ABSTRACT

The two reading programs discussed in this paper, "Reading Unlimited" (RU) published by Scott Foresman and "New Primary Grades Reading Systems" (RS) by the University of Pittsburgh Learning Research and Development Center, provide maximal contrasts in materials and teaching strategies. The instructional strategies in RU are analytic and inductive, while RS uses strategies that are mostly synthetic. While RU begins instruction with emphasis on syntactic/semantic information, RS starts with an emphasis on graphemic information and letter/sound correspondences. The two programs are compared in this paper in a systematic, simultaneous evaluation of how each program meets its stated objectives. The paper examines the scope, materials, extent of individualization, and the teaching, learning, and testing procedures found in each program. The rationale and procedures that were used in this comparison serve to illustrate how reading research, theory, and practice can be coordinated to improve reading instruction. Examples of materials from each program and discussion following presentation of the paper are appended. (RL)
An Analysis of Two Beginning Reading Programs:
Scott Foresman's Reading Unlimited and
Pittsburgh LRDC's New Primary Grades
Reading Systems

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Running head: "Scott Foresman and LRDC"

This paper was presented at the conference on Theory and Practice of Beginning Reading Instruction, University of Pittsburgh, Learning Research and Development Center, June 1976.
The materials and methods of instruction for two beginning reading programs are analyzed in this paper. The two programs, Reading Unlimited (Scott Foresman, 1975) and the New Primary Grades Reading System (Learning Research and Development Center, Pittsburgh, 1974), provide maximal contrasts in materials and teaching strategies. Authors of both programs agree that the ultimate goal is to gain meaning from print, to comprehend written messages; but one finds in analyzing the programs that the sequence of instruction and the strategies taught to the beginning readers are quite different for each program. The instructional strategies in Scott Foresman are analytic and inductive while those in New Reading Systems are mostly synthetic; and while SF begins instruction with the focus on syntactic and semantic information, NRS initially emphasizes the graphemic information and letter/sound correspondences.

The paper is planned to systematically compare the two programs while simultaneously evaluating how each meets its stated objectives. We will first outline the scope of the two programs and the materials included in each, then examine specific teaching/learning strategies and their organization in each program, ask how well each testing program evaluates the children's use of these strategies, look at the content and other motivational aspects of the programs, and finally estimate the extent of individualization possible under each program.
SCOPE

Reading Unlimited is the 1976 revision of Scott Foresman's 1972 Reading Systems, which packages the components in a less cumbersome manner and better coordinates the management of the system. The SP program specifies two major goals: "to help children learn how to read and to communicate to children the rewards of reading." Toward these goals, the materials combine a variety of teaching techniques to help children get meaning from print, and further, they incorporate a rich and varied content in the readers. Both of these aspects will be discussed later in the paper; however, Table 1 gives an indication of the materials available.

Beck and Mittoff (1972) in describing NRS give as their underlying definition of reading that stated by Carroll (1964, p. 336), "the perception and comprehension of written messages in a manner paralleling that of the corresponding spoken messages." NRS emphasizes individualization in terms of student rate and adaptive systems for teaching. The materials included in NRS are displayed in Table 1 also. Prior to commercial publication, NRS may be revised and consolidated somewhat, but our analysis includes the components as outlined in Table 1. The goals of each program have influenced the variety of components included and the specific content of each component as well.

Insert Table 1 here

Our analysis of program materials is confined to those levels most often used by first and second grades only. Figure 1 displays the distribution of most of the components in each program in a manner which will allow us to contrast content across programs at comparable levels.

Insert Figure 1 here
<table>
<thead>
<tr>
<th>Grade level</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>1</td>
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<td>End of level</td>
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<td>8</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>5</td>
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<tr>
<td>&quot;Read Alone&quot;</td>
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</tr>
<tr>
<td>Number of &quot;Group&quot; Stories</td>
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<td>2</td>
<td>2</td>
<td>2</td>
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<td>Workbooks</td>
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<td>3</td>
<td>3</td>
<td>3</td>
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</tr>
<tr>
<td>Progress check  (excluding those for remedial sequences)</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>8</td>
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</tbody>
</table>
### TABLE 1

**Materials Included in Scott Foresman's Reading Unlimited Program (SF) and LRDC's New Primary Grades Reading System (NRS)**

<table>
<thead>
<tr>
<th>SF</th>
<th>Teacher's Editions (all levels)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Magneto-board and magnepiece file (for use with levels 1-3)</td>
</tr>
<tr>
<td></td>
<td>Pupils' books—(All levels have one book, except level 2 which has 3. Available as smaller booklets at lowest levels.)</td>
</tr>
<tr>
<td></td>
<td>Study book (one for each level) [Independent practice book] [Duplicating masters]</td>
</tr>
<tr>
<td></td>
<td>[End-of-level tests]¹</td>
</tr>
<tr>
<td></td>
<td>[Skills Assessment tests]¹</td>
</tr>
<tr>
<td></td>
<td>A variety of other materials are &quot;available&quot;: Practice books for further pupil reading, puzzles, alphabet records and cards, picture dictionaries, storybook box with cassettes.¹</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplementary materials</th>
<th>Teacher's manuals (levels 1, 2, 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scope and sequence chart (levels 4-14)</td>
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<tr>
<td></td>
<td>Game presentation guide</td>
</tr>
<tr>
<td></td>
<td>Alternative strategies booklet</td>
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<tr>
<td></td>
<td>Blending booklet</td>
</tr>
<tr>
<td></td>
<td>Read-alone story booklets (about 8 each at 14 levels)</td>
</tr>
<tr>
<td></td>
<td>Group readers (two at each level)</td>
</tr>
<tr>
<td></td>
<td>Workbook</td>
</tr>
<tr>
<td></td>
<td>Audio-cassette instruction recorders, earphones</td>
</tr>
<tr>
<td></td>
<td>Progress check</td>
</tr>
<tr>
<td></td>
<td>Games (correlated vocabulary at each level; 17 types, 10 per level)</td>
</tr>
<tr>
<td></td>
<td>Flip-a-words (word pattern manipulable)</td>
</tr>
<tr>
<td></td>
<td>Management aids: Recording booklet for games and stories Progress check booklet Prescription pages in workbooks</td>
</tr>
</tbody>
</table>

¹[Supplementary materials]
An overview of both programs reveals gross differences, differences that would be immediately obvious to the most casual visitor in classrooms implementing the two programs. In the classrooms I visited using SF I found even in grade one, art projects, samples of creative writing, scenes for dramatic play, and books for the children to read which were correlated to the stories being read in the pupils' readers at that time. Some programs give "suggestions" to the teacher for such activities. SF goes beyond "suggesting" in several ways: many art and craft projects are initiated in the pupils' readers and/or in their studybooks, also selections, stories and poems for the teacher to read to the children are found in the teacher's editions, and boxes of trade books appropriate for each level may be purchased from the publishers.

Creative projects stemming from NRS are more apt to be teacher designed. There is no reason why activities similar to those in SF classrooms might not be found in NRS classrooms, but they are not an integrated part of the program. I observed NRS in a classroom for "learning disabled" children and such activities were not evident. I did look in on one other NRS classroom and arts and crafts were underway there, but their relatedness to NRS was not obvious. Games which were specified for the various levels of NRS were very much in evidence in these rooms and youngsters were seen actively engaged with each other, with the teachers, and with visitors who happened by. Games, which are not included in SF, are an important component of the program, and appear to be highly motivating.

What are some other readily observable differences between NRS and SF classrooms that are attributable to program variation? Certainly the role of the teacher varies and also the children's behavior varies. Instruction for the SF pupil is very much directed by the teacher. Groups of students rather daily to be motivated and guided in their story reading in their SF readers.
Explicit directions are given in the teacher's edition for building background concepts and interest and for setting forth a purpose for reading to the pupils. Each page of text then can be read independently or with the guidance of teacher questioning and direction. Those pupils not reading with the teacher work in their workbooks, sometimes as a group with the teacher's aide; they work on projects or activities, as described earlier; they read trade books, or they engage in some other math or science work. In one first grade classroom I visited, the involvement of one group with a workbook caught my attention. The children were completing exercises dealing with letter-sound relationships.

When I asked about the workbook they were using, I was told that it also was purchased as supplementary material from Scott Foresman, because the teachers found it "extremely valuable for teaching consonant and vowel sounds which the children do need more practice on." I realized once again that attempting to correlate children's achievement with specific program components only, and not classroom settings, is a delusion.

In the NRS classroom, five or six pupils are seated at "listening stations," complete with earphones, responding in their workbooks to the audio cassette instructions. The remainder are on the floor playing relevant "games" or at their seats working in their individual workbooks. A few may be found at a library table, each reading his own appropriate paper-back "Read-alone" story. The teacher's aide and the teacher travel among the students responding to their questions, initiating dialogue about workbook pages and/or listening to individual pupils read their "Progress Check" page. The teacher has a significant "management" role: making individual assignments, checking on the progress of each pupil individually.
and reading with the children. The teacher's role is well defined and material is well organized so that these various tasks were easily managed in the classroom I saw. Though not seen, the day I visited the classroom, the NRS teacher also gathers three or more children together for a group story for which they previously had "signed up." They "sign up" when they come to a pink page in their workbooks directing them to make a mark beside a specific story name on a class chart. Two such pink pages appear at each level, and the teacher assembles a group whenever several pupils have marked the chart for any given story. Because of individual pacing, there would likely be a wait of a few days between the time when one student signed up and enough to form a group of three were ready. Each child reads at least one group story every two weeks. All other reading is relatively independent.

The view given above of the NRS classroom would be found only after children had completed levels 1 and 2. The lessons at levels 1 and 2 consist of "teacher-led small-group instruction, with provision for one-to-one teaching when necessary." Attention is directed toward the mechanics and conventions of the "system" for the remaining 12 levels and for the developing self-management skills as well as reading strategies.

I have followed the clear and inclusive format of Beck and Block (see page this volume) to outline typical lessons in NRS and SF. Figures 2 and 3 and the descriptions given above should serve to give a flavor for the manner in which teaching occurs in SF and NRS, for the role of the teacher, and for the pupils' interaction with the materials.

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Insert Figure 2 here
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Insert Figure 3 here
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Activities

1. Teacher introduces story topic, necessary concepts and background and sets the purpose for reading.

Children's materials

Teacher's manual (lesson objectives, suggestions for motivation, lesson development and extension)

Objectives related to story

2. Teacher directs the students' attention to pictures and interaction with text including any comprehension questions and questions which will elicit vocabulary in text. Some oral and some silent reading of text.

Teacher's manual

3. Teacher led discussion eliciting inferences, emotional reactions, etc.

Teacher's manual

Enrichment: Art, drama, story-listening, writing

4. Teacher introduces workbook pages and students complete pages: working on skills such as picture cues, letter-sound cues, context cues, noting relationships, etc.

Teacher's manual

Teacher's manual (stories to be read by Teacher poetry included)

Studybook

1. Magna-board picture, word, and letter cards are used extensively through levels 1 and 2 and somewhat in level 3.

2. Independent practice books and masters are available supplementary materials.
TEACHING/LEARNING STRATEGIES

Let us try to put some comparisons of the actual teaching/learning strategies into a framework which may help in the analysis of these two programs. An oversimplified schema\(^1\) for the interrelationships among certain dimensions of reading behaviors is presented in Figure 4.

At a macro-level, we may examine the differences in the way the developers of the two programs view the teaching of reading by tracking instruction along the various sides of the triangle in Figure 4. Probably both programs would agree that their major objective is to teach the children to get from a (print) to A (meaning), but they would disagree as to how that should be done. SF begins with meaning (A): and meaning may be derived from pictures, from the children's knowledge of the world, from their knowledge of the language, and from explicit information provided by the teacher. From the very beginning levels, teachers focus on this meaning to elicit oral sentences (or teachers may actually "give" the sentences) which will match those printed on the page. The children are then asked to "read" the print orally ("a"). The stated goal of the early program segments is for children to "reconstruct the meaning of the written language" (Level 2, p. 25) and to "understand that the print tells the story: the pictures help, but the print supplies the meaning" (Level 2, p. 30). Therefore, SF states, "a substitution which makes sense as the child reads is acceptable." For example, "fruit" is acceptable for bananas or "grocery" for supermarket (Teacher's Edition, Level 2, p. 89). It would seem that a child must know the meaning before he could make such a substitution; therefore the meaning is not coming from the print but from the child's experiences, picture cues, and teacher prompts. Nevertheless, after the print is read orally ("a"),
If we were to draw arrows on the diagram in Figure 4 they would be: first from the top (A or meaning) down the right side to speech ("a"), over to print (a) and back the same route to meaning. The goal, however, for early instruction is to go back and forth from print to meaning or up and down the left side of the triangle as the child uses meaning to predict print and print to elicit further meaning. Practice necessarily appears to be in another direction.

Without getting into finer issues, so important to the initial teaching strategies of NRS, what is the direction their teaching/learning takes at the outset? The program begins with the print (a), the child is given an associated oral response ("a") to that unit of print, and practice on the association of print to speech. Then that oral response is associated with meaning (A). Their stated goal for early instruction is to enable the child to go from print, through speech (inner or overt) to gain meaning from that print; across the bottom of the diagram to speech and up to meaning. Therefore the strategies taught are those expected to be used in NRS. It is important to remember that we are referring now only to the very initial stages of each program; the sequence of strategies as well as the skills taught are different for the two programs and the skills emphasized vary at different points even within each program.

