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Reading Education Report No. 4

TEACHING READING COMPREHENSION
IN THE MIDDLE GRADES

Joseph R. Jenkins and Darlene Pany

University of Illinois at Urbana-Champaign

January 1978

Center for the Study of Reading

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN
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Teaching Reading Comprehension in the Middle Grades

The subject of this chapter is reading comprehension instruction during the middle elementary years, specifically grades three through eight. The chapter focuses on existing instructional approaches and programs designed to improve comprehension. Several of the more prominent approaches and programs are sampled and described. Some of the approaches, notably Smith and Goodman's (1971) psycholinguistic view of reading comprehension, are more conceptual and general than they are operational and specific. In contrast, certain programs such as DISTAR Reading (Science Research Associates, 1974-1975) and the basal reading series, provide teachers with highly specific instructional guidelines and materials. For each of the instructional approaches and programs sampled, we have attempted to locate research on its effectiveness in terms of student achievement. As will be apparent, evidence of specific program effects is, more often than not, either altogether absent or largely insubstantial.

While the focus of this report is on children in the third through eighth grades, descriptions of some beginning reading programs are included, since most commercial instructional programs used in the middle elementary years are continuations of programs begun at first grade. Examination of these programs reveals that the comprehension skills which receive the greatest attention during the middle grades have been introduced and taught during the child's first year of reading instruction (Rosenshine, (1978). This is as true for beginning reading programs noted for their strong code or phonic emphasis as for those characterized by a "meaning emphasis."

To provide a completely comprehensive account of how reading compre-

hension is currently taught is probably not possible; there may be as many

ways to teach reading comprehension as there are reading teachers. We

have assumed that while there are numerous differences between any two

teachers in the way that they teach comprehension, many of these differences

are incidental and not functionally related to reading achievement. The

same may be said about different approaches to teaching reading comprehen-

sion (e.g., DISTAR vs. a basal reading series). Stated simply, some of

the differences between instructional practices are not important and need

not be described.

All programs contain a variety of activities which purport to enhance

comprehension. Such variety makes it difficult to identify with confi-

dence which aspects of comprehension instruction are important, that is,

are functionally related to changes in comprehension skills. We have

tentatively identified five features of comprehension instruction upon

which programs may vary, and which are at least plausibly related to

program effectiveness. These potentially "critical features" are: the

corpus or text that students read, the skills which a program claims to

teach, the relative emphasis a program gives to different skills, how the

program teaches a skill, and the program's requirement for skill mastery

(i.e., to what extent must a child demonstrate skill acquisition before

progressing in the program).

We do not suggest that our admittedly tentative list of critical

features is either exhaustive or empirically validated, only that it

possesses some face validity. Even then, it is debatable as to how

critical any of these features are to reading achievement. For example,

some reading researchers have taken issue with the notion that reading

comprehension can be divided into discrete skills (Goodman, 1969; Spearritt,

1972; Thorndike, 1971) and instead, argue that reading comprehension is

a complex global ability. If their conception of reading comprehension

is correct, then four of our five "critical features" become trivial.

Since we have not found the evidence in support of the global ability

viewpoint to be particularly convincing (Jenkins & Pany, Note 4), and since

most instructional approaches to reading treat comprehension as a set

of multiple skills (e.g. finding the main idea, sequencing), we will for

the present consider the skills taught by a program to be a critical

program feature. In reference to the corpus feature, it is interesting

to note that between reading programs there is remarkably little overlap

in what children read. This suggests to us a viewpoint that what is

read has little to do with the development of comprehension skill, and

that instruction in reading comprehension can occur with one corpus as

well as with another. We suspect that such a view is inaccurate, and

that topic, stylistic and syntactic features of text may be factors

which may need to be systematically and carefully programmed.

Thorough, quantitative analyses which compare instructional approaches

according to these features have not been accomplished to date, and are

clearly beyond the scope of this chapter. Fortunately, some programs

provide explicit information on certain of these features. In addition,

a few investigations have been reported which compare selected reading

curricula on one or more of the aforementioned features. Our strategy

in describing the various approaches to comprehension instruction was

to secure and report any previous comparisons which focused on one or

more of these critical features. When such reports were lacking we under-

took a modest, noncomprehensive, nonquantitative but descriptive analysis

of each approach according to the five aforementioned features.

