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EDITORIAL COMMENT

THE POWER OF THE PRINTED WORD

The status of reading in the country is the topic of many negative
minded commentators. What they are saying is that adults merely buy a lot
of books but don't read them. Surveys and questionnaires indicate to
scholars of our society that people find reading too difficult to tackle, and
accept the less challenging time passer, television.

It becomes the duty of some of us, then, to report the positive side of the
ledger whenever we can. There are myriad signs that we read carefully,
completely, and with comprehension, wherever safety, economy, and/or
welfare are in the balance. Watch what the inflationary prices are doing to
family shoppers now. You will find adults and their children doing daily
vocabulary drills and computational exercises in the supermarkets. “What
does no additives mean?” “What do they mean by inert?” “Is 59c for eight
ounces more expensive than $1.13 for a pound?”

Everywhere you look, you may find signs that give hope for the reading
generation coming along. Did you read about the wonderful comeback of
Rexburg, Idaho, after the devastating flood? Sixty Reading Councils,
chapters of the International Reading Association, contributed books to
restock the Rexburg Library. This is an act of recognition of the im-
portance of books in our daily lives, just as other agencies rush to aid with
food and shelter.

What is so important for parents to realize is that any kind of reading a
child does is creative in nature, adding to and enriching the stock of ex-
periences that gives future reading more meaning. When little children stop
at the book and magazine rack in supermarkets, it may be as helpful for
them to see words and figures, pictures and ideas, as to ride in cars across
the country on a family trip.

We need to pull ourselves from under the blanket of pessimism about
the printed word that movies and television writers throw over us. We have
to see written communication as having a potential greater than our wildest
dreams – much more than pictures can convey, because pictures are mere
impressions in the mind. Words are tools with which we may shape
thoughts, logic, ideas. And ideas can accomplish wonderful things.

One of those wonderful things resulted from creative communication
just a few days ago, on the local scene. Meals-on-Wheels, a service in which
volunteers deliver a hot meal a day to Senior Citizens, and the Bookmobile
service are working out plans to deliver requested books along with hot
meals. Large print books are becoming more plentiful, and that too may
help make books more used and usable to the older generations.

Adults who use reading skills for learning directions, information,
recreation, guidance and participation, were taught these rewards of
reading by dedicated teachers. Teachers are forces of influence, and set
powerful examples in the minds of students, even though they cannot immediately view the results of their work. If each adult who reads well today were able to trace the ability to its source, the chances are nine-in-ten that an enthusiastic teacher brought that reading skill to its point of independence.

Kenneth VanderMeulen
Editor
EDITOR'S NOTE: "... research findings suggest pupil success or failure is most directly related to the 'teacher variable' in the teaching of reading." In Part II of "Understanding the Hypothesis, It's the Teacher that Makes the Difference." Jerome C. Harste explores the impact of the teacher's own theoretical orientation toward teaching reading, whether the teacher consciously or not admits to such an orientation. "While other researchers have not directly studied the notion that how a teacher cognitively processes available information may be key to understanding the elusive teacher variable in reading, much of their work lends credibility to such a study."

Our readers will find the conclusions of this outstanding article especially thought provoking when applied to their own effect on those they teach.

*Examples of Theoretical Learning*

We began our explorations of pupil orientations to reading assuming that if we explored pupil perceptions of the reading process we would, in fact, have an unobtrusive measure of reading teacher effectiveness. What we discovered during these interviews, however, is that some pupils in every classroom hold theoretical orientations toward reading which differ from their teacher's. We have therefore had to tentatively question the notion that the theoretical orientation held by a given pupil is passively dependent upon the teacher's theoretical orientation. Because we have found incongruencies between teacher and pupil theoretical orientations even among very young readers, we now believe that readers hold a theoretical orientation to reading regardless of whether or not they have been exposed to instruction. Apparently in their interaction with the process of reading a theoretical orientation develops. Stated differently, we now believe that to be a user of the reading process is to view that process theoretically.

At first blush this statement appears dramatically opposed to our earlier statement that student performance, at least in part, mirrors instruction. We make both statements, however. As subsequent data will show, an analysis of student reading performance clearly shows the utilization of those reading strategies taught. If anyone ever questions the effectiveness of reading instruction, we strongly recommend that some time be taken to study in-process reading behavior. This activity should certainly set your mind at ease about the utility of instruction. It will, however, raise the
question of whether or not those strategies taught should be taught as exclusively as they are under certain models of reading. Studying in-process behaviors of readers will also demonstrate the fact that all readers use strategies which have not been formally taught. It is because of this phenomenon that we make the statement, "to be a user of the reading process is to view that process theoretically." Our experience suggests that the reading behavior of proficient readers often far extends the theoretical model which is being presented in the classroom. The reading behavior of less proficient readers seems more dependent upon the instructional model being presented for the development of their reading strategies. A good test of the adequacy of the various models of reading is to observe the reading performance of those students whose reading behavior documents that they are applying that model consistently when reading.

To illustrate this point, we will offer an extended example of one student's responses to a series of questions about his reading:

Q: I want to ask you some questions now just about your reading. When you come to something you don't know in reading, what do you do to figure it out?
A: First I try to sound the word out. Then, if I don't know it, I ask my teacher.

Q: Is there any other way you can figure out words other than by sounding them out?
A: By putting the letters together first. If it's a compound word, just put one word together and add the other one to it.

Q: Are there any other ways?
A: Putting the letters together and sounding out their sound and putting them together.

Q: Do you know anybody who is a good reader?
A: Yeah.

Q: What makes them a good reader?
A: They pay attention and then try to sound out the words and just try a lot and they do it.

Q: Do you know what your teacher thinks a good reader does?
A: No.

Q: What would you guess. If she walked up to you and patted you on the head and said, "You are really a good reader," what do you think she'd mean?
A: Well, I tried and I got all the words right and I just read the story good and I really tried and got all the words.

Q: If you wanted to get better in your reading, you know, become a better reader, how would you go about it?
A: I'd just get more books and try more harder and things and then get more easier words and work my way up.

Q: Who is the best reader you know?
A: A girl who is in my class named Lisa.

Q: Why do you think Lisa is such a good reader?
A: I don't know. She just reads real good.

Q: What do you mean when you say, “She reads real good?”
A: I don't know. Well, she tries and she gets her stories right and she gets all her words right and everything.

Q: How do you think writing is like reading?
A: I don't think it's alike.

Q: How do you think talking is like reading?
A: I don't know.

This pupil’s name was Toni. He was just beginning the second grade. From his interview it is easily seen that he has some definite ideas about what reading is all about. These ideas, it should be noted, are consistent and hold up over repeated probings.

Toni’s beliefs about reading show up clearly when one examines his oral reading in process behaviors.

---

key -- omissions - circled
substitutions - written above word
* - sounds like
+ - evidence of clear syllable unification

We interviewed Linda, a fifth grade student, and asked her, “When you are reading and you come to something you don’t know, what do you do? She answered, “I skip it.” We probed, “How does that help you?” She responded, “It helps me keep to the story, and besides you really don’t need to know all the words to understand.” Her view of reading as an empirical process showed itself clearly when she was reading:

In summer the living has been easy for the world's largest carnivorous land mammals, the big brown bears of Kodiak islands.

We asked Linda, "If a student were having difficulty reading, how would your teacher help him?" She replied, "She'd probably have him sound the word out." We asked Linda, "Do you ever sound words out when you are reading?" Her reply, "Yes, but not much. I don't find it works so good for me."

Building from the work of previous researchers (Weintraub and Denny, 1963; Johns, 1970), one of our growing favorite questions to ask children in an effort to explore their theoretical orientation to reading is, "What is Reading?" Their responses, while showing theoretical orientation, often also reflect their instructional history:

"It's filling out workbooks."
"Pronouncing the letters."
"It's when you put sounds together."
"Reading is words put together."
"Reading is learning hard words."
"Reading is like think . . . you know, it's understanding the story."
"It's when you find out things."
"It's like talking, only it's reading."

Other Research Suggesting Teacher Cognitive Processing Behaviors as a Key Dimension of the Teacher Variable

While other researchers have not directly studied the notion that how a teacher cognitively processes available information may be key to understanding the elusive teacher variable in reading, much of their work lends credibility to such a study.

