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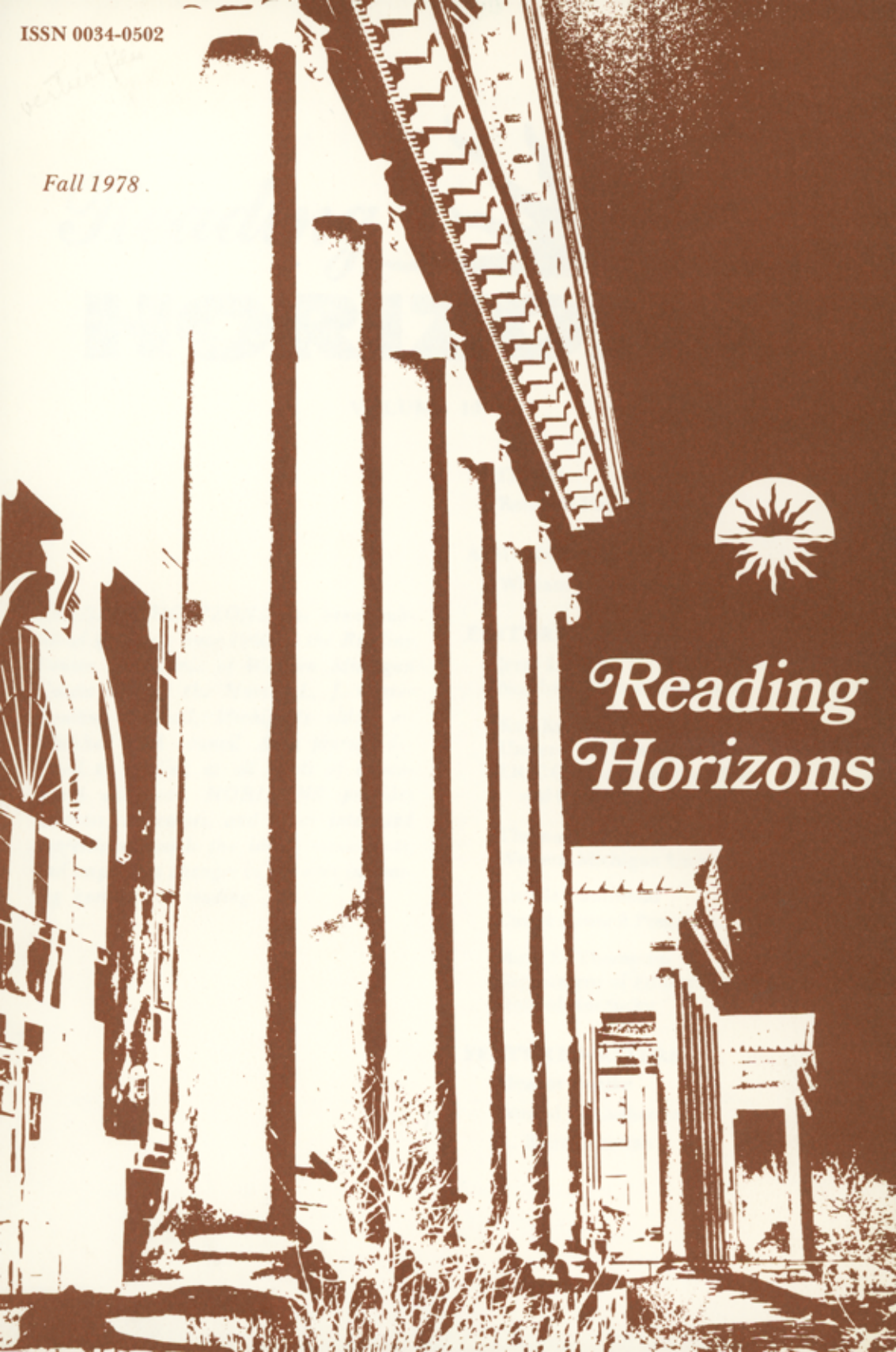


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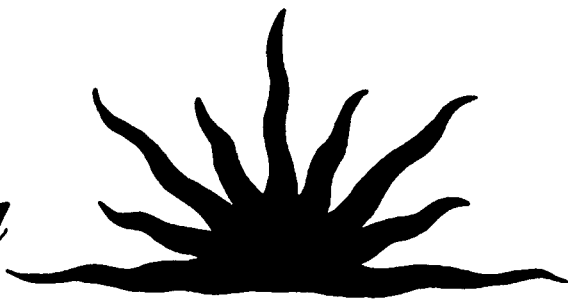


Reading Horizons



Reading

HORIZONS



VOLUME 19

NUMBER 1

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STATEMENT OF POLICY

As people in jobs all through the spectrum of industry and business stop to reflect on their goals and directions, we must share with our readers our hopes and plans for this new volume and future issues of *READING HORIZONS*. While individuals may indulge the luxury of picturing ways of wending to greatness, we must be more formal and enumerate exact steps by which we will reach our "place in the sun."

During the past two months, we have written to our past and current contributors to ask approval for use of their articles in a projected book of *Selected Readings from RH*. The responses have given us many valuable suggestions. In keeping with these ideas, we hope all of our issues will work toward accomplishing the following:

- 1) meet the needs of teachers-in-training who are becoming acquainted with ideas made available to them by professionals in the field
- 2) bring to teaching practitioners the many methods and approaches which are the results of experiment and research by experts all over the nation
- 3) make the publication of articles serve the interests of the readers in a limited number of themes or areas: (a) tests and inventories, (b) teaching strategies, (c) theory and research, (d) teacher preparation, (e) reviews, information, and bibliographies, (f) beginning reading, (g) remediation, (h) vocabulary, (i) school administrators and reading programs, (j) college reading, and (k) issues and special problems
- 4) provide a place where theory and practice may meet, to make solutions for problems expressed in the forum of *RH* pages

Of course, a basic need for *RH* is to increase the size of its subscription list, so that rising costs of printing and distribution may be absorbed more easily. Here again, we must ask readers to help us, by lending and showing copies to others. Since *READING HORIZONS* was listed in the top five journals in the nation by the *Directory of Learning Resources in Reading*, we feel we may publicize this journal without embarrassment. However, to survive as an inexpensive, practical teaching aid, it must grow.

We have given our thoughts and resolutions for the future. May we enlist your cooperation and support, in the name of the cause of reading as a life-long habit?

Kenneth VanderMeulen
Editor

PERCEPTIONS OF READING INSTRUCTION

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Reading is a tool for learning in the elementary grades, not simply a subject to be taught. The full implications of this statement are often overlooked by educators. Reading achievement is best conceived as resulting from a developmental learning process which takes place as children move through the elementary grades. Irrespective of the particular method adopted to teach beginning reading, initial emphasis is placed on the acquisition of word attack skills in the primary grades. This emphasis gradually shifts to teaching comprehension and study skills in the intermediate grades. Here pupils encounter an increasing number and variety of reading tasks while reading materials in a widening spectrum of different content areas. Within this context of a broadening elementary curriculum, greater emphasis is placed on independent learning and the independent reading required to achieve this learning. Consequently, pupil success in reading is vital for pupil success in the entire elementary curriculum.

It follows that there exists an obvious need for elementary reading programs to be closely articulated with the developing and changing reading requirements of pupils as they progress through the elementary grades. There is an even more obvious need for close cooperation between teachers and administrators in order to implement reading programs that meet pupil requirements.

Unfortunately, cooperation between teachers and administrators is often inhibited by a basic incompatibility in their respective perceptions of reading instruction. While teachers and administrators generally recognize the need for mutual cooperation in the development and operation of reading programs, teachers tend to view reading in terms of the instructional process involved in the actual teaching of reading. Administrators, on the other hand, usually regard reading from the standpoint of pupil achievement. In this article I wish to examine the nature of differences in teachers' and administrators' perceptions of reading instruction and to delineate the basis for more effective cooperation.

Teachers' Perceptions

Obviously the role of teachers is to teach. Their work involves them directly in the process of facilitating learning. As Karlin states, reading teachers are expected "to translate the objectives [of the reading program] into learning tasks and guide children in mastering them" (1:40). In this way, teachers are in direct contact with the day-to-day learning-to-read process of their pupils.

The role of teachers inevitably leads them to perceive reading in-

struction as a dynamic, multi-dimensional, developmental process. Pupil growth is seen to result from the complex interaction of a multitude of factors including language and concept development, skills development, broadening interests, and enriched affective responses.

Teachers tend to adopt procedures to measure pupils' reading achievement which reflect their process orientation toward reading instruction. These procedures are usually informal, and their nature has been described by McCracken:

A Teacher gives an informal reading inventory each time she asks a child to read an assignment, each time she asks a child to write, each time she sends a child to the library, each time she discusses with a child the book he has read, each time she talks to a child (2 :273).

In short, teachers, while directly engaged in the process of teaching reading, generally rely on informal observations for the assessment of pupil progress.

Administrators' Perceptions

Administrators have been described as "facilitators" of reading rather than specialists (3) and their role has been variously defined as giving "aid and comfort" to teachers (4), providing for the improvement of classroom instruction (5), and becoming concerned with reading curriculum development (6). The common factor in these descriptions is that administrators are one step removed from the actual process of teaching reading. While they are responsible for the quality of reading instruction, their involvement in this instruction is removed from the classroom by the nature of their role.

The distance tends to color administrators' perceptions of reading instruction. Rather than seeing reading instruction as a dynamic, multidimensional learning process, administrators are inclined to perceive reading mainly in terms of measured pupil achievement. Administrators often ask "how much" rather than "how" pupils have learned. This measurement orientation is reflected in a dependence on standardized test scores to provide evidence of pupil growth in reading and in a tendency to overlook the underlying teaching and learning process which these scores reflect.

Problems and Solutions

The divergence of teachers' and administrators' perceptions of reading instruction reflects a failure by both groups to consider reading instruction in a systematic and comprehensive fashion. By viewing reading instruction primarily in terms of the teaching process involved, and by relying on the informal and often incidental assessment of pupil progress, teachers are in danger of becoming preoccupied with the multitude of activities concerned with teaching reading at the expense of determining the true extent of pupil achievement. If teachers fail to see the systematic measurement of pupil achievement as a legitimate and necessary component of the instructional

process, they are in danger of losing direction in their teaching. They will be unable to determine their success in realizing their instructional objectives and will therefore remain insensitive to pupils' needs for corrective help if these needs arise. In order to avoid this problem, the measurement of pupil achievement must accompany teaching in order to ensure the kind of accountability which effective teaching demands.

The measurement of pupil achievement must be seen as the third stage in an instructional sequence that involves the initial determination of instructional objectives and the subsequent teaching toward these objectives. Instructional objectives should be decided upon and accepted by all teachers and administrators concerned with the reading program before instruction begins. Objectives which are somehow discovered after they have been incidentally achieved by pupils either before or after instruction begins must be viewed with caution.

The actual teaching of reading mediates between the determination of instructional objectives and the measurement of pupil achievement of these objectives. Effective teaching requires the implementation of instructional strategies specifically designed to bring about predetermined instructional objectives. It also requires the selection and development of appropriate instructional materials.

The accurate measurement of pupil achievement necessarily proceeds directly and logically from the initial determination of instructional objectives and the subsequent teaching aimed at attaining these objectives. Only in this way will the measurement of reading achievement determine what pupils have actually learned. Careful determination of objectives and diligent teaching toward these objectives are futile activities if the deliberate measurement of pupil achievement of these objectives is not undertaken.

The manner in which measurement is undertaken demands caution, however. Even if a valid concept of reading instruction could be based solely on formal measurement, the limitations of current standardized reading tests make an exclusive dependence on measurement by these instruments impractical. Standardized reading tests generally reflect simplistic conceptualizations of the reading process; they tend to concentrate on the more easily measured aspects of reading achievement, particularly word attack skills measured in isolation through the use of multiple-choice questions, and literal-level thinking skills. Another shortcoming of standardized tests is their failure to measure small increments of growth in reading achievement thereby depriving more slowly progressing pupils of motivation and a sense of success. Neither do standardized tests measure the affective growth of children in reading—the development of taste, enjoyment, motivation, and interest. All these must be objectives for effective reading instruction, yet they are not usually measured by standardized tests.

The most serious shortcoming of standardized tests is their frequent lack of validity. Often these tests do not reflect the instructional objectives set and pursued by teachers, especially when these objectives have been developed to meet the particular needs of children in specific educational settings. Moreover, these tests commonly fail to measure reading skills and

abilities in the way in which they were taught. Very often the tasks demanded of pupils on standardized tests are not presented in the same way by the test as they are by teachers when teaching these skills. Pupils become confused and their performance fails to represent the status of their reading achievement. In this way, standardized tests frequently do not measure the process of learning along with the outcomes of learning.

Given the shortcomings of standardized reading tests coupled with the necessity for the systematic assessment of pupil achievement, an eclectic approach to measurement is required. Whenever possible, standardized tests should be adopted when they closely correspond to the instructional objectives and teaching methodology of the programs in which they are used. In this way, the accurate measurement of pupil reading achievement within the limitations imposed by these tests is provided. At the same time, however, the limitations of these tests demand the adoption of less formal measures of pupil achievement. Informal teacher-made tests will be used in the classroom to provide direct, though less scientifically controlled, indications of pupil achievement on a day-to-day basis. It is this combination of formal and informal measurement that will provide teachers and administrators with the most sensitive assessment of pupil progress in reading.

Conclusion

Obstacles to the planning and development of effective elementary reading programs are implicit in an exclusive acceptance of either teachers' or administrators' perceptions of reading instruction. Closing the gap between teachers' and administrators' perceptions requires that both sides expand their points of view. These perceptions are complementary. Together they form a comprehensive view of reading instruction, while individually they give only half the picture.

Both process and measurement are integral parts of reading instruction, but each must be informed by the other. It is vital that the systematic measurement of pupil achievement be made in terms of the instructional objectives and teaching methods adopted for the reading program. Teachers' perception must focus not only on the instructional process involved in the teaching of reading, but also on the systematic measurement of pupil responses at each successive stage of learning. Without systematic measurement, the assessment of pupil success in achieving reading program objectives will remain at best incidental and intuitive. Conversely, administrators must broaden their perceptions of reading instruction to include not only the formal measurement of reading achievement, but also a fuller understanding of the instructional process as the means through which pupil achievement is determined and through which achievement may be observed and assessed. Teachers and administrators must assume partnership roles in order to establish cooperative goals for more effective reading instruction, and to develop greater mutual understanding of their respective roles in attaining these goals.

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A PSYCHOLINGUISTIC LOOK AT THE INFORMAL READING INVENTORY PART I: LOOKING AT THE QUALITY OF READERS' MISCUES: A RATIONALE AND AN EASY METHOD

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Instead of relying on machine-scored tests, many teachers wisely assess children's reading themselves, in an individualized session with each child. Some version of what is popularly known as the informal reading inventory (IRI) is often used for such assessment. The IRI provides a handy but not necessarily reliable method for determining what level of reading material might be appropriate for a given child. Furthermore, it is even less likely to be valid in determining a child's reading strengths and weaknesses. Some recent versions of the informal reading inventory encourage teachers to underestimate children's reading strengths and even to prescribe "remedial" work for excellent readers. Also, the various phonics, sight word, and word analysis tests that sometimes accompany the IRI have limited relevance in determining how well a child can read.

In the present article we will emphasize the importance of looking at the quality of a reader's miscues (errors), rather than the quantity. This means, in practice, that one must look at the miscues in context, determining how well they fit with the preceding and following grammar and meaning. After presenting a brief rationale for this position, we will offer an easy approach to analyzing a reader's miscues and determining what kinds of instructional approaches might be appropriate for that reader. Our rationale will be further developed in the next issue of *Reading Horizons*, where we will deal in depth with some of the potential weaknesses of the informal reading inventory.

1. *Quality Rather than Quantity*

One of the major problems with the IRI is that it can readily become a *quantitative* analysis of a child's errors instead of a *qualitative* analysis of the child's reading strategies. For example, the teacher is typically asked to compute the independent, instructional, and frustration reading levels for the child, using such criteria as these below. These criteria and the Reading Diagnosis Checklist discussed in our next article are from Frank May's *To Help Children Read* (1973), which in most respects is an excellent book.

May provides the following typical criteria (p. 122) for determining a child's reading level:

<i>Reading Level</i>	<i>Words Pronounced Without Error</i>	<i>Questions Answered Without Error</i>
Independent	about 98-100%	about 90-100%
Instructional	about 94-97%	about 70-89%
Frustration	usually below 94%	usually below 70%

Apparently assuming that “exact reading” equals “good reading,” May suggests that if there is a conflict between the word recognition scores and the comprehension scores, it is usually best to rely on the word recognition scores, because they are generally more reliable.

To see how such a computation might work in actual practice, let us look at Anne's miscues below (technically, a miscue is an oral response which differs from what is cued by the text). The passage is from the beginning of *Little Circus Dog*, by Jene Barr. The © indicates that the miscue was corrected:

- 1 Now the band began to play. Then the lions
about
2 roared. Peter the pony ran around the ring. Bill
© let
3 the circus boy led Penny the elephant into the
Everyone
4 circus ring. Everybody forgot to eat popcorn. They
forgot to drink soda pop. They forgot to wave
A
6 balloons. The circus man made a bow.
- 7 Trixie ran into the middle of the ring. She sat
went
8 and waited. Carlo the clown ran up to Trixie.
on
9 Trixie jumped up and sat in his hand. Carlo put
the
10 Trixie on a box. Trixie stood on her hind legs.
- 11 Then she jumped onto Carlo's head. Trixie looked
Everyone
12 very funny sitting on Carlo's head. Everybody laughed.

Since this first grader pronounced only 92% of the words without error, her word recognition score would indicate that this selection is at her frustration level—that is, too difficult for her to read. But an examination of the actual miscues indicates that Anne preserved the essential meaning of the text; indeed, the selection was so easy for her that she recalled almost every detail

of the story. In order to determine what material is appropriate for a child, we must look at the *quality* of miscues rather than just the quantity.

