31	0.15	0.62
Structural Analysis			
instruction	not observed	1.04	not observed
review of instruction	not observed	not observed	not observed
application	1.73	2.39	1.11
Word Meanings			
instruction	1.01	1.19	not observed
review of instruction	not observed	not observed	not observed
application	0.15	not observed	not observed
Assignment			
gives	8.21	5.22	1.85
helps with	12.39	11.49	22.22
checks	9.08	2.84	5.93

Table 10 Percent of teachers' time spent on comprehension and study skills during the social studies period

Behavioral Categories	School No. 1 (458 min.)	School No. 2 (274 min.)[a]	School No. 3 (243 min.)[b]
Comprehension			
instruction	Not observed	Not observed	Not observed
review of instruction	Not observed	Not observed	Not observed
application	Not observed	Not observed	Not observed
assignment	1.97	4.00	Not observed
help with assignment	Not observed	6.93	Not observed
preparation	Not observed	Not observed	Not observed
assessment	4.59	44.89	Not observed
prediction	Not observed	Not observed	Not observed
Study Skills			
instruction	Not observed	Not observed	Not observed
review of instruction	Not observed	Not observed	Not observed
application	Not observed	Not observed	Not observed
assignment	Not observed	Not observed	Not observed

[a] In this school, time is reduced for two reasons. Following the first observation, one teacher informed the observer that nothing else was going to be done with social studies "for a while." Science was taught in another room, which further reduces the time shown in the table.

[b] Two of the four classrooms in this school were teaching science rather than social studies. This accounts for the reduced time shown in the table.

Table 11 Behavioral categories that consumed large percentages of the time spent observing 3 subjects during the reading period

Behavioral Categories	Third Grader (1548 min.)	Fifth Grader (1957 min.)	Sixth Grader (1439 min.)
Listens	27.77	11.85	24.25
Writes	32.75	43.33	39.05
Reads:			
follows another's oral reading	3.04	1.69	8.83
aloud	0.71	0.77	0.35
silently	8.91	12.01	3.75
Noninstruction	9.24	21.00	11.40
Transition	4.07	4.75	4.24
	86.49	95.40	91.87

Table 12 Percentage of three subjects' time spent on comprehension and study skills during the reading period

Behavioral Categories	Third Grader (1548 min.)	Fifth Grader (1957 min.)	Sixth Grader (1439 min.)
Answers aloud:			
comprehension assessment	0.26	0.15	0.07
Listens to:			
comprehension instruction	0.58	0.15	0.07
comprehension instruction review	not observed	not observed	not observed
comprehension application	not observed	not observed	not observed
comprehension preparation	not observed	not observed	not observed
comprehension assessment	7.04	1.84	1.39
Writes:			
comprehension assessment	4.65	5.42	8.55
comprehension assignment	8.91	7.56	9.03
Listens to:			
study skills instruction	1.42	not observed	0.35
study skills instruction review	2.39	not observed	not observed
study skills application	not observed	not observed	not observed
Writes:			
study skills assignment	0.90	0.87	not observed

Table 13 Percentage of 3 subjects' time spent in the reading period listening to various kinds of instruction excluding comprehension and study skills

Behavioral Categories	Third Grader (1548 min.)	Fifth Grader (1957 min.)	Sixth Grader (1439 min.)
Phonics			
instruction	not observed	not observed	not observed
review of instruction	not observed	not observed	not observed
application	0.39	not observed	not observed
Structural Analysis			
instruction	0.13	0.41	not observed
review of instruction	not observed	not observed	not observed
application	not observed	not observed	not observed
Word Meanings			
instruction	2.20	1.89	0.07
review of instruction	not observed	not observed	not observed
application	not observed	not observed	not observed

Table 14 Percentage of 3 subjects' time spent in the reading period on written assignments concerned with phonics, structural analysis, and word meanings

Behavioral Categories	Third Grader (1548 min.)	Fifth Grader (1957 min.)	Sixth Grader (1439 min.)
Writes			
phonics	0.84	1.58[a]	not observed
structural analysis	1.10	0.36	not observed
word meanings	2.45	5.42	8.62

[a]This figure underestimates written assignments for phonics because the spelling workbook, used during the reading period, had a phonics orientation.