Shavelson (1973), for example, concluded from his research on teacher behavior that any teaching act is the result of a decision, either conscious or unconscious. He argues that the basic teaching skill is decision making, and criticizes previous research on basic teaching skills because it has examined alternative teaching acts (e.g., explaining, questioning, reinforcing) without examining how teachers choose between one or another act at a given point in time. He goes on to say:

What distinguishes the exceptional teacher from his or her colleague

---

1 Text and Story Authorship Unknown.
is not the ability to ask, say, a higher-order question, but the ability to decide when to ask such a question. This decision-making process is examined using decision theory. Viewed from the decision theory perspective, a teacher has a number of alternative acts from which to choose. The choice may depend, for example, upon the teacher's subjective estimation of a student's understanding of some material and the usefulness of various alternatives in increasing that understanding. (p. 14)

Shavelson suggests that understanding how teachers arrive at instructional decisions is key to growth in the field of teacher education research. Our field observations not only also suggest this, but further suggest that looking for patterns across teacher decisions is a necessary component of such research.

Similarly, Morine (1973) urges educators to focus their attention to teacher planning skills. Morine's argument is logical, namely, that the diagnostic-prescriptive teaching of reading presupposes teacher planning for instruction prior to and during instruction with students. While Morine focuses her attention on developing alternative behavioral repertoires in teachers, it is interesting to note that the focus of her work, like Shavelson's, is upon teacher cognitive processing behaviors. This is interesting because cognitive processing, which characterizes both the preinstructional and instructional phases of teaching, has not been the focus of much teacher education research conducted during the 60's and 70's. Most research during this period focuses upon the behavioral dimensions of teaching (Flanders, 1960; Rosenshine, 1971, 1974; Brophy and Good, 1969; Brady and Lynch, 1975). While cognition can be inferred from behavior, such a direction has not been the thrust of most past research in this area, even though such explorations seem warranted given the results of past research.

Veldman and Brophy (1974), for example, investigated teacher stability in producing student learning gains. Using residual gains on standardized achievement tests administered in four successive years, a series of regression models were compared, using pretest, squared pretest, pupil sex, years of testing, and teacher as predictors of post-test performance. Inclusion of the teacher variable usually yielded a substantial and significant increase in predictive efficiency.

Samph (1974) identified a sample of 155 sixth graders who scored two or more grades below their normal level on the Metropolitan Achievement Test (MAT). The subjects were grouped according to teacher verbal patterns measured by Flander's System of Interaction. Student performances were compared on pretest and post-test results on the Language Section of MAT and on the Pupil Attitude Inventory. Seven months elapsed between the administration of pre- and post-measures. Analysis of covariance was used, co-varying on pre-achievement, with the outcome favoring the group taught by teachers who showed more frequent behaviors allowing for student freedom of expression, such as praise and use of student ideas.
Brady and Lynch (1976) argue that more continuity between the two fields of reading and teacher behavior is a must if we are to improve reading instruction. Few studies have attempted to identify teacher skills in reading from theoretical perspectives of the reading process. We know that some teachers spend by far the majority of their reading instructional time on word recognition skills (Quirk, et al., 1974) and that such behaviors affect pupil reading strategies and achievement. Clark (1974), for example, when using a modification of Quirk's system (1974), found that more oral reading occurred in low than in the high achieving schools. Piestrup (1973), in an investigation of teacher styles of responding to dialect-speaking first graders, found that teacher responses to such errors affect reading achievement. In this study, pupils in classrooms where teachers demanded Standard English pronunciations had significantly lower reading achievement than those who accepted the child's speech. However, a more detailed understanding of the cognitive processing underlying teacher behaviors during reading instruction is needed if we are to relate teaching strategies to pupil reading strategies.

How a pupil approaches reading and the stages of reading he/she goes through have been shown to be influenced both by developmental and instructional factors (Barr, 1975; Biemiller, 1970; Cohen, 1975; Weber, 1970). However, none of these studies actually observed teacher responses to miscues. Better readers, regardless of instructional method, progress to a stage of contextually and graphically constrained miscues, though the stages differed, depending on method (Biemiller, 1970; Cohen, 1975). Poorer readers, however, tend not to progress to the stage of contextually and graphically constrained miscues. They fail to self-correct when context is distorted (Levitt, 1972; Weber, 1970), have difficulty utilizing graphic cues (Barr, 1975), and, once graphic cues are learned, tend to misuse graphic information (Weber, 1968). Goodman (1965) concluded that interruptions during oral reading were detrimental and argued that the focus during reading must be placed on meaning.

The results of the above miscue studies and other research in reading suggest relationships between teacher behaviors and pupil reading strategies. If a teacher demands exact word-for-word reading, as most do (Brady, 1976), the pupil will be using only one source of information—letters to identify words. When the focus is only on isolated words, pupils tend to make more errors and are less likely to self-correct because the grammar and meaning of the sentence or story are not being attended to (Goodman, 1965; Piestrup, 1974). If the teacher always tells the pupil to sound out unknown words, as in synthetic phonics approaches, nonsense word production and sounding out may be frequent error types, as Cohen's results (1975) suggest. Spelling as a teacher approach to word recognition can cause pupils to spell unknown words but may have no relationship, or a negative one, to achievement in word recognition. Teaching the name of letters making up a list of words to be learned does not shorten the time needed to learn the list of words (Samuels, 1970).
Conclusion

This paper has attempted to capture some of the field data and thinking which led Dr. Burke and me to the formulation of the hypothesis that both the teaching and learning of reading is theoretically based and to relate this work to past and present efforts at understanding the teacher variable in reading. Readers interested in pursuing this hypothesis should contact the author as new research instruments and procedures for studying this hypothesis are currently being developed and field tested.

It is our belief that the findings reported in this paper merit widespread exploration and have much utility for the profession. An experience we had while involved in teacher preparation follows and makes this point most vividly.

We called one teacher, whom we had observed conducting a directed teaching lesson, in which children were presented vocabulary, set a purpose of reading, read the selection, and did follow-up skill work, to check out a date when our classes might observe her teach. To our surprise she announced that we could bring our students on the date we wished, but that she would be doing a "language experience" lesson. We agreed to come with the understanding that she would talk about how she normally conducted reading with our students at the end of the hour. When we arrived she did teach a language experience lesson to the children. Together with the class they composed a story covering a class trip to the zoo. The story read:

We went to the zoo.
We saw lots of animals.
We saw a monkey.
We saw a tiger.
We saw a duck.
We had lots of fun.

It was fascinating watching her use this approach. No matter what the children actually said she transformed it into the type of sentence shown in the story. When the class finished the story the teacher framed the letters "We" and asked the children to identify the word and find the same word someplace else in the story. She followed the same procedure with the word "saw." With the word "A" she said, "This is a sight word. Who can find this same word someplace else in the story?" While this teacher might have "changed reading approaches," because she had not changed theoretical orientations, what she was doing in the classroom remained, in effect, unaltered.

From this experience and others like it, we have come to believe that looking at reading instruction in terms of theoretical orientation is a more cogent, insightful, and accurate one than looking at reading instruction in terms of reading approaches. In short, the variable we have identified looks hopeful. We would encourage you to explore it with us.
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In any discussion of reading instruction, there is usually considerable debate about what teachers should and should not do to help children read. However, it is a narrowly focused view to think of reading instruction as solely the responsibility of teachers. Recent research (Artley, 1975; Rich, 1973) has clearly demonstrated the role of parents in affecting children’s success in reading. Parents can and do have a profound influence upon children’s subsequent reading achievement. Therefore, it is mandatory that teachers and parents take an active role in reading instruction to insure success for children during the learning to read process.

This paper explores some ways in which teachers can direct the efforts of parents so children gain the best possible advantage in learning to read.

*The Child and Reading Instruction*

The discussion should begin with a word about the child. Learning to read is not easy. It is a task which will require much effort on the part of the child. Basically, the child will be attempting to develop two sets of skills: (1) word recognition skills—needed for decoding unknown words and (2) comprehension skills—needed for understanding what has been read. If and when these skills are established, the child will spend less time learning to read and more time reading to learn. However, a certain level of skill attainment will be necessary before this point is reached. These skills can be taught in a variety of ways and there is continual debate as to the best method of teaching reading.

*The Foundation for Reading*

Children are different and come to school with a variety of skills and attitudes which either enhance or hinder reading achievement. This raises the question: What should parents be encouraged to do to help their child’s reading so the child comes to school with skills and attitudes which enhance the formal instruction supplied by teachers? Teachers must play a role in a child’s reading instruction both before and after formal schooling begins. By forming an alliance with parents very early in a child’s schooling, teachers can suggest activities and procedures which will benefit the child in preparing for the difficult task of learning to read.

Teachers should outline specific aims which parents should attempt to work towards with their child. It should be remembered that the child’s education for the five years before formal schooling begins is completely guided by parents, consequently parental actions will influence later
outcomes. What should the teacher suggest parents work towards on the part of their child? The aims should include helping the child achieve:

1. sufficient command of simple English sentences;
2. wide speaking vocabulary;
3. reasonable facility in use of ideas, in conversation, and in simple reasoning;
4. a wide range of experiences;
5. genuine desire to read.