Several of the more dominant approaches to reading instruction were

selected for review. These include: basal readers, the DISTAR program,

objectives-based reading systems, language experience, and psycholinguistic

recommendations. Estimates of dominance were based on an examination of

the materials that schools purchased for reading instruction and on approaches

recommended by various reading authorities. Only comprehensive programs

that seemed to provide teachers with extensive guidance over long periods

of time were included. Not considered were more circumscribed, although

frequently recommended teaching ideas such as using newspaper articles,

choral reading, poetry reading, reading games, and the like (Harris &

Sipay, 1975). Research on program effects is described whenever such

research was available. However, as will be painfully evident, research

on most comprehensive approaches is scant.

Basal Reading Series

The most prevalent approach to teaching reading comprehension is
through basal readers. Barton and Wilder (1964) reported that between
92 and 98% of primary grade teachers use a basal series on all or most
days of the year. The frequent adoption of basal series is due in part
to commercial publishers' success in creating a teaching tool that is
unrivaled for convenience. The series provide stories and workbooks for
children, questions for teachers to ask, lesson plans, and a host of
recommended classroom activities. Moreover, the explicit instructional
guidelines that are contained in basal teacher's manuals probably exert
a strong influence on classroom instruction. Beck and Block (1975) have
observed:

> Although the implementation of these programs [developed
>
> by commercial publishers] undoubtedly varies with individual
>
> teachers, there is evidence (Diederich, 1973) that the instruc-
>
> tional strategies, found in teacher's manuals accompanying
>
> commercial programs, heavily influence the teacher's classroom
>
> behavior. Our personal experience supports this evidence,
>
> indicating that many teachers rely on the content, sequence,
>
> and instructional strategies specified in the teacher's manual
>
> (p. 1).

We examined three basal reading series to determine what methods
and materials are commonly recommended for teaching comprehension: Keys

to Reading (Economy Co., 1972), Reading 360 (Ginn & Co., 1973), and Reading

Unlimited (Scott-Foresman, 1976). These programs represent three of the

most widely adopted basal reading series.

Corpus

To determine how basal programs select and construct the reading

corpus we inspected the Reading 360 3-2 (third grade, second half) level

teacher's manual (Ginn, 1973). Selection of content seems to be a function

of supposed developmental changes in children's interests. No mention

is made of systematic attempts to vary semantic and syntactic features

of text. The following description from the manual is revealing.

Selections for today's students should reflect a broad

range of cultural and social settings. The stories should

portray realistically the children of cities, suburbs, rural

areas, and foreign lands. Content in which characters are

portrayed with lifelike qualities permits pupils to identify

with the characters and their problems and to develop and

test self-concepts. At this level children's reading abilities

and interests are expanding and deepening. The stories, poems,

and factual articles of Level 10 clearly take into account

these developmental changes (Teacher's Edition, Level 10, 1973,

p. 28).

Inspection of two other widely used programs, Keys to Reading (Economy, 1972) and Reading Unlimited (Scott-Foresman, 1976), yielded a similar picture of corpus selection. Beck and Block (1975) have suggested that at least in reading series used in grades 1 and 2 there may be rather large differences between program content in terms of meaningfulness, variety, and interest levels, especially when code emphasis programs are contrasted with programs with a lesser code emphasis. While it is clear that semantic and syntactic features, topics (e.g., fiction vs. non-fiction), stylistics, and other aspects of text change in complexity as grade level increases, there has been remarkably little attention given to what children read. Variations in syntactic and stylistic features, and in paragraph structure may be related to instructional effectiveness. For example, in teaching recognition of main idea, corpus variables such as location and frequency of main idea statements in a passage, as well as the presence and density of clues may need to be systematically programmed for efficient and effective instruction (Anderson, Wardrop, Hively, Muller, Anderson, Hastings, & Frederiksen, Note 1).

Skills Taught

Publishers may generate their own comprehension skill lists or adopt skill lists from other sources. For example, the 36 specific comprehension skills which the Ginn Reading 360 series identifies are patterned after Barrett's taxonomy of comprehension skills (1968).

The manuals which accompany basal readers are explicit about the skills that their programs teach. As mentioned earlier, there is some controversy surrounding the number and nature of reading comprehension subskills. That controversy is reflected in the skills' listings found in basal programs. The various programs differ both in the number of comprehension skills identified, and in the way these skills are described and classified. For example, comprehension skills at the 3-2 level are subsumed under 17 categories in Scott-Foresman versus 10 in Ginn. However, it appears that merely comparing total comprehension skills listed may overestimate the differences between any two programs. Some of the skills listed under "Comprehension" in Scott-Foresman are differently classified in Ginn as "Decoding," "Literary Understanding and Appreciation," "Vocabulary," "Language," "Information and Knowledge," and "Creativity."