II. *Words and Parts of Words*

Another problem with the IRI is that it can easily lead a teacher to dwell upon words and parts of words, as if word recognition and word analysis were equivalent to *reading*. They are not, if we define “reading” as getting the meaning of a written text. There are several points to be made in this connection: 1) an ability to recognize or analyze words in isolation does not guarantee that a child will or can use this ability in reading connected text; 2) words are normally easier to recognize in context than in isolation; 3) if a child cannot recognize certain basic “sight” words in isolation, it does not necessarily follow that he/she cannot recognize these words in a familiar context, nor does it follow that these “sight” words can best be learned if they are presented in isolation.

Our current emphasis on phonics and recognition of sight words has produced many readers who can pronounce words but who fail to attend to the author’s meaning. They have been subverted from the real purpose of reading, gathering meaning from print, to performing the mechanical task of recognizing and/or saying words. And, unfortunately, some readers cannot transfer these mechanical skills learned in isolation to processing connected text.

Since word analysis skills and certainly sight vocabulary are necessary in reading, it would be more efficient to develop these strategies through the use of connected text. In such a way, the often troublesome task of transferring these skills from isolated practice to actual reading could be avoided. Furthermore, words are actually easier to recognize in context than in isolation. To convince yourself of this, you might try the following experiment. Give yourself just half a second to look at the first set of words below, then write down as many of the words as possible. Next, do the same with the second set of words:

sign the read he slowly
tears has dress her two
he permit a me gave
the wound up she string

he read the sign slowly
her dress has two tears
he gave me a permit
she wound up the string

Doubtless you could recognize and recall more words from the second set, because you could use *syntactic context* (your implicit knowledge of how sentences are put together) and *semantic context* (your knowledge of how meanings go together, your knowledge of the real world). The same is true for children: they can deal with words easier in context than in isolation, unless teaching has prevented them from doing so. This is amply demonstrated in a study by Kenneth Goodman. In the context of a story, his

first grade group correctly read 62% of the words that they had missed in isolation; his second grade group correctly read 75% of the words they had missed in isolation; and his third grade group correctly read 82% of the words they had missed in isolation (Goodman 1965).

Observations and experiments indicate, then, that readers can identify words faster in context than in isolation, and that beginning readers can often identify in context words that they could not identify at all in isolation. Why should this be so? The reason is simply this: when we are predicting (however unconsciously) what will come next, we do not need to pay as much attention to the visual appearance of words in order to identify them accurately. We are able to reduce the number of probable alternatives by using our knowledge of English syntax and our understanding of the meaning being conveyed. To test these statements, you might try to read the following sentence:

Th-r- -nc- w-s- f-sh-rm-n wh- l-v-d w-th h-s w-f- -n- m-s-r-bl- l-ttl- h-v-l
cl-s- t- th- s--.

Of course no one is likely to suggest that children be given such mutilated texts to read, but it should be quite clear that if readers are making predictions from context, they usually will not need to look at all the letters in a word in order to identify it correctly. In fact, if children pay attention to all of the letters in all of the words, both reading speed and comprehension will be greatly reduced. The proficient and efficient reader uses nonvisual information in order to reduce the amount of visual information needed in recognizing words.

Using context to identify words may seem like cheating, but how often outside of the classroom do we have to deal with words that have no context whatever? The octagonal red sign provides a context for the word "Stop," the cereal box and its picture provide a context for the word "Pebbles," and the soup can provides a context for the words "Chicken Noodle." Except for signs and labels such as these, we usually encounter words in phrase or sentence context. To isolate words and parts of words is to make the task of learning to read as difficult as possible for the child, as well as to distort the normal reading process.

Thus there are at least two problems with the various phonics, sight word, and word analysis tests that often accompany the Informal Reading Inventory: 1) they imply that an ability to recognize or analyze words in isolation is necessary for reading, which is not entirely true (indeed, an undue emphasis on words and parts of words can retard reading progress); 2) such tests imply that sight words and word analysis skills can best be taught in isolation, but this is not so either. The most efficient and effective way to teach sight words and word analysis skills is to have the child read materials that are meaningful in content and predictable in structure. The child should be taught to use context to predict what is coming next, then to confirm or correct the prediction—not only by looking at the word itself, but by continually asking himself/herself "Does that sound right?" and "Does that make sense?" An example may help. Suppose the child is reading a story about Jane's father fixing their T.V. antenna and comes to the word

house in the sentence *Jane's father was on the house*. If the child is relying on sight word recognition and/or phonics but not reading for meaning, he/she may read *horse* instead of *house*. A child who is reading for meaning may predict *roof* or *house*, and only a quick glance or a minimum of word analysis is then necessary to identify the word as *house*. This identification is confirmed by the fact that *house* does indeed sound right and make sense in this context.

But we may well question whether the word *house* is much better than *roof* in this instance, since Jane's father is obviously on the roof part of the house. This returns us, then, to the original point: that to determine a child's reading ability, we must look at the *quality* of his or her miscues rather than just at the quantity. In the context given, *roof* for *house* is a high quality miscue.

III. *Analyzing Miscues and Determining Instructional Approaches*

Out of the research of Kenneth Goodman and his associates, Yetta Goodman and Carolyn Burke have developed a thorough Reading Miscue Inventory for analyzing the quality of a reader's miscues (Goodman and Burke 1972). However, the procedure is too involved and time-consuming for most classroom teachers. Hence we would like to suggest a much shorter procedure, one developed by Laura Smith. In addition to its simplicity and brevity, this procedure has another advantage: it readily enables teachers to translate analysis into instruction.

"0"	"1"	"2"	"3"	"4"
A B C	A B C	A B C	A B C	A B C
Y Y Y	Y Y N	Y N A	Y N N	N N N
Y Y A	Y N Y	N Y A	N Y N	
	N Y Y	N N A		
	N N Y			

A = Semantically acceptable

B = Syntactically acceptable

C = Correction

Key

Y = Yes

N = No

A = Attempted

Obtaining and Analyzing a Reading Sample

In using the following procedure for analysis, it is best to select a whole story which is new to the reader and appropriate for his/her level of

development. However, the longer, more advanced paragraphs from IRI can also be used successfully. The following steps describe the procedure for analyzing the reader's strengths and weaknesses.

1. First, tape the child reading an unfamiliar story and have him/her retell the story. He should be told before he begins to read that 1) he will be given no help during the reading; and 2) he will be asked to retell the story after the reading. It is often useful for the teacher to outline or summarize the story before the reading, in order to identify the significant information. The reader's unaided retelling should be followed by questions based on the information included in the retelling; that is, the teacher should attempt to draw additional information from the reader but should avoid giving the reader any "new" information. Skillful questioning will enable the teacher to better evaluate the reader's understanding. The teacher might ask such questions as: "Can you tell me more about (*person, place, event mentioned by the reader*)?", "Was (*event mentioned by the reader*) the first thing that happened in the story?", and "Did anything happen after (*event mentioned by the reader*)?" Such questions often enable the reader to expand on the information included in the unaided retelling.
2. In the first two columns of the Analysis Sheet (Figure 1), list all of the miscues the reader makes and the actual word(s) in the original text. Words or names which are miscued repeatedly should only be included on the first occurrence. The teacher should notice the strategies used by the reader on these multiple occurrences and later include this information in the Teacher Observation space on the Analysis Sheet.
3. Answer the following questions about each miscue in order to begin to evaluate the reader's use of language and of content and prior knowledge in his reading. Record the answers in Columns A, B, and C of the Analysis Sheet:
 - A. Did the reader's change make sense? (Yes/No)
(This question can be interpreted in either of two ways: 1) Did the reader's change make a sensible sentence, even though the sense of the original sentence may not have been preserved? or 2) Did the readers' change preserve the sense of the original sentence? Simply decide which way to evaluate the miscues, and be consistent.)
 - B. Did the change create an acceptable English structure? (Yes/No)
 - C. Did the reader correct or try to correct the change? (Yes/No/Attempted)
4. Tabulate the patterns in Columns A, B, and C, using the following chart, and record the appropriate number in Column D on the Analysis Sheet. These patterns will later be used to plan instructional strategies for the reader:
5. Evaluate the reader's retelling and record Teacher Observations, such as strategies used on multiple occurrences of unknown words, dialect-related miscues, the degree to which the miscue and the text word were related graphically, the reader's apparent confidence and comfort, and

Name _____ Date _____ Name of Story _____

Text	Child	Did it Make Sense? (A)	Was it an Acceptable English Structure? (B)	Was it Corrected? (C)	Evaluation (d)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
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Teacher Observations:

observations related to the reader's oral language. The amount and kinds of information a reader includes in the retelling will vary, and the teacher may need to question the reader to get a valid picture of what the reader has gotten from the story (see step 1 above). However, the reader's overall understanding of the action and the characters is more important than his/her knowledge of details.

Evaluating the Reading and Planning Instructional Strategies

The numbers in Column D can now be used to plan appropriate instructional strategies for the reader.

Evaluation "0"

If a miscue has been tabulated as an "0," this means that the miscue was semantically and syntactically acceptable, but that the reader nevertheless corrected or attempted to correct the miscue.

Any reader who has a large number (at least $\frac{1}{3}$) of his/her miscues tabulated "0" is probably too concerned with reading every word correctly. If the reader makes the corrections rapidly and does not seem concerned about them, then there is no reason for the teacher to be concerned. But if such correction is making the child's reading less efficient, interfering with his understanding, or causing him to feel frustrated, the teacher should help him to see that exact reading is not necessary.

The following activities should help these readers see that exactness is not necessary to successful reading: (1) Give the reader a paragraph with a few blanks, misprints, or nonsense words. His task is to supply an acceptable word or phrase which is consistent with the grammar and the ideas developed in the paragraph. (2) Give the reader a paragraph with a number of underlined words. His task is to substitute a word or phrase for each of the underlined words without interfering with the author's meaning or the grammar of the paragraph. This exercise will be more difficult if the reader has a limited vocabulary. These same exercises done as a group or whole class, orally, can help the participants expand their vocabularies, since the words available to any member of the group now are available to all. These experiences will also help the readers realize that a great variety of choices can all be "correct."

Evaluation "1"

If a miscue has been tabulated as a "1," this means that 1) the miscue was semantically and syntactically acceptable, and (therefore?) not corrected; or 2) the miscue was unacceptable semantically and/or syntactically, but was corrected. Most of a good reader's miscues will fall into these categories.

Any reader who has a large number (at least $\frac{1}{3}$) of his/her miscues tabulated "1" merely needs some chances to read and discuss what he has read. He seems to be aware that reading has to make sense and sound right. Any plan which allows time to read and discuss the reading would be useful. Discussion can be with peers (in pairs or small groups), or with an adult

(teacher, aide, parent), either on a one-to-one basis or with a very small group of students per adult.

Evaluation "2"

If a miscue has been tabulated as a "2," this means that the miscue was unacceptable semantically and/or syntactically, but that the reader attempted to correct the miscue.

Any reader who has a large number (at least $\frac{1}{3}$) of his/her miscues tabulated "2" appears to be aware that reading has to make sense and sound right, but he or she is not yet able to make the necessary corrections.

The following activities should help the reader improve his ability to correct: (1) Read to him while he follows along in the text. (2) Have him listen to tapes or records of stories while he follows along in the text. (3) Have him do activity (2) in *Evaluation "1"* above, to expand his vocabulary. If the language structure of the material being read is unfamiliar or unusual, as it often is in folktales, poetry, etc., the problem may be the material and not the reader. Try taping the reader again, using a story written in a more familiar style. But since readers do need to be able to read a variety of materials (stories, poetry, newspapers, content area texts, directions, and so forth), expand the reader's exposure to and awareness of various styles in writing by reading aloud to him. Starting to read a long selection aloud, perhaps with the reader(s) following along in the text or on an overhead projector, will expose the reader to the author's style and make it more predictable in print. This procedure will also help the reader become familiar with the characters' names, the setting, and enough of the plot so that the reader will want to find out more by reading for himself. These strategies work equally well in a group and thus do not necessarily segregate the reader who is encountering difficulty with the unfamiliar style or vocabulary.

Evaluation "1" and "2"

Good readers typically make miscues that are semantically and syntactically acceptable and hence not corrected (a YYN pattern, tabulated as a "1" according to the chart).

However, any reader who has a large number (at least $\frac{1}{2}$) of his/her miscues tabulated "1" (other than YYN) and "2" (combined) may be encountering difficulties in predicting. This is often related to lack of experience with the author's style or the topic being discussed. The teacher may need to provide further background information or exposure to that style of writing in an oral setting, by reading to the children and/or providing in-class activities which will introduce the unfamiliar topic in a non-reading situation (experiments, films, and so forth).

Evaluation "3"

If a miscue has been tabulated as a "3," this means that the miscue was semantically or syntactically unacceptable, but that the reader made no attempt to correct the miscue.

Any reader who has a large number (at least $\frac{1}{3}$) of his/her miscues

tabulated “3” appears *not* to be aware that reading has to make sense and has to sound right. Note, however, that some readers who exhibit this pattern may simply be correcting to themselves. They will usually do well in their retelling and probably have *no real reading problem*.

By looking at the patterns in Columns A and B, the teacher can determine whether the difficulty is related to meaning (many N's in Column A) or to structure (many N's in Column B), or both.

The following activities should help readers understand that reading must “make sense” and “sound right” (sound like English): (1) Have the child write experience stories (Mary Anne Hall's *Teaching Reading Through Experience* provides helpful ideas for teachers). (2) Have the child read to a listener who asks “Does that sound right?” or “Does that make sense?” when the reader miscues in ways that do not “sound right” (syntax not acceptable) or do not “make sense” (meaning not acceptable). The listener could also help the reader make the necessary corrections if the reader is encountering great difficulty. (3) Read to the child while he follows along in the text.

Evaluation “4”

If a miscue has been tabulated as a “4,” this means that the miscue was semantically *and* syntactically acceptable, but that the reader made no attempt to correct the miscue.

Any reader who has a large number (at least $\frac{1}{3}$) of his/her miscues tabulated “4” does not know what reading is (unless the material was simply too difficult). Often readers who exhibit this pattern are unaware that the context and their own knowledge of language and the topic can give them clues to “the next word.” They often expend their efforts matching letters and sounds or trying to remember words they have been taught as sight words. These readers have learned that the task in reading is merely to “say the words on the page.” Often this was not the teacher's intent, but the emphasis during the teaching was such that this is the lesson perceived by the child.

The activities suggested above for readers with many “3's” are appropriate for these readers. However, activity (2) is probably less useful than the others, because the reader's first need is to develop his ability to predict, using prior knowledge and what he has read so far. If the material was simply too difficult, it would be better to retape the reader on less difficult material to get a better view of the strategies he uses while reading and the kinds of information he is able to use (semantic, syntactic, grapho-phonetic, etc.).

Evaluation “3” and “4”

Any reader who has a large number (at least $\frac{1}{2}$) of his/her miscues evaluated as “3” and “4” (combined) is encountering the problems described above in both *Evaluation “3”* and *Evaluation “4.”* He does not understand what he is reading for, nor does he know that his knowledge of language and the topic can help him as he reads. He does not realize that

what he is reading must “make sense” and “sound right.” The activities suggested in both *Evaluation “3”* and *Evaluation “4”* are appropriate for him. Mary Anne Hall’s book mentioned above will be especially helpful to the teacher planning for such a reader.

IV. *Conclusion*

If reading instruction is to be based upon a solid understanding of a reader’s strengths and weaknesses, it is not enough to merely look at the quantity of miscues the reader makes on a series of graded paragraphs. Rather, we must look at the *quality* of the miscues, examining each miscue in context to see whether it preserves acceptable grammar and appropriate meaning. Only then will the teacher be able to determine appropriate instructional strategies as well as suitable instructional materials.

Our suggested procedure for analyzing miscues is, of course, only one of the possible methods for examining the quality of a reader’s miscues. However, it is a considerable improvement over some of the recent versions of the informal reading inventory, which focus the teacher’s attention mainly on words and parts of words, without regard to whether or not the miscue preserves grammar and meaning. In the next issue of *Reading Horizons*, then, we will return to this topic, examining the kinds of inferences that may be inappropriately drawn from an informal reading inventory.

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CONTENT AREA TEXTBOOKS— WASTE NOT . . .

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What are the dustiest, least-used books in an elementary classroom? Probably those considered as basic texts for science, social studies, health, and perhaps even math.

Why is this so? To quote many teachers:

"Because the children can't read these books!"

"They're too hard for my students to read!"

"How can I have time to find a lot of other materials to teach social studies (science, math) to many students who are reading below grade level?"

If children do not possess adequate skills to read these textbooks, what should be done to correct the situation? Can teachers make use of content area texts and time normally allotted to content area study to plan appropriate learning situations?

The answer to the latter question is "Yes!" Teachers can use textbooks by and while teaching students the special skills that they need to read content area textbooks. Any effective method of teaching students to read textbooks concerned with a variety of subject matters must propose ideas formulated and presented with a relationship to reading skills but with a base in subject-matter topics. In helping students to read content area textbooks, there are Four Basic Areas of Concern: Word Recognition, Vocabulary, Comprehension, and Study Skills.

Word Recognition

In order to utilize subject-matter textbooks, students must first be able to recognize words presented in science, social studies, mathematics, and literature textbooks. Teaching students to recognize words involves introducing them to a system to sound and identify terms. As part of subject-matter teaching, words could be identified in terms of three different systems: syllables; prefixes, roots, suffixes; or word parts.

1. While dividing words into syllables can become an artificial exercise, it can also be a useful means to identify unfamiliar words. Glance quickly at the word written below:

ozoniferous

As you glance at it quickly, can you pronounce it? What system do you use to try to pronounce it? It's possible that you used your own sort of "division system" to separate the word into pronounceable parts. If you used a rule-perfect system of dividing a word into syllables, you looked at this word in terms of the following parts: o zo nif er ous. Even if you did not separate the word into these exact parts, you may have used a system which yielded

similar parts and which enabled you to pronounce the word. Introducing students to words which are divided into smaller parts can be a helpful means of introducing unfamiliar terms.

2. Some words divide naturally into recognizable parts. These parts are easier for us to understand when they take the form of prefixes, roots, and suffixes which we commonly use. For example,

reconstruction conversation insoluble monologue can readily be divided as follows:

re construction con ser va tion in solu ble mono logue Our familiarity with other words containing similar word parts is an aid to pronunciation of such terms.

3. One of the most helpful techniques for identifying unfamiliar words is to look for smaller, familiar words within such terms readily fall into this category and can be taught by pointing out these familiar word parts. Examples include: *dividend*, *patronage*, *actress*, and *dichlorofluoromethane*.