The first three aims are primarily concerned with language development and are quite important if it is realized that reading is a communication process just like language. A child is never really taught to speak in a formal manner; it is a process of exposing the child to spoken language in interesting and meaningful ways. The child needs input and once given that linguistic input, the child reveals a remarkable ability to create language (McNeil, 1971). Therefore, the time a parent spends with a child is invaluable. Talking with, not at, the child and listening to, not anticipating, the child will express a great deal of love and attention on the part of the parent and aid the language development of the child. Specifically, the teacher should suggest the following to parents:

1. give the child ample opportunity to listen since this is in the main channel of information;
2. readily supply a label for unknown objects.
3. avoid overcorrection of grammatical faults;
4. avoid making the child struggle to be understood;
5. engage in real conversation with the child.

Hopefully, the outcome is the establishment of an adequate language base upon which reading instruction can build. Just as the child was exposed to spoken language, the child can be helped to succeed in reading by offering increased exposure to written language in interesting and meaningful ways. The goal here is directed at achieving success for the last two aims mentioned above.

What Parents Should Do—Three Important Activities

I. The first and foremost activity that teachers should encourage for parents is to read aloud to their child at home. Reading aloud at home is one of the most affective ways by which a parent can help a child’s reading. This is an activity that should begin during the playpen days if the child is to grow up with the conviction that reading is an important activity worth the time and effort.

Research (Monroe and Rogers, 1954) has clearly demonstrated that a child’s early experience with printed matter has an influence on later attitudes towards books and reading. By about two years of age, the child learns to turn pages without tearing them, learns to recognize the front and back of a book, learns that pictures have a top and bottom, learns where the story begins, learns how to get meaning from pictures, and how to follow the sequence of events in a story.
In short, the child is laying a foundation for reading. This is important if reports (Downing, 1969) which show that children with reading problems lack a real conceptual understanding of what reading and reading-related concepts mean are believed. However, this situation is easily avoided if there is reading in the home. A child cannot be taught to love books but by reading to a child, an atmosphere that will help the child appreciate the gifts that reading and books can bring can be created. Reading to children enriches their language. Unconscious and conscious memorization of words, phrases, and images often results. Depth and breadth of vocabulary is enhanced. Reading to children develops their concepts, knowledge, and thinking ability. The vicarious experiences obtained are essential in order to broaden the child's understanding of the world. The importance of reading to the child cannot be emphasized too strongly. To facilitate the activity, some specific points should be enumerated to parents by teachers. These points include:

1. The materials read to the child should include poems and prose, fiction and nonfiction, adventure, fantasy, myths, fairy tales, legends and folk.

2. If possible, both parents should become involved with reading to the child either together or on alternate occasions. It should be pointed out that the influence of a parent is far greater if the parent enjoys reading. If parents themselves read, it is a graphic demonstration that reading can give continuing satisfaction.

3. Parents should be encouraged to make the reading-listening period a time for enjoyment and relaxation. It should not be a formal type of instructional period; instead it should be what Gates (1954) referred to as "easy-going guidance." It should probably last about a half hour. During this time, there should be no television, no record player, no radio and no friends of the child present.

4. Parents should be cautioned not to read longer than the child can sustain attention to the reading. The time spent will vary depending upon the moods of the child and parent, the amount of time available, the child's interest and other unpredictable factors.

5. Teachers should emphasize that withdrawal of the reading-listening period should not be used as punishment for misbehavior. This is the fastest way to destroy the positive effects of the activity.

6. Parents should interpret the mood, tone, and action of the passage being read. Parents should not be afraid to be dramatic.

7. A very good adjunct activity is the educational television programs such as Sesame Street. They are enjoyable and also manage to give some formal instruction. Daily watching of these programs plus the parents reading with the child will be most profitable in insuring a solid foundation for formal reading instruction.

Initially, the child should simply be read to, for the enjoyment and pleasure of listening. Gradually, parents should read to the child with the child in their laps so the child is able to see the print. Slowly, the child will begin to associate print and speech, follow along, and learn persistence to
establish some basic ideas about what is involved in reading.

Even when the child is in school, parents should be encouraged to continue reading aloud at home. The beginning reader has limited skills and needs to hear the rhythmic language of an experienced reader. An obvious question of parents is: “Won’t reading to a child who can read spoil the child?” and “Doesn’t the child need practice in reading?” The teacher's answers should be no and yes, respectively. The child needs practice but also needs the parents' guidance through a variety of new stories and, most importantly, the warm, reassuring experience of talking over what has been read. Gradually, as the child becomes more independent in reading, parents can become the listeners as the child reads aloud. Much discussion should follow in which the child takes the leadership position. This will greatly enhance the child's feelings of maturity. One procedural guide should be suggested to parents: If the child cannot pronounce a particular word, tell the child what it is. Guard against telling a child to “sound out” a word if the child could do so, it would have been done and while struggling, the sense of the story is lost!

II. A second activity in which parents should be encouraged to make a contribution is in relating a child's reading to the child's interests. There is little or nothing which can sidetrack the child who is interested in what he is doing. Children will make an extraordinary effort over a long period when the subject is close to their hearts.

What does this mean for parents? It means essentially three things:

1. The child should be encouraged to pursue individual interests;
2. Parents should aid the child in developing new interests through new experiences;
3. Parents should help the child find reading matter that will whet the curiosity and answer the questions that stem from interests.

The interests of the child can become a springboard to reading. Teachers need to point out that the important thing for parents is to be aware and alert to the question, “Why?” From this question “Why?”, parents should try to cultivate an attitude of “Let's look it up,” which will lead the child to home reference books. They, in turn, can lead to more extended reading of books and magazines. But the bridge from curious question to extended reading is not built by itself. Parents need to lead the way in helping the child select books and sometimes aid the child in accumulating the information.

III. The final way parents should be encouraged to help their children with reading is to supply them with adequate tools. A carpenter or electrician could not work without the proper tools; a child also needs tools, that is, books at home which will increase interest in reading and provide the practice that the child needs to become a fluent reader. Without attractive reading material, the child is likely to turn to comic books and TV as his only entertainment. While this is not necessarily bad in and of itself, it does not foster the desirable reading habits which improve chances for
success. The child should be provided with a wide array of books so access to an interesting book is as easy as access to a TV program.

Some parents may raise the question, "But doesn't the child read in school?" The teacher's answer should be yes but with qualifications. It should be explained that most of the reading time in school is spent in learning new skills and refining existing skills. It should be pointed out that some reading materials used in school may not be particularly interesting and motivating for the child because of the constraints put on them as teaching materials. In addition, it should be noted to parents that the school day offers precious little time for free reading because of the demands of other curriculum areas. However, if the amount of time a child spends out of school is considered, it is not unreasonable that parents set aside time for their child to read. If parents join in this reading, soon enough the child will discover the joy of books and reading then becomes a self-perpetuating activity.

What Parents Should Avoid

Teachers should strive to make parents cognizant of the learning to read process and how they and their child can avoid experiencing difficulty with it. A very important factor affecting the learning to read process is the pressure which is put upon the child (Heilman, 1972). This pressure can come from three major sources: (1) The school. Grades and scores are often used as a threat; certain grouping procedures, or comparisons of and contrast to another child's work are sources of pleasure; or learning materials are often inappropriate. (2) The child. When a child cannot keep up with school work or fails to adjust adequately, disappointment and a sense of failure and despair put pressure on the child; the outcome can be either regression or rebellion. (3) The home. Outside sources unduly influence parents and put pressure on them; they, in turn, overtly or covertly put pressure on the child to learn to read. This pressure starts with the first day of school and continues with the first report card or the first parent-teacher conference. Consciously or unconsciously, the parents' influence is felt by the child in school. By probing questions and invidious comparisons, the overanxious parent may have a paralyzing influence on the child; at the other extreme is the parent whose apathy may be deadening for the child.

Reading and Learning

Teachers must bring parents to the realization that their actions have an effect on the child's reading achievement. Reading cannot only be thought of in terms of special books, special word lists, and special teaching procedures. If three basic principles of learning are emphasized for parents: (1) we learn by doing, (2) we learn best the things we like to do, and (3) we comprehend more readily the information and ideas that have immediate relevance for us, then the guidelines and activities outlined will be in line with these basic principles of learning and allow parents to take an active role in their child's reading instruction. This additional help can only be beneficial for the child in attempting to cope with the difficult task of
learning to read. The ultimate goal, of course, is a child who is a skilled reader and knows the joys of reading. It is doubtful that any parent would argue with that goal or not actively try to help their child achieve that goal if made aware of the importance of such help by the teacher.