Rosenshine's (1978) analysis of comprehension skills taught by different basal programs provides additional evidence to support the conclusion that there is indeed a large common core of comprehension skills taught by different basal programs. He examined five curricula for eight comprehension skill areas (e.g., detail, main idea, cause-effect, inference, etc.). All five programs introduced these eight skills very early, usually in the first grade, and there appeared to be little evidence of a hierarchical skill sequence either across or within programs.

Despite the evidence that the series share a number of skills in common, we noted that in two of the series examined (Ginn and Scott-

Foresman), each appeared to have identified some "unique" skills. "Increase ability to read orally" is a comprehension subskill unique to the 3-2 level of Scott-Foresman. Unique to Ginn at the same level is "Making judgments of worth, desirability and acceptability."

Skill Emphasis

Besides differing in the identification, the number and the categorization of comprehension skills, different basal series seem to vary in their emphasis on particular skills. Where two basal series specify the same skill, they often disagree on the amount of instruction and practice allotted to the development of that skill. For example, Ginn at the 3-2 level offers eight exercises in the teacher's manual which provide practice in the skill of specifying story sequence. At the same level, Scott-Foresman offers only one-half as many exercises. Scott-Foresman suggests eight exercises to teach the use of base words, prefixes, and suffixes (identified as a "Context Cue" comprehension subskill). Ginn, in contrast, provides three times as many exercises dealing with that skill (listed under "Structural Analysis" skills).

Armbruster, Stevens and Rosenshine (1977) have investigated the relative emphasis given to different comprehension skills by various reading series. Using the number of exercises designed to teach a given skill as a measure of a series' emphasis of that skill, they found correlations ranging -.08 to +.43 among three basal series. Cooke (1970) further substantiates differences in skill emphasis among programs. According to Cooke's examination of three basal programs, comprehension of detail received

the greatest stress in all three series, even though the degree of stress varied significantly across programs.

Instructional Procedures

We speculated earlier that in addition to corpus, comprehension skills taught, and skills emphasized, a program's instructional procedures are a critical feature affecting the development of reading comprehension. Comparisons of comprehension teaching procedures employed by different basal readers have not been reported in any of the research we examined. Thus, we determined to undertake a modest analysis of teaching procedures recommended in Ginn, Economy, and Scott-Foresman. As a basis for comparison, we selected two areas in which all three series provided instruction. Specifically examined were the third and sixth grade level student workbooks and the teacher manual recommendations for teaching main idea and overall story comprehension.

All three third grade level teacher manuals suggested a comparable number of different instructional activities (3-4) to teach main idea. However, the number of workbook exercises in Economy (7) was about double that of Ginn (2) or Scott-Foresman (3). Instruction consists mainly of teacher-led group discussion of the main idea for a brief selection. The most common practice activity found in all three series requires students either to select a passage's main idea from a set of alternatives or to generate the main idea in written form. In addition, Ginn and Economy also provided main idea practice by requiring students to select appropriate titles for short passages.

At the sixth grade level, the three series varied in the amount of instruction on main idea. Economy provided most, with four teacher manual activities and nine workbook exercises, and Ginn with occasional questions related to the main idea, provided the least instruction. The sixth grade instructional procedures bore a close resemblance to those used in third grade, except that the older children were also asked to locate supporting details for the main idea.

An examination of activities recommended to accompany story reading reveals similar overlap among instructional procedures in these three basal series. However, as with the naming and categorization of comprehension subskills, the series tended to give different names to similar instructional activities. Random samples of three stories at the 3-2 level indicated that pre-reading activities in all three series included word meaning study and purpose-setting (either teacher-provided or student-generated). The three series also provided suggestions for optional teacher-guided reading of several pages of a selection at a time (either in the form of "read to discover . . ." or several questions to answer while reading). Discussion of the entire story followed reading (questions are provided to aid the teacher in guiding the discussion).