Table 15 Percentage of three subjects' time spent on comprehension and study skills during the social studies and science periods

Behavioral Categories	Third Grader (547 min.)	Fifth Grader[a] (1159 min.)	Sixth Grader (810 min.)
Answers aloud:			
comprehension assessment	not observed	not observed	not observed
Listens to:			
comprehension instruction	not observed	not observed	not observed
comprehension instruction review	not observed	not observed	not observed
comprehension application	not observed	not observed	not observed
comprehension preparation	not observed	not observed	not observed
comprehension assessment	0.91	4.92	1.85
Writes:			
comprehension assessment	not observed	4.83	10.49
comprehension assignment	0.91	3.97	4.20
Listens to:			
study skills instruction	2.93	0.69	not observed
study skills instruction review	not observed	0.26	not observed
study skills application	not observed	0.35	not observed
Writes:			
study skills assignment	not observed	not observed	not observed

[a]This time divides between science and social studies. For the other two subjects, all the time is social studies.

APPENDIX A

Categories for a Teacher's Behavior: Directions

ASSIGNMENT: checks

If a teacher spends time with one or more children in order to check answers connected with an assignment, use this description for her/his behavior. (If a teacher checks papers while the children do something else, use the description "Noninstruction.")

ASSIGNMENT: gives

All reading assignments get this description except those dealing with comprehension or study skills.

ASSIGNMENT: helps with

If teacher assists one or more children with an assignment that does not focus on comprehension of connected text or on study skills, use this category.

COLLECTS MATERIALS

This category should be used when a teacher collects something--for instance, art supplies or completed assignment sheets.

COMPREHENSION: application

If the teacher does or says something in order to learn whether comprehension instruction enables children to understand connected text, use this description.

COMPREHENSION: assessment

This is like the category "ASSIGNMENT: checks" (reread that description) except that it is assessment related to comprehension. It includes questioning children about something they have read. (Anything concerned with comprehension must be described in detail in the time-accounts.)

COMPREHENSION: assignment

If teacher gives assignment that requires the comprehension of connected text (e.g., a cloze exercise), the behavior goes here. (Note: If list of questions about material to be read is given before the reading begins, list the activity as "COMPREHENSION: preparation." If a teacher says something like, "After you read the story, answer the questions at the end," it goes under "COMPREHENSION: assignment.")

COMPREHENSION: helps with assignment

If a group or individual is having problems with a comprehension assignment and the teacher helps (raises questions; suggests certain parts be read again; asks what something means "in your own words;" etc.), the teacher's behavior is "COMPREHENSION: helps with assignment."

COMPREHENSION: instruction

Use this category whenever a teacher does/says something to help one or more children understand or work out the meaning of more than a single word.

COMPREHENSION: prediction

If a teacher says something like, "Now that you've read the first part of the story, what do you think is likely to happen in the next part?" the behavior goes here.

COMPREHENSION: preparation

This includes everything a teacher does to prepare for reading before it begins. The category thus covers attention to new vocabulary. Often, attention will also go to the meanings of words. (Only if special and separate attention goes to meanings does the activity belong under the category "WORD MEANINGS: instruction.") Preparation might also include questions or attempts to motivate the children, or to provide them with background information.

COMPREHENSION: review of instruction

If teacher offered earlier comprehension instruction and now takes the time to review or repeat it, use this heading.

DEMONSTRATES

Teacher shows something--for instance, a special book, a diagram, or how to manipulate something. (If child shows and discusses something, the teacher's behavior is "LISTENS.")

DIAGNOSIS: checks information

If teacher checks written information pertaining to diagnosis of instructional needs, categorize the behavior as "DIAGNOSIS: checks information."

DIAGNOSIS: writes

Use this category if the teacher writes something that pertains to an instructional need.

DISCUSSION: teacher directed

Whenever this category is used, specify what is being discussed. [If the discussion is an effort to find out whether children comprehended something they read, use "COMPREHENSION: assessment." If the discussion is clearly noninstructional (e.g., deals with lost property, revised bus schedule), describe the teacher's behavior as "NONINSTRUCTION." If the discussion has instructional potential but the teacher is listening rather than directing the discussion, list her/his behavior as "LISTENS."]