An extensive list of the skills, abilities and understandings which SF aims to develop in their program is given in Appendix A. This is taken directly from the teacher's edition. NRS has not outlined the skills emphasized in a like manner, but most of the same skills are included. The difference between the emphasis found in the two programs occurs mainly in the very initial stages.
Print-to-Speech Units Taught

Both programs call attention to different units of writing and speech at different points in their programs. During the first levels of the programs, mostly within the teaching framework described above, the children spend varying amounts of time going from print to speech. Instruction includes work at the level of the letter, word patterns, words, and sentence and story reading with different input from "meaning." Let us examine the manner in which each program offers instruction for the different written units and thereby gain some understanding of the sequence and the emphasis in each.

(1) Letter-sound associations. The intent in the SF program is to teach the children to use semantic, syntactic and, in a minimal way, graphemic cues in reading for meaning. The semantic and syntactic cues are assumed to be already in the pupils' repertoire, a part of their skill with language. Therefore the students are taught not only to use them to read, but also, in Levels 2-5, students are prompted to use semantic and syntactic cues to "discover" that graphemic cues are available and to discover what they are. Graphemic cues are limited, in Level 2, to initial consonant letter-sound cues. Semantic knowledge is used to predict what an unlearned word in context might be and then knowledge of initial letter cues might be used to confirm this prediction as reading proceeds.

The inductive approach is used to teach letter-sound associations in SF to aid the student in understanding a story. The teaching strategy begins with MEANING. For example, beginning with a discussion of a picture of a boy in a boat, the teacher prompts the reading of a sentence written beside an appropriate picture, "The boy is in the boat." Attention is then directed to boy and boat, their oral recodings, "boy" and "boat," and pictures of each. The teacher queries students about the similarity of the first letter in each word (both are b's). The isolated
letter is presented under each word and children are asked if the words "begin with the same sound" (a task for which they've had much prior practice). This sound is referred to as the b ("bet," not "byh") sound. Other objects are found whose names begin with the b sound, they are written in a list and attention is drawn to the initial letter b and the b sound at the beginning of the words. In studybook exercises following such teaching (see Appendix B), the child is asked to select one of two sentences which tells about a picture: the only difference between the two sentences being a key word in each, a word which begins with the recently taught letters b or g. For example:

The goat is in the garden.
The bird is in the garden.

I did not find in the teacher's directions in Level 2 or 3 any explicit statement that a letter stands for a specific sound until on p. 177, Level 2, we read, "Both the letter c and the letter k stand for the k sound at the beginning of these words." However, one assumes the child is, in fact, learning that each letter stands for a specific sound as these associations are pointed out and worked on in the studybooks. The expected learning is that b represents the various allophones of the phoneme /b/ found in the initial position of words. Consonant letter-sound correspondences are taught initially as one letter-to-one-sound relationships. At Level 3, SF introduces vowel letter-sound correspondences.

The concept that a vowel letter can stand for more than one vowel sound is taught very quickly. Picture cues and oral and written context cues (syntax and semantics) are used to read the words and then attention is called to the vowel sounds. After matching vowel sounds with the associated letters, explanation is offered that the letter a, for instance, "followed by one consonant letter and final e stands for the vowel sound heard in ate, lake, game, make, and cakes. The letter a followed by one or more consonant letters
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<td>m, t, s, c, w /a/</td>
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<tr>
<td></td>
<td>th, d (as in kite)</td>
</tr>
<tr>
<td>2</td>
<td>oo, oe /e/</td>
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<td>e (as in it)</td>
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<td>in, ir, ie, en, igh /i/</td>
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<tr>
<td></td>
<td>er, er, ar /e/</td>
</tr>
<tr>
<td>6</td>
<td>y (as in cry)</td>
</tr>
<tr>
<td>7</td>
<td>oo (book)</td>
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<tr>
<td>8</td>
<td>ear</td>
</tr>
<tr>
<td></td>
<td>a (across)</td>
</tr>
<tr>
<td>9</td>
<td>s (as in grass)</td>
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<td></td>
<td>lo, loss</td>
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<td>10</td>
<td>oo (as in snow)</td>
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<td>igh /e/</td>
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<tr>
<td>11</td>
<td>ia, i, au (as in know)</td>
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<tr>
<td></td>
<td>sound</td>
</tr>
<tr>
<td>12</td>
<td>oo (as in boss)</td>
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</table>

**New correspondences taught in levels 6 - 8 are minimal.**

**Table 2**

Sequence of Letter-Sound Correspondences in Levels 1 - 14

in LRDG's New Primary Grades Reading System

and Scott Foresman's Reading Unlimited, Levels 1 - 5
and watch while the isolated sound is given by the teacher, children say it together with teacher mouthing, then individual children say the sound, the letter is shown, the sound given by the teacher, the sound repeated by the children several times as teacher points to letter and finally the students point to the letter and say "its sound." This is an explicit sequence of 10 steps which is followed for the introduction of letter/sound relationships by the teacher until further along in Level 1 when audio cassette instruction is begun.

Nearly one hundred consonants, consonant blends, vowels, consonant digraphs and vowel digraph associations are explicitly taught, though not all in this specific manner.

NBS introduces a, teaches the children that it "has the /a/ sound" and then teaches them to blend consonant-/a/-consonant words. Only five lessons later, NBS presents the a-/a/ correspondence in ace-pattern words and marks both the a and the e. What has research to say with regard to a decision which must be made about multiple letter-sound correspondences: is it better to teach single letter-to-single sound correspondences? or multiple letter-to-single sound correspondences? or single letter-to-multiple sound correspondences? or multiple letter-to-multiple sound correspondences? Studies by Levin (1963) and Williams (1968) led to the popularization of the "set for diversity" theory. The conclusions of their studies included the generalization that "when a graphic symbol stands for two or more sounds, it should be learned and transferred more readily when the variations are learned together than when they are learned separately" (Levin and Watson, 1963, p. 21). Blackman, Harston and Reinhardt (1973) call attention to problems with the research in terms of a) the age of the subjects (always older readers), b) the design of the word lists using an artificial orthography, c) the use of trigrams or even letters rather than words in context, d) the validity of equating the experimental task with
stands for the vowel sound heard in *at, sat, and Ann*, and *Jan*" (Level 3, p. 72).

In the next lesson "the letter a followed by e usually stands for the vowel sound heard in *park, car, jar, and shark*" (p. 77). It is relevant to note, however, that the simultaneous presentation of one vowel letter-to-several sound associations is not the children's introduction to recoding these vowels. Quite to the contrary: at this point in the program the children are analyzing words they have been reading in their books. The program uses these known words as examples to call attention to the fact that the letter a stands for several vowel sounds.

In SF when the child is taught that "the letter a stands for the vowel sounds in *at* and *ate,*" the term *vowel sound* is used and in the explanation of this concept the term *consonant letter* is also used. These terms are also used in the studybooks. However, there is no explanation given nor discovery prompted of the concept of "vowel" (letter or sound) nor the concept of "consonant" (letter or sound). While the program is so fastidious in teaching the concept of "words" and the "association of oral to written language," it is difficult to understand how these more difficult concepts were bypassed and the words themselves used in a critical manner.

Studybook exercises are offered wherein the child reads words (from context or picture cues) and decides whether the *vowel* a stands for the same or different sounds as a stimulus word. Other suggestions for extended work in skills do ask the child to apply his knowledge of grapheme cues, but always in the presence of semantic and/or syntactic cues as well. (See Table 2 for letter-sound associations taught in Levels 2 and 5.)

In NNS there is a "basic script" for presenting letter/sound relationships which is included in the teacher training. The children are asked to listen
the learning task confronting the six-year-old beginning reader, and e) the validity of equating the experimental teaching method to the training that might go on in a classroom. (A modified paired associate task giving
"successive" or "concurrent" one letter to several sounds is the experimental task while in actual teaching a second association to a given letter would rarely be taught without reference to an earlier learned association to that same letter.) These critics conclude that the basic question about training multiple correspondence successively or concurrently still remains.

The methodology of the Levin and Williams research does not approximate the teaching strategies in either SF or NRS. And if one were posing a research question concerning multiple or one-to-one associations, the same question would not be appropriate to both NRS type training and SF training. One program teaches letter-sound correspondence to recode print to oral speech (NRS) while SF analyzes already known words to indicate that there is a systematic relationship between letters and sounds. When we take the nature of these two tasks into account in trying to generalize from research results with yet a different experimental task, I do not believe it is possible to draw any meaningful implications.

Table 2 presents the sequence of letter-sound associations taught in NRS as well as in SF. The list is quite extensive for NRS and the program developers expect that many second graders will learn all these elements. Another question to which research has not offered an answer has to do with the usefulness of extended phonics teaching.

(2) Word Patterns. Among others, Fletcher (1973) comments rather astutely on some of the disadvantages accruing when one uses spelling patterns for beginning reading instruction. "In initial reading, the use of spelling patterns encounters several practical difficulties, one of which is the strained vocabulary that results in choosing words to illustrate the regular spelling patterns being presented, and another of which is the pronunciation of an orthographically regular utterance in ordinary discourse. Both of these difficulties are illustrated by Bloomfield's prototypical 'NAN CAN FAN DAN.'
The sentence appears strained because Nan is not a particularly familiar name and because who can fail whom is not a concern of moment to initial readers.

Further, the sentence may contain grapheme-phoneme irregularities in ordinary discourse. For instance, CAN in this sentence would be ordinarily pronounced /kan/ or /kin/ in American dialects" (page 9).

It is interesting to note that when SF calls attention to words that rhyme, it is in the context of other words and the spelling patterns are found by the pupils in a manner consistent with their other analytic procedures. For instance, "A fat little cat went to sleep on a mat. He dreamed of a pig in a wig who was dancing a jig" (Level 3, p. 34). Pupils are to underline the words which rhyme with fat and pig.

NRS introduces the at and in spelling patterns in Level 2 by using words in isolation and dramatizing them with a manipulable booklet called "Flip-a-word" with which the children do exactly that by literally changing the initial consonant which appears before the pattern. Following this they are presented in their workbooks with words, using the same patterns, in sentences as well as in isolation. Yes, "the fat cat sat" and "Tap can nap in a cap." (Tap is an anthropomorphic ant.) However, only two such pages occur at this level. A new set of patterns appears in Level 3 and "Nop the cop is tasting pop" on p. 145 of the workbook and "Nit is sitting in the pit."

Thus, both programs work with spelling patterns; however, they are not the major program focus. The usual difficulties are not apparent in SF at all, and they are lessened somewhat by the use of other words and by the limited emphasis on pattern words in NRS.

(3) Words. Instruction which will lead to recognition of individual words is given much more attention in NRS than in SF. In introductory material in the teacher's editions of SF we read, "Reading is meaning centered, not word centered. ...Emphasis is upon getting beyond individual words to the ideas
Printed words are a symbol system that has no meaning unless the reader brings meaning to it.

With this philosophy, it is not surprising that we do not find individual words given much attention in SF. Color name words are isolated on one page in the studybook at Level 1, but they are used as directions for coloring balloons; occasionally at Level 2 choices for answering studybook questions are words, but most often they are preceded by an article. Rarely in either the studybook or the pupil's book do we find words isolated, even for instruction. The exception is when instruction is being directed toward letter-sound correspondences and words are isolated prior to isolating letters.

The attention given to the concept of a "word" is very significant. In Levels 1 and 2 there are pages in the studybooks created to give the child an understanding of where a word begins and ends, and of the fact that a sentence is made up of a number of words. The child is given practice in circling a specific word in a printed sentence read orally by the teacher (see Appendix C).

With the concept of "word" firmly in hand, then how is attention drawn to the reading of words? We shall return to consideration of that question for SF in the next section on learning sentences. Let us now examine instruction at the word level in NRS.

NRS introduces 11 grapheme/phoneme correspondences in Level 1, including some digraphs, and these are immediately incorporated into a synthetic approach for recoding printed words to oral words. A blending procedure is established. In this procedure of "successive" blending, "as soon as two sounds are produced, they are blended, and successive phonemes are incorporated in the blends as they are pronounced" (Resnick and Beck, 1975). For instance, with their first word, sat, the children are taught through very explicit teacher instruction and modeling to proceed thusly: /s/, /a/, /sa/; /sa/, /t/, /sat/; ending with
the final decoding of the word "sat" as the children recognize its meaning.
Each child uses a blending booklet with manipulable letters during this very structured teaching/learning sequence for a given word with the teacher. Later, blending is taught within the framework of the audio cassette instruction. The traveling teacher who oversees workbook activity encourages and reinforces the pupil for using the blending procedure to decode new or unfamiliar words. In the NRS classroom I visited in the spring, children who had started in NRS in September would, without the slightest hesitation, blend a word on cue from the teacher (or me). Also I saw a few children spontaneously using the technique. In every case where the pupil knew the component sounds, it "worked." Several youngsters were still having a problem with a few vowel letter-sound correspondences they had not mastered, but once the individual elements had been established, (and the children seemed to know enough to ask if they did not know them), the confidence with which they attacked the words was very impressive. Children are encouraged to remember words they have learned and are reinforced for responding to the whole word once they get underway with their workbook exercises.

The words taught in Level 1 are used in phrases and sentences in Level 2 and new letter-sound correspondences are taught. The new vocabulary is controlled by and generated from these taught correspondences. In addition, a few sight words are incorporated into paragraphs and the first group story at the end of Level 2. Letter-sound correspondences and the blending procedure are the major emphasis, as stated above, in these early lessons in NRS. However, this phonics instruction is not devoid of attention to the "meaning" aspect of reading: After letter-sound correspondences are taught and words are for example, in the first lessons children are expected to match pictures and words or phrases in one of several formats (see Appendix D), the child must read and understand the words in order to make the required
responses. Level 2 introduces eight "sight words" taught as whole words, and these are helpful in creating meaningful text.