Vocabulary

After recognizing the content-area term, students need a system to understand the meaning of the word—to make it a part of their vocabularies. Two techniques for determining word meaning are developing an understanding of the meanings of component parts of a word and utilizing context, or the rest of the sentence.

1. A knowledge of the meaning of commonly used Latin and Greek prefixes can be helpful in discerning the meaning of unfamiliar words. For example, apply what you know about the meaning of each component of the following words to determine what each word means:

(1) epitranscaputable (epi trans caput able)

(2) circumspherejectarium (circum sphere ject arium)

If you analyzed the first word correctly, you may have realized that each of the word parts convey the following meanings: epi—over; trans—across; caput—head; able—capable of. Thus by association of the parts of the word, an epitranscaputable is a hat. A hat is an object which is capable of going over and across the head. Through a similar analysis, you may have discovered that the second word is another name for a stadium. An indepth analysis shows the following meanings for the word parts: circum—around; sphere—ball; ject—throw; arium—place for; a stadium is a place for throwing around a ball. Although these examples are fictitious and extreme due to the sophistication of the reader's vocabulary, students can use a similar sort of analysis to discern the meaning of words such as ionosphere, decimeter, and democracy.

2. Students' success in using the context to discover the meanings of unfamiliar terms depends not only on their skills in using context but on the method in which textbooks explain the term. An examination of several science and social studies textbooks shows a variety of means of expressing the meaning of words. In some instances words were clearly defined; for example, "a triangle is a three-sided figure" or "Mercury, the closest planet

to the sun.” In other instances a more sophisticated method had to be used to determine the meaning of the term which the author had presented; for example, “the antagonism which was felt was reflected in his angry facial expression.” Students should be made aware of different examples of use of context to explain the meanings of terms in books.

Some teaching ideas for introducing vocabulary might include:

- (1) Introduce words in terms of a clue system – for example, word part meaning (*vulcanization* or *personification*).
- (2) Allow students to scan the chapters and write their own word list. Keep these words in a secure place, perhaps a notebook, so that they can be reviewed periodically.
- (3) At the beginning of each year, make a list of special terms relative to your content area and be sure to present them to students and to review them frequently. This list would include terms frequently used throughout the year; for example, a math teacher might list: equation, add, subtract, formula, problem, divide, multiply, answer, solution.
- (4) Devote a day each week to vocabulary studies through such activities as solving crossword puzzles, playing games, preparing projects or posters, conducting indepth studies.
- (5) Use materials other than books to show the relationships of the terms used in the books with everyday life and to current events. Such materials might include newspapers and magazines.

Comprehension

When students are able to recognize and understand the meanings of words, they will be ready to consider the meanings of entire passages. There are three aspects of comprehension which are important in content area reading.

1. The first is the ability to understand what is being read on a literal level. What the print says, it means; for example, “Put the burner under the flask,” or “Patton was a general.” Students’ abilities to comprehend on a literal level are based upon their abilities to recognize words and understand vocabulary and upon their attention to the material which they read. In order to strengthen their abilities to comprehend on a literal level, students might be asked to:

- (1) Turn to the index and find one word that tells *who*, one that tells *what*, one that tells *when*, and one that tells *where* and to write those words on a piece of paper. Students should then exchange papers and write sentences using their partners’ words. In some cases students may have to look up the words to see what they mean. An example of this might be: “Ben Franklin, Civil War, 1900, Hawaii ---”

Who – Ben Franklin

What – Civil War

When – 1900

Where – Hawaii

While Benjamin Franklin lived and the Civil War was fought before

1900, Hawaii became our fiftieth state well after the turn of the century.

- (2) Locate the most important words in each of the entries in the Table of Contents of the textbooks. Discuss what might be in the chapter based upon associations made with these words.
- (3) Consider a very broad topic such as “growth” or “war” and then asked to list words to describe the topic. After these lists are read aloud, a discussion should be held about how many words were presented that were factual and how many were interpretive.
- (4) Examine different sets of directions given in textbooks to see how literal each set is and to determine if there are any sets which could be open to different interpretations.

2. A second aspect of comprehension is that which requires interpretation by students. In dealing with this aspect, there is usually no one correct answer. In interpretations of a word, sentence, paragraph, descriptions will vary based upon what the reader brings to the situation. Our own “built in” set of opinions will influence how we interpret different passages. In addition, the author of the passage has added a great deal of his own interpretive remarks to each statement. Encourage students to check the identity of the author and to discover as much information as possible about him/her before reading a textbook, magazine article, newspaper article, etc. Make students aware of terms as a clue to the interpretation of a passage; for example, “thus,” “in other words,” “for example.” Ask the students to read a sentence or short paragraph orally; then ask another student to reword it in his own words. Discuss “what would you expect” situations with regard to different subject areas with students. In social studies, such a situation might ask for students’ reactions to “Rockefeller’s ability to describe poverty”; in science, “a non-oxygen environment”; in math, “to multiply by 10, 100, 1000”; in literature, “a conversation with Longfellow’s *Hiawatha*.” One key of interpretation that is often relegated only to primary years is that of examining pictures. Sometimes pictures can be very helpful to the student who is having difficulty in reading. One activity which is to ask everyone to open their textbooks to a certain picture, to write just one word to describe that picture, and then to read aloud that word and compare it with what other students had written.

3. A third aspect of comprehension is recognizing the importance of sequence. Establishing an order for items is important for scientists in terms of experiments and in terms of animal/plant development; in social studies, it is important in terms of steps which lead to, for example, battles leading to a war or controversy which lead to the passage of a bill or formative years which lead to a country’s principles. Requisite to solving math problems and understanding events in a story is a need for appreciation of sequence. Some content-related activities which might help students to master the idea of sequence include the following:

- (1) Ask students to scan textbook materials to find order words—first, next, finally and to. Make note of these.

- (2) Create “what if” assignments for students to respond to. These might include---

What if we put the Bunsen burner under the flask before we add the liquid?

What if the Founding Fathers had elected a national leader and then formulated provisions for running the country?

What if our muscles moved before receiving signals from the brain?

What if we subtracted 493 from 322 before we added 367?

- (3) Allow students to make mural size models whenever possible of such things as historical events, country development, animal development, spatial relations. Be sure students include not only pictures but also words to label each thing going on. These words might be written on separate cards so that they could be removed, mixed, rematched, and replaced in the correct positions.
- (4) Before beginning a unit, present students with a list of words related to that unit and ask them to put them in a logical order.
- (5) As a written assignment, present students with some order words — such as first, later, finally, following, soon — and a few important words — such as Civil War, slaves, Lincoln, Freedom — and ask them to write a paragraph using all the words given. They may, of course, add other words which they feel are necessary.

Study Skills

Each content area has some study skills which are specific to it, but there are some skills which are common to all subject areas. In all content areas students are required to locate information. Their search for this material might require the textbook, dictionary, atlas, chart, globe. Discuss all these things with students. In conducting dictionary activities, be sure to point out the guide words and note how they can be useful. In discussing charts, ask students to open or look at a chart and to note what things they look at first; point out means by which charts may be drawn to help emphasize the author's point.

One of the most difficult assignments for students seems to be to obtain information from the reference and to rephrase it in their own words. Some activities which might be useful in encouraging students to do this are:

1. Ask them to reword famous quotes — “Give me liberty or give me death.”
2. Ask students to read an experiment, a word problem, or a description of a happening or character and then tell in their own words what happened or what the person might look like or do.
3. Allow a student to do a demonstration and then ask other students to detail exactly what he or she did.
4. Keep a file of newspaper and magazine clippings related to the different units which you plan to be teaching. Present one clipping to each

student and ask them to read the clipping silently and then report to the class concerning what was contained in the clipping.

The fact is that millions of dollars have been, are being, and will be spent to purchase content-area textbooks. While there are certainly changes in the texts which could be made to make them more interesting and more readable, it is a shame to waste the content-area resources now at rest on school shelves and to ask teachers to spend much of their time searching for alternate teaching aids. Taking time to give attention to word recognition, vocabulary, comprehension, and study skills related to each subject area can enable teachers to use available resources, to save time, and to teach content-related subjects!

PROVIDING FOR THE OLDER READER IN THE COLLEGE READING PROGRAM

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For years, middle-aged and older learners have engaged in educational pursuits at all level of achievement. It is only recently, however, that educators have begun to address the problems presented by such learners. In the field of reading, attention is paid to the young adult enrolled in college reading programs and/or in reading clinics. Little is known about the performance of older readers (Robinson and Maring, 1976; Kingston, 1973), even though more is known about the value of recreational reading programs for institutionalized aged adults and Senior Citizen Center participants (Lovelace, 1977; Wilson, 1977).

This current lack of knowledge is understandable because of society's focus on the education of the young. In addition, society values youth more than age and leads its populace to believe that age creates burdens. Recent studies by Neugarten (1977) show that today's middle-aged person – the "sandwich generation" is responsible for the growth and development of the young and for the financial and emotional assistance of aging parents and other relatives. People of this generation, in competition with each other for survival, feel burdened by the demands of the older adults while hopeful for the progress of the young. Educators, many of whom are middle aged, bear these responsibilities. Also, they are "sandwiched" by the belief that all learners, throughout their lives, are in need of educational experiences that contribute to their intellectual and emotional growth. They find themselves ill-equipped, however, to provide for older than average students in the educational system.

This paper will discuss what reading clinicians and researchers have discovered about the older reader in college reading programs. Specifically, it will discuss the common stereotypes of the older adult, the performance of the older reader, and some suggestions for planning for the older reader.

Common Stereotypes

1. *The older reader has low intelligence or else s/he would have become a proficient reader earlier in life.* Many persons who are currently older Americans were born and reared fifty to seventy-five years ago. Then education was a luxury. Other older adults relate tales of uncomfortable educational experiences which led them away from school at a young age. Still others parrot the "Dick and Jane" series and suggest comprehension was often lacking. (Haase, 1976; Robinson, 1976).

Inherent in the prejudice is the notion that cognitive functioning decreases with age. In fact, cognitive functioning does *not* decline as age increases. According to Cattell (1965) and Horn and Cattell (1967), it probably becomes more crystalized, i.e. less fluid, after young adulthood. Riegel (1968) and Riegel and Reigel (1972), and Palmore (1975) have shown that cognitive functioning increases with age, if it is high initially. The only time it appears to decline is prior to death. Given such evidence, it appears older adults can "crack the reading code" at any point in their lives, if the components of reading are presented in such a way that the individual can grasp.

2. *Older readers do not have the life experiences they should have*. This is a bias of educators who find the experiences of the older reader do not live up to the expectations of the teacher involved. Older adults have lived through the crises of childhood, adolescence, young adulthood, and middle age, and through historical times, such as the Great Depression, World War II, and the Korean conflict. To deny such richness of experience casts aspersions on the person doing the denying.

3. *Older readers, especially if they are retired, are doddering and senile*. Senility is a wastebasket term for a range of symptoms from paranoia to depression. What it should refer to is the emotional problems of aged persons. An overwhelming majority of older Americans are not emotionally disturbed (even though society may suggest they be that way). They are alert, viable, dynamic and busy. Simone de Beauvoir (1972) once said, "What is this old face doing on such a young mind?"

4. *Why do older readers need to learn to read and/or improve their reading ability; they're going to die anyway?* Daniel, Templen and Schearon, (1977), show the 60+ age group goes back to school to contribute more to society, become more cultured, to earn more money, learn things of interest, gain general education, get a better job, improve social life, meet interesting people, and improve reading and study skills. The older readers want to learn to read and/or improve their reading ability because they are alive, they are involved, and they wish to continue to be active. The *sine qua non* of successful living is to be wanted and useful. Learning to read may help a grandparent read to her/his grandchildren. Improving reading ability might help older persons to start a business in their home. Both learnings may bring joy and satisfaction as older readers rediscover such classics as Zane Gray, the Tolkien Trilogy, and the daily newspaper (Haase, 1976; Robinson, 1976).

5. *You cannot teach older readers much because they are rigid*. Rigidity is usually a function of personality rather than age (Chown, 1972). Most teachers can attest to young people who are rigid in many areas, such as inability to accept differences among themselves. Supposedly, the more educated a person is, the less rigid is her/his thinking. Yet many educated persons, young and old, are rigid in specific areas of thought.

6. *"Isn't s/he cute?"* Cuteness denotes helplessness. It labels the person as an object which pleases by its actions, and therefore, denies the person's humanness. When older persons are treated as objects and made

powerless – by being treated as infants – they soon realize that no voluntary response they make will produce a result they want. This makes them helpless, a state which can lead to depression and unexpected death (Seligman, 1975). Older readers are not “cute.” They are adults exercising control over their lives by learning to read or by enhancing their reading ability.

Bringing this bias to the teaching/learning situation creates an atmosphere for failure. If the teachers of older readers recognize their bias toward age and attempt to rid themselves of their prejudices, then they can begin to visualize the older reader as a reader in need of their help.

Performance of the Older Reader

1. *Older readers are motivated to engage in the reading process for many reasons.* The older adult who enrolls in reading classes is there by choice and commitment. S/he may wish to learn to read so s/he can comprehend bus schedules, ingredients in canned food, ads in the newspaper, and the senior citizen newsletter. Others may want to improve their ability to read more in less time, enjoy the books on the best seller list, and read to their grandchildren.

2. *Older readers are as creative as their younger counterparts.* Creativity is not the sole province of the young. It appears to depend on will power, working strength, endurance, and enthusiasm. All of these qualities are embodied to some degree in aged as well as young readers.

3. *Older readers are cautious, very interested in the accuracy of their responses, and self-determining.* These characteristics of performance are grouped together because they are greatly interrelated. Older readers are cautious, as life has taught them not to run headlong into the unknown. Living has also taught them to be as careful and as correct as possible. Their jobs, businesses, and family relationships have depended on just the right mix of decisions. These decision-making acts of living have also made them self-determining. They will do what they need to do or want to do as cautiously and as thoroughly as possible (Botwinick, 1973).

These characteristics may give concern to teachers, since older adults are not so quick to respond as younger adults. What may be happening is that older adults may be “checking out” the learning task to see if they think it will evoke the appropriate response. If they decide the task will help them reach their goal, then the quality of their performance will increase. Reading programs which provide structure and correctness of response appear to have success with older readers.

4. *Older readers do better without interference.* A relatively quiet setting seems best for teaching older readers. Older adults appear more affected by distraction than their younger counterparts. Schaie (1968) has shown that the greater the number of distractions, the greater the anxiety, which results in less learning.

5. *Older readers are very diverse in interests and abilities.* Many experts in gerontology believe that youth is more homogeneous than age (Butler, 1975). Practitioners have found selecting materials for reading programs

for aged adults difficult because of their diverse interests and abilities (Lovelace, 1977; Wilson, 1977).

6. *Elderly readers (Those over 70) appear not to utilize mental set well.* Sometimes they have difficulty remembering items over a short period of time. These problems appear to be a function of physical aging, since the aging processes slow people down. Teachers can aid elderly readers with difficulties in mental set by helping them to organize their work. In order to enhance memory over a short period of time, teachers can give the older reader more time to learn the material, and then *not* test for knowledge by asking for specifics in specific order.

Provisions for the Older Reader

In order to allow for older adults in the college reading program, provisions must be made for their uniqueness. The following are offered for consideration.

1. Examine and discard instructor stereotypes of older readers.
2. Realize adults can be helped if only they wish to be helped.
3. Provide an atmosphere of pride and commitment so that the older reader does not feel helpless but somewhat in control of the situation.
4. Slow down the pacing of the content.
5. Organize the material of older readers only if they need help.
6. Provide relevant, meaningful, and/or practical tasks.
7. Reduce interference by providing quiet and appropriate lighting conditions.
8. Utilize as many senses of the older reader as possible.
9. Provide supportive emotional statements.
10. Locate reading programs in accessible places.
11. Offer reading programs for a particular population, i.e. for non-readers, improvement, discussion, problem solving, selection of children's books.
12. Love older readers as you would younger ones, for all are human.

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IDENTIFYING THE BASIC ELEMENTS OF CRITICAL READING

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A person undertaking a search of the existing literature on the topic of critical reading would notice immediately that there is a rather large number of articles and book chapters dealing with the topic. In reading a few of the articles it would also become apparent that there is little consensus regarding what critical reading is—the definitions range from a very narrow view such as “Critical reading is recognizing biased writing” to rather broad views such as “Critical reading is the process of comprehending in its highest form.” One other thing emerges clearly from the literature; critical reading is viewed as a valuable and important skill, but one which is being taught in an inadequate and limited way. In speculating about the causes of this inadequate success level in teaching critical reading, a number of possibilities come to mind. Some of these possibilities include the lack of agreement on what critical reading is, a hesitancy of some teachers or systems to deal with controversial issues, lack of training in the teaching of critical reading at the college pre-service level, or the fighting of educational “brush fires” at the lower comprehension levels (if a student doesn’t comprehend literally, can he read critically?) These and many other possibilities exist.

Current Definitions

An exhaustive listing of all current definitions of critical reading would be of limited value; however, an examination of a few may be helpful in viewing the situation which exists. Consider the following:

“Critical readers are those who, in addition to identifying facts accurately as they read, engage in interpretive and evaluative thinking—they project the literal meanings against their own background of experience. . .” (Piekarz, 1964).

“Critical reading . . . enables the reader to receive the ideas conveyed on the printed page . . . to make them his own . . . (it) is independent thinking.” (Kottmeyer, 1944).

“Critical reading is the process of examining . . . verbal materials in the light of related objective evidence, comparing the statement with some norm or standard, and concluding or acting upon the judgment then made.” (Russell, 1956).

“Critical reading involves comparison of two or more sources of information . . . considering new ideas or information in the light of one’s previous knowledge and beliefs . . . and the ability to detect and resist the influences of undesirable propaganda.” (Harris, 1975).

The common thread running through all these is that critical reading

requires thinking; it is not just a passive intaking of facts, but calls upon the reader to become actively involved with the reading material. Some writers, in fact, state that critical reading and critical thinking are synonymous terms (Foolman, 1969; Shores and Saupe, 1953).