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A COMPARISON OF UNDERLYING STRATEGIES FOR IMPROVING READING COMPREHENSION AND RETENTION

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Much interest currently exists in topics related to the improvement of learning through such avenues as "mathemagenic activities," and a considerable amount of research has been done recently in the area of visual cueing as a learning enhancement technique. This paper is restricted to a discussion of one visual cueing technique—underlining—and some implications arising from underlining research.

Review of Related Literature

Matthews (1938) studied high school students to see if the underlining of important concepts and ideas by the students was more effective than outline notes or reading without notes. He reported no significant differences on two comprehension measures between the treatment groups.

Similar studies done by researchers such as Arnold (1942) and Idstein and Jenkins (1972), which compared underlining done by students and other forms of study or repetitive reading, have consistently failed to show the effectiveness of underlining of this type as a learning aid.

A second type of underlining research is exemplified by the work of Cashen and Leicht (1970). They studied a group of college freshmen, using passages underlined by the examiners to determine if reading underlined passages facilitates comprehension; and, if so, what the effect was on learning adjacent, non-related items. They found their experimental group scored significantly higher on the criterion tests than the control group did.

Related studies by Klare, Mabry and Gustafsen (1955) and by Crouse and Idstein (1972) also found that prior instructor underlining of prose passages can facilitate immediate comprehension.

A third variation of underlining research is the type done by Willmore (1966). A group of college students were taught how to underline, then were compared experimentally to students taught other study techniques. On criterion measures, the underlining (following instruction) group scored significantly higher than any other.
Statement of the Problem

The authors of this paper, after examining the existing work in underlining, designed a study to incorporate the various techniques already described into a single experiment. The approaches examined sought to: 1. determine if underlining of various types improved immediate and delayed recall of textbook-like material; 2. determine which technique was most effective; and 3. determine whether prior reading ability affects the value of these techniques for certain students.

Procedures

The study examined two populations, one at the senior high school level and one at the junior college level, each of which was divided into four groups for experimental purposes. Group one received 110 minutes of instruction and practice in underlining prior to the experiment in which they were asked to read and underline the experimental passage. Group two received no instruction or practice in underlining but read the experimental passage which had been previously underlined by the examiners. Group three received no prior instruction or practice in underlining, but was told to underline the passage as they read. Group four was the control group, and was told only to read the passage.

Immediately following their completion of the passage, each person returned the passage to the examiner and received a 20-item multiple choice test over the passage. Delayed recall was assessed by administering the same criterion test eleven days later (no reviewing or re-reading was allowed).

The instruments used were an 1100 word passage on neural maturation adapted from an educational psychology textbook by Cronbach (1963) which has a Dale-Chall readability of college level, and a 20-item multiple choice test developed and used in earlier studies by Schnell (1973). The test has a split-half reliability of .70 and overall item discrimination in the .40-.60 range.

The underlining strategy taught and also used by the examiners in underlining the passage for Group 2 was based on three criteria found in Read, Underline, Review (McGraw-Hill, 1970). Those criteria are: 1) Underline the right amount by selecting key words and phrases which, when read together, make smooth, flowing sense; 2) Underline completely by making sure all main ideas are included; and 3) Underline correctly so that the information underlined and read in review will reveal in capsule form the same information as the original passage.

The sample populations consisted of 88 high school students (grades 10-12) from a suburban St. Louis school district and 53 junior college students from a school in the same approximate location as the high school. The students were assessed on prior reading ability with one of two instruments— the Gates-MacGinitie Reading Test, Survey F, Form 1M, or the Nelson-Denny Reading Test, Form A. The groups were found to be equal in terms of standard score means and ranges on the reading tests.
Results

Data gathered in the experiment were analyzed by computer, using a multiple regression analysis technique. The major findings (significant at a level of at least .05) include:

1. The groups which underlined for themselves and the group which received instructor-underlined material all scored significantly higher on the criterion test than the control group on immediate recall.
2. There were no significant differences between groups on delayed recall, but scores approached significance in the hypothesized direction.
3. The groups which did their own underlining scored significantly higher than the instructor-underlined group on immediate recall, but not on delayed.
4. There was a significant interaction between prior reading ability for all groups and the criterion test scores on delayed recall, but not on immediate.

Summary and Conclusions

Based on the data gathered in this experiment, plus data found in the existing literature on underlining, it appears that the use of underlining can result in significant improvement in reading comprehension and retention of textbook type materials. An analysis of the various cueing methods used in this study indicated that active participation by the reader in underlining is more beneficial than using material underlined by the instructor.

Several implications for instruction in content area classes are suggested by these results and observations. Teachers who selectively underline (i.e. up to 20% of the material) major ideas for the students, or students who underline material immediately before some evaluative activity such as a test, are likely to find improved literal comprehension. Since literal comprehension is necessary for students to reach interpretive and applied levels of understanding, these techniques should be employed before group activities which require the higher levels of understanding.

Suggestions for the teacher should include such ideas as giving students a minimum of 5 hours of instruction and practice in underlining before expecting them to use the skill. Lessons should start with short paragraphs which have been underlined in various ways, with the students asked to select the one which is best (multiple-choice). The next step would be to have them do their own underlining on easy, short paragraphs, increasing the length and difficulty as skills improved. The final stage would be practice in underlining longer selections such as chapters.

Another suggestion would be to allow students to review the underlined parts of their materials at regular intervals to provide maximum retention possibilities.

It seems that underlining is a viable "mathemagenic activity," and should be taught as a regular part of any class which requires retention of prose material.
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ATTITUDE TOWARD READING AND READING-RELATED CONCEPTS AMONG ELEMENTARY STUDENTS

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ABSTRACT

The study measured student attitude toward reading and reading-related concepts to determine the effects of grade level, reading achievement, sex, race, and social status upon reading attitudes.

Measurement instruments included the Estes Reading Attitude Scale, Diehl Reading Attitude Scale, Metropolitan Achievement Test, and Two Factor Index of Social Position. The sample included 260 grade four and grade six students from three elementary schools in a large mid-southern urban school district. The achievement test was administered approximately two weeks prior to the administration of the attitude scales.

Girls had a significantly more favorable attitude toward reading than boys. A significant difference existed in attitude toward reading in relation to reading achievement with the most positive attitude found among students with high reading achievement. No significant interaction existed between sex and reading achievement.

No significant difference existed for attitude toward reading between grade four and grade six students. White students had a significantly more favorable attitude toward reading than black students. A significant difference existed in attitude toward reading in relation to social status with the most positive attitude found among upper social status students. No significant interaction existed between race and social status.

The study was designed to measure student attitude toward reading and to determine the effects of grade level, reading achievement, sex, race, and social status upon reading attitudes. The study also investigated student attitude toward 25 reading-related concepts.

Because reading is an academic as well as a recreational factor, it is vital that students develop a positive attitude toward reading. Attitude toward reading may influence reading ability. The student with an unfavorable attitude toward reading has little chance of becoming a mature reader (La Pray, 1972; Sutton, 1964; Yarington and Boffey, 1971).

This study is significant since it includes independent and dependent variables which have received little or no attention in previous investigations. No reported studies combined the two measures of attitude used in this study. Reading attitude was not compared between black and white students in other studies. Most studies of attitude toward reading did
not include social status as a variable. This study was unique in its inclusion of the variables of grade level, reading achievement, sex, race, and social status.

Design

Attitude toward reading was measured by the Estes Reading Attitude Scale, which consists of twenty items relating to reading. The Diehl Reading Attitude Scale, a semantic differential, was used to ascertain attitude toward 25 reading-related concepts. Reading achievement was assessed by the total reading subtest score of the Metropolitan Achievement Test. Social status was determined by the Two Factor Index of Social Position.

The instruments of the study were administered to 260 grade four and grade six students from three elementary schools in a large mid-southern urban school district. There were 125 boys and 135 girls in the sample.

The two measures of attitude were administered on the same day. The achievement test was administered approximately two weeks prior to the attitude scales. Parents of the students provided information used to assess social status. Data analysis included analysis of variance and the Newman-Keuls procedure.

Results

Girls had a significantly more favorable attitude toward reading than boys ($F = 6.6, p < .05$). The girls also had a significantly more favorable attitude toward reading-related concepts than boys ($F = 8.9, p < .05$).

A significant difference ($F = 32.3, p < .05$) was found to exist among three reading achievement groups for attitude toward reading. The mean attitude score of the above grade placement students was significantly more positive than the mean attitude score for both the below and at grade placement students. The mean attitude score of the at-grade placement students was significantly more positive than the mean attitude score for the below grade placement students.

A significant difference ($F = 4.87, p < .05$) was found to exist among the three reading achievement groups for attitude toward reading-related concepts. The mean attitude score for students reading above grade placement was significantly more positive than the mean attitude score for students reading below grade placement. No other comparisons were found to be significant. No significant interaction between sex and reading achievement was found for attitude toward reading or for attitude toward reading-related concepts.