Davidson (Note 2) surveyed the procedures recommended for teaching "inferential" comprehension in three basal series: Harcourt, Brace and Javonovich (1970), Macmillan (1970), and Houghton-Mifflin (1971). She noted that practice in answering questions (e.g., find the main idea) was the most frequently used instructional procedure. When additional

verbal instruction was provided, it usually consisted of the teacher

stating a strategy (e.g., "Answering two questions can give you clues to

telling what the main idea of a paragraph is: (1) What is the topic of

the paragraph? (2) What is the most important thing that is said about

the topic?" (Davidson, 1972, Pp. 87-88)), and sometimes providing positive

and negative examples (e.g., correct and incorrect inferences). Different

instructional procedures in the three series she studied could most often

be attributed to the presence or absence of strategy giving and of pro-

viding positive and negative instances.

Results of our own analysis and that of Davidson suggest that the

dominant instructional procedure for reading comprehension is questioning.

Thus, in basal series "instruction for" and "testing for" comprehension

appear to be closely aligned. It is tempting to conclude that compre-

hension instruction consists primarily of repeated testing with feed-

back. In addition, teachers sometimes describe a comprehension strategy,

tell students word meanings, or provide preliminary background informa-

tion for a particular reading selection.

Skill Mastery

To determine how programs addressed the "critical feature" of skill

mastery we examined the third grade levels of both Ginn and Scott-Foresman.

Ginn provides evaluation pages (tests) at several points within its skills

workbooks. Both Ginn and Soctt-Foresman provide criterion-referenced

end-of-level tests with recommended performance criteria to indicate

mastery. However, neither program makes very definitive statements about

what should happen if children fail these tests, other than to suggest that additional exercises might be called for.

If the test is used as a post test, the scores will show how well pupils have mastered the skills and practiced in the level. An examination of the scoring and analysis sheets of those who do not achieve 90% mastery will help you determine which skills they have not yet mastered. You will also want to note indications of the skill strengths and weaknesses of each pupil and plan to make use of them in planning instruction (Scott-Foresman, Teachers Edition, Level 17, 1976, p. 219).

It seems that children can advance to the next level even if their test performance is inadequate, or if they do not benefit from the "additional exercises." A similar situation exists with instruction that occurs in the children's readers. No correction procedures are recommended in the event children fail to give appropriate answers to the teacher's comprehension questions. Nor is there a procedure suggested to ensure that all children in the group are answering the teacher's questions. Apparently, the teacher is left to his or her own design in identifying and solving problems of inadequate student performance.

In summary, some consistency is evident across several basal series in regard to early emphasis on comprehension, the skills taught, teaching procedures, and mastery requirements. The series differ in their reading corpus, identification of "unique" comprehension skills, and in the emphasis and ordering of those skills which they share in common with each other.

While various publishers make claims about the up-to-date research base for their reading systems, and each implies that they have presented the "best" way to teach reading, we were unable to locate empirical evidence which systematically evaluated growth in reading comprehension as a function of basal programs. The publishers of basal series apparently feel no compulsion to study the effectiveness of their products, even though they regularly revise their programs in an effort to improve them. Scott-Foresman, for example, presented a reading program in 1970 which they revised in 1976, and which is currently undergoing another revision. Children's reading achievement did not appear to be an important factor in these revisions. Although the publishers wrote of "learner verification" as influencing product development, this has little to do with learning. Under learner verification, the publishers write:

When it came time to revise Systems, all these comments [from administrators, teachers, parents, children, and minorities] were synthesized into a set of working guidelines that were the beginning of, and the basis for, Reading Unlimited.

In addition, selections considered for Reading Unlimited were put through four tests:

Twelve authors--all with teaching experience--read and evaluated materials in terms of readability, appropriateness, and relevance. The Reading Miscue Research Center at Wayne State University tested selections with children; each child's performance was analyzed by clinicians at the center.

Scott-Foresman's Learner Verification Department had

teachers in twenty-five states--in rural areas, in small

towns, in suburbs, in cities--try materials in their classrooms.

Reader consultants--teachers, reading specialists, princi-

pals--read and commented on materials in the pupil books,

Studybooks, and Teacher's Editions (Scott-Foresman, Teachers

Edition, Level 17, 1976, p. 10).

The method of basal reader product development is analogous to that

used in the auto industry to create new models. At regular intervals,

new product lines are presented. The bodies and styles change and new

"extras" are offered such as tape decks and finer upholstery. The changes

are based on appeal to consumers; not on improved functioning. Auto-

makers appear to use a somewhat different product development method for

engine changes, however. These changes are empirically tested and tend

to be based on observable improvements, such as increased power or superior

gas mileage. Unfortunately, the reading industry has not chosen to emulate

this aspect of automobile development. With the exception of the First

Grade Reading Studies (Bond & Dykstra, 1967), we could locate no compara-

tive evaluation of basal program effects.