**NRS** focuses on recoding letters into sounds, blending those sounds into words and then verifying the oral word by questioning meaning. The blending process is conditioned and the child is prompted to use it for all unknown words. As a larger number of words become a part of his repertoire of decodable words, the blending procedure is relied on less and less even though new letter-sound associations are introduced. For many students this is so because semantic and syntactic contextual cues are available to aid the decoding process. When unknown words are unprompted by picture cues or discussion and are presented in isolation, recoding into the oral word is then dependent upon graphemic cues only. SF understandably avoids presenting words in isolation since their students would not have sufficient phonic skills to decode such words. The structure of **NRS** has assured that graphemic cues are salient and well practiced and the blending procedure is also. In the **NRS** classroom I listened to all ten children read and virtually every one of them who blended an unknown word in context began with the practiced method. They did, however, often stop short of blending the final letter and give a correct whole word response based on the first few blended sounds and the context.

Earlier in this conference W. Kintch proposed that we might research the question: Is meaning achieved before the oral reading of the word in context? The educator who carefully observes the child learning to read could tell you how to set up an experimental situation where the hypothesis could not be rejected. She could also tell you how to set one up that would spell its doom. In the case of successful beginning readers who are learning under the structure of a carefully sequenced program like **NRS** where an uncommon unknown
word, which contains graphemic elements that have been taught, is presented in uninformative context; such children will blend the elements in that word, pronounce it, and achieve meaning for it. The children being taught under a program similar to Scott Foresman's who are at a point where they have learned only initial consonant letter sound cues and where the major emphasis has been on using semantic and syntactic cues may begin to give the initial sound. However, chances are they will draw on every other available cue to find a meaningful completion to the phrase or sentence, and then they will utter an oral word. I believe our "theory" has to allow for both possibilities: pronunciation first, then meaning, and vice versa. Likewise, both may even be found to occur for the more competent reader under certain circumstances.

Secure in our knowledge of how we read, and often of how we think we learned to read, we are too eager it seems to me, to posit either/or hypotheses. The very fact that we can conjure up such hypotheses should alert us to the fact that the same answer ought not to be expected to apply equally to all beginning readers, particularly not to all "at risk" beginners whose cognitive capabilities are changing rapidly as they mature.

(4) Sentence reading. Given the differences in their approach to "words," it is not difficult to anticipate differences in the teaching of sentences. Basically, in SP a preparatory discussion is used prior to asking the children to read the sentence. In the very earliest stories, the sentence patterns to be read are elicited prior to reading to "assure success."

IRD5, after having taught the blending procedure, moves from words in Level 1 to two word phrases, three word phrases, and sentences in Level 2. Here also the teacher reads the phrase under a picture and the children repeat the phrase. A workbook format for responding to a choice of pictures for a given phrase or sentence, or a choice of phrases for a given picture, is introduced and the teacher continues to read the phrases with the children for
several pages before independent work is assigned for these same phrases. Models are provided for sentence reading as well and the same workbook procedure is followed. The game *Sentence Lotto* is introduced to support sentence reading.

(5) **Strategies for story reading.** As the students move toward reading more context in both programs, strategies change. In *SF*, the first strategy utilizes the teacher’s telling of a story as children follow pictures in their books. She asks inference questions and questions which can be answered from the pictures. Then print appears in the children’s books within the framework of the story and children are guided by the storytelling to read the print. For instance; on page 7 in the pupil’s book, *Balloons*, the first print appears and the printed words are taken directly from the story being told by the teacher. The children thus are prompted to "read" the sentence. The teacher’s prompting of each sentence fades as the sentence is repeated with a different color word inserted, which is quad by the picture (see Appendix E). Children are thus reading the story, not from a "sight word" approach at all, but rather from a total meaning approach, and they predict the text based on teacher comments and picture cues.

Throughout Level 1 and somewhat into Level 2 the teacher continues to provide a rich story context for the students. Such prompting is gradually faded as children's attention is directed toward the pictures and toward their own anticipation of the story events. For those children who need guidance in their reading, the teacher continues to comment and to elicit phrases which the children read in the text. The use of redundancy of phrases and/or sentence patterns is prevalent. In fact, verbal cues are still being given in Level 3. For instance, for "The Great Big *Enormous* Turnip," the title is read. Before
The children are asked to read: The old man said, "Grow, grow little turnip. Grow sweet. Grow, grow little turnip. Grow strong." the teacher says, "The old man talked to the turnip he had planted and told it to grow sweet and strong."
The students who are listening to the teacher are given strong cues for reading. By Level 4 (end of Grade 1) these cues are dropped and teacher guided reading consists of literal comprehension and inference questions and some statements to set a purpose for reading each page.

As the students become more proficient, they are expected to read more independently, and teacher prompts are minimized. In some instances, as at Level 5, "How the World Got Its Color," the teacher's edition suggests that, "children will benefit from reading and discussing the first two pages of the story before continuing independently" (p. 35) while for other stories the suggestion is to "Encourage children to read (the whole story) independently. If there are some who need help in the initial reading, use some or all of the guidance that follows" (p. 84). "Guidance" at this level usually implies key questions posed by the teacher. At the end of every story, suggestions to the teacher are given for checking comprehension and for providing students with an opportunity to react to the story.

In NRS most of the stories are Read-Alones, and the provision for teacher involvement with them is minimal. At each level eight Read-Alone Books are available from which the students select as many as they wish to read. I noticed in the classroom I visited that these books, along with the games, tended to be assigned rather than selected. I expect this would vary from one school situation to another. The books are written using a restricted vocabulary and controlled sentence structures. There are no comprehension questions asked following the reading. Appendix F gives an example of a Read-Alone at Level 2. The children are expected to approach the task of reading a story in a similar manner to the way they have been guided by the audio cassette instruction, or the teacher earlier on. That is, they are expected to read stories for meaning, responding to the familiar and frequent words as whole words, and to approach the unknown words with the sound blending
technique and the use of contextual cues. This approach is practiced in the "Group Stories" which are prescribed, two per level, throughout the fourteen levels. Appendix G presents the teacher/group interaction scheme for the first of these stories, Sasha. It differs somewhat from SF's early story reading. There is very little teacher modeling, but there is some (see p. 8). In NRS, the story line is expected to be carried more by the printed text than by the teacher's explanation. The teacher asks questions which the text will answer in NRS; whereas in SF the teacher enriches the context to cue the reading of the text.

By Level 7 of NRS in the group reading situation, the teacher introduces the characters, sets a purpose for silent reading, asks for oral reading by the children of specific sentences to answer questions, and orally reads some of the sentences and paragraphs herself. The emphasis in the group story reading is on using contextual cues. The approach expected of the child after the first few levels is not significantly different as we view NRS group stories and SF pupils' books. The differences become more obvious when we note that all students, including the poorer readers, are expected to cope with the Read-Along Books in NRS independently, whereas only the better readers will be reading independently in SF. This independence has been structured into the NRS program from the beginning. The Read-Alones are composed of only vocabulary for which the program has prepared the child. The books are intended to serve as a bridge between workbook activities, teacher guided group reading and tradebooks in the real world. In contrast to this, SF pays little attention to reading vocabulary development or word recognition skills. Thus, the guidance of the teacher continues to be a necessary part of instruction for the less able children.

The different way in which the workbooks are used in NRS from the studybooks in SF has also contributed to independent mastery. Let us compare that aspect of the two programs briefly.
Studybooks and Workbooks

Workbooks usually are a major component of reading programs at the earliest levels. We examined this component for each program and will describe how it is used; first in SF and then in NRS.

The studybooks of SF are used as an introduction to skills helpful in reading a new story, or as a follow-up of concepts or skills used in the story, or as a complete lesson in and of itself. At the bottom of every page of the SF studybooks, the emphasized skill is stated. These skills tend to support the emphasis given in the teacher's edition and set forth in Appendix A. The content of the studybooks is attractive and the format suitable. Responses in Levels 1-4 include: underlining the correct choice or sentence in a passage, marking an "x" in an answer square, and circling a word. Levels 5-8 add responses of writing in words, phrases, and sentences; selecting a choice, A, B or C, for each of eight or more questions; numbering sentences in sequence; and drawing lines to indicate matches.

A random selection of pages was sampled to analyze the extent to which the stated objectives were apt to be met by the responses required of the students.

"Associating letters and sounds" is one such objective. The teacher is to guide the students in underlining the word choice which begins with the sound of the letter. (See Figure 5) A sentence emphasizing the sound is included.

Insert Figure 5 here

If the teacher guides the reading on the entire page, students will likely read it all. However, if teacher guidance is omitted, students are apt not to read all the print included. They can simply underline the word that begins with the letter given in the same row as a stimulus and they may or may not attempt to read that word, which is pictured. There is no reason to read the sentences.
The bear is in the boat.
Consonant Review

1. The ___ is on the table.
   - dish [ ] book [ ] pie [ ]

2. The ___ is behind the tree.
   - lion [ ] camel [ ] horse [ ]

3. The boy is looking at a ___.
   - bear [ ] seal [ ] duck [ ]
Once a baby woodpecker flew through the hole of a birdhouse. But it grew too big to go out that hole. So it began to peck around the hole. Soon the hole was big enough for the bird to get out.

Draw a line under the sentence that tells what the problem is.
When Did It Happen?

- Miss Grant's class was going to the Science Museum to see baby chicks hatch. The children made name tags. Miss Grant hired a bus.

- When they got inside the museum, the children walked toward the sign marked Baby Chicks. Everyone liked watching the chicks. The chicks worked very hard to get out of their shells.

- When the children got back to school, they drew pictures of what they had seen. Everyone wanted to go to the museum again.

1. When did the children make name tags?
   - before the trip □  during the trip □  after the trip □

2. When did the children see the eggs hatch?
   - before the trip □  during the trip □  after the trip □

3. When did the children draw pictures?
   - before the trip □  during the trip □  after the trip □
Write the Word

stilts    lantern    grape    harp    wizard    otter

A ___________________________ is a small fruit that
grows on a vine.

A light that can be carried is

______________________________
called a ________________________.

Long poles used to walk on for fun are

______________________________
called ________________________

A ___________________________ is a large musical
instrument with strings.

______________________________

An ___________________________ is a playful water animal.

A storybook man who uses magic

______________________________
is a ____________________________

Using context clues (word meaning)
Using letter-sound cues is another stated objective at Level 2. The children are to name the picture, read the sentence, read the words, and mark an X in the answer square beside the word that begins with the same sound as the picture. (See Figure 6.) Responses can be made by children without reading anything on the page if they know the initial sound-letter association.

In "recognizing story problems" the intent is for children to read an entire story and then go back to underline the problem. However, they may underline the problem even if they read only until the sentence that relates the problem is reached (see Figure 7).

Pages designed to teach children to "recognize time relationships" (page 47, Level 4) suggest guided reading, but students may read the page independently. Questions following the selection are "when" questions and answers might easily be guessed without reading the selection (see Figure 8).

In "using context cues" the children are expected to select a word from those at the top of the page on the basis of sentence context (see Figure 9). They must read; there is no other way they could select the correct word. It is a good test of reading and using context cues.

As with most workbook pages the SF studybooks are directed toward specific objectives but the responses may be made by children following a different
procedure than the one desired and, in general, less reading is often done than the authors intend. Most pages test a skill rather than teach it. However, they do provide practice on the skills outlined, although not necessarily by reading the entire page.

NRS workbooks are also designed to teach specific skills. A variety of formats are introduced by the teacher in Levels 1 and 2 and the teacher guides the students through the exercises, asking them to read all the material presented. Beginning at Level 3, the audio cassette takes over this instruction for introductory pages of each lesson, and the student is required to do several pages independently for each lesson as well.

Formats include selecting the correct word that corresponds to a picture, selecting the correct picture that corresponds to a printed word or sentence, underlining letters in words that correspond to isolated phonemes or word patterns, matching words and sentences to pictures, yes/no responses, and selecting words to go in blanks. (See Appendix D for examples.)

A random selection of pages from NRS workbooks reveals one of the problems occurring in SF studybooks. When a page presents a quantity of print to be read, it may be the case that children can respond to questions without reading the entire page (e.g., page 138 from Level 7 in Appendix II). However, without making a formal count, it appears that the NRS pages are more successful in posing questions/exercises which require reading of the text than SF. The objective of each page is not specifically stated in NRS workbooks, therefore an analysis similar to that done above for SF is not feasible.

Some persistent and relevant questions arise for both programs, the answers to which are troublesome.

For SF: What are the expectations set up in the child by having the teacher play such a large role in guiding the reading, including eliciting exact oral language patterns which are then presented in print?
strategies are the children actually learning? Should we expect them then to ask their own questions, set their own purposes? Also, consider that the children a) use what they know of the world and their language to understand what the print is communicating at this early level and then b) use pieces of that "message" to inductively learn letter-sound associations. Is this in conflict logically with the aim of using letter-sound knowledge to recode printed words into oral words in order to understand what the print is communicating? In SF readers, correspondences taught are not put in a context where it is necessary to use them to decode. How does the child then learn that the knowledge of letter-sound correspondences is useful in reading?

For NRS: Because of the tight structure built into NRS and the relatively greater control of student behavior, much of their material is suitable for research questions. A few which come to mind immediately are: 1) Can all children be led successfully through the detailed blending process? 2) How might one determine, in the context of the program, the optimal number of letter-sound associations for any individual student; i.e., when does context efficiently "take over?" how much phonics is "enough?" "too little?" or "too much?" 3) Does marking the long vowel and the final silent e prompt children to attend to these cues rather than the spelling pattern? 4) What are the relatively more difficult lessons? Why? Researching such questions would, admittedly, keep the program "in the lab" for several more years, and it may be more important now to have it published and follow its use in schools, but the questions are tantalizing.