Other ideas noted in the definitions are that critical reading ability rests on previous experiences, pre-established standards or criteria for judgment, and the drawing of conclusions. Assuming all of these to be a part of the total fabric of the elusive "critical reading," it seems that the next step is a discussion regarding the reasons for trying to develop critical readers.

The Importance of Critical Reading

Why does general agreement exist regarding the desirability of helping readers learn to read critically? Why is so much print devoted to the topic? Society today, perhaps more than ever before, is being called upon to make evaluative judgments about many things which affect it now and which may affect it in the future. As a major receptive communication skill, reading is in the forefront of the total system of accumulating and evaluating information. It allows a more rapid procedure for receiving information than listening does, it allows for greater flexibility in reviewing material and comparing multiple sources, and it provides an opportunity to reflect on important points as needed. In addition to these obvious benefits, the sources of information requiring this flexibility, such as newspapers, are among the primary sources of information that should be considered critically. In a period where we need to reflect on the happenings of the past to improve the future, current events occur so rapidly that reflective thinking is frequently impossible. For example, our country has recently suffered through major political corruption, the revealing of secret information, a terrible winter, and a natural gas shortage. Citizens are presented with many and varied reasons why each of these things happened; how else is the responsible person to make judgments about each of these except through critical reading of all sides of each issue? A democratic society must depend on rational decision making by its members—decisions on issues ranging from abortion to euthanasia. On a more daily basis, decisions need to be made regarding purchases of goods, investments of time and money—the list could be extremely long.

Given these reasons, and others unmentioned, the importance becomes readily visible. The responsibility for encouraging and fostering critical reading and thinking skills lies within the province of all of us. We should not continue to think of literacy in its most narrow form—word recognition and literal comprehension—but should make a commitment to the development of these higher level skills.

Review of Related Research

Within the ideal situation described in the previous few lines, it is interesting to examine our success at this juncture; in other words, how well can our society perform now on critical reading tasks? This look at the research emphasizes, but is not exclusive to, studies done with college-age

students, for they are the ones who most frequently must begin to assume their positions as responsible leaders in our society.

In the most recent figures on reading released by the National Assessment of Educational Progress (1976), it is stated that "The reading ability of 13 and 17 year olds changed little over a 4-year period. Both ages . . . (showed) a slight decline in inferential comprehension. Comprehension drops off quickly as reading tasks become more difficult." Farr, in the same report, says that "we need to find out if the decreases of the higher level reading skills . . . are real and what the possible causes are." (p. 3)

In an earlier study, Coles (1963) studied some 6800 students entering college nationally who were tested for their ability to read a short passage, evaluate the accuracy of that passage, and write a short essay explaining their position. Fewer than 1% of those tested were able to recognize "the propagandistic nature of the prose." It was concluded that the overwhelming majority know little or nothing about critical reading or thinking.

Tests

Both of these studies do make the claim that their testing of the higher level comprehension skills shows deficiency; however, the testing was done in very different ways. The NAEP testing was a performance on measurable objectives; the Coles study was based on two essay questions. Perhaps both are valid and reliable tests, yet attempts to interpret the critical reading research requires some knowledge of the instruments used. The most widely used critical reading tests are the *Watson-Glaser Critical Thinking Appraisal* (1964), *Test of Critical Thinking* (1951), and the *Cornell Critical Thinking Test* (1961).

The *Watson-Glaser*, in studies done with it (Follman and Miller, 1971), yields high total test reliability— $.66$ to $.77$ —but only moderate subtest reliability. The item discrimination is poor, in that the items do not discriminate consistently between good and poor critical readers. Also, the two forms, YM and ZM, are not parallel in difficulty. Scores on Form YM are consistently higher than on Form ZM, making pre- and post-test score differences difficult to interpret.

The *Test of Critical Thinking* and the *Cornell Critical Thinking Test* were also studied (Follman, 1971). Again, total test reliabilities were rather high ($.54$ -. $.81$), but subtest reliabilities were low. In summary, it appears that the total test reliabilities are satisfactory for the three tests, but research has shown subtest reliability and construct validity to be suspect.

Instruction

There are many research studies on the teaching of critical reading skills, a few of which are examined here. These include instruction in such skills as recognizing inferences, interpretation of literary devices and recognizing and analyzing arguments. One of the early studies using direct instruction was done by Glaser (1941). In this study, which began the research on the *Watson-Glaser* test, materials were designed to develop skills such as evaluating arguments and discriminating among inferences.

Ten weeks of instruction with twelfth-grade subjects found significantly better test scores for experimental group members.

In a study with 80 college students, Kemp (1963) found that an experimental group which received 10 hours of instruction in solving critical reading problems scored significantly higher on the *Watson-Glaser* than did a control group which received no instruction.

These studies, and others like them, point up the probability that critical reading can be improved at this level through specific instruction in such skills as problem solving, making judgments, and drawing inferences.

Some related studies in critical thinking and logic are also worth mentioning here. O'Brien (1973) reports a study in which college students were instructed in logical inference patterns. Results showed that, while post-test performance was improved over the pre-test, a consistent use of logic was not found in problem solving.

Shipman (1974) found in a study with graduate students that the teaching of how to judge the validity of verbal arguments was enhanced by translating verbal arguments to symbolic form, a sequence which is the reverse of that found in most texts on logic.

Another related area is one called value analysis. A technique advocated by many social science educators, its purpose is to help readers use logical thinking in dealing with social values issues. A frequently cited study by Hovland and Weiss (1951) used college students as subjects. Each of four articles, attributed to a highly credible source, was given to half the subjects. The same four articles, attributed to a low credibility source, were given to the other half. Ideas attributed to the high credibility source were judged as "fair," and changes of reader opinion based on these ideas were $3\frac{1}{2}$ times greater than opinion changes based on the low credibility source. The conclusion was that the credibility of the communicator is more persuasive than the ideas of that communicator.

The effects of authoritative testimony on the attitudes of 118 college students were investigated by Whitehead (1971). Two versions of a speech were given to experimental and control groups. One version had quoted material attributed to authorities, while the other version had the same quotations, but which appeared to be the speaker's opinions. Tests indicated that good critical readers in both groups gave no more credence to the authority quotes than to the speaker's opinion quotes; however, poor critical readers rated the speech with authority quotes much higher on content and impact.

Other studies have shown that personality variables such as dogmatism (Kemp, 1963), prior belief (Crossen, 1948), and attitude (Mehrley and McCroskey, 1970) affect ability to read critically.

Summary

To bring all this to a focus, then, what do we know about critical reading? The definitions remain tenuous and somewhat conflicting, largely because of the weakness in validity of current critical reading tests. Ability to read or think critically appears to be closely related to general mental ability, and *may* be dependent on literal reading ability.

Specific instruction in various types of critical reading skills with college-age students does affect performance on critical reading tests, leading to the conclusion that critical reading is a learned skill which can be taught. Further, it is an important trait in those who may serve to lead our society in the future. Given all the above, the next logical step is to determine ways and materials to aid in the teaching of critical reading skills for those who would try to teach those skills. Certainly the effort should be made.

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CRITICAL READING AND TODAY'S ADOLESCENT

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Of all of the areas of reading skill development, the component of critical reading may well be one of the most neglected on the part of both students and teachers. Most reading authorities agree that emphasis on critical reading should begin as early as the primary grades. There are many opportunities for primary and intermediate children to respond to questions and situations which call for high level evaluative answers. The key to effective development of critical reading appears to be centered around the teacher's attitudes and what she or he demands of students with regard to concept retention. If the instructor requires the memory of isolated facts apart from honest inquiry, the pupil will be ill equipped in giving divergent responses when requested.

All teachers at the secondary level must understand that they have many opportunities to enlarge the critical skill levels of all students. The areas of science and social studies lend themselves especially well to the direct, planned teaching of these competencies. The field of journalism with study of the formation of advertisements presents a chance for the instructor to discuss the nature and use of various propaganda techniques such as band wagon, card stacking, identification with prestige, and name calling.

The purposes of this article are to explain the nature and kinds of prerequisites involved in learning critical reading skills and describe some classroom lessons and activities which can be employed to build these abilities with all kinds of students. Each lesson described will need some slight adaptation to fit the exact requirements of a given classroom and/or teacher.

Prerequisites for Effective Critical Reading

Some students can process, understand, and develop critical reading skills in a satisfactory manner, while others cannot. There are numerous conditions or prerequisites which must be present if the effective learning of these skills is to take place.

First, the reader must be as free from bias and prejudice as possible. While the classroom content teacher probably cannot deal directly with this facet, a frank discussion of this factor and how it influences one's critical thinking skills may be appropriate. Unfortunately, many persons who have relatively high levels of intelligence are hampered by bias and thus cannot read critically concerning certain sensitive issues.

Second, all learners must understand that what they read in newspapers and magazines *may* or *may not* be factual in nature.^{1, 2} They must decide if the stated conclusions and implications are based on actual facts or if they

are merely the opinions of the writer. This factor can be evaluated by asking each student to read a two- or three-paragraph passage about a topic which is relevant to the content area being studied. A short comprehension test can be administered which contains questions similar to the following:

1. Council Bluffs is the capital of Iowa.
2. The last state to be admitted to the Union was Hawaii.
3. Wisconsin has better climate than Missouri.
4. The leading cause of cancer in males is obesity.
5. A yard equals thirty-six inches.

Other exercises such as the following may be employed to alert students to the different types of propaganda techniques.³ (It is assumed that a series of appropriate orientation lessons have been conducted with respect to the techniques.)

Each of the following statements illustrates a kind or type of propaganda technique. Write the name of the technique on the blank to the left of the statement.

- _____ 1. Things go better with Betterdrink soda.
- _____ 2. All politicians are dishonest.
- _____ 3. I know all farmers will vote for me because I was born and raised on a farm.
- _____ 4. John Denver prefers Neato guitars over all other brands.
- _____ 5. Senator John Blowall is an ultra-conservative.

Following the use of the above essay, the instructor could distribute a supply of popular magazines and newspapers and ask students to find examples of six propaganda techniques. Encourage the readers to find as many *different* kinds of techniques as possible.

Third, some knowledge must be gained relative to the general level of intelligence of each of the learners since there is a high degree of correlation between comprehension (especially critical reading skills) and mental age. Students who have limited levels of intelligence will encounter much difficulty with regard to the concept loads of more technical types of critical and creative reading. Reading activities which demand these kinds of skill development should not be emphasized with students of limited mental capacities.

Fourth, each student must be able to assess the relative value of any printed material by mentally asking the following questions:

1. Who wrote the material and are the writers really qualified to write on this topic? (Reading educators have long since known that many persons without any academic training have written articles in popular magazines about phonics and other methods.)
2. When and why was the material written?
3. How does the philosophy of this writer compare with the ideas promoted by other writers on this subject?
4. Does the writer use propaganda techniques and generalized statements (without research data) to promote his or her point of view?

*Techniques for Improving Critical Reading Skills
of Secondary Students*

The maximum development of a high level of skill development in critical reading does not come naturally or by chance. Each secondary teacher in each content area must be alert to opportunities which will serve to enhance the capabilities of each student in this area. The following lesson suggestions may be of help to teachers in fulfilling this goal. These ideas should be especially helpful in the areas of social studies, science, and literature.

1. Establish a vertical file in your classroom for collecting newspaper and magazine articles on controversial subjects. Further division may be made into "pro" and "con" categories.
2. Provide students with the names and addresses of senators, congressmen, legislators, mayors, and other officials. Encourage students to write to these persons regarding their views on certain topics and issues. Encourage them to compare this data with other information from other sources.
3. Ask the director of the school media center to establish a designated section of the center where controversial subjects can be studied and where such items as books, tapes, filmstrips, films, videotapes, and other materials can be stored and used. To establish closure on any subject, the student must have input from a number of sources.
4. Invite community leaders who represent divergent viewpoints to speak to your class. Train your students to be well prepared for the presentation by having them study opposing viewpoints from different materials during the time period immediately preceding the presentation. Encourage them to ask questions of the speaker which will cause him or her to defend his or her point of view.
5. With the help of the school debate coach, a debate between two more able debaters could take place, which involves a controversial issue relevant to a given content area. In the area of social studies, the topic may be "Why the Senate Should Ratify the Panama Canal Treaties."

At the close of the debate a discussion could take place relative to the facts and opinions which each speaker gave. Establish which speaker used the best documentation for his or her position.

Summary

Of all the comprehension skills, the development of effective critical reading skills may be one of the most important goals of both student and teacher. These skills cannot be left to chance and must be taught directly by every content teacher through the use of the many activities which have been described in this article. The printed word is a powerful tool, and we educators must insist that our learners understand it both literally and critically.

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A BOOST FOR THE "BASICS" THROUGH CHILDREN'S LITERATURE

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While I am in complete agreement with the notion of teaching basics, I am not in total agreement with some of the strange connotations that the term "basics" conjures up in some circles. If, indeed, this means drudgery, rigidity and regimentation, I demur. If it lines up with a concerted effort to assess needs and then to organize an environment that helps children in attaining these needs, I am with the basics movement with one further qualification, that is – that whatever basics are taught transfer immediately to a real life situation. Perhaps this criterion can best be guaranteed if learning takes place in a context that is as life-like as possible in the first place. I share Nancy Whitelaw's (Duffy and Sherman, 1977, p. 56) concern about teaching skills in a vacuum:

Having a reading program based on just diagnosis and prescription is like making a cake and not tasting it

Like notes of music on paper -

Like a library with closed doors -

Like a marriage by contract.

Explaining the rule for determining whether g is "hard" or "soft" is like outlining how to play jazz

Like instructing how to kiss -

Like using a compass without a map -

Like explaining a bad joke.

Reading is not a Forty-five Minute

Period of Instruction with Behavioral

Objectives and Predictable Outcomes.

Reading is enjoying, learning, feeling, becoming, sensing, laughing, crying, hating, deciding, loving, growing, sympathizing, listening.

Reading is All Day -

Being and Becoming -

Growing and Growing.

The most persistent hazard in skills emphasis is that we become so busy teaching them that we forget about the important goal – to develop readers and writers. I know children who can perform skills in isolation to 80 percent proficiency, 95 percent proficiency, yes, even 100 percent proficiency. But, they can't read where it counts – in the real world of books. What is even more distressing is that some of them don't even want to enter this real world because they have never had a taste.

With this background let me demonstrate to you, with my apologies to any children's literature purists in the audience, how we can, with careful selection of material and with well defined goals, avoid the polar positions

that skills are the answer to everything or, on the other hand, that kids learn to read by reading and that skills are just deadening mechanics. There must be a balance.

Before I proceed to offer some suggestions about a few of the basics that can easily be taught through children's literature, let me make abundantly clear that what I am advocating is not a bandwagon to replace your basal program, your individualized program or whatever program; I am suggesting activities that all children should be exposed to for ten minutes here and there (I might add as often as possible) regardless of the program you are following. You may even decide at times to replace certain aspects of your present program with some of the things I am suggesting.

While the need to underpin the discussion with a detailed theoretical rationale may be dubious, a brief context might be helpful. Few would argue that reading is, first and foremost, language-based. The reader who has the greatest resource of language cues available has the chance of becoming the most powerful reader. These cues include grapho-phonetic (the sounds and patterns of oral language and the squiggles and patterns of squiggles of the written language); syntactic (word order); and semantic-associational (knowledge of what words refer to in the real world and how words are hierarchically related). (Pearson, 1976). Efficient reading demands that these cues be used in concert. The efficient reader, in essence, predicts or anticipates what is coming in print and uses grapho-phonetic information to verify his predictions. To summarize, the most powerful predictions occur where the strongest language base exists.

I am wiser than to enter into a "phonetic or not-to-phonetic" debate. I believe, however, that often we have misconstrued "basics" in reading to relate to the grapho-phonetic segment only. I'm sure I have 10,000 feet of oral reading tapes from readers who use only these cues to attest to my point. The vast majority of work-book pages in the primary grades relate to activities in the grapho-phonetic realm. Only a few days ago I observed a reader who attempted the word "revolve" in a meaningful context. He stumbled over various attempts all the way from "revel," "revole" to "revolve." He came to the word "material." His attempts, again, made no sense – "materral," etc. It would be tempting to say that this reader needs work in the grapho-phonetic area. However, it was clear to me that these words were not in his readily available listening-speaking vocabulary (semantic-association). So, in fact, his inability to say these words correctly in my judgment is not a reading problem but a symptom of something far more basic – an impoverished meaning vocabulary. To treat these words from a grapho-phonetic standpoint (i.e., to use phonetic and structure clues) at this stage is nonsense. The problem lies in the semantic-associational area. To illustrate further, another child ran across the sentence "The queen will reign over England." The child was unable to make any sense out of the word "reign" even from the associations that might have been available from "queen" and "over England." When the teacher pronounced the word for the youngster and asked what the sentence meant, the response was, "The queen will fly over England." Again, not necessarily a reading

problem—a problem that goes back to the child's store of oral language. Efficient reading, then, is dependent upon what the reader is able to bring to the printed page—grapho-phonically, syntactically and semantically.

Now for some illustrations (and just a sampling) of the kinds of “basics” input we look for in children's literature to plug some of the child's gaps in each of the three areas—grapho-phonetic, semantic-associational and syntactic. I choose to begin with the semantic-associational.

Vocabulary Awareness

Barring first-hand experience, involvement in good literature is probably the best source of vocabulary enrichment. Let's look at a few samples to examine the possibilities. Barbara Cooney's *Chanticleer and the Fox*, offers a good example not only of richness in vocabulary, but also, to jump ahead a little, of models of variety of sentence structures.

The poor widow by careful *management* . . . was able to take care of her and her two daughters . . . Her bedroom was very *sooty*, as was her kitchen in which she ate many a *scanty* meal . . . She had a yard, fenced all around with sticks, in which she had a rooster named Chanticleer. For crowing there was not his equal in all the land. His voice was merrier than the merry organ that plays in church, and his crowing from his resting place was more trustworthy than a clock. His comb was redder than fine coral and turreted like a castle wall, his bill was black and shone like jet, and his feathers were like burnished gold. Now this fine rooster had seven hens, all colored exceedingly like him. The hen with the prettiest throat was called fair Demoiselle Partlet. She was polite, discreet, debonair, and companionable, and she conducted herself so well since the time that she was seven days old that, truly, she held the heart of Chanticleer all tightly locked.