DISTAR

DISTAR Reading and DISTAR Language (Science Research Associates,

1972, 1974-1975) represent a comprehensive instructional program which

is explicitly based on a behavioral model. The objectives, their sequence,

and the associated instruction procedures are precisely specified in

the Teacher Presentation books that are a major part of each program.
These books contain precise teacher scripts for each lesson, specify hand
signals with which teachers cue group responses, and prescribe error
correction procedures. In a daily lesson, group instruction is followed
by teacher-directed and then self-directed tasks in workbooks. The
DISTAR Reading programs also include student readers and criterion-
referenced tests that are administered to students at frequent intervals
to evaluate progress.

The corpus of the DISTAR I and II reading programs (designed to be
used in kindergarten or first grade) is mostly fiction. In contrast,
DISTAR III (for grades 2 or 3) focuses almost entirely on the content
areas, such as biology, physics, history and mythology. The latter
program is subtitled, "Reading to Learn."

The first two levels of the DISTAR Language programs teach vocabulary,
logical concepts, statement making and question asking strategies that
the authors consider fundamental to the comprehension of both oral and
written language. DISTAR Language III teaches beginning sentence analysis
skills, capitalization and punctuation, and includes a sequenced program
in writing. The program also contains exercises in which the children
read paragraphs and answer questions about them.

In contrast to basal series, reading comprehension in DISTAR is not
described as a set of discrete skills. However, the activities that
appear in the Teacher Presentation books can be categorized to match
those descriptions that occur in most basal series. This categorization
reveals that there are exercises in the DISTAR program in which children

must focus on details in the text they read, learn word meanings from context, determine appropriate sequence of sentences, identify cause-and-effect relations, predict outcome, and infer the motives and emotions of characters in the stories they read. If there are comprehension skills unique to DISTAR, they are the identification and learning of "rules" that appear in text and the application of these rules to items in workbook exercises (e.g., "if A, then B"). Rule strategies are taught at the end of the Level II program and are used extensively in the Level III program.

We could locate no analyses which compare DISTAR to other reading approaches according to relative emphasis given to particular comprehension skills. However, it is our impression that rule learning and rule application are more heavily emphasized in DISTAR than in other programs. As in other reading programs, the comprehension teaching procedure in DISTAR tends to rely primarily on verbal and written questioning. Children are told the strategy for performing an exercise and are led with teacher questions through model exercises. For example, paragraph comprehension instruction appearing in DISTAR Language III (these are reading exercises) includes an exercise in which children are to select summary sentences for paragraphs which they have read. If children encounter difficulty with this task, their teacher tells them a strategy to follow such as, "A good summary sentence must answer the question who, what and why. Does the first sentence tell you who sat on the alligator? . . ." (DISTAR Language III, 1972, p. 25). Another unique characteristic of DISTAR instruction is the frequency of review exercises.

Children are regularly asked to recall and apply previously taught rules and information.

DISTAR intends for its instruction to be criterion-referenced, demanding mastery or proficiency for each exercise. Teachers are instructed to repeat exercises until mastery is achieved. If a child makes an error, the teacher corrects the error and has the child return to the beginning of the exercise. No child is to leave an exercise until he/she is "firm," that is correct on every item.

In summary, DISTAR resembles basal series in its selection of comprehension skills taught. It appears to differ from basal series in its stronger emphasis of comprehension in the content areas, on rule identification and application, on provision of actual instructional and correction procedures, and on its heavy demands for mastery and retention.

The DISTAR program has been regularly evaluated as part of the U.S. Office of Education study, Project Follow-Through, a program whose goal is to raise the achievement of economically disadvantaged children to a level comparable with national norms. At the end of third grade, low-income students in Project Follow-Through who have participated in the Direct Instruction Model which uses the DISTAR programs, are close to one standard deviation above the norm on the Wide Range Achievement Test word recognition subtest (Becker, 1977). On reading comprehension, measured by the Metropolitan Achievement Test (MAT) reading score, these same students fall slightly below the national norm. However these students register MAT total reading scores that are one-half standard

deviation above the average of thirteen other Follow-Through model

sponsors. DISTAR appears to be one of the few Follow-Through programs

which has consistently and significantly enhanced children's reading

comprehension. However, these data do not permit one to separate

the relative contribution to reading comprehension scores of the decoding

and comprehension components of the program. It is possible that the

comprehension scores obtained by DISTAR-taught children are superior

to those of comparison children because the former have become signifi-

cantly better decoders.