No significant difference existed in attitude toward reading or attitude toward reading-related concepts between grade four and grade six students.

A significant difference ($F = 8.75, p < .05$) was found to exist for attitude toward reading in relation to social status. The mean attitude score for the lower social status students was significantly less positive than the
mean attitude scores for the upper, upper middle, and lower middle social status students. The mean attitude score for the upper lower social status students was significantly less positive than the mean attitude scores for the upper and middle social status students. No significant differences in attitude toward reading-related concepts were found as a function of social status.

A significant difference (F = 1.20, p < .05) was found to exist for attitude toward reading between black and white students. White students had a significantly more favorable attitude toward reading than black students. No significant difference was found between black and white students for attitude toward reading-related concepts. No significant interaction was found between race and social status for attitude toward reading or for attitude toward reading-related concepts.

A positive attitude was found to exist toward all 25 of the reading-related concepts. The four concepts which received the most favorable ratings were reading to myself, comic books, going to the library, and reading during a free reading period. Students expressed a positive attitude toward reading games and paperback books. Unfavorable concepts were reading workbooks, school reading textbooks, mimeographed reading materials, reading aloud in a group, and writing about what I read.

Discussion

Replications of this study would be helpful since the variables of reading achievement, sex, grade level, race and social status were combined with two measures of attitude. Elementary teachers would find the instruments used in this study simple to administer. Teachers at all levels should be more concerned about developing positive attitude toward reading. To promote positive attitude toward reading more use should be made of reading games, paperback books, and magazines along with a corresponding decrease in the use of reading workbooks and mimeographed reading materials. Student attitude toward reading may affect reading achievement and the likelihood that the student reads voluntarily for information and pleasure.

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SPORTSPRINT—A PRIMER FOR THE READING BLAHS

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Newspapers decry low reading scores. Parents battle with children urging them to read more. Educators bemoan reading readiness, reading curiosity, reading skills on the part of their students. Some segments of the society blame the electronic media and limply rationalize that nothing can be done about a deplorable situation.

NBC opts to spend nearly one hundred million dollars on the 1980 Olympics. *Sports Illustrated* has a very successful book club specializing in lengthy tracts focused on the sporting life. Virtually one out of every three Americans each year is entranced by the Super Bowl on television. And millions of Americans in reading newspapers and magazines turn first and fondly to the sections dealing with sports.

There is, or there should be, a connection between the world of reading and sportsprint. For instead of attacking the American obsession with sports, educators should capitalize on it and use it for the priming of reading skills. Just as many non-achieving students look forward to attending educational institutions because of the opportunity to engage in athletics, so would non-achieving readers look forward to immersing themselves in reading activities where they have a built-in interest—the reading world of sportsprint.

What is being proposed here is not a nation of sportsprint zealots, but at least a maximum effort to cull from the magazines, newspapers, books that write about sports in an intelligent manner—starting points for reading skills for non-enthusiastic and inefficient readers.

The world of sports is a world of records. The performances of athletes and teams are noted daily, synthesized, analyzed, computerized and preserved in print media all over the United States.

In the season of baseball, for example, a box score reveals how many times a batter came up to hit, how many hits that batter recorded, the number of runs he scored, his runs batted in and equally (in)significant info. Pitchers have preserved for posterity in the box scores the hits and the runs and the strikeouts and the balls and the earned runs they were responsible for on any given day.

Basketball box scores likewise provide a healthy statistical yield. The number of shots taken, the amount of minutes played, the fouls given and the rebounds accomplished—all of these are there for the discovery and the enlightenment of the reading sports fan.

A student who gives up half-way through a slightly difficult reading passage, frustrated in his search for comprehension and meaning, will expend ten times the amount of time and energy studying the box scores for
insights into the exploits of his favorite athletes. Why not capitalize on this built-in obsession with the world of the sporting record? Why not assign some work, some projects aimed at following and plotting the successes and failures, the ebbs and the flows of athletes and teams?

Reading for detail, for application, for conclusions, development of skills in skimming, pre-reading, all of these could very easily be developed through contact with the world of sportsprint. And this would be just one facet of the sportsprint functioning as a primer for the reading blahs.

Once the records and the statistics of sports have primed the reading pump—the next logical area of activity could be the accounts of the games and the close-ups of athletes in the pages of newspapers and magazines.

Tone, style, main thoughts, use of supporting details, units on contrasting the writing of the newspapers versus the magazine or one columnist in one newspaper as opposed to that of another could also be introduced.

A third major area and perhaps the sector of sportsprint most applicable for reading development is the world of sports literature. This is the area where readers can really be taught to use their intellect, to feel new emotions, to garner a new awareness into the nuances of reading, of life.

Readers could be led to understand and appreciate the bittersweet friendship of the baseball battery in the Mark Harris novel, *Bang the Drum Slowly*. They could share the rage and drive and frustration of Jack Johnson in Howard Sachler's *Great White Hope*. The symbolism of Jack London's aging boxer pitted against brash youth in "A Piece of Steak" and the protagonist's romantic musing about the nobility of lions in Africa and Joe DiMaggio at Yankee Stadium in Hemingway's *Old Man and the Sea*—these too could be the benefits of sportsprint.

The list of emotions, of reading skills, of subject matter is endless. Just a brief sampling of what a sportsprint literary bibliography might look like includes:


The lure is in the subject matter. The material of sports is being read. We as educators have to simply provide the guidance and the focus and the direction for the material to be read in such a way that SPORTSPRINT becomes A PRIMER FOR THE READING BLAHS.
Introduction

The latest trend in teacher education is towards competency-based programs which focus on the specific knowledge, skills, and attitudes that teachers ought to develop in order to perform well on the job. One area of teacher competencies is knowledge of the subject-matter. Cooper (1973) calls this knowledge competency. Several writers have emphasized the mastery of subject-matter as an important component in teacher preparation. Bush (1954) says that students like teachers whom they regard as high in knowledge of subject; and pupil liking of teachers is related to pupil liking for the subject. Miller and Miller (1971) asked school administrators to rank order a list of 17 items representing personal qualities and professional competencies considered essential for teaching. There was unanimous agreement on the knowledge of the subject-matter in the teaching field as being most important for a successful classroom teacher. Vanderwerf (1958) says that there is some evidence to indicate that a relationship exists between what a teacher knows about his field and his success in teaching. Wade's study (1960) provides some evidence that teacher knowledge of reading skills and its application was related to pupils' gain in reading achievement. Menges (1975) also recommends knowledge of the subject-matter and its application as two important aspects of professional readiness.

Although experts seem to agree that knowledge of reading is important for teaching reading, the development of instruments for measuring teacher knowledge of reading has received limited attention from researchers. The major reason for this seems to lie in the disagreement among experts on such issues as the definition of reading, skills involved in reading, and measurement of comprehension. For example, the Current Issues in Reading (Smith, 1969) demonstrates that opinion is divided on questions like: Is there a sequence of reading skills; and which approach (programmed, linguistic, basal, i.t.a.) is more effective? Robinson (1971) has also pointed out that we do not have a standard terminology to discuss reading problems and that our knowledge of the reading process is inadequate. Nevertheless, there have been a few attempts at developing instruments to measure teacher knowledge of reading. These instruments can be divided into three categories: (i) measurement of specific skills in teaching reading, (ii) measurement of the diagnostic ability of the teacher, and (iii) assessment of teacher knowledge of reading practices and instructional techniques. Most of the instruments are intended for elementary
teachers. This writer developed a test to measure teacher knowledge of reading at the secondary level. A brief description of these instruments follows.

*Instruments for Measuring Specific Skills in Reading*

Teacher knowledge of phonics and structural analysis has been investigated by several researches. Schubert (1959) was interested in finding out if the elementary and secondary teachers possessed sufficient knowledge of structural and phonetic principles to help students who face problems in word analysis. He developed an informal quiz consisting of 10 questions based on an understanding of these concepts. He administered the quiz to 80 elementary teachers and 42 secondary teachers and reported that a substantial number of them did not possess knowledge of certain basic principles of word analysis.

Spache and Baggett (1965) report that Gagon used an informal *Rogers Test of Phonics Ability* to measure the status of phonics knowledge of elementary teachers in the State of Utah. This test was not available to this writer and as such no comments on this are possible. Another test also not available for review was developed by Farinella (1960). This test of phonetic and structural analysis was administered to 394 teachers in grades one through six. Results indicated that an alarmingly large number of teachers were deficient in their knowledge of essential word-attack skills.