Troublesome to this reviewer, at the present time, is some of the elaborate and slowly paced teaching in NRS. For many children, much of this is unnecessary. While the developers tell us that the more capable students go through the NRS program more rapidly, certain questions are haunting. If children are
capable of coming closer to the desired mature reading behavior early in their reading instruction, does it affect their understanding and positive response to reading if they are forced to go through specific tasks? Once again, the attitude of the teacher and the classroom "climate" will exert a significant influence.

Summary. A way to graphically display some of the major differences between the two programs is presented in Figure 10 which is a simplified adaptation of R. Shuy's acquisitional sequence of the "language accesses" in reading (Shuy, 1975).

The lines drawn in are tentative at best, but for future program evaluations one might consider having the program developers estimate the slope of each line themselves. These could then be verified by reviewers. Such a scheme does portray the major emphasis of each program and helps the evaluator keep in mind the direction of the program as well.
Testing

An examination of tests in any given program allows us to determine which abilities the developers formally check for in the children. One would assume those abilities tested would have been assigned the greatest significance, or they would not be tested. The following analysis on the content of one End-of-Level Test (Level 3) and a Skills Assessment Test (Level 2) from SF and the content of several Progress Checks from NRS gives a slightly different flavor for the emphasis implied in each program's design.

The SF End-of-Level 3 Test

Throughout this test a set of items presents a stimulus with 3-choice responses. The first 23 items are of the format shown in Figure 11. One finds that the correct alternatives for these 23 items contain only nine words which are indexed as having been used more than once in the pupils' books, Levels 1 to 3; eight of these and eleven (or 19 response words) were found in the corresponding studybooks. The students then must rely on letter-sound correspondences to respond correctly to the remaining four items and they may, in fact, use that strategy to respond to the others as well. As all initial letter-sound correspondences have been taught by the end of Level 3, that strategy for word identification would be a likely choice. For the first 12 items, it is an efficient strategy: only the correct choice has an initial letter that matches the sound in the stimulus item. However, in items 12-23 the students must use a strategy focussing on the medial vowel if they do not recognize the whole word. All three choices for each of these items have the same initial consonant. If the child could label the picture correctly, hear the vowel sound in that word, and find its representation amongst the alternatives, he would be successful. All the vowel representations used in the correct choices have been taught. Incidentally, it is entirely unnecessary.
The ruler is on the bench.
to read the entire sentence containing that picture as a rhabus for the missing word. Sentence reading is of no more help than picture-word matching in selecting the correct response. The particular format used in this test of selecting the correct word using either the whole word or the letter-sound cues strategy is not found in the studybooks.

Items 26–29 and 30–34 are two sets of "wh" questions each of which follows a story and has a three-choice response format. This format is a familiar exercise in the studybooks. Test questions of this type vary in difficulty and may be answered by various means. In a somewhat oversimplified categorization, these items fall into the following types (the numbers in parenthesis indicate the number of items for each type):

a) can be answered merely by looking at pictures (2)

b) can be answered with minimal reading and the pictures (1)

c) reading... facts present (6)

d) reading... inference necessary (2)

One story is the "everyday" type and one is fantasy and the vocabulary and language patterns are similar to what the children have been reading in their books. These 11 items seem to reflect the stated emphasis of the program.

Items 35–50 focus on vowel letter-sound correspondences and the children are required to select the correct response from three alternatives once again. They are to choose the printed word containing the same vowel sound found in a pictures and printed word in isolation for items 35–45 and found in a pictured and printed word in context for items 46–50 (see Figure 12). Reading the context, or sentences in items 46–50 will help the child to read the target word (which may be necessary because of ambiguous pictures), but it is possible...
The dog has a huge bone.
to respond correctly by reading only the underlined or target word in the stimulus or correctly identifying the picture. Children may avoid reading the sentence if they so desire. All three alternatives in each response set have the same vowel letter present, but in different spelling contexts. For instance, the choices for /a/ might be words with a followed by a consonant (e), followed by e, or followed by a consonant and final e. Thus the children must know that the letter a represents different sounds in different spelling contexts and they must know how to identify these contexts. This is a format familiar to them from their studybook exercises.

In summary, for the End-of-Level 3 Test in SF, 11 of 50 items focus directly on the meaning, on using context, and on reading larger chunks of materials; these 11 thus reflect the stated primary objectives of the program. The remaining 39 items focus on letter-sound associations, not particularly as cues to meaning, but more as a skill.

The Skills Assessment Test (Level 2)

Twelve skill areas are defined (one for each subtest), seven of which use particular initial consonant letter-sound cues and consonant blends. An analysis of the items in each subtest for using letter-sound cues reveals that knowledge of those cues is necessary and that also, having that skill is sufficient; i.e., reading the context is not necessary.

In other subtests, the circling of specific words in sentences tests word boundaries, "why" questions test cause-effect, sorting pictures tests distinguishing real from fanciful content, and answering comprehension questions following a reading selection tests the effective use of picture context, and letter-sound cues. Only one subtest raises some questions with regard to eliciting appropriate behaviors. In that subtest, the intent is to use pictures cues to identify place relationships and read sentences. The task is illustrated in Figure 13. The picture probably cues many of the words in
The rabbit is on the swing.
The rabbit is under the swing.
the sentence. However, the place relationship words (in the example, "on" and "under") have to be read to determine which sentence matches the picture. Knowing the place relationship in the picture does help the student to anticipate the print, but other words in the sentence are more obviously cued by the picture.

The purposes for which these subtests were designed - periodic diagnostic testing of skills - seem to be adequately met, judging from the one available for examination at Level 2. We read that these skills are taught in SF to achieve meaningful reading, but meaningful reading, per se, constitutes a minimal part of the testing program. However, another testing technique, that is the teacher's use of the miscue analysis outlined in the teacher's edition, is a direct attempt to determine if the child is using syntactic and semantic cues in his reading and therefore, by inference, comprehending.

**NRS Progress Checks**

From the very first lessons in NRS, the progress checks occur after almost every one of the ten lessons at each level. (See Appendix I for examples of these tests.) They consist of one page of oral reading by the children and the teacher scores the correctness of their responses to only selected key words. I analyzed the words scored and they consistently include the elements taught in the preceding lesson. Beginning at Level 5, a few items which require choice answers by the students are included at each level to check on comprehension.

It is a curiosity of more than passing interest that the students in NRS (a program in which initial emphasis is on phonics) read sentences and short stories individually to their teacher who scores them on specific words to determine if they have "mastered the elements taught," whereas in SF...
(a meaning emphasis program) the larger number of test items require little contextual reading and specific skills are tested to determine if the children are able to "read for meaning." In the case of NRS, the context could prompt the correct reading of the key words, rather than mastery of the elements; and in SF, mastery of the elements could, in many cases, provide correct responses without contextual reading. One has to pause and reflect on this phenomenon for its implications for both theory and practice.
Content

While most youngsters have a high degree of motivation for learning to read, the content of the reading program itself may provide further motivation. Some subjective judgments may be made about motivational value by simply examining the story and picture content of the materials in both programs and the format of the instructional materials.

Scott Foresman Content

The books in the SF program are nothing short of delightful. They are appealing in design and very colorful. Beginning with the very easiest books, the content includes fanciful stories, common experiences of children, selections about animals, suggestions for craft projects, poetry, folk tales, and scientific selections. Reference to Appendix A will indicate the different literary forms incorporated. Children's art enhances each book's cover and the illustrations within include diagrams; black and white and color photographs; realistic, fanciful, and surrealistic art; and a variety of media and styles. The print is clear and the amount of print per page increases gradually over the eight levels analyzed. From Level 7 on there is a glossary giving explanations of unfamiliar words as well as information on places referred to in the text.

Examples of stories from Level 1 and Level 4 of SF are included in Appendix J to give an indication of the content for these first grade books. While story content of these can be replicated here, certainly the flavor of the books themselves cannot. Illustrations and other format characteristics which provide interest are missing. One notices immediately the literary quality that can be achieved in these early stories when vocabulary is not restricted in terms of the number of new words introduced nor the regularity of letter to sound relationships. If there are controls over the syntactic structures used, they are not obvious either. At Level 4, end of first grade,
the following complex sentence structure appears: "The dragon was happy because no one was afraid of him, and he had lots of friends" (The Little Knight, p. 24). The rhythm and tempo of the selections, the "flow" of the language, so to speak, is quite natural. Sensitive to the fact that on trial runs, children's "MISCUES" or errors arose mostly from the use of unfamiliar language or from difficulties with concepts, these early stories are written in a manner designed to help them "read themselves," according to one program description of SF. One intuitively feels that from the point of view of appeal, the SF readers are quite superior and very much like the wider world of children's literature. That is in keeping with the program objectives to introduce the students to literature and to motivate them to read. It is important to note that, although some children may be able to read The Little Knight, Level 4 (See Appendix K) near the end of first grade, the instructional procedure includes a great deal of guidance from the teacher with suggested motivating comprehension, and discussion questions for children who are not able to read independently.

New Primary Grades Reading Systems Content

NRS is still in experimental form and it is indeed with some reservations that I comment on its eye-appeal. While the illustrations are all very good, they are done in the same style in black and white for trial use. I assume these features will change with commercial publication. The literary forms incorporated in the series of Read-Alone books for levels 2 - 8, include many realistic fiction or personal interest selections and fantasy selections, a few informational articles, and some poetry. Many of the personal interest stories are oriented toward city youngsters. The number of words per page increases gradually over the eight levels of Read-Alone books reviewed.

The authors state that new sentence structures are first introduced in the group story situation rather than in the Read-Alones, and that "NRS slowly
increases the complexity of sentence structure under the guidance of the teacher" (Dick & Mitroff, 1972, p. 76). The intent is to assist the students in transferring their oral/aural knowledge of structure to the printed language. An example of a group story is presented in Appendix L for Level 7. Vocabulary in these group readers is controlled and at the earliest levels it is difficult to avoid entirely some awkward language patterns.

However, at the end of first grade in the Read-Alone Books (Level 7) we found such complex sentences as "The foxes were so glad to be free that they went back and had fun at the winter party" (Boxes of Foxes, p. 19). The content of one of these Read-Alone Books for the first graders (Level 7) is presented in Appendix M. It takes a great deal of imagination to create stories with a vocabulary restricted to certain letter-sound correspondences and a limited number of sight words and NRS has done well. However, the result, of necessity, does include language patterns that are not entirely natural nor literary and story lines that are also restricted. The authors intended that these books be read alone by all students who have advanced to the assigned level and no teacher-guided reading is expected. This expectation that children be able to read alone has exerted a strong influence on the content of these readers. A careful analysis indicates that if the phonic elements and sight words taught are mastered, one would expect the books to be mastered as well. It would be interesting to know if children impose their own language patterns in these stories that are written so that the children can master the printed word. And would such reading behavior be considered good or bad by the program developers?

For the highly successful student, reading on his own in SF or NRS is possible, and the content of SF does intuitively have more appeal. The less successful students are apt to need guidance either from the teacher or the structure of a controlled vocabulary. Guidance from the teacher is provided.
for the less able SF students who cannot and do not read alone. The NRS
students are able to, and required to, read alone and the content is structured
for them to do so. If there is motivation in interaction with the teacher and
one's peers, SF provides that as the group reads their stories together. If
there is intrinsic motivation for children in mastery and in knowing they have
mastered a skill, the content in NRS is more apt to provide that form of
motivation even for the less able students.
Other Motivational Features

One senses motivation for reading the selections themselves in the SF readers and motivation for mastering the reading skill and being able to read the content in the NRS readers. As for other motivational aspects of the program, it is beyond the scope of this paper to go into any detail but we would like briefly to note some other features of each program that might be particularly motivating.

SF encourages projects associated with the reading and pre-story discussions of their own experiences. Reading tends to focus much of the activity in the classrooms. Another motivational aspect is the occasional letter sent home to the parents informing them of what reading experiences the children are having in their classroom.

The extensive use of manipulables in NRS is striking: games, flip-a-words, audio cassettes and recorders with headphones, and even the Read-Alone storybooks which are available for independent reading. Individual and personal attention from the teacher at regular intervals and frequent mastery checks are also motivating factors.

Motivation and attention are no small part of beginning reading. A more complete program analysis ought to include how attention is learned and reinforced in reading programs and how that reinforcement is faded. We should note how the cluster of behaviors we call attention is first taught and then how it comes to be the intent of the reader rather than the teacher.
Individualization

Surely there are a multitude of problems when one attempts to adapt an educational program to individual differences. To my knowledge, none of the current theories of the acquisition of reading skills has incorporated parameters of individual differences. With or without theoretical rationale, the desire to design instructional systems that take into account individual differences is very evident. The literature on new programs is laden with assurances that these programs do provide for individual differences. Such is the case with both reading programs analyzed in this paper. From the program announcement of SF: "Materials in Reading Unlimited can be combined to accommodate differences in children, their timing, and your classroom organization." And from the Beck and Mitroff (1972) paper: "NRS is described as an individualized-adaptive system. It is individualized in that it permits children to progress at various rates, it allows for different routes to the mastery of an objective, and it is organized so that a teacher can monitor a classroom of children doing different things at different times. It is adaptive in that alternative teaching strategies are available to meet the needs of different children and for the requirements of different tasks" (p. 35). Let us examine how each program implements their concern.

Lesson plans in SF offer ideas for "personalizing instruction" that may relate to additional work on specific skills, extending the reading to more difficult selections, etc. Each teacher's edition contains an explanation of and directions for miscue analysis (developed by Dr. Kenneth Goodman, one of the program's authors). An analysis of the "variations from the text" made in oral reading may be analyzed to estimate how well the student is using syntactic cues or graphic cues and to note whether students are self-correcting the "miscues" which alter the meaning of the text. Additionally, private
conferences with the children to discuss their progress, as well as the story content, are highly recommended by Dr. Helen Robinson, another co-author.