Take another example, Lynd Ward's delightful *The Biggest Bear*. Johnny Orchard's strange involvement with the “biggest bear” provides a nice setting for acquisition of words, e.g.

Whenever Johnny went down the road to the store for a piece of maple sugar or something, he always felt humiliated. The other barns in the valley usually had a bearskin nailed up to dry. But never Johnny's barn (p. 4).

The story unfolds as Johnny's befriended bear makes a nuisance of himself in the community drinking milk meant for calves, raiding smokehouses for bacon and raiding cornfields at night. It is not surprising to learn that the bear grows quickly to an enormous size when he goes as far as to drink up the McLean's store of maple syrup. Indeed,

What they had to say about Johnny's bear was plenty. He was a *trial* and a *tribulation* to the whole valley. (p. 46).

The vividness of the illustrations accompanying the text add considerably to the excitement and meaning of the story. There will be little doubt about how Johnny feels when he is “humiliated.” There will be even less doubt about what is meant when the author relates that the bear was “a trial and a tribulation.”

I am talking about more than simply providing children with verbal labels; I am talking about providing labels that connect with meaning. In fact, I believe that children’s books provide a ready avenue to back up first-hand experience to help children develop concepts. Joan Sullivan’s popular *Round is a Pancake* with its vivid illustrations come readily to mind. The delightful rhythm aids in children’s repeating the patterns.

Round is a daisy,
And a fisherman’s reel,
Round is a hamburger,
Round is a cake,
Round is a cherry,
And the cookies we bake,
Round is a puppy,
Curled up in a rug,
Round are the spots
On a wee ladybug. (pp. 17-23).

Still on the topic of vocabulary and concepts, we know that many children experience difficulty with many of the signal words for which there is no pictorial representation or concrete object. My strong view is that the best approach to helping them overcome this problem at a reading level is to provide much input of the right sort at a listening level to bring the function of these important signals to a level of awareness.

To illustrate, let us look at signals of time and sequence. Again, of the hundreds of books ready to be used for this purpose, I have chosen *The Biggest Bear*. The sequence is unmistakable:

He (the bear) likes pancakes on Sunday Morning . . . In the *fall* Mr. McCarroll got pretty upset *when* the bear spent a night in his cornfield . . . In the *winter* he had a wonderful time with the bacons and hams . . . But it was worse *later* . . . *Finally* Mr. McLean started talking to Mr. Pennell . . . *After* the neighbors had left . . . So the *next morning* . . . (pp. 30-54).

The whole story is literally “glued” together with words depicting time and sequence. These words are the basis of the structure or organization for the entire story. They are not nearly as critical here as they are in certain other contexts as, for example, in much of the social studies material.

I mentioned earlier the fact that structure words cannot be represented by concrete or pictorial referents. What does give these words their meaning is the total context and how these words are said. I cannot overemphasize

the importance of effective use of intonation and juncture in helping children develop a consciousness of these key words in speech and reading and, I must not forget, their own writing.

Syntactic Awareness

The foregoing comments related to filling gaps in the semantic-associational aspect of language. Certainly, I am not advocating developing vocabulary in the absence of syntax (the examples used prove this). However, it might be worthwhile to look at some literature that can be used expressly to develop awareness and competence in varied syntactic patterns.

There is perhaps no principle more important in selecting these activities than to base them on the child's natural interests and the universal appeal for rhythm. An environment "thick" with poetry, verse and song is likely the best guarantee that this interest and appeal is going to be satisfied. Library shelves are bursting at the seams with stories waiting to be read, chanted and listened to. Many of these are particularly useful in aiding the development of patterns of varying structures. It is important to note here that the emphasis at the beginning is on listening—listening to the ideas and the vehicles that carry these ideas. Children will become sensitized to the peculiar intonation patterns that characterize certain syntactic elements, the junctures and the stresses that are as essential to the meaning as the arrangement of the words themselves. There are many stories which will only be listened to. However, there are many that children will want to hear often enough for them to memorize and chant along as the teacher reads. This is excellent. The sound patterns they have listened to are becoming the sound patterns of their own productions.

Take as an example, Leland Jacobs' "Old Lucy and the Pigeons" (Martin, Jr., 1966). Not only does the poem use varied and recurring sentence patterns, but it also expands these same patterns with phrases, adjectives and adverbs so that the kernel sentence repeats with one variable added.

Old Lucy Lindy lived alone.
 She lived alone (in an old stone house).
 . . . She didn't like dogs.
 She didn't like cats.
 And (especially) she didn't like pigeons.
 All day she was busy.
 She was busy (with a hammer).
 She was busy (with nails).
 She was busy (with a brush).
 (pp. 16-17).

The poem illustrates well how sentence patterns (and corresponding rhythmic patterns) repeat and how the basic pattern can repeat but at the same time be expanded with an additional rhythmic and meaning element. It is often valuable to have children add their own expansions simply to add

to the fun and their linguistic awareness. For instance, they might be encouraged to add to the following:

Go away, pigeons.
 Go away (from my fence).
 Go away (from my yard).
 Go away (from my house).

If children are unable to add additional elements (phrases), discussion will produce the basic ideas necessary for such expansions. The teacher might ask, "Where else might Old Lucy Lindy find pigeons?" It is likely that responses such as "on the grass," "on the roof," "on the gate" will emerge. These, then, become the source for the expansions.

To add just one further example of how the poem might be used to develop awareness of syntactic elements, have children listen to (and read) a version like the following:

She did not like cats
 She did not like dogs.

Then have them listen to the original version demonstrating how the use of the contraction "didn't" helps to create a more desirable rhythm than "did not." The point to be made here is that children need to be strongly attuned to the aural, as well as meaning aspects of language.

There are many children's books on the market which use effectively the cumulative recurring sentence pattern to build up a sequence of events.

Barbara Emberley's *Drummer Hoff* illustrates the notion well. The events leading up to Drummer Hoff's firing off the canon begin with "Private Parriage brought the carriage." Each soldier appearing brings one part of the remarkable machine. One event per page is added so that on the last page the whole series is repeated:

General Border gave the order,
 Major Scott brought the shot,
 Captain Bammer brought the rammer,
 Sergeant Chowder brought the powder,
 Corporal Farrell brought the barrel,
 Private Parriage brought the carriage,
 but Drummer Hoff fired it off.
 (p. 22).

Again, the opportunity to develop awareness of very basic syntactic units is there and in interesting format.

Grapho-phonics Elements

There is no suggestion here that the basic teaching of the graphophonic elements of reading have to be taught through literature. It seems, though,

that so many visual, auditory and visual-auditory association elements can be brought in without compromising the enjoyment of literature that it seems a shame not to do so.

To sample some of the possibilities for extending knowledge of rhyming elements either at the auditory or reading-writing stage, let us go back to the Lucy Lindy example again. The teacher might ask the class to imagine all the things that Lucy Lindy didn't like. She might start them with "She didn't like dogs" and have them finish "She didn't like _____" (rhyming element).

Then this might continue:

She didn't like cats,
 She didn't like _____,
 She didn't like mice,
 She didn't like _____,
 Lucy Lindy liked things, NICE.

For spelling work the same example might be used. Many children's books lend themselves very well to this kind of activity. Langstaff's *Frog Went A-Courtin'* is just one further illustration. The teacher might give the group any two lines, e.g.:

He rode right up to the mouse's hall,
 Where he most tenderly did c_____.

Depending on the children's level of development, they would fill in the whole word, just the initial consonant or the "all" phonogram. This kind of activity can be extended to include new words with the same phonemic base. For example, the "all" base from the example above might be used to develop phonogram practice strips like this:

call/fall	ball	hall	stall
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Depending on individual needs, different cues can be used to elicit the rhyming words. If the basic problem is auditory, the teacher might say, "Which word rhymes with 'call' and begins the same as 'sting'?" If semantic cues are needed, "Which word rhymes with 'call' and is something that bounces." Incidentally, this is an excellent way to teach children to use "in concert" grapho-phonetic and semantic information.

There is probably no more suitable selection for development of beginning consonant awareness and phonemic bases than Edward Lear's *Nonsense Alphabet*. The first stanza is illustrative of its usefulness:

A was once an apple-pie,	
Pidy,	Pidy,
Widy,	Nice insidy,
Tidy,	Apple-pie.

There is an abundance of literature that lends itself ideally to developing the auditory bases of structural analysis. Preston's *Pop Corn and Ma Goodness* is an example in point:

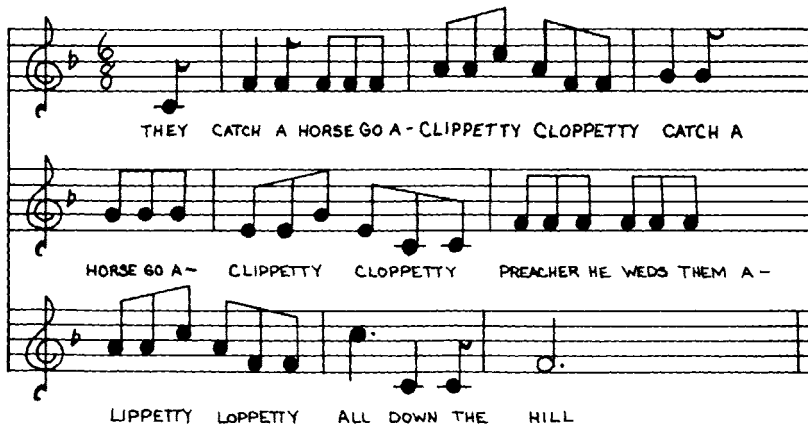
Ma Goodness, she's coming a —
 skippetty skoppetty
 skippetty skoppetty
 skippetty skoppetty

. . . Pop Corn, he's a-coming a —
 hippetty hoppetty
 hippetty hoppetty
 hippetty hoppetty.

. . . A chippetty choppetty
 mippetty moppetty
 snippetty snoppetty
 bippetty boppetty
 flippetty floppetty
 Together they go a — lippetty, loppetty . . .
 (pp. 1-20).

Children might benefit from clapping the rhythm as they go chanting along with the teacher. Later they might determine how many claps are needed for each nonsense word. To extend into the spelling-reading domain children might be encouraged to write the first part of each word they hear; e.g., "skip" from the word "skippetty."

A variation for slightly older children involves setting music to some of the refrains from the story, e.g.



Other verses may be introduced emphasizing the difference between a happy section and a sad section (e.g., the wedding and the funeral).

This involves making decisions of how many notes are needed (if the teacher feels uncomfortable about music notation, lines representing word parts are equally effective). At this stage accent is logically stressed.

Another interesting variation involves giving children a suggested scene and producing appropriate refrains. For example, one child when given the suggestion "Pop Corn had a cold" produced the following version:

Pop Corn, he's a-blowing his nose
 a-sniffetty, snoffetty
 blippetty, bloppetty,
 blippetty, bloppetty.
 Ma Goodness, comes a mippetty, moppety
 mippetty, moppety.

*Structural Elements As Models for
 Children's Writing*

There is much to be said for using literature to provide basic models on which children can base their own productions. Using fairly well-defined guidelines and structures as a basis for the beginning composer or artist is quite acceptable, if not desirable. There is no reason why these models cannot be employed in children's writing. Good beginning models are the ones that have repetitive elements or refrains. A further consideration is a plot structure that is very obvious. Kipling's *Just So Stories* lend themselves well to this kind of activity. Some of the Eskimo legends like "The Owl and the Lemming" are good. Some of the old traditional tales like "Henny Penny" or "The House That Jack Built" provide a very well-defined structure. It is often helpful for the teacher to work out a story with a group or class before they are "turned loose" on the task.

Summary

I have outlined a mere sampling of activities that can be correlated with children's literature. I haven't begun to tap the possibilities for developing prediction, main idea, inferential skills and so on and on. I believe, though, that the sampling is sufficient to illustrate the tremendous wealth of material waiting to be tapped for the enjoyment of kids and for the development of skills—a nice compromise between learning to read and reading to enjoy.

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THE ILLITERACY CONCEPT: DEFINING THE CRITICAL LEVEL

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Available evidence indicates that the state of reading in 1977 is no better than it was at the turn of the decade. New investigations lend credence to the disturbing possibility that the situation is in fact more severe than initially proclaimed by the late Commissioner of Education, James Allen (1969), when he stated the following shocking facts concerning reading deficiencies in the United States:

One out of every four students nationwide has significant reading deficiencies.

In large city school systems up to half of the students read below expectation.

There are more than three million illiterates in our adult population.

About half of the unemployed youth in New York City are two or more years retarded in reading.

In a recent U.S. Armed Forces program called Project 100,000, 68.2 percent of the young men fell below grade seven in reading and academic ability.

I would suggest that there remains a lack of clarity regarding the character of the problem -- what actually constitutes being "literate" in the United State. For, what is commonly referred to as literacy bears only incidental relation to the actual activity of reading.

I propose that literacy is related directly to comprehension of what is read, and comprehension is associated with the individual's experience, environment, and interest. As well, social, ethnic, economic, and cultural realities combine to form the contexts to which comprehension is bound.

Literacy as a concept never plateaus. Rather, in a technological society, it progresses toward new heights and forever seeks new peaks. Levels of literacy that are sufficient for the present may be insufficient for the future. These variables, moreover, are inexorably intertwined with the unique situation of each country's socio-economic and cultural ambiance. I would further suggest that levels of literacy that would suffice to make a person

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literate in one area of the world would transform them into a functional illiterate in another.

It is for these reasons that there cannot be a universal definition of literacy. The only determiners are derived from the specific character of each nation; just as those of yesterday required more redefinition in order to comply with contemporary realities. As this character undergoes transformation, as the experiences, environments, and interests of the individual within a nation develop, so too will the levels of comprehension (literacy) demanded of its people. As well, a primary factor which mandates the need for continual redefinition is the fact that occupational activity increases in complexity concurrently with and parallel to this process, causing in its wake increasingly complicated reading tasks.

The purpose of this paper is to explore various definitions of being literate or of being illiterate. I must admit that achieving this understanding is difficult because literacy is not a solidary trait; it comprises many sub-skills and varies from location to location. However, definitions of literacy can probably best be determined in terms of levels of "literacy" required to function well in a society.

The Extent of Illiteracy

As part of the International Literacy Day Program held on September 8, 1975, in Washington, D.C., Dr. Thomas Keehn (1975) referred to the world-wide nature of the problem of adult illiteracy which "... holds untold millions in its shackles." According to Dr. Keehn, there are an estimated 785,000,000 illiterate adults in the world. Of these, 62 percent are women. In the United State, more than 50 percent of the adult population is considered either functionally illiterate or marginally illiterate, i.e., they do not have the educational tools to cope with personal, community, social and economic problems that confront them daily.

The extent of illiteracy in the United States may vary considerably, depending somewhat on the method of assessment used. The Census Bureau (Statistical Abstract, 1974) considers literate anyone 14 years of age or older who has completed sixth grade. Those who have not completed the sixth grade are asked whether they can read and write a simple message in any language; if they say, "Yes," they are considered literate. Based on this credulous method, it is estimated that approximately one percent of those aged 14 years and older are illiterate.

The National Center for Health Statistics (1973) has conducted a survey using their *Brief Test of Literacy*, which shows that 4.8 percent of individuals 12-17 years old score below the average 4th grader on the instrument and can therefore be regarded as illiterate.

Louis Harris (1970) was commissioned by the National Reading Center to conduct a study of adult functional illiteracy. His survey team asked respondents to read and fill in the appropriate information on five forms — application for public assistance, application for Medicaid, application for a driver's license, personal identification form, and a personal loan application. Using the criterion of 90 percent correct responses on these

forms, Harris reports that 13 percent of the sample, or an estimated 18.5 million Americans, fell below that level — that is, were marginally literate to functionally illiterate in terms of ability to perform these tasks.

A second survey completed by Harris in 1971 explored deficiencies in the United States. The research focused on reading skills that are required to cope with everyday experiences common to most Americans. It concluded that 4 percent of the U.S. population 16 years of age and older suffers from serious deficiencies in functional reading abilities. Blacks had a level of difficulty that was nearly three times as high as for whites. Income level and age were found to be highly related to reading ability. Easterners and Southerners scored lower than those in the Midwest and West.

In the same study, Harris analyzed respondents' ability to successfully answer straightforward questions about newspaper employment advertisements. Ninety-two percent of the total sample got all nine of the questions correct, although 70 percent of all blacks tested got nine correct. Survey personnel obtained similar results using classified housing advertisements: 88 percent of those surveyed got all items correct. Blacks averaged 67 percent correct of all the housing advertisement questions.

In order to develop a representative pool of competencies attributable to a literate person, Northcutt's (1975) Adult Performance Level Project (A.P.L.) conducted an extensive literature search surveying governmental agencies and foundations to determine the characteristics of successful and unsuccessful adults; and interviewed adults who were under-educated and under-employed, employers, and personnel specialists. The necessary skills identified during this study can be grouped into the following four areas: (a) communication skills, (b) computational skills, (c) problem solving skills, and (d) interpersonal skills. A.P.L. also identified five general knowledge areas (a) occupational knowledge, (b) consumer economics, (c) community resources, (d) government and law, and (e) health.

Because these skills demanded more than the ability to use or comprehend written material, they did not fit comfortably within the general concept of literacy. Therefore, A.P.L. staff substituted the term "functional competency" for "functional literacy."

Using a national sample (1,500 respondents), the Adult Performance Level Project has determined that as many as 20 percent of the adult population are functionally incompetent. Indeed, the study concluded that nearly 35 million adults have trouble buying life insurance, using credit, shopping wisely, and handling other facets of consumer economics; one-fourth of all Americans cannot understand their rights and obligations under our system of government and law; one in five adults have trouble with the basics of finding, getting, holding, and advancing in a job. Finally, in the skills tested — reading writing, computation, problem solving, and interpersonal relations — the 1,500 people surveyed had the most trouble with computation. Projected to the total population, the A.P.L. study concluded that 39 million Americans are unable to perform basic computations and that another 35 million can barely get by.