One of the early tests of phonics generalizations which received attention from some investigators was developed by Aaron (1960). Aaron was interested in assessing teacher and prospective teacher knowledge of phonics generalizations. He examined teachers' guidebooks which accompany basal readers and selected eight principles which are commonly taught in grades two and three. Based on these principles, he constructed a 60-item multiple-choice test using nonsense words. By means of the Hoyt Analysis of Variance Method of Test Reliability, he obtained a reliability coefficient of .98. He administered the test to a group of 293 persons enrolled in an introductory course in the teaching of reading taught at the University of Georgia. There were 104 persons with one or more years of teaching experience and 189 with no teaching experience in the group. Results indicated that very few subjects were well-grounded in phonics principles. As expected, persons with teaching experience performed better than those without similar experience. Spache and Baggett (1965) used a modified version of Aaron's test with graduate students and inservice teachers pursuing graduate work and found that they were generally weak in the areas of phonics and syllabication. Ilika (1968) reports the results of Aaron's test administered to undergraduate and graduate students and classroom teachers over a five-year period and concluded that there was an improvement in teacher's knowledge of vowel generalizations.

Ramsey (1962) developed a test of phonics and other word recognition skills in order to determine the extent of knowledge possessed by elementary student-teachers in this area. There were 85 items in the test. The first 30 items were designed to measure an understanding of the basic sound-
symbol relationships and required students to spell unfamiliar syllables pronounced by the examiner. The remaining 55 items were cast in multiple-choice format and covered areas such as professional terminology used in phonics, phonics generalizations, and application of principles of syllabication.

Another test to determine the extent to which teachers in grades one through six possessed knowledge of basic skills in reading was developed by Browman (1962). This test consists of areas such as the sequence of basic reading skills, grade levels at which they are taught, phonics and syllabication generalizations, and definitions related to word-recognition skills. These areas were selected because they were common to the textbooks in use for teaching reading in elementary schools. The researcher stated that by making the instrument objective, inter-scorer reliability was achieved.

The only test of phonics which is available commercially was developed by Durkin (1964). This test, called the Phonics Test for Teachers, is based on the following skills:

- Syllabication.
- Vowels.
- Vowel generalizations.
- Sounds of c and g.
- Digraphs.
- Diphthongs.
- Sounds of oo.
- Sounds of qu.
- Sounds of x.

Durkin (1965) reports the results of a survey in which her test was administered to 603 students enrolled in reading methods courses in different parts of the States. She found that teachers in training generally lacked knowledge of phonics principles.

The author claims that the test was specifically designed for use in reading methods courses to help students identify what they know and what they do not know about phonics. This test can be considered as an informal diagnostic tool as no data on validity and reliability is provided. Reliability is threatened by the fact that in some sections of the test there is only one item intended to measure a particular phonic skill. It seems that the test under review can be used as a screening device in providing needed phonic instruction for preservice and inservice teachers.

**Instruments for the Appraisal of the Diagnostic Ability of the Teacher**

Two tests developed specifically to measure the diagnostic ability of teachers were located. One was developed by Burnett (1961) who considered teaching as problem-solving or decision-making and identified five levels in this operation. The first level problems call for the examinee to pick critical information from a pool of data. The second level problems require selecting a means of securing additional data. The third requires the interpretation of data. At the fourth level, the examinee is required to make recommendations for improving instruction. At the fifth level all the available data are supplied to the examinee and he is asked to evaluate his recommendations made at level four. The test consists of two problems at each level, based on the reading performance and other information of a third grade boy and a fifth grade girl. Burnett administered his test to
students, teachers, and reading specialists and obtained a split-half reliability coefficients of .33, .76, and .84 for the three groups. Analysis of his data showed that neither teaching experience beyond the third year nor the master degree held by subjects resulted in increased problem-solving proficiency of elementary school teachers.

The second test was developed by Thomas (1975). She constructed a criterion-referenced test to measure the ability of elementary school teachers to choose and interpret data for assessment in reading. Her test consists of 70 items and is divided into four parts. The first part has 18 items and is divided into four parts. The first part has 18 items related to determining reading levels and grouping techniques. The second part has 12 items which deal with reading expectancy level and reading achievement. The third part contains 22 items which purport to measure and interpret student progress in reading. The fourth part includes 18 items which test techniques for determining reading readiness.

Thomas established the content validity by specifying the knowledge and skills to be measured. As a check on content validity, experts were asked to make independent evaluation of the test blueprint and test exercises in terms of importance, relevance, and congruence. The reliability was determined by the Livingston method which is a new technique and has not become an established procedure yet. The reliability was found to be .98 at one standard error of measurement.

Although the areas covered are pertinent for diagnostic teaching of reading at the elementary level, the test is lengthy and as such may not find favor with practitioners. The design of the test is also cumbersome. The examinee has to read footnotes provided with some of the items or check the additional data provided at the end of the test to answer some questions. Moreover, some items require one answer to be marked while others require more than one.

Instruments for Assessing Teacher Knowledge of Reading Practices and Instructional Techniques

Three instruments which cover rather broad areas of reading are reported in the literature; two of these are recent and are available commercially.

The earlier test in this category was developed by Wade (1960) who was interested in measuring the following skills:

- selecting books of proper level of difficulty
- placing children in homogeneous groups
- judging the amount of reading gains made by pupils
- diagnosing specific reading deficiencies
- diagnosing and correcting phonic and syllabication errors
- recognizing the goals of workbook exercises

In order to test those skills he used oral reading activity from an audio-tape and paper-and-pencil questions. Wade does not provide adequate
information about the content validity of his test. However, he discusses the results of his test administered to students, teachers, and reading specialists. He found, as expected, that students achieved the lowest and reading specialists achieved the highest. He also compared a few teachers' scores with their pupils' gains and found the relationship inconsistent.

Harp and Wallen (1972) prepared a 28-item multiple-choice test as part of the Instructor's Guide to accompany Wallen's Competency in Teaching Reading. Their test has four sections: testing recognition, testing comprehension, teaching recognition, teaching comprehension. The reliability coefficient is reported to be .72. A good feature of this test is that it is available in three parallel forms, A, B, and C. However, its scope is limited in terms of the knowledge areas required in teaching reading.

The most widely known instrument for measuring teacher knowledge of reading is called the Inventory of Teacher Knowledge of Reading and was developed by Artley and Hardin (1975). This test contains 95 multiple-choice items. The brief manual accompanying the test indicates that the test covers the following areas:

- a. The reading act
- b. Preparation for reading
- c. Word identification
- d. Comprehension and critical reading
- e. Reading in the content areas
- f. Reading interests and tastes
- g. Corrective procedures

The manual does not list how many and which items belong to each area. The reliability coefficient by Kuder-Richardson formula 20 is reported to be .92. The authors further report that factor analysis indicated that the seven areas from which the items were drawn were not identifiable as discrete factors.

Kingston and his associates (1975) attempted a revalidation of the Inventory of Teacher Knowledge of Reading. They administered the Inventory to undergraduate students, teachers and reading specialists. The mean score of the reading specialists was the highest (73.28) and that of the undergraduate students without reading courses was the lowest (47.38). The factor analysis by these researchers failed to reveal the seven components the Inventory is reported to be composed of.

Koenke (1975) also analyzed the results of this Inventory administered to 180 undergraduate female students and 60 experienced teachers. He found that the freshmen achieved lower than the juniors who were outperformed by the seniors. The experienced teachers did better than the seniors. However, the difference in their mean score was not significant.

The Inventory can be used as a criterion-referenced measurement in that it discriminates those with a reading background from those without. Thus it can be employed in evaluating the effectiveness of preservice and inservice programs in elementary reading instruction. Rorie (1975) has mentioned that 30,000 copies of the first edition of the Inventory were sold in 1972 and 1973 which indicates its popularity.
In order to measure teacher knowledge of reading at the secondary level, Narang (1976) developed a 45-multiple-choice-items test based on the following content:

| Section                                      | No. of items | |
|----------------------------------------------|--------------|
| I. General Background                        | 10           |
| a. Reading and Reading Problems              | 7 items      |
| b. Nature and Difficulty of Materials        | 3 items      |
| II. Reading Skills                           | 11           |
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He administered the test to 124 teachers and 64 students in secondary education. Their scores ranged from 11 to 40 with a mean of 24.5 and a standard deviation of 6.3. The reliability coefficient obtained by KR-20 formula was .76.

Summary

The tests developed for measuring teacher knowledge of reading were reviewed and their strengths and weaknesses were pointed out. Some of the tests measure teacher knowledge of phonics and syllabication, while others assess the diagnostic ability of the teacher. For elementary teachers, only one test was found to be comprehensive in scope. At the secondary level, a test to measure teacher knowledge of reading was discussed.