The extent of individualization in SF then is dependent upon the teacher's initiative in adapting to variations in children's performance and her willingness to incorporate the many suggestions given. However, specific suggestions that offer an alternative to the basic approach to instruction were not evident in the program. As discussed in the section on skills, the authors of SF espouse an inductive methodology which emphasizes the meaning of the passages in the pupils' books. The hierarchy of skills is from the largest meaningful units, down to letter-sound relationships, and no provision is made for children who are unable to cope with this strategy.

In a SF classroom, the teacher assembles groups of children to read and discuss stories together. One assumes that the first grade teacher will make judgments concerning the students' readiness for reading and then group them accordingly. End-of-level tests and criterion referenced skills assessment tests help in deciding whether a pace that is too fast has been set for an individual and whether or not review is necessary, and one assumes that adjustments in group assignments are made accordingly.

NRS, on the other hand, is definitely designed for individualized pacing. The first two levels of the program only are taught to groups of students. At these levels, each group moves at a pace geared to its facility with the program. During this time, self-management schemes are taught and then, beginning at Level 3, the teacher makes a daily assignment, or prescription, for every individual. Because review work is necessary for some children and because the assignments may vary in the amount of work expected, students are very soon working on different segments and at different levels according to their individual needs.

Different routes are "available" for the child in terms of games and other manipulatives but the road is pretty well charted through the cassette led
instruction and the workbooks. The review sequences built in for students who do not achieve mastery on the progress checks at the end of each lesson are "more of" rather than "different from" the instruction already given; i.e., the basic approach remains the same. Later, the techniques offered as alternative teaching strategies (after a child has failed at least two times to master the skill in the prescribed manner) include first, tutoring the child following the same basic procedures in moving through the several levels of difficulty for letter-sound correspondences. In addition, tracing the letter is a further suggestion. The procedure for blending is altered and instead of blending sounds into words, the strategy is to begin with the whole word, break it into its component sounds and then blend into the whole word.

While these two alternatives are suggested, the instructional method underlying the program does not change. The hierarchy of skills is from the lowest discernible units, the letter-to-sound relationships up to words, and sentences and meaningful reading of continuous text and little provision is made for children who are unable to cope with this strategy.

All eleven students in the classroom I visited were progressing in NRS. Since it is still an "in-house" program I asked whether or not any children in other NRS classrooms had been given an alternate program with an entirely different structure. While the answer was, "yes," the authors obviously felt that this procedure might not be necessary once teachers gain more confidence in their own skills in implementing the program. The opportunities for individualization which are present in the program are greater than in other programs I am familiar with, and the authors may be correct in their assumption that it is enough. At least they should be given credit for moving significantly in this important direction.

I'd like to submit a personal note on individualization at this point which cannot be identified as a part of my analysis. However, I think it is
important to theory and instruction.

Beginning readers are different. Their behavioral repertoires are different, their strategies for thinking about their world are different, and their personality characteristics are different (Jansky and Hirsch, 1972, Durkin, 1972). Because they all learned language in a similar way, though possibly on a different time line, does not necessarily mean that they will all learn to read in the same way. At the most obvious level, instruction in the first grade has to be geared toward children whose chronological ages range over a full year. The provisions made for individualization of instruction, particularly those that go beyond pacing, appear to me to be crucial for a successful first grade experience. And the success of that experience is crucial for ego and scholarly development.

Procedures which might be introduced to effectively individualize initial reading instruction are still absent from beginning programs. However, more research is needed prior to prescriptive methodologies.
SUMMARY AND CONCLUSION

This examination of two very different planned approaches to initial reading began with a presentation of the scope of each program and an overview of obvious differences between them. A comparison of the teaching/learning strategies related to various linguistic units (graphemes/phonemes, word patterns, words, sentences and stories) was then made as well as an analysis of the workbooks. The testing program and its relationship to the objectives of each program was examined. The content of the students' books and other motivational aspects of the program were discussed and finally we looked at the extent of individualization possible under each program. Similar analyses, covering these same aspects in other programs, might allow educators to know what options are available for initial instruction in reading. Further, such analyses do suggest areas for further research.

What outcome of the analyses presented in this paper might lead to research on reading theory? And how might that theory help in further programming? As I have worked through these programs I have again been convinced that many hypotheses need to be researched within programs. One might, for instance, want to research questions about the behaviors and cognitive processing of a child being taught with a program similar to SF quite apart from research on those same questions with children learning in NRS.

Differing hypotheses about how children learn to read need to be formulated and tested on children who are being taught in various ways. Systems similar to each of the two investigated in this paper and other systems which show specific contrasts in any of the characteristics analyzed ought to be included. We suspect that there is more than one way to learn to read. The mere fact that children have learned under systems as
contrastive as SF and NRS suggests that this is so. What is challenging to research and pedagogy alike is that children have failed to learn under different kinds of instruction as well. Once beginners begin in a specific program, they soon fall into one of several categories: either they learn that which we teach them, they learn in spite of what we teach them, or, sadly, they do not learn. That fact influences the child's future success in reading and other academic as well as several and emotional areas as well. For these reasons, research in beginning reading instruction ought to continue, but perhaps within a planned sequence.

General consensus now has it that there has been a rise in the mean achievement on standardized tests in first and second grades. Some have attributed that improvement to the shift toward the inclusion of a phonics component at the earliest levels (though that has not been proven, to my knowledge). However, does such information help us to select programs for our "at risk" children? Does any of the research focus on the lower 50% of the children and ask what is more effective with them, or if they also are now better achievers? Are there differences within this group in learning strategies? One might hypothesize that the differences in achievement which have occurred are largely a function of raising the scores of children in the upper end of the continuum rather than the lower. However, to my knowledge, no data have been analyzed to address that hypothesis. There appears to be a need to reconsider the implications of data that have been accumulated.

We need to consciously relate our research in beginning reading instruction to theory. Would it not be possible to tap behaviors of young children to determine where they are in their cognitive development and to research initial strategies in beginning reading in an attempt to make a match between child characteristics and program characteristics? We need to be asking what abilities are necessary for success in the different types of
Sight word approaches, with their straight stimulus-response, almost paired associate type learning, may require different strategies than the recoding from letters to sounds, and thence to words and sentences which must be remembered until meaning is attained (as in LEAD's program, NRS). And both of these types of programs must require different skills than the Scott Foresman program which moves from meaning, through language, to print and back again. Young children, particularly in mature children, perhaps find it difficult to attend to syntactic, semantic, and graphic information all at the same time in the beginning. Different programs emphasize different aspects, as we have seen in this analysis, and I believe the challenge is to know for whom each is most appropriate—the way a very wise first grade teacher knows. Can research and theory building allow for different processes for different children? And can it help us in answering questions about beginning reading that are still with us? If we make some penetrating observations of teachers and of children, along with our program analyses, we may move closer to some answers.
Figures

Figure 1. Sequence of levels of instruction and pupil materials for Scott Foresman's Reading Unlimited (1976) and Pittsburgh LDRC's New Primary Grades Reading System through the second grade.

Figure 2. General flow of a typical lesson in Scott Foresman's Reading Unlimited. (SF) (Level 3)

Figure 3. General flow of a typical LDRC's New Primary Grades Reading System (NRS) lesson. (does not include possible review exercises)

Figure 4. A model of the interrelationships among relevant dimensions of reading behavior.

Figure 5. Exercise from Scott Foresman's Studybook, Level 2, on associating letters and sounds.

Figure 6. Exercise from Scott Foresman's Studybook, Level 2, on using letter sound cues.

Figure 7. Exercise from Scott Foresman's Studybook, Level 4, on recognizing story problems.

Figure 8. Exercise from Scott Foresman's Studybook, Level 4, on recognizing time relationships.

Figure 9. Exercise from Scott Foresman's Studybook, Level 6, on using context cues.

Figure 10. Proportion of different language skills used in initial "reading" as taught by New Primary Grades Reading System (NRS) and Scott Foresman's Reading Unlimited. (SF) (See Shuy, 1975)

Figure 11. An example of one item test format from Scott Foresman's End of Level Test, Level 3.

Figure 12. An example of item test format from Scott Foresman's End of Level Test, Level 3, focused on vowel letter-sound correspondences.

Figure 13. An item from Scott Foresman's Skills Assessment Test, Level 2.
Footnotes

1. This schema is adapted from a scheme developed by Hively, Popp and Porter and is given a full explanation in Hively, 1966.

2. Throughout the paper the simplified phoneme representations between slash marks has been used, similar to SF's notation. "Short" vowels are represented by the vowel letter only (e.g., /a/ not /ae/) "long vowels are marked with a bar (e.g., /a/ not /ey/).
BIBLIOGRAPHY


Learning Research and Development Center, New Primary Grades Reading System. Pittsburgh: University of Pittsburgh, Learning Research and Development Center, in press.


APPENDIX A
Listing of Skills, Understandings, and Attitudes taken from Scott Foresman, Teacher's Edition, Reading Unlimited

Skills, Understandings, and Attitudes

The listing on these pages includes in concise form the skills, abilities, and understandings that are developed and practiced in Levels 1-21 of Reading Unlimited. It represents the cognitive and affective objectives of the total program. The skills printed in red are the ones indexed at this level.

COMPREHENSION

Decoding
• use auditory discrimination
  initial, medial, final sounds
  intonation (pitch, stress, juncture)
  rhyme
  sounds in the environment
• use visual discrimination
  colors
  letters (capital and small forms)
  shapes
  sizes
  pictures
  words
• use auditory and visual perception
• use letter-sound cues
  consonants (initial, medial, final)
  consonant blends
  consonant digraphs
  vowels
  vowel digraphs
  vowel diphthongs
• use picture cues
  action
  characters
  concepts and processes
  details
  objects
  position
  setting
  size
  time
• use context cues
  abbreviations
  antonyms, synonyms
  base words, inflected forms, derived forms
  compounds
  connotation, denotation
  contractions
  metathesis
  homographs, homophones, homonyms
  pronoun referents
  pronunciations
  relationship of words, phrases, sentences
  word, phrase, sentence, paragraph meaning

• use conventions of written language
  abbreviations
  acronyms
  apostrophes
  balloon dialog
  capital letters
  colon
  comma
  dash
  dotted lines
  ellipses
  exclamation mark
  fractions
  hyphen
  indentation
  language experience
  line
  left-to-right
  progression
  mathematical
  formula
  musical notes
  numbers
  parentheses
  period
  question mark
  quotation marks
  semicolon
  syllabication
  type
  underscore
  word boundaries

Language experience
• extend listening skills
• associate oral and written language
• increase vocabulary
• increase concepts
• identity statements, questions, exclamations, commands, phrases
• express ideas
• recognize use of dialects
• understand idioms
• recognize that words may have more than one meaning
• recognize that many words have similar meanings
• increase ability to read orally
• recognize that language changes

Relationships
• analogous
• general-specific
• sequence
• cause-effect
• part-whole
• size
• class
• place
• time

Main idea and supporting details

CRITICAL READING

Evolution of Information and Ideas
• distinguish realistic and fanciful content
• make inferences
• draw conclusions and substantiate them
STUDY SKILLS

Alphabetical order

Dictionary
- locate entries
  - alphabetical order of general position
  - base words in inflected or derived forms
  - cross-references
  - entry words
  - guide words
- derive meanings
  - abbreviations
  - definitions
  - homographs
  - illustrative sentences
  - labels
- derive pronunciations
  - accent
  - diacritical marks
  - foreign pronunciations
  - full pronunciation key

Key words

Reference tools
- almanacs
- bibliographies
- card catalogs
- dictionaries
- directories
- encyclopedias
- gazetteers
- glossaries
- indexes
- tables of contents
- thesauri
- word lists

Graphic and tabular materials
- calendars
- charts
- diagrams
- graphs
- identification keys
- tables
- time lines

Textual aids
- abbreviations
- annotations
- by-lines
- captions
- credit lines
- datelines
- editor's notes
- epilogues
- footnotes
- forewords
- grid lines
- headings
- subtitles
- symbols
- titles

Setting purposes

Ways of reading
- follow directions
- preview
- take tests
- reread for specific purpose
- read for enjoyment or information
- read to confirm ideas
- skim

Adjust rate to purpose/content

Comparison and contrast

Author's organization of ideas
- recognize chronological organization
- recognize organization based on importance of ideas
- recognize episodic organization of material
- recognize topical arrangement of ideas
- recognize general-specific arrangement of ideas
- recognize type and purpose of paragraphs

Organizing and summarizing
- use tables, charts, or diagrams to organize information
- list items related in specific ways

- make generalizations
- recognize author's point of view
- recognize author's purposes
- recognize illustrator's purposes
- make and/or withhold judgments
- evaluate author as an authority
- distinguish fact and opinion
- distinguish relevant and irrelevant information
- evaluate ideas for a given purpose
- evaluate advertisements
- recognize bias, prejudice
- select and evaluate information from different sources

STUDY SKILLS

Alphabetical order

Dictionary
- locate entries
  - alphabetical order of general position
  - base words in inflected or derived forms
  - cross-references
  - entry words
  - guide words
- derive meanings
  - abbreviations
  - definitions
  - homographs
  - illustrative sentences
  - labels
- derive pronunciations
  - accent
  - diacritical marks
  - foreign pronunciations
  - full pronunciation key

Key words

Reference tools
- almanacs
- bibliographies
- card catalogs
- dictionaries
- directories
- encyclopedias
- gazetteers
- glossaries
- indexes
- tables of contents
- thesauri
- word lists