Objective-Based Reading Programs

Beginning in the 1960's a number of reading programs were developed

which may be characterized variously as objective-based programs, skills

monitoring or management programs, or criterion-referenced systems.

Essentially these programs consist of a delineation of specific reading

skills or objectives, criterion-referenced tests designed to assess an

individual's performance on each objective, lessons or recommended

materials appropriate for instructing each skill, and a general recording

system with which teachers can monitor individual students' progress.

Several assumptions underlie the development of objective-based

programs. It is assumed that reading is composed of many separate, and

measurable skills and that mastery of a sufficient number of specific

skills will result in a proficient reader. It is further assumed that

reading instruction will be improved if teachers and students possess

exact conceptions about what is to be learned, if teachers have access

to a profile of what skills have and have not been mastered by individual

students, and if teachers are provided with a resource file enabling

them to select or adapt instructional activities and materials for

specific skills.

Objectives-based systems do not themselves constitute an instructional

program. Rather, they are intended to assist teachers in assessing students'

skill development and in locating existing curricula which are appropriate

to particular students' skill deficiencies. Stallard (Note 6) in reviewing

fifteen objectives-based programs notes that each includes a reading

comprehension component. The programs differ in the number and kind of

comprehension skills identified, and in the instructional resources

which they recommend to teachers. The instructional materials most often

recommended are workbooks and exercises from various basal series.

In a sense, the instructional materials of objectives-based systems

are a composite of basal programs. Thus, remarks made about basal pro-

grams can also apply to objectives-based programs. The primary differences

between these and basal series is that the former have a wider access

to instructional materials, and because they are test-based they have

a stronger emphasis on skill mastery.

We were unable to locate any published evaluation of objectives-based

programs. However, the Wisconsin Design for Reading Skill Development

(WDRSD), one of the more prominent objectives-based programs, has field-

tested its comprehension element in several elementary schools. WDRSD

contains 36 instructional objectives and accompanying program embedded

tests related to reading comprehension. The results of this field test

(Klopp, Note 5) indicated that on program embedded tests, children showed

significant growth in mastery of the objectives taught during the year,

and their performance exceeded the performance of children who did not

experience the WDRSD Comprehension Element. However, more often than not

the differences between treated and untreated groups were not statistically

significant. On standardized measures comprehension achievement asso-

ciated with the Design usually did not differ from control conditions

for children in the middle grades. Overall, the effects of the WDRSD

Comprehension Element were not particularly impressive. It should be noted,

however, that effects were measured over the course of one year, but that

the actual implementation of the Comprehension Element occurred only for

seven months. Longer implementation periods and increased familiarity with

the program could yield more favorable results.

The idea upon which objectives-based systems are based is an appealing

one. It would seem that teachers' jobs would be eased if they could easily

monitor individual children's mastery of specific objectives and had access

to appropriate instructional resources for teaching those objectives. The

success of objectives-based systems, however, rests on several key vari-

ables: the criterion-referenced tests must be reliable indicators of

skill mastery; the testing, recording, and grouping requirements must be

organized well enough so that teachers can implement them; and, instruc-

tional materials or activities that are genuinely effective in teaching

the specific comprehension skills must have been identified. Finally,

teachers must have ready access to the necessary materials. Inadequacies

occurring at any one of these points can incapacitate an objectives-based

system. Our prediction is that the identification of effective instruc-
tional materials and procedures will be the Achilles' heel of these
systems, much as it appears to be with other reading comprehension programs.

Other Approaches to Comprehension Instruction

The Language Experience approach (Allen & Allen, 1970) and the
psycholinguistic view (Smith, 1973; Smith & Goodman, 1971) represent two
other approaches to reading comprehension instruction. We devote less
space to these since they are often used prior to or in conjunction with
a basal series.

Language Experience

The thrust of a language experience approach to reading is that speech
can be written down, and that what is written down can be read. The reading
corpus is generated by individual children, who dictate personal experiences
and stories which the teacher transcribes. As such, language experience is
a beginning reading approach.