DISTRIBUTES MATERIALS

If a teacher takes time to give materials to individuals (for example, for an assignment), the activity goes here.

LISTENING: check

This will be used whenever a teacher attempts to find out what was comprehended in a listening activity--for instance, in a film that was shown.

LISTENING: preparation

If the teacher does something prior to the start of a listening activity that is meant to help children comprehend, the activity is described with this label.

LISTENS

If a teacher is listening to something other than oral reading, the activity is assigned to this category. (If s/he is listening to children's answers to assess their correctness, the activity is "ASSIGNMENT: checks" or "COMPREHENSION: assessment.") Listening to a movie or to a record is "LISTENS."

LISTENS: to oral reading

If a teacher spends time listening to individuals or a group read aloud, the activity goes under this heading. (If s/he is having the children read aloud in order to check on responses, the activity goes under "ASSIGNMENT: checks" or under "COMPREHENSION: assessment.") Reserve the above category for the round-robin type of reading, or for something like listening to a child read a definition from a dictionary.

MAP MAKING

If a teacher does something like sketch a coastline or draw the shape of a sea, use this heading.

MAP READING

This category is for teacher-directed activities related to maps that do not involve reading. (If reading is involved, the activity ought to be classified differently.)

NONINSTRUCTION

This heading is to be used whenever a teacher spends time doing something that is not instructing anybody in reading--for instance: checks papers at desk; chastises child; records grades; waits while children do assignments; participates in noninstructional discussion with one or more children.

ORAL READING: application

If a teacher directs one or more children to put into practice what s/he has been stressing about good oral reading and s/he guides the practice, the activity is put here.

ORAL READING: instruction

If a teacher spends time on ways to improve the oral delivery of written material, use this description.

PHONICS: application

If the teacher has children practice (use) what has been taught, the effort goes here. (If the practice is being done under the supervision of the teacher, this is where to put the activity. If the practice is an assignment that the children will do on their own, the activity is classified as "ASSIGNMENT: gives.")

PHONICS: instruction

If a teacher provides instruction in some aspect of phonics, the activity is classified under this category. (Phonics instruction is concerned with roots whereas structural analysis deals with derived and inflected words, compounds, and contractions.)

PHONICS: review of instruction

This is for times when a teacher goes over previous instruction.

READS ALOUD

If the teacher reads aloud to one or more children, use this label.

REVIEW: oral

If a teacher directs an oral review of what was done or studied earlier (e.g., in a previous social studies chapter), put the behavior here.

SILENT READING: children

The individual or group with whom the teacher is working is reading silently, and the teacher waits. (If s/he does something while they read, what s/he does should be classified under another heading.)

STRUCTURAL ANALYSIS: application

If the teacher is directing an activity in which one or more children are using or applying what was taught earlier about word structure, it is put under this heading. (If the use or application is an assignment that will be done by the children working independently, classify it as "ASSIGNMENT: gives.")

STRUCTURAL ANALYSIS: instruction

If something about the structure of derived, inflected, or compound words is taught, use this category to describe the teacher's efforts. Attention to contractions goes here, too.

STRUCTURAL ANALYSIS: review of instruction

If the teacher goes over something taught previously, use this category.

STUDY SKILLS: application

If the teacher is directing an activity in which one or more children are using or applying what was taught earlier about a study skill, use this description.

STUDY SKILLS: assignment

If the teacher gives an assignment in study skills (e.g., an exercise in skimming; or one that requires paraphrasing; or one that deals with guide words in a dictionary), use this description for her/his behavior.

STUDY SKILLS: instruction

If the teacher gives instruction in a study skill (e.g., outlining; use of SQ3R, skimming, varying rate to suit purpose and difficulty of material), use this category.

STUDY SKILLS: review

If earlier instruction about a study skill was given and the teacher repeats or reviews it, put the activity under this category.

SUSTAINED SILENT READING

If both teacher and children read silently, the activity is "SUSTAINED SILENT READING." (Change to another category when the teacher stops reading.)