In an evaluation of the Right to Read Effort after four years, Dr. Ruth

Love Holloway (1975) reported that it was difficult to interpret to the nation as a whole that a country which was so affluent as the United States had between 15 and 17 percent of its people functionally illiterate. As of 1971, there were some 18 million adults who were considered functionally illiterate and seven million elementary and secondary school children who had reading deficiencies sufficient to cause problems in the schools. She reports that the problem appeared to be so massive that a committee established the following goal for the National Right to Read Effort:

To ensure by 1980 that 99 percent of all people under 16 years old living in the United States and 90 percent of all those over 16 would possess and use literacy skills. (Holloway, 1975)

Defining the Condition of Literacy/Illiteracy

The historical American definition of literacy has been that it is nothing more than the ability to read and write one's name, or to score at some grade level on a standardized test. *Webster's* (1976) defines literacy as the ability to read and write. *Black's Law Dictionary* (1968) defines an "illiterate" as unlettered, ignorant, unlearned, and generally used of one who cannot read and write.

Robert F. Barnes (1965) provides his observations about illiterate adults in a speech delivered to an assembly of adult basic education teachers. He states that they are the low-income, un- or under-educated. He suggests that we must classify them as a society rather than a segment of our total society. Why? For reasons such as:

1. They have a separate system of values that are different from those of our great, affluent, snobbish class mess that we call society.
2. As a result they, in general, have been forced to adopt a set of morals that are not quite acceptable to our middle class society.
3. They have established their own hierarchy or "peck-order."
4. They have their own power structure.

In defining non-readers, the Mott Basic Language Skills Program (1966) makes reference to their having "... less than five years of reading ability." Illiterates are divided into: (a) non-readers who might be classed as lazy; (b) individuals who did not have the opportunity to go to school; (c) individuals who had certain limitations, handicaps, and difficulties which made reading a superhuman effort; and (d) adults who matured slowly and did not have the "readiness" to learn reading when it was offered. Additional synonyms for illiterates include non-reader, second-grader, sub-functional, slow, undereducated, poor-readers, dropouts and functional illiterates.

In a recent request for proposals, the United States Office of Education (1976) infers that literacy is the presence of requisite reading skills necessary to enable individuals to function effectively in society. As well, a National Right to Read Effort (U.S.O.E.) pamphlet, *Literacy—A Must for All*, refers to a profile of inmates in the federal prisons functioning at the 5th

grade level or below in reading ability. It is easily conveyed that this is the critical level in distinguishing literate from illiterate offenders.

The National Center for Health Statistics study, *Literacy Among Youths 12-17 Years* (1973), defined literacy as that level of achievement which is attained by the average child in the United States at the beginning of fourth grade. Using items on the *Brief Test of Literacy* based on this definition, their test was validated on a group of fourth graders. If a 12-17 year old youth passed the reading section, they were termed "literate." If they failed the reading section, they were termed "illiterate."

The term "functional literacy" connotes reading for some purpose — a purpose in some way related to social utility. William S. Gray (1969) defines functional literacy as the ability to engage effectively in all those reading activities normally expected of a literate adult in his community. This definition, while circular, does emphasize the fact that certain tasks are required of adults by members of their community.

Harman (1975) in examination of levels of literacy required for minimum functioning indicates that the critical level is particularly high, and has risen dramatically since World War II. He cites one recent study (Sticht, 1975) which concluded that an 11th-grade reading level was the minimum literacy requirement for most military professions (7th grade for military cooks, 8th grade for repairmen, and 8th grade for supply clerks) and these correlated significantly with civilian pursuits. He suggests that if an 11th-grade level is stipulated as a minimum necessary requirement then surely a desirable minimum level of functional literacy would be even higher.

Bormuth (1974) states that in the broadest sense of the word, literacy is the ability to exhibit all of the behaviors a person needs in order to respond appropriately to all possible reading tasks. Of course, this definition is highly comprehensive, and no one would be literate to this extent.

Sticht (1975) defines functional literacy as "a possession of those literacy skills needed to successfully perform some reading task imposed by an external agent between a reader and a goal the reader wishes to obtain." He suggests that this excludes such reading activities as reading for pleasure. Also, he differentiates between reading to learn a job and reading to do a job. As a rule, the former requires a higher level of literacy than the latter.

In a related effort, under a contract with the Bureau of Adult, Vocational, and Technical Education of the United States Office of Education, researchers attempted to describe "functional literacy" in pragmatic behavioral terms and to develop devices for assessing literacy that would be widely used. In pursuing these objectives, the Adult Performance Level Project staff (1973) analyzed the components of adult literacy, reaching three crucial conclusions:

1. "Literacy" is a construct which is meaningful only in a specific cultural context. Furthermore, as technology changes, the requirements for literacy change.
2. "Literacy" does not consist of just a single skill, or even two skills. It is

best defined as the application of a set of skills to a set of general knowledge areas.

3. "Literacy" is a construct which is directly related to success in adult life.

Conclusions

The way in which "literacy" is conceptualized has profound implications for the kinds of programs and processes that are created to reduce or eliminate illiteracy. Unfortunately, no standard definition of literacy exists, and estimates of the extent of illiteracy in the United States varies greatly.

Literacy is not, in and of itself, an objective. The real aim is that of social and economic participation and reading is but a tool—one means for its attainment. Research indicates that in the United States the levels of reading comprehension necessary for such participation are predictably high and have risen dramatically since World War II.

A U.S. Department of Labor study (1970) indicated that at the end of the 1960's the median years of schooling completed by Americans 25 years of age and above was an impressive 12.3 years. They have predicted that by the end of the 1970's, the median grade level will have climbed to around 12.5 years. In a more recent study conducted by the U.S. Department of Labor (1975), fewer than 2 million people were reported to have had only a fifth grade or lower education in 1970 and that figure is expected to drop to about 1.4 million by 1980.

We may conclude that the minimum level of reading ability, required for full participation in the social and economic life of the U.S., is around the eleventh-grade level. As well, the minimum level required to actively participate in the economic and social order may be considered as a measure of a nation's literacy level.

Completion of a set number of years of schooling does not provide assurances that individuals do in fact perform and retain performance levels paralleling those of the grades completed. This situation, to the relief of many dedicated educators, does not reflect the efficacy of schooling but might well indicate that skills once learned regress when not put in use. Wherefore, it shifts the onus of the poor performance from the school to the individual.

Adequate evidence suggests that school attendance does not guarantee scholastic achievement commensurate with the grade level attained. Not all high school graduates can read at a 12th-grade level, or eighth-grade students at an eighth-grade level, and so on. Various studies have concluded that over the past few years that the inability to read is far more widespread than census data might lead us to believe.

As well, the impact of the employment sector must be regarded in the study of literacy. During the past several decades, there has been a major shift in the proportions of people employed in various areas of the labor market. Its demand in terms of educational qualifications has been rising, in turn inducing growing numbers of people to seek additional education. The high levels of reading requirements for job performance ("relative functional literacy") could well be a function of this shift since job-related

materials seem to be linguistically more complicated in disregard for the reading public.

In summary, you cannot say universally a person who has attained a fifth-grade level of reading is a literate person and one who has a lesser degree of reading ability is illiterate. Fifth-grade reading would make a very literate person in the Ugandan context, but would be totally inadequate in the context of the United States or some of the highly developed countries of the West. By developing an international yardstick, there is no literacy problem in the United States, but by measure which should be applied internally, we are in a crisis situation.

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DRILL VERSUS DISCOVERY: THE EFFECTS ON STUDENT ATTITUDES

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Much emotional heat has been generated during the past three decades over the consequences of "direct," "authoritarian," "didactic," "rigid," and "repetitive drill" instruction. These terms and other synonyms have assumed in some quarters the emotive equivalent of the terms "traitor," "incompetent," and "sadist." Recent leaders in education have generated numerous alternatives to the traditional teaching patterns suggested by the supposedly odious terms. These alternatives have included: inquiry, discovery, interest centers, trade-book reading programs, and such organizational arrangements as open-concept rooms and so-called "free" schools. Work by Jerome S. Bruner (1966) for instance, has caused us to shift our concern from the memorization of facts to the discovery of principles. This emerging approach to education has had its inevitable effects upon the teaching of reading.

From as early as the work of Edmund Burke Huey in 1908, there has been movement in the reading field in the direction of emphasizing acquisition of ideas and concepts, perhaps at the expense of accuracy in decoding. Recent texts in methodology continue to belabor the question of direct teaching vs nondirective teaching. Silvaroli and Wheelock (1975) develop the terms "pre-structured" and "emerging" classrooms to dichotomize the concepts discussed herein, with a bias toward the latter organization. A sub-heading appearing in a recent text on phonics instruction, interestingly entitled "The Answer to the Entire Phonics Problem," repeatedly stresses "discovery and creativity" as opposed to "formal" teaching.

Some of the results of the recent pressures toward informality and discovery have been, either intentionally or accidentally, to avoid the teaching of rules, to neglect the direct teaching of many sight words, and to teach comprehension skills either offhandedly or incidentally. Paradoxically, there has been a parallel growth in highly structured, drill oriented programs, such as Distar, Sullivan Programmed Readers, and the Ethna Reid Program. The resultant conflict may result in the sabotage of structured programs by teachers who were trained to value teacher creativity and student participation in the selection of learning tasks. (Hill, 1971)

Extant research, however, has not clearly supported many of the inferences and suppositions concerning the outcomes of differing teaching styles. The teaching of categorizing concepts to Black kindergarten children by means of direct teaching and incidental opportunity and exposure was investigated by Puryear (1970). He found that direct teaching was

significantly superior in producing cognitive outcomes, regardless of age, sex, and I.Q. Similar results were obtained by Kersh and Wittrock (1962) who used both discovery methods and direct rote memory teaching to teach literature concepts to sixth graders. These investigators found direct rote memory drill to produce significantly superior short term memory and application. There were no significant differences in long term memory and transfer.

Two additional studies are of particular import to the present investigation. When comparing the critical reading outcomes of authoritarian (i.e., directive) teachers and nonauthoritarian teachers, Mueller found no significant difference in the measured outcomes. Whenever the prospect of rigid, drill-oriented programs emerges, one of the objections is usually concerned with the affective outcomes. It is assumed in many quarters that children have negative reactions to rigid drill-oriented teaching. Bennett (1973) found, however, that there were no significant differences in the affective outcomes when sixth graders were taught by inquiry methods and direct authoritarian teaching. A relative paucity of hard research in this area would indicate that the heat generated by this topic exceeds the light of research.

The purpose of the present study was to investigate the effects of imposing a highly structured, repetitive, teacher-oriented routine for teaching decoding and comprehension upon a traditional teacher's guide oriented basal reading program. The Ethna Reid Reading program was used. This study is not regarded as an evaluation of that specific program per se because of methodological omissions which are vital to the Ethna Reid program. Both cognitive and affective outcomes were measured.

METHOD

Subjects: Teachers in three classrooms were selected to participate as a partial requirement for an advanced reading course. Students who attended these teacher's classes included a rural, white, predominantly lower-middle class sixth grade (N=50) an urban, white, generally middle class sixth grade (N=34) and first grade (N=28) and an urban first grade composed predominantly of lower socio-economic status black children (N=26). Total N = 138.

Materials: All classrooms involved used the Houghton-Mifflin Basal Reading Series, a program which had been used in these rooms for a number of years. The teacher's guide was followed rigorously by both experimental and control groups. Rooms in all schools and levels were departmentalized, with reading classes being divided into three groups.

Experimental Procedure: S's were randomly divided into control and experimental groups. During approximately 60 hours of instruction, both groups received basal reading instruction. The experimental groups received drill in word identification and comprehension, using the format suggested by the Ethna Reid Reading Program. A rigidly followed set of Directives was provided for teaching sight words, teaching context, teaching phonics, and teaching word analysis (affixes). Figure one includes

the directives for teaching sight words. With each word to be presented, the teacher made the decision concerning which of the four methods would be followed. This instruction was supplemental to the routines and worksheets provided by the basal program. Figure two illustrates the Mastery Test each experimental S took following instruction. The directive routine was redone if a word was missed. Figure three illustrates a portion of the directives for teaching "Judging the Accuracy of Information." The basic difference between the experimental and control groups was the rigid, repetitive drill provided by the Ethna Reid format.

Prior to commencing the experimental procedures, the three teachers involved, the experimenter, and two graduate aids were given 18 hours of instruction in the Ethna Reid program. Instruction was given by a graduate of the Ethna Reid Training Program who is certified to train other personnel. During the course of the experimental treatment, teachers were observed by the researchers. An observation record, recording whether or not the directives were being accurately followed, other diagnostic and recording procedures were being followed. These independent observations were quantified, submitted to a Kendall Test for Independence. The null-hypothesis that the observation data were not identical was rejected at $\alpha > 0 = .06$.

EVALUATION

Experimental subjects were administered the Woodcock Reading Mastery Tests, Form A for pretest, Form B for posttest. The Word Attack SUBTEST (Measure 1), Passage Comprehension subtest (Measure 2), and Total Reading score (Measure 3) were used for statistical analysis. Scores were reported as Grade Equivalents. Using a Multiple Regression Analysis of Variance, six variables (control, experimental, 1st grade, 5th and 6th grade, high achievement, low achievement) were tested for possible interaction. Achievement grouping was achieved by dividing each grade level tested at the mean.

Table one displays the program for evaluation of the test data. Table two, which reports the results of the Multiple Regression Analysis of Variance indicates that none of the Beta's differ from zero significance. Variation due to any of the six variables is not statistically different.

In addition to the above data, each child was given a pre- and post-test a semantic differential assessment which was read to each child. The test contained twenty attitude toward reading (i.e., My reading book is) questions and twenty attitude toward common non-reading activities (i.e. Watching television is) questions. Children were given three appropriate choices, such as; enjoyable, alright, terrible. One-tailed t-tests indicated no significant difference between experimental and control groups on either reading or non-reading questions.

Following the experimental procedure, the following change of attitude comparisons were made with the t-tests: experimental vs control on reading questions, experimental vs control on non-reading questions, experimental vs control for first grade on reading questions, experimental vs control for

FIGURE ONE

Sight

[illegible]

1. YOU WILL LEARN TO READ A NEW WORD BY SIGHT.
2. THIS WORD IS _____. (Teacher states.)
3. READ.
4. Teacher uses word in oral sentences.
5. READ.
6. SPELL AND READ.
7. Use in Word Formation exercise.
(See attached page.)
8. (Remove model.) WRITE, SPELL AND READ.
9. (Show model.) PROOF AND CORRECT.
10. (Remove model.) SPELL AND SAY. LOOK AT ME.
11. THIS WORD IS _____. READ.
12. THINK OF A SENTENCE USING THE WORD _____.
13. TELL (ME/PARTNER) YOUR SENTENCE.
14. Pupils read the new word in sentence(s).
15. Use in Word Discrimination exercise.
(See attached page.)
16. Multiple untimed practices.
17. Single and multiple timed practices.
(Some directives will be repeated for multiple practices.)

Words Taught

1. _____
2. _____
3. _____

5th and 6th grade on reading questions, reading vs non-reading for first grade, reading vs non-reading for 5th and 6th grade. Only the test of change in attitude toward reading vs non-reading questions of first grade was significant, as indicated in Table 3. In this instance, while the children displayed an increased positive attitude toward non-reading items, their attitude toward reading moved toward a more negative attitude.

IMPLICATIONS AND CONCLUSIONS

The Ability to make strong inferences from this study may be limited by

FIGURE TWO

SERIES: The Kaleidoscope Readers Roosevelt High School Title 1
 BOOK: *Two Blades of Grass* Project for Reading Development
 CHAPTER: 3 "Tough Kid"
 STORY: *To Be A Man* (Check In) And *The Frost*
 PAGES: 36-38

Name _____ Date _____ Completed _____
 Teacher _____ Period _____ Yr. in School _____

MASTERY TEST NO. 3-4 A

"CHECK IN"

Fever	Beneath	Destroy	Velvet
Pretend	Shelter	Member	Reward
Kettle	Prepare	Rescue	Gone
Tremble	Crawl	Fix	Some
Minutes	Five	Is	Itself
Red	Shelter	Went	Driver
Candy	Himself	Sinking	Frightened
Score	Here		

Mastery: Spelling _____ Reading _____ Writing _____ Vocab _____ COMP _____

CRITERIA FOR PASSING WORD LIST: (30 WORDS)

	DATE	TIME
READ: 100% IN 30 SECONDS		
SPELL: 100%		

MASTERY TEST NO. 3-4 B

"THE FROST"

Young	Seize	Every	Your
Fly	Ere	Courtyard	Glitters
White	Cruel	Grass	Once
That			

Mastery: Spelling _____ Reading _____ Writing _____ Vocab _____ Comp _____

CRITERIA FOR PASSING WORD LIST: (13 WORDS)

	DATE	TIME
READ: 100% IN 13 SECONDS		
SPELL: 100%		

– DELETE FROM SPELLING LIST

FIGURE THREE

Part I—Judging the Accuracy of Information

- A. Judging the Accuracy of Information Through Personal Experience
(When teaching listening comprehension, substitute LISTEN or HEAR for READ when appropriate.)

TEACHER DIRECTIVES (CAPS)
and Procedures (lower case).Pupil Responses to be Elicited
and Praised.

1. YOU WILL JUDGE/DECIDE
IF THE INFORMATION YOU
READ COULD BE FACT.

1. Looks at teacher.

2. FACT IS INFORMATION
THAT IS TRUE. IT IS AC-
CURATE OR CORRECT. IT
IS INFORMATION THAT
USUALLY CAN BE PROVED
TO BE TRUE.

2. Looks at teacher.

3. WHAT IS FACT?

3. "Fact is information that is
true."
Any statement which supports
this concept.

Follow-up Procedures:

INFORMATION TELLS
SOMETHING.

FOR EXAMPLE: TODAY IS
SEPTEMBER 24. THIS IN-
FORMATION TELLS
TODAY'S DATE.

SCHOOL BEGINS AT 8:30 IN
THE MORNING. THIS IN-
FORMATION TELLS WHEN
SCHOOL BEGINS.

Repeat #2 and reiterate, FACT
IS INFORMATION THAT IS
TRUE.

Repeat #3

+

Remember to give praise!
Examples: "Fine." "Right."
"Good listening and remem-
bering."

4. a. TO HELP YOU JUDGE
WHETHER OR NOT THE
INFORMATION YOU READ
COULD BE FACT, YOU CAN
USE YOUR OWN EX-
PERIENCE. YOU MAY HAVE
SEEN IT OR DONE IT.

4. a. Looks at teacher.

b. Modeling directives.