Graphic and tabular materials
- calendars
- charts
- diagrams
- graphs
- identification keys
- tables
- time lines

Textual aids
- abbreviations
- annotations
- by-lines
- captions
- credit lines
- datelines
- editor's notes
- epilogues
- footnotes
- forewords
- grid lines
- headings
- subtitles
- symbols
- titles

Setting purposes

Ways of reading
- follow directions
- preview
- take tests
- reread for specific purpose
- read for enjoyment or information
- read to confirm ideas
- skim

Adjust rate to purpose/content

Comparison and contrast

Author's organization of ideas
- recognize chronological organization
- recognize organization based on importance of ideas
- recognize episodic organization of material
- recognize topical arrangement of ideas
- recognize general-specific arrangement of ideas
- recognize type and purpose of paragraphs

Organizing and summarizing
- use tables, charts, or diagrams to organize information
- list items related in specific ways
- classify items in specific ways
- make outlines to organize information
- summarize ideas in statements and paragraphs
- organize information from different sources
- describe processes
- relate pictures and text

**LITERARY SKILLS**

<table>
<thead>
<tr>
<th>Literary forms/kinds of writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>anecdote</td>
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<tr>
<td>autobiography</td>
</tr>
<tr>
<td>biography</td>
</tr>
<tr>
<td>book jacket</td>
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<tr>
<td>cartoon</td>
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<tr>
<td>diary</td>
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<tr>
<td>editorial</td>
</tr>
<tr>
<td>fairy tale</td>
</tr>
<tr>
<td>fantasy</td>
</tr>
<tr>
<td>folk tale</td>
</tr>
<tr>
<td>fairy tale</td>
</tr>
<tr>
<td>historical fiction</td>
</tr>
<tr>
<td>how-to-do-it article</td>
</tr>
<tr>
<td>informational article</td>
</tr>
<tr>
<td>interview</td>
</tr>
<tr>
<td>joke</td>
</tr>
<tr>
<td>journalistic narrative</td>
</tr>
<tr>
<td>legend</td>
</tr>
</tbody>
</table>

**Elements of style**

- alliteration
- allusion
- exaggeration
- figurative language
- flashback
- foreshadowing
- humor
- imagery
- irony
- literary allusion
- metaphor
- mood
- onomatopoeia
- parallel structure
- personification
- point of view
- pun
- refrain
- repetition
- rhyme
- rhyme scheme
- rhythm
- simple
- slang
- suspense
- symbolism
- tone

**Features of narrative writing**

- recognize setting
- identify stereotyped characters
- identify traits, motives, and actions of characters

- recognize author's delineation of characters
- recognize story problem and solution
- recognize conflict
- recognize plot
- distinguish narrative text and dialog
- recognize theme
- recognize descriptive writing

**ATTITUDES AND HABITS**

- approach reading as a positive experience
- seek meaning from written materials
- include reading as a leisure-time activity
- develop permanent interests in reading
- seek printed materials related to personal interests and needs
- broaden reading interests
- read various kinds of writing
- evaluate validity of ideas expressed in written materials
- share and discuss ideas gained from personal reading
- grow in appreciation of well-written materials
- select some well-written materials to read
- react emotionally to written materials, whether read or heard
- respond to rhythmic and sound patterns
- capture emotional intensity in imagery
- increase sensitivity to differences in people and cultures
- increase concern for welfare of others
- increase concern for environment
- enhance self-image and understanding of self
- appreciate traditional values of country and cultures
- relate moral principles encountered in reading to personal life
- broaden scope of interests to include art
- increase awareness of career possibilities
- increase ability to evaluate own progress
Which Sentence?

The goat is in the garden. □

The bird is in the garden. X

The guitar is in the basket. X

The bat is in the basket. □

The bell is in the boat. X

The girl is in the boat. □

The ball is in the basket. □

The game is in the basket. X
Monkeys are funny.

See the balloon.

Donna is running.

Ed and Sue are here.

Pat is riding with Ann.

Tom likes his new bike.

Children are instructed to draw a line between the words in each sentence. The sentence is read aloud by the teacher and then the children are asked to circle a specific word, e.g. "funny" in item 1.
APPENDIX D
(from NRS Workbook, Level 1)

net

tent

man
can
cab

mats
nets

nets
bats
Teacher tells story: Every morning Mr. Burton got up very early to blow up his balloons. He took them to the zoo to sell.

Teacher tells: Mr. Burton was at the zoo with his balloons before the animals were awake.

Teacher asks: How can you tell that it is early in the morning? How do you think Mr. Burton might blow up his balloons? Can anyone tell what kind of animals are sleeping here?

Teacher tells: Today there weren't many people at the zoo. When the bus arrived, a woman and some children got off. Mr. Burton was still sleepy, so he didn't hear the children coming to try to buy his balloons.

Teacher asks: What made Mr. Burton jump? How many children do you see? Where is Mr. Burton?

Teacher tells: He was so surprised that he let go of the balloons, and they floated away from him.

Teacher asks: How do you think the children feel now? What do you think will happen next?

Teacher tells: Quickly, the boys and girls scrambled around trying to help Mr. Burton catch the balloons.

Teacher tells: Janet grabbed one as it flew by her face. She called, "Here is the yellow one."

Teacher asks: Look at the sentence on this page. Who thinks they can read what Janet called?

Children read: Here is the yellow one.

Teacher tells: Danny found one by the fence. He shouted, "Here is the blue one."

Here is the yellow one.
Page 8
Teacher asks: Who can read what he shouted?
Children read: Here is the blue one.

Page 9
Teacher asks: Where did Debbie find a balloon?
Teacher asks: What did Debbie yell from the tree?
Children read: Here is the red one.

Page 10
Teacher asks: What did Ken say?
Children read: Here is the orange one.

Page 11
Teacher tells: Yoshi tried to catch one as it floated over a flower bed. She grabbed for the balloon and tried not to step on the flowers. Then she called.

Page 12
Teacher tells: Mr. Burton caught two balloons. Stretching for the first one, he said.

Page 13
Teacher tells: Then he saw the second one, grabbed for it with his other hand, and called.

Page 14
Teacher tells: Carlos really had to run to catch his balloon. It kept getting away from him. But finally he caught up with it. As he reached for it, he shouted.

Page 15
Teacher tells: Then they all heard a voice calling from near the peanut stand. It was Elena. She had found the last balloon and was yelling.
Teacher tells: Mr. Burton thanked the children for helping him and offered to give each of them a balloon. But the children were sorry they had startled him and they wanted to buy the balloons. So Janet got the yellow one, Danny got the blue one, Debbie got the red one, Ken got the orange one, Yoshi got the black one, Carlos got the purple one, and Elena got the green one.

Teacher asks: How does Mr. Burton look now that he has all the balloons back? How do you think the children felt at the end of the story?
Here is the yellow one.
Here is the blue one.

Here is the red one.
Here is the orange one.

Here is the black one.
Here is the white one.

Here is the brown one.
Here is the purple one.

Here is the green one.
APPENDIX 4
The Storm
(From NRS Read-Alone, Level 2)

A storm is at the tent.

A man came.

The man sat.
The stem is bent.

The man sat at the tent.
APPENDIX G

'Sasha
(Level 2, NRS, Group Story)

Page 2
Teacher: Look at the girl in the picture. Is that Sasha? What is girl's name? Read the sentence to yourself to find out what Nan is saying. Let's read the sentence together.

I am Nan.

Page 3
Teacher: Let's make sure everyone is on the right page. Point to page number 1. Read the sentence on this page yourself. Read the sentence out loud, (child).

I am Ben.

Page 4
Teacher: Look at the picture on this page. Where is Nan? (Reinforce phrase at Ben's tent.) What is Ben coloring in his coloring book? (Reinforce the word men.) Now, let's go to the two sentences under the picture. Let's point to the words and read the sentence about Nan together.

Nan is at Ben's tent.

Teacher: Now, let's read the sentence about Ben together. Ready?

Ben can color the men.

Teacher: (child), read the two sentences for us out loud.

Page 5
Teacher: Who came to visit Nan and Ben? (Reinforce Sam or a boy and a dog.) Read the first sentence for us. (child.)

Sasha came.

Teacher: Point to the word Sasha on the page. Now, say the word out loud. Now you know who Sasha is. Sasha is a dog. Read the second sentence to yourself to find out who Sasha belongs to.

Sasha is Sam's.

Teacher: (child), read the second sentence for us.
Sasha is Sam's pet. Do you think Sam likes to have Sasha as a pet? Do you like pets? Why? Are dogs the only kind of pets children have? Look what Sam is carrying in his arm. Do you see the can of dog food?

Teacher: Read both sentences on this page yourself.

Who did Sasha meet? (child), read the two sentences out loud.

Look at Nan and Ben in the picture. How do you think they feel about meeting Sasha? Does Sasha seem to be a nice dog? What is Sam doing?

Teacher: Look at Sam in the picture. What did Sam do while Sasha ate? (Reinforce phrase bent the can.) Read both sentences by yourself.

Sasha ate.

Sam bent the can.

Teacher: Read the sentence that tells what Sasha did, (child.)

Read the sentence that tells what Sam did, (child.)

Look at Ben sitting at the tent. What do you think he is doing?

Teacher: What is Ben showing Nan and Sam? The sentences under the picture tell what Ben said when he came over to show Nan and Sam the picture he had made. You read the first sentence out loud for us, (child.)

I can color Sasha.

Teacher: I will read the next sentence. Listen. "Sasha is the best!"

This (point) is called an exclamation mark. It tells you that the sentence was said with an excited voice. Ben was so happy and excited about meeting Sasha that he said, "Sasha is the best!" (child), read both of the sentences for us. When you read, make your voice sound the way you think Ben's voice would sound.

I can color Sasha. Sasha is the best!
1. Is the short man eating corn or meat?
   - [ ] corn
   - [ ] meat

2. Is the tall man petting a dog or a horse?
   - [ ] a dog
   - [ ] a horse

3. Is the horse running or eating?
   - [ ] running
   - [ ] eating

Make sure the child understands the format of marking an X in the box preceding the correct answer.
1. Ben and Mike are boys. Mike is a boy.
   They are sisters.
   They are friends.

2. Nan and Mildred are boys. Mildred is a girl.
   They are friends.
   They are brothers.

3. Make an X on Mike's cap.

4. Make a ring around Mildred's hat.
APPENDIX K
(from NEIS Workbook, Level 7)

Stan bumped his bottle of coke. The coke bottle dropped off the table and coke spilled on the floor. Then Stan cleaned up the spilled coke.

1. What happened first?
   - Stan bumped his bottle of coke.
   - Stan cleaned up the spilled coke.

2. When did Stan clean up the coke?
   - before the coke spilled on the floor
   - after the coke spilled on the floor

---

It started to rain. Mr. Pike opened his umbrella.
Then it stopped raining.
Mr. Pike closed his umbrella.

1. What happened first?
   - It started to rain.
   - It stopped raining.

2. When did Mr. Pike close his umbrella?
   - before it stopped raining
   - after it stopped raining
Pete went with Ben and his family to the zoo. The boys liked to watch the baby animals. Pete and Ben watched the zoo keeper give a baby zebra a bath. The zoo keeper cleaned the zebra until his black and white stripes shined.

The boys saw a baby hippopotamus with a silly fuzzy hat on. The boys laughed and laughed because the hippopotamus wanted to eat the hat.

Pete got a box of popcorn. Ben bumped Pete's arm and spilled his popcorn into the pen where the ducks and squirrels lived. The animals came quickly to eat the popcorn. Ben hoped the popcorn would not make them sick.

The boys watched the lizards for a long time. There were green, red, and tan lizards. They climbed up and down the branches of a small tree. They chased each other around the rocks.

At the end of the day the boys hated to go home.

1. Which one of the animals wanted to eat its hat?
   - the zebra
   - the hippopotamus
   - the duck

2. Which of the animals climbed up and down the branches?
   - the lizards
   - the ducks
   - the squirrels

3. Which of the animals ate Pete's popcorn?
   - the lizards
   - the ducks and squirrels

4. The boys hated to go home.
1. I am thinking of a machine which can measure how much pressure is being pushed through the earth. This machine is on a piece of wood which is attached to the earth. What is the name of the machine I am thinking of?
   - a telescope
   - a washing machine
   - a seismograph

2. I am thinking of the building where scientists who study earthquakes work. This building is found near the fault from an old earthquake. What is this building that I am thinking of called?
   - a seismic observatory
   - a pharmacy
   - a skyscraper

---

Pretend that you are a scientist who studies earthquakes. You are working in your seismic observatory and the seismograph starts to draw wavy lines.

1. What could the wavy lines on the seismograph mean?
   - that there is a lot of pressure being pushed through the earth and that there might be an earthquake soon
   - that there is not much pressure being pushed through the earth and that there is no danger of an earthquake
One day, Mr. Pike was reading his newspaper. He read that there had been an earthquake out in the desert.

The newspaper story said that the earthquake had made a large fault in the crust of the earth, and that the earth had vibrated for many miles in all directions during the earthquake. But luckily, there were no people living near the place where the earthquake occurred. No one had gotten hurt.

Mr. Pike also read that many scientists had been able to predict that the earthquake was going to occur. They had studied their seismographs in their seismic observatories, and they had seen the seismographs start to draw wavy lines. If there had been people living near where the earthquake was going to occur, the scientists would have had time to warn the people and to tell them to go to a place where there would have been no damage.
Answer these questions about An Earthquake in the News:

1. Where was the earthquake that Mr. Pike read about?
   - in the woods
   - in the sea
   - in the desert

2. What had the earthquake done to the crust of the earth?
   - It had made a large fault in the crust of the earth.
   - It had made a large mountain in the crust of the earth.