One set of materials, Language Experience in Reading (Allen & Allen,
1970), was examined to determine the comprehension skills taught. The
teacher's guidebook is arranged in units centered around activities which
are designed to develop specific skills. The list of comprehension skills
mentions main idea, details, sequence, inference, conclusions, comparisons,
author's intent, etc. The similarity between these skills and those taught
in basal series is obvious. However, comprehension of the experience
stories is not emphasized "since each child obviously understands what
he has written" (Allen & Allen, 1970, p. 10). Instead, comprehension

skills are first taught through listening to stories, and later through reading what other class members have written. The kind of instruction and practice in specific comprehension skills also differs from basal readers. While a basal series might teach sequence through exercises requiring children to number sentences consistent with events in a story, a language experience approach would teach sequence by having children repeat for dictation the proper sequence of an activity in which a child has participated. Once students become proficient readers of their own writing in a language experience curriculum, they are likely to be placed in a commercially prepared curriculum, e.g., a basal reader.

Language experience appears to produce levels of reading achievement comparable to that produced by basal programs. Dykstra (1968) who summarized the results of the follow-up to the First Grade Reading studies reported that at the end of second grade, there were no significant differences on measures of reading or writing between basal and language experience participants.

A Psycholinguistic View

In this section we refer to the psycholinguistic viewpoint of reading instruction as that expressed by Frank Smith (1973) and Kenneth Goodman (1969, Note 3, 1972). We recognize that a number of psycholinguists besides Smith and Goodman have offered their views on reading. However, among teachers, Goodman in particular is recognized as the major spokesman for a psycholinguistic account of the reading process (Cambourne, 1977). He

has also associated himself with a well known basal reading series, Reading

Unlimited (Scott-Foresman, 1976).

According to this psycholinguistic perspective, reading is not pri-

marily a visual process wherein print is first decoded to sound and then

understood. Instead, reading consists of the active construction of

meaning, a process in which the reader's prior knowledge of language,

reading, and the world play the major role. The proficient reader recon-

structs the author's message using as little visual information as possible.

The more visual information that a reader requires to get meaning from

text, the less efficient is his reading. In fact, Smith (1973) argued

that meaning precedes word identification, and that the latter is used

only as a source of feedback to either confirm or reject the reader's

hypothesis.

While Smith and Goodman (1971) regard psycholinguistic theory as

capable of providing fresh insights into the reading process as well as

important implications for reading instruction, they are careful to avoid

proposing a psycholinguistic approach to reading instruction. In fact,

Smith and Goodman (1971) have written:

> To be blunt, we regard the development of 'psycholinguistic
>
> materials' as a distinct threat, not just to us but to the entire
>
> educational community . . . Our objective is to destroy the
>
> phoenix of 'psycholinguistic instruction' before it can arise
>
> . . . (p. 178).

Since Smith and Goodman do not prescribe a psycholinguistic teaching method, we have tried to select quotations related to the same five "critical elements" we have used to discuss other approaches.

In regard to corpus for reading instruction, Smith asserts that "many primers bear absolutely no relevance to the child's life or language, and short sentences barely connected by a story line place a premium on word identification and provide little support for intelligent guessing. Subject matter texts . . . often present an even worse obstacle" (1973, p. 191). Elsewhere Smith writes that the reading corpus should consist of large samples of language that are both interesting and comprehensible, and that teachers should reject large portions of the available reading materials which are inappropriate. Plentiful, assorted, natural, non-stilted, and interesting are descriptors of the reading corpus which would appear to satisfy these criteria.

Similarly, Goodman and Smith have called attention to flaws that they have observed in conventional analyses of the reading process (what skills should be taught) and in many of the instructional methodologies that are commonly applied to the teaching of reading. Goodman, in particular, has voiced strong opposition to the belief that reading can be analyzed into a series of subskills. He writes:

> Fractionating the process into constituent skills for
> the purposes of research or instruction qualitatively changes
> the process and the nature of the parts since they normally
> function as a complex process (Goodman, 1969, p. 15).

There is no possible sequencing of skills in reading

instruction since all systems must be used interdependently

in the reading process even in the first attempts at learning

to read (Goodman, Note 3, p. 25).

Frequently, sequential skill instruction will interfere

with comprehension since the learner's attention is diverted

from meaning (Goodman, 1972, p. 1254).

In a similar vein, Smith and Goodman write:

Psycholinguistic techniques as applied to reading indi-

cate a child needs to be exposed to a wide range of choices

so that he can detect the significant elements of written

language. The child learning to read needs the opportunity

to examine a large sample of language, to generate hypotheses

about regularities and to test and modify hypotheses based

on feedback.