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Diagnostic teaching with all its ramifications is one of the trends in education which has had profound implications for the field of reading. Unfortunately, too much of the emphasis has been on diagnosis and not enough on teaching. Teachers are constantly bombarded with new tests—diagnostic, criterion referenced, etc.—all of which are reputed to accurately pinpoint the reading needs of all students. Many of the results of these measures are at best tenuous: the fact that a well trained teacher is the best diagnostician is one fact that is often ignored in any implementation of diagnostic teaching.

Another irony in the diagnostic teaching movement is the fact that although teachers are constantly exhorted to apply diagnostic teaching techniques, these same techniques are rarely applied to teacher training itself. In most cases teachers are routinely subjected to present graduate programs and inservice training with little attention to the specific needs of particular teachers and their students. The role of the reading field agent was developed to meet this need.

The development of the field agent model was also, in part, facilitated by the American interest in the British infant school. As hundreds of American educators travelled to England to observe “open education” they were also impressed with the British “teacher centers” for inservice training.

In the United States, the reading field agent model has been developed through two ESEA Title III Projects. The initial project developed in Greensboro, North Carolina (Goldman and Wolff, 1971) transported teachers and their students to a central location. A second project, the Delaware Reading Center, based on the Greensboro project and located in Newark, Delaware, deployed the field agents to the schools for most of their time. It is this model that is delineated here.

Definition

A reading field agent is a specialist hired specifically to assist the classroom teacher in utilizing his or her reading resources to the fullest. The field agent does not serve as a remedial teacher. In Delaware, the field agent was housed in a central location and reported to various schools throughout the county. Using the services of a field agent was voluntary, and teachers with the approval of their principal submitted applications. The Director of the Center and the field agents interviewed all candidates in order to ascertain where the field agents’ services would be of most value.
Once applicants had been selected, the field agent worked intensively in one school for approximately five weeks.

The role of the reading field agent in the school was carefully delineated. The field agent's main function was to work in the classroom with one teacher. Every effort was made to fit the classroom training to the needs of a particular teacher. No effort was made to promulgate any one set of materials or methods. Another teacher at the same grade level was essentially an observing teacher. Hopefully, this intensive work with one teacher and somewhat less intensive work with another produced a ripple effect on the rest of the staff.

Stage I — Diagnosis

A field agent's work in a school began with a brief orientation workshop. The school principals, and teachers involved met with the Reading Center staff for a brief workshop during which the field agent's role was explained in detail.

The second step in this preliminary stage was planning. The field agent and the teachers involved discussed and diagnosed the needs of the participating teacher, and these were recorded in objective format. Generally, objectives for the field agent's stay fell into a few general areas:

1) **Management and Record Keeping:**
   Ex. The participating teacher will maintain a class summary chart to show which centers have been completed by children.

2) **Phonics Instruction:**
   Ex. The participating teacher will use a variety of techniques to aid pupils in the application of vowel knowledge to unknown words.

3) **Comprehension Instruction:**
   Ex. The participating teacher will use additional direct teaching procedures for introducing those comprehension skills that are introduced in Scott Foresman such as getting the main idea.

4) **Development of Creative Writing:**
   Ex. The participating teacher will use substitution and a variety of other approaches to motivate creative writing.

5) **Diagnostic Teaching Techniques:**
   Ex. The participating teacher will use every-pupil-response strategy to help determine word recognition skill needs and mastery.

It should be noted that all these objectives were developed in terms of the participating teacher. However, the observing teacher was also charged with implementing the objectives that would be applicable to his or her classroom. The necessity of an observing teacher was supported by research which seems to indicate that in order for change to take place, more than one teacher had to be functioning as a change agent.

Once tentative plans and objectives were formulated, the field agent began an intensive period of observation. Several days were spent in the classroom of the participating teacher and at least one day was spent in the classroom of the observing teacher. At the conclusion of this ob-
servation/diagnostic period, the field agent and the teacher involved formulated the final plans for the remainder of the field agent's stay.

Stage II — Instruction

Stage two was essentially an instructional period. The field agent assumed major responsibility for teaching the class of the participating teacher. During this time, which usually averaged two weeks, the field agent attempted to implement the objectives as planned. Concurrently, some released time was provided for all teachers involved in order to attend inservice workshops revolving around the stated objectives. Other teachers from the same district were also invited to some of the workshops. All of the teachers attending the workshops were shown the wide variety of resource materials housed at the Center. This instructional stage was very important, and during this time, activities were carefully structured so that the teachers involved were very much aware of exactly how the objectives were being implemented.

Stage III — Application

No learning takes place unless the learner can successfully apply what is taught. Thus, during the last stage of the field agent's stay in the school, the participating teacher gradually reassumed control of the classroom. With the aid of the field agent, the classroom teacher tried to apply the planned objectives as the field agent had demonstrated. Some released time was arranged so that any obstacles or problems could be thoroughly discussed. At the end of this stage, the field agent and teacher evaluated the various objectives and activities as they had been planned and implemented. Provision was also made for follow-up visits, and field agents outlined exactly what they would be looking for in these return visits.

Evaluation

Results of a comprehensive evaluation showed that teachers who received the services of a reading field agent showed some significant gains in their knowledge of appropriate teaching strategies than teachers who had not received those services. Work with a field agent also tended to change teacher attitudes in a number of areas relevant to reading/language arts instruction. After receiving the services, teachers showed an increased awareness of the importance of using learning centers, small group interaction, small group games for reinforcement, instruction based on diagnostic information and detailed records of pupil performance as well as a number of other areas. Teachers who did not work with a field agent, in general, did not exhibit this change in attitude.

Questionnaires administered to both teachers and principals showed that an overwhelming majority of both groups considered the project most valuable. Comments like the ones below were commonplace:

“It really helped me to focus in on the needs of my classroom.”

1st grade teacher
"It's the finest federal project I've ever had contact with."
Elementary Principal

"Your (field agent) is an outstanding teacher and teacher trainer. I hope we will be able to have her return to our district in the not too distant future."
District Superintendent

Implications

The applicability of the field agent model could be widespread since it is compatible with the trend to establish teacher centers or instructional resource centers. Field agents could be housed at these centers and deployed to schools throughout the district or county. If no teacher center is available, the field agents can operate out of the central office. Wherever they are housed, however, it is important that the model is preserved and the work of the field agent is not diluted with administrativa and one-shot inservice efforts. Certainly careful application of this model can help insure that every teacher is a diagnostic-prescriptive teacher.

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READING EXPECTANCY FORMULAE—
STRENGTHS AND LIMITATIONS
TO BE CONSIDERED

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Reading expectancy formulae and intelligence tests are two instruments with which the reading teacher is very familiar. However, the designs of both reading expectancy formulae and intelligence tests have incorporated various strengths and limitations into each. When the two are combined to determine a child's level of expectancy, much distortion in prediction may occur if careful selection and evaluation of these instruments are not executed. A critical look at the popular reading expectancy formulae and related use of intelligence tests will show that there are beneficial uses of reading expectancy formula in general but that there are also valid reasons which substantiate the need for caution when dealing with these formulae.

The Intelligence Factor

One of the basic premises related to the determination of a child's reading expectancy is that a child's reading ability is closely related to his mental ability. The mental ability, often expressed in terms of mental age or IQ, has become a common factor of the various reading expectancy formulae. However, attaining a precise and valid evaluation of a child's mental ability is not an easy task. There is such a wide variety of methods to use, each with its own biases and weaknesses, that the mental ability factor is the most questionable component of these formulae. This element alone could invalidate any of these formulae.

There are four major types of mental ability tests. The verbal group mental tests are probably the most misleading when used to determine a child's expectancy. A verbal group mental test is not an accurate measurement tool for poor readers or children of culturally different or culturally disadvantaged backgrounds. Generally, blacks test lower than whites, rurals test lower than urbans, bilinguals test lower than monolinguals, and low socioeconomic children test lower than high socioeconomic children. The second type of mental tests, the nonverbal group mental tests, tend to depress cultural bias, but they do not measure the specific abilities needed for success in reading. The individual mental tests are probably the most widely used, but again the poor reader does not fare well on these tests. Problems with vocabulary, abstract words, and sentence structure may result in a five to twenty point underestimation of a child's IQ score. The individual performance mental tests have very limited usage, being used mostly with children who are visually or auditorily handicapped. As in the nonverbal mental tests, the verbal skills necessary to
reading achievement are not tested.

The limitations discussed above are simple and obvious. When an attempt is made to use such test scores in predicting a child's reading ability, the criticism of these tests becomes more vehement.

In *Investigating the Issues of Reading Disability*, Spache presents several reasons why expectancy should not be based on IQ test results. He finds that different IQ tests vary greatly in the measurement of and relevancy to the process of reading. The methods of teaching reading which are used with a child can influence his reading progress more than his mental ability will influence this progress. Furthermore, the IQ tests falsely assume that all types of reading skills develop at the same rate. Spache also feels that group tests do not elicit the best possible performances from children. Further inaccuracies occur because most evaluators tend to overlook the standard error of measurement which is present in any such type of evaluation.