(1) I WILL READ THIS INFORMATION AND I WILL JUDGE/DECIDE IF IT COULD BE FACT BY USING MY OWN EXPERIENCE. WHAT I HAVE SEEN OR DONE.

(1) Looks at teacher.

(2) Read aloud from chart.
TADPOLES CHANGE INTO FROGS.

(2) Looks at teacher or chart.

(3) I KNOW THIS INFORMATION IS ACCURATE. I HAVE WATCHED TADPOLES GROW LEGS AND THEIR TAILS BECOME SMALLER UNTIL FINALLY THEY ARE FROGS. I USED MY OWN EXPERIENCE. THIS INFORMATION IS FACT. IT IS TRUE.

(3) Looks at teacher.

+

<p>Examples: "I like to see your eyes. You must be good listeners. Thank you."</p>
--

at least two factors. There was some uncontrolled variance in the basal teaching technique of the teachers involved. More importantly, only about 20 percent of the Ethna Reid program was implemented.

It may be concluded that the addition of the repetitive and structured drill neither helped nor hindered the reading achievement which was measured. While the drill may not be worth the time and effort, neither will it inhibit learning, even though less material may be covered. In the case of the present research, about 15 percent less material was covered by the experimental group. This was attributed to the extra time consumed by drill and evaluation.

Of equal interest is the observation that the presence or absence of structure and drill did not seem to affect the children's attitudes toward reading. Reading teachers and others may be concerned over the finding that first graders' attitudes toward reading became more negative as the year progressed.

The present research should contribute a note of caution to much of the "common sense" folk-wisdom concerning the effects of drill. Additional research is needed in these areas, particularly in the area of the development of attitudes toward reading. Such questions as, "What are the affective effects of early childhood and primary education?" and "What are the causative factors in the attitude changes?" should have a high research

TABLE 1
 MULTIPLE REGRESSION ANALYSIS OF SIX VARIABLES
 FOR THREE MEASURES OF READING ACHIEVEMENT

$$Y = \alpha + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6$$

$X_1 + 0$	control
$+ 1$	exp
$X_2 + 0$	first grade
$+ 1$	5th & 6th
$X_3 + 0$	Low
$+ 1$	High
$X_4 + 0$	control & 1st grade
$+ 1$	control & 5th or 6th
$+ 2$	exp & 1st grade
$+ 3$	exp & 5th or 6th
$X_5 + 0$	control & L
$+ 1$	control & H
$+ 2$	exp & L
$+ 3$	exp & H
$X_6 + 0$	1st grade & L
$+ 1$	5th or 6th & L
$+ 2$	1st grade & H
$+ 3$	5th or 6th & H

priority. Implementation of new or supplementary reading programs may not be as important as the classroom atmosphere or interaction which determines the child's desire to read.

TABLE 2
RESULTS OF MULTIPLE REGRESSION ANALYSIS OF VARIANCE
FOR THREE MEASURES OF READING ACHIEVEMENT

<i>Analysis of Variance for the Regression for Measure 1</i>				
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
Attributable to Regression	6	28.11766	4.68627	0.63444
Deviation from Regression	125	923.29516	7.38636	
Total	131	951.41272		

<i>Analysis of Variance for the Regression for Measure 2</i>				
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
Attributable to Regression	6	20.41181	3.40196	1.86086
Deviation from Regression	125	228.52026	1.82816	
Total	131	248.93206		

<i>Analysis of Variance for the Regression for Measure 3</i>				
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
Attributable to Regression	6	10.90025	1.81670	0.96921
Deviation from Regression	125	234.30172	1.87441	
Total	131	245.20196		

TABLE 3
CHANGE IN ATTITUDE TOWARD READING VS. NON-READING
QUESTION IN FIRST GRADE READERS ON ONE-TAILED "t" TEST

	\bar{X}			
Reading Q	-.032	df = 54	t = 2.39	p < .01
Non-reading Q	+.071			

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A COMPUTER-ASSISTED PRE-SERVICE PROGRAM IN READING

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Introduction

In 1975, the National Right-to-Read effort funded an experimental project at Northwestern University involving the application of computer facilities to the operation of a pre-service program for teacher preparation in reading. Utilizing a competency-based model (Houston and Howsam, 1972), the computer component of the program managed the student's entry into and progress through a series of on-line, interactive tutorials by assessing their initial behaviors, assigning lesson modules, guiding use of a bibliographical data base and monitoring progress.

The Management System

The instructional management component of the system was designed to accomplish six purposes: (1) student registration for the course of study, (2) storage of diagnostic information, (3) sequencing of computer-assisted tutorials for each student according to stored diagnostic information, (4) provision of student performance information to instructors, (5) provision of communication between instructors, students and programming staff, and (6) routing students through the diagnostic, instructional, information-retrieval, and communication components of the system. Each of these purposes is elaborated below.

Registration

Upon initial entry into the system, the students provided information similar to that collected at regular course registration. This information was used primarily to reserve for the student a space within the student records block for the storage of performance information and to effect communication between the student and the instructors using the computer.

Storage and Retrieval of Diagnostic Information

After initial registration, each student was involved in an assessment of his or her competencies in reading instruction. The assessment information, collected on-line, was converted into a set of prescriptions stated in terms of the lessons through which a student should be sequenced. This lesson

*MULTITUTOR is the name given to the language and organizational framework of the CAI environment at Northwestern. The name is derived from TUTOR, the language of the PLATO system, with which MULTITUTOR is upwardly compatible.

"chain" was followed each time the student used the system in an instructional mode. Diagnostic assessments accompanying each lesson allowed for transformations of the prescribed sequence as the student progressed. Performance information was stored within the system and could be easily reviewed by the course instructors for the planning of personal conferences or group lectures or for student evaluation.

Communications

One of the advantages of a computer-managed instructional system is that students may flexibly schedule their interaction with it. This advantage does not come without cost, however. Instructor-student communication becomes a problem unless the computer can be utilized as a communication device. The management system contained an "electronic blackboard" on which students and instructors could "write" messages to one another. The management system ensured that each message was received by the person to whom it was "addressed" as well as alerting the recipient that a message was waiting when he or she entered the system. Each message, after having been read, was erased and its space made available for other messages.

Routing

To the students, the system appeared to be a unified program when, in fact, it was comprised of a set of MULTITUTOR programs.* The appearance, maintained by the management component, was necessary to permit the students, most of whom had not encountered a computer before, to utilize the options afforded by the system without communicating with the machine in computer language.

The Lesson System

The lesson system consisted of simulation units on such standard topics in pre-service instruction as word attack (lesson ATTACK), emphases in beginning reading (lesson CODE), diagnosis of reading difficulties (lesson DIAG), use of the cloze procedure for assessment and instruction (lesson CLOZE) and others. The lessons were designed to take advantage of the interactive capabilities of the computer and to expand upon lecture and text presentations.

For example, in lesson DIAG, the students were required to choose tests for administration to a hypothetical student. After each choice, the pre-service students were required to score and evaluate the response data which were supplied by the computer, representing the test results on an individual child, so that the next step in the diagnostic procedure could be chosen. Thus they received feedback on the entire diagnostic process as it proceeded, much as one would in an actual testing situation.

In ATTACK, the students were introduced to basic word recognition strategies and asked to design step-by-step classroom procedures for strategy development. As each choice was made, a response to its appropriateness was communicated to the student before the next step of the procedure could be designed. In this way, the program attempted to communicate the importance of careful structuring of instructional presentation.

Each lesson was designed not only to present/review basic information but to involve the student in simulation of basic classroom activity before meeting the same sort of activity in the practice teaching situation. In conjunction with the computer interaction, practice modules provided for videotape and other audio-visual simulations as well as for on-site experiences with the designated topic.

The Reading Information Retrieval System

To say in 1977 that there has been an information "explosion" in the literature on reading seems trite. Pre-service and in-service teachers must expend enormous amounts of energy wading through information to find material appropriate to their needs. Indeed, that is at least part of the reasoning behind the creation and proliferation of commercially available educational data-bases such as ERIC. Three problems impede the systematic use of such systems in teacher education. First, they are prohibitively expensive for liberal use. Second, the mass of information, such as that made available through commercial systems, cannot be subjected to scrutiny. As a result, indexing is sometimes ambiguous to the inexperienced user. Third, such systems cannot be utilized prescriptively to serve students' instructional needs.

The information-retrieval component of the reading education system was created with an eye to solving or circumventing these problems. The cost to use the retrieval component averaged approximately \$1.00 per student contact hour, well below the cost of commercial systems. The number of descriptors with which students could retrieve information was purposefully kept below eighty. Students tailored their search strategies not by selecting a highly specific term, but rather by logically combining descriptors to reduce the number of possible sources of the information they sought. For example, if a student chose the descriptors "context clues," and "instructional techniques," articles on the use of the cloze procedure would be included in those generated. Each resource, prior to its inclusion in the data base, was reviewed by graduate students or faculty and carefully abstracted so that students using the retrieval component could evaluate the utility of the information while conducting their search.

The power of the retrieval component lay in its links with the instructional component. Should a student give evidence of poor performance in a lesson, the retrieval system could be automatically instructed to do a search for material relevant to the topic of the lesson. This feature enabled students to be exposed to other informational resources without depending either on their initiative or their ability to define the nature of their instructional problem. Furthermore, it enabled the background resources available to a lesson to be expanded without maintenance by the author of the lesson.

Conclusion

The pre-service instructional system was piloted with undergraduate and Master of Arts in Teaching students at Northwestern University.

Besides internal criteria provided by the system's series of mastery tests, students were asked to evaluate the utility of the system with respect to the demands of their practice teaching situations. Excluding those respondents who found any involvement with computers anxiety producing, 76% felt use of the computer lessons helped them operationalize the content of their pre-service course in the classroom. 62% reported that they were able to utilize the teaching structures and techniques directly in their practice teaching experience.

Since piloting of the project in 1976, the lesson simulations have been used in further pre-service preparation, in preparing tutors for an adult reading academy and for Right-to-Read in-service training. All of these uses emphasize the potential for computer use in the pre-service/in-service program.

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GAME BOOKS FOR READING INSTRUCTION

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Books which contain directions on how to construct and use games for reading skill development are popular with teachers because they contain practical suggestions for classroom activities. There are matters related to the selection and purchase of such books with which the teacher should be familiar; those matters are discussed here.

There is enough variety in reading game books to satisfy many specific instructional objectives while using a number of different formats. One area in which game books differ is that some contain activities for many curriculum areas such as reading, math, social studies, science, and health while others deal exclusively with reading activities. Another noticeable difference is that some game books contain written descriptions of games whereas others contain actual patterns for game boards which the teacher may use as presented. There are also differences in the audiences the activities are designed to reach. Many books include themes which will be of interest to young children while other books are designed to encourage older children to develop more elaborate game-playing strategies.

The organization of activities also differs from book to book. Games may be arranged by skills to be developed, such as word recognition, comprehension, and vocabulary, or they may be arranged according to grade level. The range of grade levels or reading levels covered differs from one book to another, although the most common grade level distinction separates primary and intermediate grade activities.

A final area in which the content of game books differs is that some include suggestions for game management programs which the teachers may find useful as they try to decide when and how to implement games in the classroom.

With all of the differences in game books, how should teachers decide which books to buy? First, it is important that they consider how appropriate the activities in any book are in relation to students' abilities and interests. Second, they should check carefully to judge how complete the directions are for constructing and using the games described. Third, teachers should try to estimate the amount of time and materials needed to complete a game. Some games require an inordinate amount of time to construct and very little time to play.

It is apparent that one could spend a great deal of time and money trying to order all the books available. The authors suggest that you examine several books and decide which one or ones are most suited to your needs.

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CONTENT READING: PAST. PRESENT! FUTURE?

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With the impetus gathered by such ideas as presented by Flesch (1955) in "*Why Johnny Can't Read*" and, certainly, by Allen's (1969) proclamation that every child should have the "right to read," a large portion of current educational writing has concerned the area of reading and reading education. Within reading education one particular facet of instruction, content area reading, has blossomed within the last few years. Articles, books, and conference sessions have been devoted to this very specific area of reading education (Herber, 1970; Laffey, 1972; Robinson, 1975).

What is the reason for this growing emphasis from reading educators? Previously, reading instruction was conceived from a basic skills approach which took place in the reading class—and only the reading class. If children had difficulty reading their textbooks, the approach was to reinforce those important skills considered necessary for successful reading. Many times the skills taught were isolated from the actual act of reading, and no differentiation was made in teaching reading to children using a basal reader or a content text.

The realization that "reading instruction in reading class only" was inadequate has finally surfaced. While the "closet clinician" has been busy remediating reading deficiencies, the remedial readers have been struggling with printed materials in their science, social studies, math, and English classes. That situation alone has caused reading educators to examine more closely the important area of content reading.

However, another stimulus, perhaps a more effective one, has been presented to reading educators from outside their profession. The emphasis on accountability in their instruction has prompted state departments of education and/or state school boards to become concerned over the reading achievement levels of their students graduating from their high schools. A dramatic trend had arisen over the past few years in the certification requirements for secondary education majors. In effect, states are beginning to mandate competence in reading.

Studies conducted by Estes and Piercey (1973) and Bader (1975) have pointed out this phenomena. In summary, they indicated that there was a 100% increase in the number of states requiring secondary reading preparation for certification in the two years between the studies. Furthermore, Bader pointed out that 55% of the states either had, or were considering, a reading requirement for secondary teachers.

Together, the internal realization of the needs of content area reading and the trend toward reading requirements for secondary majors have brought content area reading to the forefront. However, with it have come a number of concerns. First of all, it is hoped that those individuals responsible for designing and implementing new preservice courses as a result of this impetus are emphasizing the important aspects of content area reading, rather than approaching the subject from the traditional basic skills point of view.

Second, there does appear to be a lack of understanding by many inservice reading specialists of the exact nature of content area reading. It is truly a sad situation when a reading specialist is approached by a content teacher with concerns about the reading difficulties of students in that particular content area, and can offer little or no specific assistance other than from a basic reading skills orientation. In many cases the misunderstanding by reading specialists concerning content area reading is due to the fact that they received little or no instruction in content reading themselves in their graduate reading preparation. As such, there is a general need to provide inservice for these individuals.

Third, complicating this growing awareness of content area reading are the objections raised by content specialists themselves. When presented with the need for such training, a typical response is —

“But I was hired to teach history, not reading. I like history! I have an undergraduate degree in history because that is what I want to teach. If I wanted to teach reading, I would get a degree in reading!”

Such a response may indicate the possibility that the term “content reading” is too restrictive. Is it any wonder that the physical education, music, and art teachers are turned off by reading people? They are instructors of activity-oriented courses. Reading, they say, has little or nothing to do with their students’ success in their activity-oriented courses! Yet, it can be argued that the technical vocabulary and concept load of music, art, and physical education is as extensive as that of English, social studies, or a host of other “core” subject areas.

Instead of pushing a philosophy which some content specialists find objectionable, perhaps a broader perspective of secondary reading is in order. This broader perspective not only can be a present aid in dealing with such objections by subject-matter teachers, but also has implications for future trends in content area reading. At the elementary level a growing emphasis in reading instruction is that of a total language arts approach (Moffett, 1973; Ruddell, 1974; Wilson and Hall, 1972). In such an approach reading is viewed as one of four communication processes, the others being listening, speaking, and writing. Since all four processes are interrelated and dependent in both process and function (Goodman, 1970), it can be argued that instruction in one communication process is reinforcing for another; i.e., instruction in listening, speaking, or writing is helpful for success in reading.

Can we, at the secondary level, separate these elements of language? Should we not take such a broader view at the secondary level? Since language is the mediational process for thinking (Ruddell, 1974), and since all content area courses require thinking skills, should we not provide students with experiences in all language or communication processes? If we conceive of the job of secondary education as the creation of a functioning member of society who is able to think and make rational decisions, then we should acquaint students in all subject areas with the power of language as a means to aid one in dealing effectively with the environment!

The need to furnish experiences in all language processes has been pointed out by Peck and Brinkley (1970) and Moore (1970). They indicated that students leaving the public schools and entering the junior college lack the language skills necessary to insure their probability of success in college level work.

Additionally, it can be legitimately argued that in all content courses, including those activity-oriented courses previously mentioned, students are required to use one, if not all, of the language processes in trying to deal with the content of the course. Listening, speaking, and writing, as well as reading, are required in all courses to deal with the language of that course!

Thus, the adoption of this broader perspective of content area reading deals with the current objections of content specialists and puts reading into its proper perspective — as one tool available for students to use in thinking, making better decisions, and dealing with their environment.

The intent of this article has been to assess the "state of the art" of content reading. Significant strides have been made in dealing with the needs of content area reading, yet significant advances still need to be made. It is hoped that content area reading can be examined from a broader perspective, i.e., perhaps educators should emphasize "content communication" in lieu of the narrower focus of content reading.

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COMMUNICATION ACROSS FOUR GENERATIONS

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MANHATTAN, KANSAS

Cross-generational programs are enabling the elderly in America to become more involved in the education of our children. Special federal programs such as RSVP (Retired Senior Volunteers Program) and the Foster Grandparents Program have brought many older persons into schools to serve as aides, tutors, and volunteers. Local school districts and individual schools have developed programs involving the elderly with children. The elderly have shown they can use their love and concern for children, their knowledge of content, and their patience and skill in working with children to develop a warm, helping relationship as they help children grow and learn.

A wealth of assistance to children and schools is available in a facility seldom tapped, the nursing home or home for the elderly. Since many of the nursing home residents cannot leave easily, it is necessary to take the children to them. By so doing the children can find that education can take place outside school walls. They discover that they have something to offer the elderly and can begin early to assume responsibility for their welfare.

One program, currently in progress in Manhattan, Kansas, is providing benefits to nursing home residents and to primary children. There are several purposes for the program:

1. to maintain the child's high interest in reading as he reads his favorite passages of books, pictures, or magazines;
2. to facilitate contact between the young children and the elderly so that the elderly can share their lives with the young children in personally rewarding situations;
3. to involve the children with the elderly in ways in which the children can begin to assume some responsibilities for the elderly.

How the Program Works

Once a week nursing home residents are visited by children from a nearby elementary school. During an afternoon recess period eight-ten students are driven a few blocks to the nursing home by the teacher or a volunteer mother. The Occupational Therapist and the teacher pair children with residents so that when they arrive, the children can go directly to the residents' rooms.