TESTS

Use this description if the teacher is engaged in an effort to test in a formal way--a written, end-of-the-week test, for example. If teacher does something else while the children take the test, describe and time the other activity. Use this category only when s/he waits while the test is in progress.

TRANSITION

What is necessarily done as one activity shifts to another is "TRANSITION." Often, this heading will have the teacher waiting while the children do such necessary things as: move from one room to another or to the reading area in a room; find books; find pages. The category also deals with those times when the teacher writes on the board in preparation for an activity.

WORD IDENTIFICATION: practice

If teacher directs activity concerned with word practice, use this category.

WORD MEANING: application

Use this category if what was taught about word meanings is being used by children under the supervision of the teacher.

WORD MEANINGS: review of instruction

Use this description if teacher repeats or goes over earlier instruction with word meanings.

APPENDIX B

Categories for a Child's Behavior: Directions

ABSENT

This is for times when subject leaves room for such reasons as: to go to library, office, lavatory. (If subject goes to library with other children, accompany group.)

ANSWERS QUESTION ALOUD

If subject answers question that is not related to reading comprehension assessment, use this category. If it is related, use the next category.

ANSWERS ALOUD: comprehension assessment

If subject responds aloud when teacher is assessing reading comprehension, use this category.

DRAWS

Use this category whenever subject is engaged in art activity (assigned or aimless doodling) that has nothing to do with reading. (If child is asked to draw picture of unpictured character in a story, activity is "WRITES: comprehension assessment.")

FOLLOWS ORAL READING

This covers times when subject is participating in round-robin reading. (The important detail is that subject appears to be silently following what someone else is reading aloud.)

LISTENS

This broad, unspecified description should be used only when subject is listening to something noninstructional.

LISTENS: to answers

This is for times when subject is listening to answers that do not pertain to comprehension assessment.

LISTENS: to comprehension application

If teacher or other children are using or applying (aloud) what has been taught, and subject appears to be listening, use this category.

LISTENS: to comprehension assessment

This category is used whenever subject is listening to something (e.g., answers, discussion) that relates to teacher's effort to assess whether a piece of connected text was comprehended.

LISTENS: to comprehension instruction
If teacher (or tape) provides oral instruction in comprehension, the child's listening is put here. (Since the instruction deals with comprehension, it must be specified in detail in the time-accounts.)

LISTENS: to comprehension preparation
Whenever subject listens to teacher preparing group (including subject) for reading a selection, this category should be used. (Preparation includes attention to new vocabulary.)

LISTENS: to comprehension review
If it appears that teacher offered comprehension instruction earlier and is now repeating it, the child's listening goes here. (Be sure to describe what is being reviewed in the time-accounts.)

LISTENS: to directions
If directions are for academic assignment, put the listening here. If they deal with something like directions for a bus schedule, use the broad category "LISTENS."

LISTENS: to discussion
Use this category only when subject is listening to something academic. (If subject is listening to child tell what s/he did yesterday after school, behavior is classified as "LISTENS.") If subject participates in the academic discussion, categorize that part of his/her behavior as "PARTICIPATES: in discussion." (Remember: if discussion is teacher's attempt to find out what children comprehended, the subject's behavior is "LISTENS: to comprehension assessment.")

LISTENS: to oral reading
If subject appears to be listening to child, teacher, or narrator of a film read something, put the listening here. On the other hand, if subject is listening and following (round-robin), the behavior is "FOLLOWS ORAL READING."

LISTENS: to phonics application
Application, in contrast to instruction, covers times when subject is listening to someone (teacher or child) use or apply what has been taught.

LISTENS: to phonics instruction
If teacher provides oral instruction in some aspect of phonics and subject appears to be listening, use this category.

LISTENS: to phonics review
This category is used whenever subject is listening to a review of something taught earlier.

LISTENS: to structural analysis application
If teacher or other children are applying (aloud) something that was taught earlier about word structure, and subject appears to be listening, the behavior goes here.

LISTENS: to structural analysis instruction
If teacher provides oral instruction in some aspect of structural analysis, use this category. (Phonics is concerned with roots; structural analysis with derivatives, inflected words, contractions, and compound words.)