3. Had scientists been able to predict that the earthquake was going to occur?
   - yes
   - no

4. The scientists had studied their
   - telephones.
   - seismographs.

5. The scientists would have had time to warn people that the earthquake was going to occur.
   - would not

[If there are any errors, turn back to the story on page 57 and show the child the paragraph in which a particular answer is found. Have him read that paragraph until he finds the information that will answer the question. Then have him correct his error.]
Instructions: Have the child read each sentence aloud. The words in the sentences that are scored are listed in the boxes at the end of each sentence. Place a 1 above the word in the box if the child reads that word in the sentence correctly. Place a 0 above the word in the box if the child misreads that word in the sentence.

1. The hen has an egg.
   - has

2. The egg is hatching.
   - hatching

3. Stan said, "See me hit the can."
   - hit

4. Mom is singing.
   - singing

5. Sam is hop
ing.
   - hopping

6. Ben sees his hat on the table.
   - hat

Total Points: Child's Score

Directions: Have the child read each sentence aloud. The words in the sentence (top row) are scored if listed in the blanks on the end of each sentence. Place a 1 above the word in the box if the child reads that word in the sentence correctly. Place a 0 above the word in the box if the child misreads that word in the sentence.

1. The bear cubs are cute.
   - cute

2. The big bear can play the drum.
   - play

3. A monkey kicks with his back legs.
   - legs

4. The tiger has cream in it.
   - cream

5. Where does Brice take a bath?
   - in a tub
   - in the sink

Total Points: Child's Score

Scoring Procedure: Only the words in the boxes are scored. Give one point for the correct reading of each of three words and one point for the correct answer to question 5. If a child's score is 7 points or more, no modification of the script is needed. If the child's score is less than 7 points, the next modification is to reduce cassette 5-9. If the child's score is less than 5 points, use the cassette 5-9a.

No. 1.

Directions: Have the child read each sentence aloud. The words in the sentence (top row) are scored if listed in the blanks on the end of each sentence. Place a 1 above the word in the box if the child reads that word in the sentence correctly. Place a 0 above the word in the box if the child misreads that word in the sentence.

1. The bear cubs are cute.
   - cute

2. The big bear can play the drum.
   - play

3. A monkey kicks with his back legs.
   - legs

4. The tiger has cream in it.
   - cream

5. Where does Brice take a bath?
   - in a tub
   - in the sink

Total Points: Child's Score

Scoring Procedure: Only the words in the boxes are scored. Give one point for the correct reading of each of three words and one point for the correct answer to question 5. If a child's score is 7 points or more, no modification of the script is needed. If the child's score is less than 7 points, the next modification is to reduce cassette 5-9. If the child's score is less than 5 points, use the cassette 5-9a.

No. 1.
Progress Check 1-9

Directions: Have the child read each sentence aloud. The words in the sentences that are scored are listed in the box(es) at the end of each sentence. Place a ✓ above the word in the box if the child reads that word in the sentence correctly. Place a O above the word in the box if the child misreads that word in the sentence.

1. Somebody took my jacket.

2. I want to look at the book.

3. The boy needs someone to help him do his workbook papers.

4. Can you cook?

5. Put your jacket on a hook.

6. I feel so good today.

7. Sam goes to football games with his uncle.

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<tr>
<td>go</td>
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</table>

Total Points Child's Score

11 ✓

Scoring Procedure: Only the verbs in the boxes are scored. Give one point for the correct reading of each of these words. If a child's score is 7 points or more, his next prescription is the 7-9-6 cassette. If his score is less than 7 points, his next prescription is the review cassette, 7-9-8.

---

Progress Check 11-3

Directions: Have the child read each sentence aloud. The words in the sentences that are scored are listed in the box(es) at the end of each sentence. Place a ✓ above the word in the box if the child reads that word in the sentence correctly. Place a O above the word in the box if the child misreads that word in the sentence.

1. Mrs. Stewart cut the pie into four equal parts.

2. The teacher will erase the arithmetic problem.

3. Doris and Boris prefer to go for walks in the evening.

4. Mr. Pike has a tortoise that is eleven years old.

5. Sometimes Ben pretends that he is a cowboy.

6. Mrs. Stewart cut the pie into four equal parts.

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<th>ename</th>
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<td>pretend</td>
<td>cowboy</td>
</tr>
<tr>
<td>cut</td>
<td>pie</td>
</tr>
</tbody>
</table>

Total Points Child's Score

9 ❌

Scoring Procedure: Give one point for the correct reading of each word. If a child's score is 6 points or more, his next prescription is cassette 11-9-6. If his score is less than 6 points, his next assignment is cassette 11-9-8.
**A girl got on the bus.**

**Then the bus went fast.**

**A boy got on the bus.**

**Then the bus went fast.**
A fox got on the bus.

Then the bus went fast.

A hippopotamus got on the bus.

Then the bus went fast.
A goat got on the bus.

Then the bus went fast.

A rhinoceros got on the bus.

Then the bus went fast.
A fish got on the bus.

Then the bus went fast.

A horse got on the bus.

Then the bus went fast.
A rabbit got on the bus.

Then the bus went fast.

A bee got on the bus.

Then...
The rabbit got off the bus.
The horse got off the bus.
The fish got off the bus.
The rhinoceros got off the bus.
The goat got off the bus.
The hippopotamus got off the bus.
The fox got off the bus.
The boy got off the bus.
The girl got off the bus.

Who got on the bus?
a bee  a boy  a fish
a fox  a girl  a goat
a horse  a book  a rabbit
a rhinoceros  a hippopotamus

Then they all ran fast.
Once upon a time a king and a queen lived in a big old castle.

The king and the queen were sad because their castle was so cold. Sometimes the queen had to put on a blanket to keep warm. And the king had to put on an old rug. Then they didn't look like a king and a queen.

Something else made the king and queen sad. They couldn't sleep because a dragon kept them awake.

Every night the dragon sat in his cave on the top of the hill. And he roared and roared and roared.

The king and queen didn't know it, but the dragon was sad too. Everybody was afraid of him. No one came to see him. He was always alone. That's why he was sad. That's why he roared. Sometimes he was so sad he cried.

One day the king sent for his knights. There were four big knights and one little knight.
The king was mad. "I can't get any sleep," he said. "Do something about that dragon!"

"What should we do?" asked one of the big knights.

"I don't care what you do!" said the king. "But do it fast!"

So the knights left the castle to do something about the dragon.

They started to go up the hill to the dragon's cave.

Just then the dragon roared. The big knights turned and ran.

But the little knight kept on going. He was a brave little knight who wasn't afraid of any old dragon. He kept on going up the hill until he got to the dragon's cave.

The little knight tiptoed into the cave. He saw the dragon. The dragon was crying.

The knight asked, "Why are you crying?"
"I'm crying because everybody is afraid of me," said the dragon.
No one comes to see me.
I don't have any friends."

The little knight said, "I came to see you.
I'll be your friend."

The dragon gave a happy snort.
Fire came out of his nose.
The fire made the cave nice and warm.

Soon the little knight was warm.
Then he thought of something.

The little knight said, "Why don't you come and live at the castle?
The castle is always cold.
You could keep it warm, and you'd have lots of friends.
Blow your nose and come with me."

The king and queen were afraid when they saw the dragon.

The little knight said, "He won't hurt you.
He's going to live with us and keep the castle warm. He'll be very quiet."

The dragon made fire come out of his nose.
The castle began to get warm.
The king took off his rug, and the queen took off her blanket.
Then they looked like a king and a queen again.
APPENDIX L

Rumplestiltskin
(NRS Group Story, Level 7)

Page 17

Once upon a time, a miller and his daughter lived in a tiny house. The miller was not a rich man. He had to work hard just so he and his daughter could live.

One day, the king was passing by and the miller wanted to impress the king. So the miller ran and told the king that his daughter could do a fine trick. He told the king that she could spin weeds into gold on her spinning wheel.

Page 18

The greedy king began to think. He said, "If you have told me the truth, miller, then your daughter would please me very much. Bring her to the castle tomorrow and I will see if she really can turn weeds into gold."

Page 19

The next morning, the king led the girl into a room that was full of weeds. He gave her a spinning wheel and he said, "You must spin these weeds into gold by tomorrow. If you do not, I will have you killed."

And then the king left.

Page 20

The girl looked around the room at all the weeds. She really couldn't spin weeds into gold. That was just a story that her father had told the king. She began to cry.

All at once the door opened, and in stepped an ugly little man.

"Good day, miller's daughter," said the man. "Why are you crying?"

"Oh," said the girl. "The king wants me to spin these weeds into gold and I can't. If this room is not filled with gold by tomorrow, he is going to have me killed."
Then the ugly little man said, "What will you give me if I spin it for you?"
"I will give you the ring from my finger," said the girl.

The ugly little man took the ring and sat down at the spinning wheel. Whirr-whirr, three times round and the bobbin was full of gold. Then he took another bobbin and, whirr-whirr, three times round and that bobbin was full too.

He went on spinning until morning. When all the weeds were spun, and all the bobbins were full of gold, he went away.

The king came into the room, and he was very happy to see all the gold. The king wanted the girl to make him the richest man who ever lived. He was starting to like the miller's daughter too.

So he said, 'This pleases me very much. But I am going to test you one more time: I am going to put you in a bigger room full of weeds. If you spin those weeds into gold, then you will become my wife.'

When the girl was left alone in the big room, the ugly little man came in and said, "What will you give me this time if I spin the weeds for you?"

The girl said, "I have nothing left to give."
"Then you must give me the first baby you have after you are queen," said the little man.

Then the man sat down and he began to spin. He spun until all the weeds were gold.

And in the morning when the king came and saw that all the weeds were turned into gold, he ordered the wedding to be held at once. The miller's daughter became the queen.

After a year's time, the queen had a fine child. She did not think once of the ugly little man.

But soon after the baby was born, the man came into her room and said, "Now give me the child as you said you would."
The queen wanted to keep her baby; so she offered the ugly little man all the riches of the kingdom, if only he would leave the child with her.

But the ugly little man wouldn't listen. He wanted the baby.

He said, "I will give you three days. If at the end of that time you cannot tell me my name, you must give me the child."

The queen spent all of her time thinking of what the man's name could be. She even sent a friend to ask far and wide for all the names her people could think of.

And when the ugly little man came the next day, she repeated all the names she could think of.

But after each name, the little man said, "That is not my name."

The same thing happened on the second day.

On the third day her friend went by a hut in the woods. Someone was singing so she peeked inside the hut. There was the ugly little man singing a song and jumping up and down.

The song went like this:

"Rumplestiltskin is my name."
"She'll never get my little game."

The friend went back to the queen and told her what she had seen. The queen smiled.

"Rumplestiltskin," said the queen. "So that's his name."

And when the ugly little man came back later that day, the queen said, "Is your name Alfred?"

"No," said the man.

"Is it Martin?" asked the queen.

"No," said the man.

"Well, then, I bet it's Rumplestiltskin," said the queen.
"The devil told you that! The devil told you that," said the ugly little man.

He was so mad that he stamped his foot so hard it got stuck in the floor. Then he grabbed his other foot with both hands and pulled so hard that he split in two.

And that was the end of Rumplestiltskin.
p. 1

Last week, something bad happened in the forest. It happened the day the foxes were having a winter party.

p. 2

It was winter and the foxes were having a winter party in the forest. The sun was shining and all the foxes were happy.

p. 3

Suddenly, one of the little foxes said, "What is that thing over there?"

All the foxes began to look at what the little fox saw.

p. 4

It was a wagon. And it was the biggest wagon that the foxes had ever seen.

p. 5

The driver got off the wagon. He was the biggest man the foxes had ever seen.

p. 6

Then the man said, "Hurry, hurry. Today I am giving away free jelly beans. Come inside my wagon and get your free jelly beans."

Also Appendix L, The Stem from NRS, Level 2.
All the foxes got in a line by the door of the wagon. One by one they went in to get some jelly beans.

As each fox went in, the big man would grab it and put a rope around its legs. Then he would drop the fox on the floor of the wagon.

Soon all the foxes were in a big pile. They were all feeling sad. 

"What will that man do with us?" they said.

The man was laughing.

Then he said, "I am going to put all of you in boxes. Then I will have boxes of foxes. I will use your fur to make jackets. Then I will sell the fur jackets and get rich."
The man put all of the foxes in boxes. There were boxes of foxes all over. By that time all the foxes were so sad that they began to cry.

First one fox was crying. Then three foxes were crying. Then ten foxes were crying. But one fox was not crying. The baby fox was not crying. He was getting away.

When the man went away, the baby fox went around to take all the locks off all the boxes.

First one fox was free. Then three foxes were free. Then ten foxes were free. In a little while, all the foxes were free, and that made them stop crying.

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When the man came back, he said, "How did you get the locks off the boxes?"

"We will never tell," said the foxes. "But now we are going to chase you away."

"Oh, no!" said the man, running as fast as he could. The man ran and ran until the foxes could not see him any more.

The foxes were so glad to be free that they went back and had fun at the winter party. And the baby fox was made king for the day.
OPEN DISCUSSION OF POPP PRESENTATION

BLOCK: I would like to know just some speculation or some notions from you regarding what these alternative instructional strategies are, that would better get to individual differences, rather than simple pacing.

POPP: At the very grossest level, we can examine two programs that are as different as these two are, and a third, the sight word approach. When a child is entering first grade we ought to know, right at that moment in time, which method would be best for teaching him or her. We ought to realize that this match may not necessarily be the right one a month from now for that child. I think we could concentrate on our high risk children and try to provide a method of instruction that would be successful for them. Whether that method leads to some other method at a later point in time or not is another question. But initial success is critical and with two critically different programs, you have at least two alternatives with which to begin instruction. Further, there is a whole continuum of less visible differences that lies between these two.