Two children read and visit with one resident. One of the children is

“experienced;” he has been there before. The other child is “new;” this is his first visit. Each child reads aloud for a few minutes. They all talk and listen to one another as they share experiences, jokes, and questions with each other.

The first grade teacher initiated the program and serves as its coordinator. Her responsibilities include:

1. initial and continued contact with the nursing home relating to permission to visit and arrangement of schedules;
2. discussion with the Occupational Therapist at the nursing home;
3. obtaining parents' permission for their children to participate;
4. preparing the children for the visit;
5. accompanying the children to the visit;
6. recruiting and training adult volunteers (generally mothers) to assume responsibility for accompanying the children.

The staff of the nursing home carefully selects the persons who will be visited. Children do not visit persons who have difficulty relating to young children.

The residents eagerly look forward to the children's visits. They visit and joke with the children. One blind woman asked to feel the face of each child who read to her. The children allowed her to do this without hesitation.

The program was started with first graders. However, after the first year many of the “graduated” first graders wanted to continue in the program and now serve as the “experienced” readers. Currently first through fourth graders are involved in the program. Only children who volunteer may visit. The program has been such a success that there are many more volunteers than regular places available. Therefore the teacher has developed a rotation system so many children during the year will have the opportunity to visit.

Each child selects anything he can read. At the beginning of the year the first grader might take a picture book, poster, self-made book, or pre-primer. Older children who take larger books must select a small selection to read since there is only a short time available.

Benefits

The elderly who are involved with the program look forward to seeing the children. They provide positive reinforcement to all the children's reading endeavors. They share stories and jokes and initiate conversation with the children.

Even residents whom the children do not visit are affected by the children. As the children walk down the hall they will be stopped by persons just to say “Hello. How are you?” One gentleman who did little talking in the home stopped his wheelchair, reached out to a small child and initiated a conversation with the child. A staff member of the nursing home was amazed at the gentleman's actions, since he made no similar overtures to adults.

The elderly want the children to stay as long as possible and to come back again soon – “tomorrow.” Rounding up the children to leave may take

several minutes because it is often difficult to conclude some of the conversations.

The interest level of the children is very high. They enjoy the whole-hearted attention they are given by the residents. They very carefully plan and practice their reading selections. They listen and tell their friends and family about the good conversations, stories, and jokes with their elderly friends.

The entire first grade classroom makes birthday cards, valentines, and May baskets for the nursing home residents, many of whom they have visited and know by name. The children look upon these gestures as a regular part of sharing those special occasions.

Many of the "graduated" first graders have continued the visits on their own time. They go after school, on week-ends, and during the summer.

A few children have involved their families. The experienced child may take a younger brother or sister who may read or visit with their elderly friend. Some have convinced their mothers that the program is important enough for their mothers to provide special trips on week-ends and summers.

The purposes of the program are being achieved. The children are reinforcing their reading skills and are assuming responsibilities in caring for their elderly friends. The nursing home residents are reaching out to the children and sharing themselves with the children. Each is giving; each is receiving. All are enjoying the process.

PROFESSIONAL CONCERNS READING INSTRUCTION AND BRAIN RESEARCH

R. Baird Shuman

EDITOR

Jeanne Chall

CONTRIBUTOR

Professional Concerns is a regular column devoted to the interchange of ideas among those interested in reading instruction. Send your comments and contributions to the editor. If you have questions about reading that you wish to have answered, the editor will find respondents to answer them. Address correspondence to R. Baird Shuman, Department of English, University of Illinois at Urbana-Champaign, Urbana, Illinois, 61801.

Jeanne Chall is perhaps best known for her searching and controversial book, *Learning to Read: The Great Debate* (New York: McGraw-Hill, Inc., 1967), which caused many teachers of reading and educators in general to rethink a great many of their long held views about the teaching of reading. Most recently, Professor Chall has collaborated in the production of another highly influential volume, *Education and the Brain*.

In her contribution to this column, Professor Chall gives an overview of her recent book, and she makes some interesting observations about the question of hemisphericity. While she does not deny the possibility that research focusing on the functions of the right hemisphere of the brain may have long term significance for reading instruction, she does indicate that at the present time "it would seem that no simple inferences for what and how schools should teach the various curricular areas can be drawn" from such research. Professor Chall stresses the importance of "environmental stimulation and experience" as fundamental determiners of the brain's development.

Professor Chall is Professor of Education and Director of the Reading Laboratory in the Graduate School of Education of Harvard University.

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I am pleased to have this opportunity to share with *Reading Horizons* some of the implications of the recently published volume, *Education and the Brain*, 77th Yearbook, Part II, of the National Society for the Study of Education (University of Chicago Press, 1978).

The book brings together the most recent theories and research from the

neurosciences for the benefit of educators. Most of the chapters are written by noted neuroscientists on basic as well as on current topics. The volume includes chapters on education and cognitive processes of the brain by M. C. Wittrock, language and the brain by Kenneth M. Heilman MD, cerebral lateralization by Marcel Kinsbourne MD and Merrill Hiscock MD, and minimal brain dysfunction by Martha Denckla MD, and others on brain evolution, motivation, brain growth and plasticity. The final chapter by the editors, Jeanne S. Chall and Allan F. Mirsky, presents educational implications.

The strongest theme of the volume relates to the central role of environmental stimulation and experience in the growth and development of the brain, and in overcoming the effects of inherited deficiencies or acquired injuries. In essence, the neuroscientists writing in the volume are saying to educators that education is central for optimal brain development. Although some progress has been made with medications for effecting behavioral and cognitive changes, the authors in the volume put greater stock in education.

Hope, not fatalism is appropriate for children with learning disabilities stemming from neurological defects. Innumerable examples are given of the potentially constructive influence of home and school for the education and development of children diagnosed as having learning disabilities, hyperactivity, or behavior disorders.

For almost every brain difficulty reported in the volume, the solution proposed is training or retraining—under the supervision of a knowledgeable and sensitive teacher who gears instruction to the child's strengths and weaknesses.

Another theme is the importance of cerebral lateralization for the development of human cognition and for understanding differences in learning style. This theme is very popular in the media and is discussed in several of the chapters. Yet the implications of cerebral lateralization for education are far from clear. It would seem that no simple inferences for what and how schools should teach the various curricular areas can be drawn from the knowledge that the left hemisphere specializes more in analytic and/or sequential processing, such as language, while the right tends to specialize in parallel processing, more characteristic of spatial learning. We cannot tell at this time what it means for how and when to teach reading and writing, for diagnosing or treating students who have difficulty in these areas, and for the kind of curriculum best suitable for those with strengths in the right hemisphere rather than in the left.

Yet enough is presented in the volume so that we may begin to formulate workable hypotheses, test them out, and avoid over facile solutions. The volume is a feast for educators and particularly for reading educators—rich with knowledge of the brain and constructive in its suggestions for educational research and application.

NEW MATERIALS

Jillone Adams

WESTERN MICHIGAN UNIVERSITY

Sometimes I Like to Cry; written by Elizabeth and Henry Stanton, and illustrated by Richard Leyden. Published by Albert Whitman and Company, 560 W. Lake Street, Chicago, Illinois, 60606. Grades P-2. Ages 4-7.

This is a delightfully engaging book about emotions. The pictures are sheer poetry and contribute greatly to the story line. This book will become part of my library.

The Very Messy Room; written by Elizabeth and Henry Stanton, and illustrated by Richard Leyden. Published by Albert Whitman and Company. Grades 1-3. Ages 6-8.

Reading "required" by every child who wants to educate parents in the delights of a messy room. Neat-niks are off-limits!

Pat Swish, Twist, and the Story of Patty Swish; written and illustrated by John Hawkinson. Published by Albert Whitman and Company, and simultaneously in Canada by George L. McLeod, Limited, Toronto, 48 pps. Grades K-3. Ages 6-up.

The first 30 pages of this book are full of watercolor illustrations that show adventures of a little animal. The reader supplies the words. The second part is full of instructions for teachers, parents, and children on how to paint watercolor pictures using 3 basic strokes—pat, swish, and twist.

This book fosters a child's vocabulary by letting him/her create a story around the illustrations. It also shows one how to paint in an attractive and easy manner using only 3 strokes—pat, swish, and twist.

In the Morning Mist; written by Eleanor J. Lapp and illustrated by David Cunningham.

A lovely book to be read aloud—especially by Grandpas. A special day of cherished memories to be shared again, and again. Nature lovers will be enthralled with the beautiful pictures.

A little boy and grandpa experience a very special and memorable day.

I Hate It; written by Miriam Schlein and illustrated by Judith Gwyn Brown. Published by Albert Whitman and Company. Grades P-2. Ages 4-7.

Children will readily relate to the delightful pictures. The concepts will "open-up" marvelous discussion sessions, with kids adding their own pet-peeves.

Behind the Scenes at the Zoo; written by David Paige and illustrated with photographs. Published by Albert Whitman and Company. Grades 4 and up. Ages 9 and up.

The guide lines are given for the care and selection of numerous animals we see in our zoos.

This book is a must for children of all ages who love animals.

The Funny Drawing Book; written and illustrated by Rick Masek. Published by Albert Whitman and Company. Grades 2-up. Ages 7-up.

A how-to-do-it book for kids who like to draw basic geometric shapes.

Appropriate for the upper elementary child.

Etymology, What's In A Name?; written by Richard A. Boning. Published by Barnell Loft, Limited, 958 Church Street, Baldwin, New York, 11510.

Short, informative paragraphs of knowledge that are written on a relatively-easy reading level. The content is interesting, informative, and brief enough to foster memorization of basic knowledge.

The format lends itself to use with younger students in the superior or gifted range as well as with students of older levels with reading problems. The appeal for this type of student is in the short but factual information presented.

Fear at Brillstone; written by Florence and Roxanne Heide. Published by Albert Whitman and Company. Grades 4-up. Ages 4-14.

This mystery follows a teenage boy and girl's exploration of stolen objects in the old building where the young man works.

Photography and a zoom lens add suspense and involve the youngsters in the dangerous events.

Mystery at Southport Cinema; written by Florence Parry Heide and Roxanne Heide. Published by Albert Whitman and Company. Grades 4-up. Ages 7-up.

A mystery involving three pre-teen youngsters who thrive on solving problems. There is something of the appeal of the Hardy Boys and Nancy Drew here.

WE SUGGEST

Eleanor Buelke

Smith, E. Brooks, Goodman, Kenneth S., and Meredith, Robert.

Language and Thinking in School

New York: Holt, Rinehart and Winston, 1976. Pp. x + 438.

The authors of this revised text believe that a language-thought-centered view of teaching and learning is a sound base for curricular and instructional strategies and tactics in all subject areas. Consequently, the book is designed to synthesize many studies and views about the nature of language and processes of thinking. The excellence of the writing in this volume; the appropriate, functional organization of its major theses; the breadth of scope, yet detail and clarity of concepts, positions, and educational implications presented; and the creative exploration of many relationships among language, thought processes, and education bring a "fresh view to old educational problems" and "open new pedagogical prospects." It is a book that could well be used by teachers throughout a wide range of classrooms, encompassing nursery school through secondary education. As a background for understanding and assessing the value and potential of both curricula in action and proposed new programs, it is a valuable resource for use by school administrators of curriculum and professors of teacher education.

Discussions in the book are organized under seven major headings: Language and the Person; Language and Knowing; Grammar in Perspective; Oral and Written Communication; Reading; Literature, Mathematics, and the Arts as Presentational Forms; and Language and Thought in Teaching. In each section, the first chapter presents theories, concepts, and thinking from pertinent disciplines, including much background from research in each area. In subsequent chapters, earlier practices, as well as up-dated and innovative strategies, are reviewed and explored for their potential in promotion of language-thought-centered teaching. On a separate page preceding each section, items for teacher focus are noted. Throughout the rest of the section, key recommendations for teachers are highlighted in italicized print. At the close of each section, practical, stimulating suggestions are given for "Testing Ideas Against Reality" and "Turning Ideas Into Practice." Challenging teachers to involve themselves and their pupils in exciting, action research in their own classrooms.

In each of the seven sections, the pervasive theme, linking language with thinking, is re-emphasized, re-examined, and made the focus of all discussions of curriculum and instruction. Language makes it possible for people to conceptualize their worlds and, in turn, gains vitality through their grasp of reality. Language is the carrier of experience and to confirm, enrich, and encourage it is to enlarge and extend the boundaries of learn-

ing. For peoples of the world to learn together and to live together creatively and productively, they need a healthy respect for the possession and use of their own dialects, for other languages, and for the past histories of both. Language learnings need to be continued in school as the mastery of language begins in the home—in real situations. A cardinal precept has been suggested: “No language without experience and no experience without language.” Expansion of learners’ language to serve their communicative needs, rather than presentation of a neat, prescriptive package to be mastered for credits or grades, appears more successful in improving effectiveness of language and promoting interest in its use, both in functional and creative ways. If children are to achieve well in language usage, time must be taken to provide a stimulating, varied, interactive human environment so that the whole process of speech-thought may be nurtured. Only a milieu of challenging, substantial concerns of children will create the need for significant communication, followed by increasingly competent responses.

If, as these authors believe, “reading is the active process of constructing meaning from language represented by graphic symbols systematically arranged,” then every reading teacher becomes a language teacher also. Effective teachers of reading must have the interrelationships between language and thinking as their ultimate, deepest concerns. Sharing the companionship of children, together they can rediscover “the joy, excitement and mystery of the world we live in,” helping each child to maintain what Rachel Carson calls:

. . . a sense of wonder so indestructible that it would last throughout life, . . . an unfailing antidote against the boredom and disenchantments of later years, the sterile preoccupation with things that are artificial, the alienation from the sources of our strengths . . .¹

To this end, these authors have described and suggested many ways to help keep alive the inborn sense of wonder in children’s learning, believing truly that:

The child is surely at the center of the learning process, for he will only learn what he can incorporate into his knowing. The teacher is certainly at the center of what will be taught, for he alone can prepare the environment and set the stage for instruction. *But language is central to the interaction of teaching and learning that produces knowing.*

¹ Rachel Carson, *The Sense of Wonder* (New York: Harper & Row, 1965), pp. 42-44, 88.

QUICK REVIEWS

Homer Carter Reading Council

Behrens, Laurence "Writing, Reading, and the Rest of the Faculty: A Survey" *The English Journal* (September 1978) 67:54-60.

This is a report of a survey recently completed by the author at the American University in Washington, D.C., where he is a faculty member. The survey was designed to measure faculty perceptions of student literacy and to discover what kind of reading and writing assignments are being given in disciplines other than literature.

Chambers, Ardan "Letters From England," *The Horn Book*, (August 1978) 54:438-442.

Do we understand too little about how to help children respond to their reading? The author lists ways to help children become more perceptive and creative.

Gambell, Trevor J. "Language in the Library— Why Shelve It?" *Language Arts* (September 1978) 55:708-12.

This is an inspiring reminder of all that can be done between the classroom teacher and the elementary school librarian to help develop children's language in its broad context of the skills of reading, research, listening, speaking, in functional, creative and personal writing, and in drama and choral speaking.

Harris, Albert J. "Practical Suggestions for Remedial Teachers" (May 1978) 31:916-22.

This article discusses five main concerns of the remedial reading teacher: how to structure the job, how to plan for efficient use of time, how to establish rapport, how to plan for effective learning, and how to meet the demand for accountability.

Helbig, Alethea K. "My Views and Reviews— Roundheads, Stink Alley, Navajos, and Auschwitz: Recent History," *The Michigan English Teacher* (September 1978) Vol. 27, No. 1.

This is the first of a series of reviews of historical fiction for children, which the author recommends because it "presents the past in human terms." Helbig claims that well-written historical fiction helps young readers learn the facts of history and discover

they have far more in common with the past than they may have thought.

Johnson, Ron and Al Conception "The Need for Reading Instruction" *Michigan Middle School Journal* (Spring 1978) 3:13.

The authors of this article remind us that "reading and listening skills will not simply develop, but must be taught." The emphasis, besides the need for teaching reading beyond elementary years, is on middle school reading laboratory.

Larrick, Nancy "Classroom Magazines - A Critique of 45 Top Sellers" *Learning* (October 1978) 7:60, 67-69.

Four Star ratings for *Cricket* and *Let's Find Out!* An expert gives her opinion of bestselling children's magazines. In these days of limited budgets and concern for quality materials, the article could be a time and/or money saver for you.

Putnam, Rosemary W. "Books can Introduce Your Class to the Mainstreamed Child" *Learning* (October 1978) 7:118-120.

A resource list of materials to help you prepare and introduce your youngsters to a special new classmate, a much neglected area in mainstreaming.

Robinson, Richard D. and Neila T. Pettit, "The Role of the Reading Teacher: Where Do You Fit In?" *The Reading Teacher* (May 1978) 31:923-927.

The professional world of the reading teacher is one of inconsistencies and a multitude of responsibilities. Three levels of expansion are outlined to help the reading teacher go beyond the role of referral teacher only.

Standal, Timothy C., "Readability Formula," *The Education Digest*, (September 1978) 44:54-56.

This overview of thirty years of research about readability formulas reminds us again of their inestimable value in matching reading materials to the ability of a given child.

Treize, Robert "What? They Can't Find the Main Idea?" *The Michigan Reading Journal* (Spring 1978) 12:44-46.

This article encourages the use of the state assessment test results. It suggests crosschecking the results with data from other tests, as well as examining the whole testing situation.

Webster, Shirley "Rev Up For Reading" *Teacher* (September 1978) 96:156.

The impact of this short article is the great reward of reading for pleasure. Eight original ideas and activities are listed. So . . . purchase pillows, subscribe to kid's magazines, get your oral reading voice in tune, and save your newspapers and magazines. A relaxed, positive atmosphere can be created by teachers who choose to follow through on these suggestions in the "creative classroom" column.

Zeitz, Pearl "Personal Dictionaries" *Teacher* (September 1978) 96:138-142.

The author states that "making their own dictionaries gives beginners confidence in their writing, reading, and spelling progress." Step-by-step guidelines are included. This is a creative alternative for helping children at various levels to see their own language in written form, and to use it as a tool in daily language arts tasks.