LISTENS: to structural analysis review
This category is used whenever subject listens to a review of something that was taught earlier about word structure.

LISTENS: to study skills application
This is for times when child is listening to the teacher or another child use what was taught about a study skill.

LISTENS: to study skills review
This category is for times when teacher reviews or offers reminders about a study skill.

LISTENS: to word-meaning instruction
If teacher is carrying out a special lesson with word meanings and subject appears to be attending to it, use this category.

LISTENS: to word meanings
If subject is listening to someone tell or read the meaning of one or more single words, put the behavior here.

MAP READING
Whenever subject spends time with a map, put his/her behavior here.

NONINSTRUCTION
Use this category whenever subject spends time with something that has no instructional value. The category fits when subject blows nose; chats with neighbor; does nothing; stares; looks out window; sharpens pencil; etc.

PARTICIPATES: in discussion
If something academic is being discussed (but it does not pertain to comprehension assessment), and subject contributes to discussion, put the behavior under this category. (If s/he responds when the activity pertains to comprehension assessment, the correct description is "ANSWERS ALOUD: comprehension assessment.")

READS: aloud

This heading is for time spent by subject reading aloud. In the time-account, specify what is being read.

READS: silently

This category is used whenever subject appears to be reading silently. In the time descriptions, indicate what is being read.

REQUESTS HELP:

Following the colon, specify the request. For instance, if child asks for help with the identification of a word, the description is "REQUESTS HELP: word identification." If directions for an assignment are not understood, the label is "REQUESTS HELP: directions."

SELF-CHECK: answers

This is for times when subject checks his/her own answers; for instance, from an answer sheet. (If the exercise focuses on comprehension of connected text, the correct description is "SELF-CHECK: comprehension answers.")

SELF-CHECK: comprehension answers

If the self-checking pertains to comprehension, use this category and describe activity in time-accounts.

STUDIES:

This covers times when subject is preparing for something like a test; that is, when the goal is to try to remember (as opposed to comprehend). Following the colon, specify what is being studied--for instance, word meanings, social studies chapter, state capitals, spellings, etc.

TRANSITION

This heading is for activities that are noninstructional, yet necessary for the logistics of instruction; for example: subject takes materials out of desk; looks for certain pages; walks to reading area; distributes papers to other children.

WRITES

This nonspecific category will be used whenever subject spends time composing something like a letter or a story, or when s/he copies material from the board. It also is used for penmanship practice.

WRITES: comprehension assessment
If subject is writing in response to a teacher's effort to learn whether something has been comprehended (e.g., gives children a test on the meanings of certain idioms, or has children write answers to comprehension questions), subject's writing goes here. Activity must be described in detail in time-accounts since it deals with comprehension.

WRITES: comprehension assignment
If subject is doing something like filling out a workbook page that concentrates on comprehending connected text, use this category. One example: using context to select appropriate word for blank in sentence. Specify activity in detail in time-account.

WRITES: grammar assignment
This includes such exercises as capitalizing proper nouns; inserting apostrophes where needed; etc.

WRITES: phonics assignment
Use this category whenever subject is filling out something like a workbook page or ditto that requires use or application of what has been taught in phonics.

WRITES: spelling assignment
If subject is doing something like writing a word three times for spelling, the activity goes here.

WRITES: structural analysis assignment
This category covers written exercises designed to give practice in using or applying what has been taught about word structure.

WRITES: study skills assignment
This category is for written work dealing with such things as using alphabetical order; using a dictionary's guide words; outlining; etc.

WRITES: test
Some of the testing activities in social studies or science may pertain to comprehension assessment; but many will be an assessment of what can be recalled or of what was memorized. The latter go under this heading. (If the assessment is of comprehension, the activity is classified as "WRITES: comprehension assessment.")

WRITES: word-meaning assignment
If child is filling out a workbook page (or something else requiring writing) that has to do with the meanings of single words, put the activity under this category. Writing a definition of a word, for instance, or pairing synonyms belongs here. (If the focus is the meaning of a phrase or more, use the category "WRITES: comprehension practice.")

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