TRABASSO: I think you provide a very interesting contrast, and I was curious whether there is any evaluation of either of these programs, that you are aware of, in terms of their success?

POPP: There has been. In fact, Isabel Beck has published a report, from the Learning Research and Development Center, on the achievement of children under the Pittsburgh program, that achievement is substantially greater than that fox children in prior years who were in regular basal programs. Is that correct, Isabel?
POPP: I am unaware of an evaluation of the Scott Foresman program. When I visited a school using the Scott Foresman program there was a cluster of children in the corner of the room who were working on letter-to-sound correspondences. When I queried the teacher about that, she said they were using a workbook that was available through Scott Foresman, and she also said that this was something which the publishers felt the children needed.

So here we have two real extremes in programs. However, you know perfectly well that some of the Pittsburgh children are learning and reading with their parents at home in "real" children's books, similar to the Scott Foresman books. They are doing a lot of whole word or meaning-type reading. On the other hand, we also know, from observation, that in the Scott Foresman classrooms, there is some straight phonics teaching. Just think of most of our research on reading. Most of it does not include classroom of observations and a very careful tally of program components and achievement without classroom observations is not going to be very informative.

TRABASSO: In your critique you point out there are alternative strategies that could be developed which would indicate something other than reading, or other meaning. When you analyzed the tests that each program uses, you indicated there were alternative strategies which the child could use where the child would not have to read at all, for example, in the Scott Foresman. In NRS, the child may not be able to really process the level of meaning because of the stress on decoding. If your identification of problems on these tests is correct, then the choice of tests one uses to evaluate these programs becomes very critical. If one were to make direct comparisons between them, one would have to design tests...
which would satisfy criteria of having both levels reached.

POPP: I think that is true.

TRABASSO: Does the testing procedure used in the evaluations have the same problems as the kind of testing that goes on during the program?

BECK: No.

POPP: In a sense, it has more. It has different kinds of problems. Isabel, do you want to answer that?

BECK: The report that Helen has is based on a school district's selection of test to be used. This district used the 1973 Stanford which was published after most of MRS was written. Interestingly, the MRS students scored slightly better on the comprehension measure than on the subtest measuring decoding skills.

POPP: Yes, and these items are similar to the comprehension checks which they have in their program, too. I think it's interesting to speculate as to why each of the publishers does testing on a skill that supposedly has not been emphasized in the program. I think in the Pittsburgh program one can justify that by saying they are using the phonics approach in order to get to meaning. They certainly don't want people to think that they are just teaching children to say words, to respond with sounds to letters. Their tests indicate that the children are doing more than that.
June 7--P.M.

Scott Foresman, on the other hand, I think has been taken to task by the teachers in the field, who want more decoding, and so here it is in the testing.

A VOICE: I am very concerned in the Scott Foresman program, that the children will substitute "bananas" for "fruit." When is this phased out, or what do they do with that? The child must learn specific, accurate reading at some point. How is that dealt with?

POPP: Well, the problem is really very serious in terms of the fact that they move from those larger units down to graphemic units. If the child is saying "bananas" and the word is "fruit," and they are going to talk about initial consonants, there is going to be a problem, as you pointed out. I don't know whether they ever consider it as a very serious problem. The reason that I say that is because Kenneth Goodman's miscue analysis is included in the last pages of the Scott Foresman manual. Teachers are urged in fact to listen to children read, and to score their errors as semantically correct, and/or syntactically correct, and whether or not they are close to the grapheme-phoneme correspondences, and so forth. There is less concern over errors that are semantically correct and syntactically correct than there is over the other.

A VOICE: The other thing I want to say is in the NRS, in the Pittsburgh program, the blending is an invaluable technique, because the children always have a tool to fall back on once they don't know a word. Is there anything in the Scott Foresman that they can fall back on, if they don't know the meaning of a word? What do they fall back on when they don't know something?

POPP: Well, they would use what they had been taught, to the extent that it
worked, which would be the context in which the word is based, or picture cues if they are available. I suspect if one has had large input from the teacher, she might be a good source of information. Not being facetious, I do think that would be a natural tendency, if that's where your information came from in the past.

WALLACH: Might we not say that the direction we need to go in, with respect to individualization, is not so much that different children need to be taught in different ways, as in the different kinds of programs you considered today, but that all children need a certain degree of decoding skills, and those who haven't picked up those skills in various ways outside of formal instruction, may need special help within formal instruction in order to do that? In other words, that's where the individualization may be needed.

POPP: That certainly is one argument that could be made. I think there may be children at a certain stage in their development for whom that's really a very difficult task, and they might in fact meet with success by parroting back stories initially. But eventually, as you say, it seems as though the poorer readers particularly, who haven't picked up phonics skill themselves, would have to be taught it. But when phonics is taught to that child, might make a critical difference as to whether or not he is going to think of himself as a failure for the rest of his life.

WALLACH: We may have misled ourselves as to how difficult a task it is; that it's easier than the conventional view tends to think it is. By not solving the instructional problem, that is, how to teach decoding to the kids who aren't able to do it yet, but instead relying on the idea of developmental level and waiting
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for readiness, that one is letting those kids get behind to a sufficient degree that it impairs their power to catch up.

POPP: I guess it depends on what they are doing, and very few would advocate that they merely wait until they have reached a particular developmental level.

WALLACH: Yes, but other things get done meanwhile, which in effect amounts to waiting for the decoding skills.

POPP: Well, maybe not. If one doesn't buy a hierarchy for teaching, one can start in higher units and wait for the lower units (letters) until later, and still be working on reading. For another child, the order could be switched.

RESNICK: One of the things that strikes me in that balloon story that you showed is that what's happening there is that the teacher is doing in school something very similar to what we think middle-class parents do with their children. At least I think that's what I do with my children.

POPP: And then swear they never taught reading to their children.

RESNICK: Yes. But we don't call that reading instruction, and we don't expect children to learn to read from that necessarily, and we don't care whether they do. It seems to me Scott Foresman is doing some of the language enrichment surrounding print that we expect middle-class children get at home and which we know some other children are not getting, and it's doing that very well. Scott Foresman seems to be making the assumption that by just doing a lot of language enrichment word analysis or synthesis skills will emerge automatically.
The word analysis training, at least in your examples of a representative lesson, is really very soft. It's putting an enormous burden on the child's inductive capacity, and it wouldn't be at all surprising that a group in the corner needed some more help, given what they are getting in the mainstream.

POPP: If I were teaching first grade, that certainly would be a prime consideration, and I think that it is the very good and wise first grade teacher who can tell us about individual differences in children, and what they can or cannot take at a certain time, that would bear down harder in the Scott Foresman program on those word analysis skills at a point in time when the child seemed to be able to cope, even with initial consonant sounds, and that there would be really some serious work at that point. Many kids are going to just pick that up anyway. No matter which one of these routes is taken, you will have children who absolutely are going to read, no matter what you do with them. And you will have some children who are not going to read. An important question is: Is it better for a child to be a non-learner under one system or the other. There will be non-learners.

WILLIS: I observed the Scott Foresman system in operation for five years in a large urban school system a while ago, and based on your description, it isn't all that different. In fact, some of the elements have been moved from Systems to Unlimited, it would seem.

POPP: Yes, they made it more manageable, that's about all.

WILLIS: One person in the area did a dissertation on what was happening in that program. Therefore it was done more carefully than the typical study of that
The study was planned to determine why achievement dropped when the school system moved from the reading program they had before, which was phonetically based, to the Scott Foresman system. The choice was made because they thought the language enrichment components would be better for the "urban students" in the school system. They discovered that those teachers whose students' achievement was not declining during the five-year period were those teachers who taught phonics to the children before using the "language enrichment" approach. Teachers were rated as either good or poor implementers, as part of the data analyses.

POPP: Regardless of the system?

WILLIS: You can't really control that behavior in the classroom. Teachers taught phonics simultaneously, and they took all of those elements that had been introduced in that language enrichment approach, and put them in their teacher-made phonics program. That was happening in schools where the teachers worked together on their joint approaches. There was a funny pattern of high achievement versus city-wide low achievement in those schools. I think I said this during the first conference; the teachers don't operate as dichotomously as their materials dictate; that is, the successful teachers don't. Therefore they are able to provide a lot more instruction that facilitates for individual learning than a particular set of materials might suggest.

POPP: I think as we look at some of the increased achievement in test results, we also often find a heavy phonics emphasis. Those children who have been successful under a phonics program are going to ceiling-out of the test or at least do very well because they have phonics skills well in hand. The child who
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is learning under a sight word or a meaning approach doesn't have that tool at the end of first grade, and while he may be doing very well in his own system, there is going to be less of an effect from his training on the tests.

So I think that the differences which we are finding are not necessarily due to lower children doing better. They are due to children who are very successful in the phonic programs who boost the class score.

CAZDEN: Yes, I want to push you harder on this individualization, because I don't understand your answers to Karen or to Michael Wallach. What would you want to know about the kids? Let's say you were going to choose approach A versus approach B, that at least differ in the sequence with which their aspects of the total reading process are emphasized. What would you want to know about the kids, in order to make that decision?

POPP: If there were an answer to that, there wouldn't be a problem; that is, if there were tests that could answer the kinds of questions that we want to ask about matching children and tests.

I think it is a researchable question. I think that if I were teaching, I would test the child and see whether or not he could do the blending procedure, to see whether he could hear segments of sounds in words as a prerequisite to the Pittsburgh program, for instance.

I think one might also go back to Piaget's developmental stages, perhaps, and make some hypotheses about how far along one has to be in concrete operations, in order to handle the phonic blending tests. But that is all very hypothetic and theoretical. I think right now it would have to be a "Can they do it?" kind of question.
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McCONKIE: In this scheme that you handed out, you refer to the theoretical model of the reading process of a mature reader, and the theoretical model implied for reading acquisition. With these two very different approaches to reading, to what degree is the difference being dictated by rather different views of what the skilled or mature reader is doing, versus rather different views as to how you should go about trying to get somebody to a common point?

POPP: I decided that was at least a whole paper in and of itself, if not more.

RESNICK: George, in some ways that's the essential question of this whole set of conferences.

McCONKIE: After having analyzed these two programs, do you have some sense of whether they were trying to get at the same thing through different processes, or whether they had different end points in mind that they were trying to reach.

POPP: I think if you would ask the authors of both of these systems, their end point would be very much the same. I don't know if they both have a theoretical model. Ken Goodman does, and he is one of the major authors of the Scott Foresman program. The notion of going directly from print to meaning, not going through speech at all, is probably how he sees the mature reading process, and sees that as a possibility for all children, even for very beginning readers. I don't think, Isabel, that the Pittsburgh people would necessarily believe that. No, Isabel is shaking her head.

McCONKIE: But the Goodman approach here clearly has his sort of hypothesis testing, analysis-by-synthesis flavor to it. Here we have an important component
of teaching reading: to teach them to use the context, to guess the appropriate responses. For this you only need very few visual cues. I can see this other approach being dominated by really quite a different view of reading; that it's very much more visually oriented, and perhaps not a process of making hypotheses and simply testing them. Is this the critical factor distinguishing these programs?

POPP: I think Isabel should answer that, but before she does, I must say that I think it is a critical factor that distinguishes the approaches. But I do think that the Pittsburgh people are directing their attention to the visual in hopes that it will be built up and mastered well enough so that contextual cues that do come in will be more automatic. Meaning is still what they are getting at. I don't think they would want you to rule out guessing from context.

BECK: In answer as to whether we think that mature reading goes through speech, I have to respond both yes and no. I think at times it does, and I think there is also evidence that at times it may go right to the lexicon. What that has to do with beginning reading, I don't think is very important. We make a distinction between beginning reading and mature reading.

We choose in the very beginning to emphasize overt blending, but only for a very limited time.

If overt blending were continued too long, we believe it would be overlearned to such an extent that the next level of processing, chucking behavior that enables more rapid recognition, would be more difficult to achieve.
Concurrent with development and practice of word recognition skills, I think we give quite a lot of attention, or implied attention, to deriving meaning by making contextually appropriate guesses.

BLOCK: I think that is a very difficult question, and I think the problem comes in in terms of how you take these general theoretical notions and translate them into what the practice would be like if practice was in fact adhering to this theory.

That's a very difficult kind of thing, and I think that when you raised the question about whether or not a particular program adheres to a particular theory, you have to confine your assessment to particular parts or characteristics of that program. This meaning approach of Ken Goodman's, although he does have a specified theoretical position, that position does not completely define the instructional procedures. There are many, many, many other things that are included, and have to be decided. Some of the sort of general, prescriptive things that he says apply to certain aspects of reading program design and not to others.

POPP: The Scott Foresman program isn't pure Ken Goodman either, I think he would remind you there are many other consultants on that.

ROSMER: I wanted to respond to the statement about characterizing the new reading system as one that focuses the youngster more heavily on the visual aspects of reading. I think that's an erroneous consideration; that actually it, as well as many of the other programs that are pointing out phonics concepts to children, really are unique in that they emphasize to children the phonological construction of the spoken language, and make it evident to the
youngster, through systematic, orthographic representation. The Scott Foresman program, even with the emphasis on the two words that begin with the B, is expecting the youngster to induce an awful lot of information, whereas the New Reading System doesn't take that risk. And I don't think that is visual orientation. I think that is heavy emphasis on the phonological attributes of the spoken language.

POPP: I think children learn a lot about the phonological system by tying it to a visual system. They are able to talk about it.

ROSNER: I think it reduces the mystery a great deal, certainly.

END SESSION