None of this, to our minds, can be formalized in a pre-

scribed sequence of behaviorally stated objectives embalmed

in a set of instructional materials . . . (1971, p. 180).

Thus from this "psycholinguistic" view, the generation and instructional

application of skills taxonomies and hierarchies, either within reading

comprehension, or within reading as a whole represents an entirely

misdirected approach. Smith and Goodman are particularly opposed to

the division between comprehending, that is reading for meaning, and

decoding. All reading instruction should emphasize the construction of

meaning, which is a function both of the reader's knowledge of language
and of the world in general, and of the visual information supplied by
print. With reference to the decoding process Goodman writes:

> Phonics isn't necessary to the reading process. In fact
> in a proficient reader any kind of going from print to oral
> language to meaning is an extremely ineffective and inefficient
> strategy. By inefficient is meant that it's not the best way
> to do it, by ineffective is meant that the reader doesn't get
> the results that he's after (Goodman, 1972, p. 1261).

Mastery learning and systematic correction are not hallmarks of this
psycholinguistic view. In discussing mastery, Smith points an accusing
finger at those who "provide immediate feedback" (systematic correction)
for errors (1973, p. 189). Goodman (1969) has proposed an elaborate
procedure for analysis of oral reading miscues (errors) which he hopes
can help teachers gain insight to new diagnostic procedures. Exactly
how teachers would use the miscue analysis is not clear, although it is
interesting to note that Scott-Foresman's Reading Unlimited series, of
which Goodman is a co-author, describes a modified version of the miscue
analysis in its teacher's manual. Teachers are alerted in partular to
those miscues which alter the information in the text. In describing
how teachers might use the miscue analysis, the manual states:

> In conclusion, Dr. Goodman advises teachers to remember
> that miscues show more about a reader's strengths than weak-
> nesses. Reading is not the exact identification and response

to letters or words. It is, in fact, a search for meaning.

Only miscues that interfere with comprehension should cause

concern and even there a teacher may find evidence of a

pupil's strengths which can be built up so the reader can

get meaning. Teachers should use miscues as a basis for

encouraging the reader in his or her productive strategies-

predict meaning, sample cues, correct miscues, and compre-

hend (Scott-Foresman, Teachers Edition, Level 17, 1976,

p. 154).

Notable for their absence are detailed or specific remediation guide-

lines. Again opposing current practice, Smith (1973) has declared his

dissatisfaction with most remediation procedures since they usually result

in reducing actual reading practice and replace it with decontextualized

drill, isolated exercises, or conceptual skill and language development

activities.

At a very general level, the instructional implications of Smith's

and Goodman's view are that children should have ample opportunity to

read interesting, coherent text which they can readily understand, or

at least be helped to understand. It is difficult to identify or evaluate

more specific instructional implications of their psycholinguistic model,

since the model remains vague on the application end. The psycholinguis-

tic perspective deserves some consideration, however, in that it challenges

a number of common assumptions and practices in the teaching of reading.

Conclusion

A number of approaches to reading comprehension instruction can be identified, however the extent of the real differences among these approaches is a matter of conjecture. The approaches clearly differ in reading corpus but the characteristics of corpus have never been very precisely described. The approaches differ with respect to their identification of comprehension skills. However, in our opinion, the programs are more similar than different on this feature. If the questions and exercises provided by different programs are taken to reflect what is taught, then they appear to teach many of the same skills. The particular sequence of skills taught varies with the instructional program, but evidence exists that most comprehension skills are introduced in the first grade in most programs.

Clear, substantive differences in emphasis appear to exist among reading programs as reflected by the number of exercises and questions devoted to various skills. The teaching procedures used in the various programs appear quite similar in the sense that comprehension instruction is dominated by questioning. In addition, teachers sometimes state a comprehension strategy and provide positive and negative instances of correct answers. Programs, for the most part, do not emphasize mastery of comprehension skills or specify error correction procedures. DISTAR is the clear exception in this regard, and it appears to be the only program in which each child is required to respond without error to every item or question.

Since few comparative evaluations of comprehension programs exist, practitioners lack basic information needed for intelligent program selection, and researchers lack data which could alert them to important program components. Some well conceived, empirical program evaluations would do little damage and might possibly raise the present state. In their absence, programs can only be compared on someone's subjective list of so-called critical features. Which, if any, of these critical features is important to reading achievement is a matter of opinion.

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