Strang has her own reasons for advising caution when using IQ tests to predict reading expectancy. She regards the IQ score as an inconstant factor. Such a score represents how someone is functioning at a particular point in time. An individual's score can vary from test to test and from year to year. Realizing that coaching can raise one's IQ score further augments its sense of instability. She also notes that IQ tests become increasingly invalid with children above the age of 13. Strang sees intelligence tests as poor assessors of a child's reading ability. A child can do well on an IQ test but have very poor reading proficiency. His ability to visually and auditorily decode, associate, and encode might not be evaluated on a mental test. Other necessary skills such as recalling detail and main idea, seeing relations, following directions, and solving practical and theoretical problems may never be measured on an IQ test but may be vital to reading performance.

Some defenders of the use of IQ tests refute that last argument and say that the intellectual activity required on an IQ test and the reading process itself are very similar. They also believe that both require convergent, divergent, and critical thinking. The strength of each of these two opposing arguments would be highly dependent on the particular mental test used.

One of the hardest defences to dispute regarding the use of IQ tests in determining a student's reading expectancy is the fact that only those students with a certain level of mental ability can profit from a remedial reading program. If a child is functioning at a very low level, but he also has a very limited mental ability, all the remediation in the world is not going to bring him to a performance level above his mental ability level.

Just as reading specialists differ in their opinions of IQ tests, those who have developed reading expectancy formulae vary widely on the use and weight of the mental ability factor. A closer look at these formulae will show some other interesting differences as well.

**Reading Expectancy Formulae**

Most reading teachers are familiar with the Bond and Tinker Reading Expectancy Formulae:
Tinker’s strongest selling point of their formula is that it is extremely easy to calculate. All the data needed to calculate it should be readily available to any classroom teacher. The statistical research Bond and Tinker have to support the validity of their formula shows a high correlation between the formula’s predictions and actual observed levels of achievement. Hence, it appears to be a useful and accurate device for determining one’s potential.

"Not so!” say the critics. First of all, Bond and Tinker’s “+ 1” factor assumes that all children entering first grade are all equally ready to begin reading. They totally disregard the effects of one’s level of intelligence during the six years preceding the child’s entrance into first grade. Another weakness arises when errors are made by teachers mistakenly inserting into the computation a child’s grade instead of his number of years in attendance. Also, the “Number of Years in School” factor falsely assumes that a child retained one year makes a year’s progress during the year of retention, whereas research shows that children who have been retained are farther behind in development than their peers who had the same weaknesses but were promoted. Finally, the Bond and Tinker formula is an inaccurate measure for children out of the normal IQ range (90-110). It sets extremely low standards for children with high IQs. It follows that even if a student with a high IQ was working well below grade level, he would probably be able to attain the low expectancy set for him and thus not be labeled a disabled reader. He would not be referred for remediation despite the fact that he may in reality need it and would indeed be the one to profit from it.

The Harris formula, Mental Age — 5 = Reading Expectancy, also loses its validity when predicting potentials for children whose IQ’s vary two or more standard deviations from the norm. By the Harris formula a child with an IQ of 170 in the middle of second grade would be expected to read on an eighth grade level. A child in that same class with an IQ of 60 would be expected to be no more advanced in the area of reading than a nursery schooler. The Harris formula does for the low IQ student what the Bond and Tinker formula does for the high IQ student. It allows him to easily achieve a low expectancy and accordingly appear to be working up to potential. Again the door to remediation is shut due to the shortcomings of a formula.

Horn’s formulae are much more complicated than any of the others. The four formulae are:

\[ \text{Age 6 - 8.5: } \frac{\text{MA} + \text{CA}}{2} = \text{Reading Expectancy} \]
The assumption underlying these formulae are that mental and chronological ages are of equal importance for beginning readers and that the mental age becomes increasingly important in older children. Horn believes that the differences in the weighting of the mental and chronological ages allow for a child's development and maturation. When compared to the Bond and Tinker formula and the Harris formula, the Horn formula tends to predict less distorted expectancies. The most common criticism of these formulae are that they are too difficult to remember for handy use.

Wanting to get away from such complicated formulae that are so vulnerable to errors in calculation, Beverly Young proposed an extremely simple formula:

\[ \text{Grade in School} \times \text{IQ*} = \text{Reading Expectancy} \]

*IQ must be written as a decimal

She not only reduces the chance of error in computation, but she also avoids Bond and Tinker's false assumption that the number of years spent in school is a measurement of progress. The biggest advantage of this formula is its simplicity. Any classroom teacher can easily remember it and use it. Since this is a relatively new formula, it has not yet proven its validity. Only through a comparative study of the application of this formula and data relating student achievement will we be able to get an estimate of its validity and usefulness.

Use of Reading Expectancy Formulae

There are several practical uses for any of the various reading expectancy formulae. Initially, the classroom teacher can use such a formula to determine if there is a significant discrepancy between a child's reading achievement and his reading potential. If there is, a recommendation for the disable reader to receive remediation can be made. As mentioned before, the child must have adequate mental ability to profit from such help.

More specifically, reading teachers may resort to the use of such formulae as a screening device when there are more candidates for remedial help than can be serviced by a particular program. Also, the results of these tests can give a "rank order" of the severity of the disabilities which will be dealt with in a remedial program. The results can also help the specialist group together the children who have similar degrees of disability.
reading teacher can later use the information obtained from the formula as a post-evaluation measure, noting whether or not a child has been brought any closer to his potential.

On a broader basis, reading expectancy formulae may be used to judge whether or not a school's overall achievement levels are closely correlating to the reading abilities of its students. A school system can check the effectiveness of its reading program. Is the reading program setting realistic goals for its students? Does the reading program need development or improvements of any kind?

Whether it is one reading teacher or an entire school system which is going to use a reading expectancy formula, the following generalizations must be considered:

1) The number of children labeled disabled will vary with the formula which one uses and one's particular definition of reading disability.

2) The formula chosen for use will depend on what types of data are available.

3) Each formula can only be as accurate as its instruments.

4) A child's specific reading deficiencies will not be revealed through the use of such a formula.

John Pescosolido and Charles Gervase, authors of Reading Expectancy and Readability, state that using one or more formulae in predicting reading expectancy produces contradictory and baffling results. They compared nine hypothetical cases scored by four different reading expectancy formulae, and they found only two scores out of all those estimated to agree. In fact, sometimes the same reader was rated anywhere from above average to disabled, depending on the formula used. The implications here are obvious and a bit frightening.

There is a plethora of variables which influence a child’s level of achievement which must be taken into consideration when assessing his potential: sex, race, native language, neurological status, intersensory integration, educational background, socioeconomic factors, physical ability, and emotional status. A child’s interests, work habits, and attitudes must be observed. So much must be examined for a specialist to obtain a true profile of a child’s abilities and potentials.

In conclusion, it seems obvious that the validity of each formula is questionable and subject to criticism. The user of a reading expectancy formula should be familiar with the various methods of prediction and aware of the conflicts in results when various methods are applied. The user must have as recent and as accurate as possible instruments and data at his disposal. Each formula should be used conservatively as a general, approximate estimate of a child’s potential. Caution and fairness are necessary if the child is to be spared undue pressures and be allowed to benefit from the use of these formulae. After all, the ultimate goal in the design and use of these formulae is to help each child reach his own true potential.
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INITIATING ASSESSMENT OF
STUDENT NEEDS IN CONTENT AREAS

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NORTHERN ILLINOIS UNIVERSITY
READING CLINIC, 119 GRAHAM, DEKALB, ILLINOIS

As students move through the elementary grades they encounter more and more reading in the content areas: social studies, science, mathematics, and English. Most teachers are aware of the burden that vocabulary and concept load place upon each student’s ability to understand what he/she has read. Although teachers usually group students according to reading ability to facilitate basal reading instruction, there is often little or no effort expended to meet individual or group reading needs in the content areas. One reason for this neglect may be that teachers lack systematic ways of assessing students’ mastery of the technical vocabulary in the content areas.

Harris and Jacobson (1972) have compiled lists of words that may be helpful for assessing technical vocabulary at the elementary level. The words represent concepts that “. . . are specific to a particular content area or which have a special meaning in that area in addition to a general meaning” (p. 2). Their lists for each of four content areas are based upon two different series of content area books frequently used in elementary schools. A random sample of twenty words from the lists prepared by Harris and Jacobson is included at the end of this article. You may want to use these lists for assessing student knowledge of the technical vocabulary in these four content areas.

The Harris and Jacobson lists are one technique for assessing student vocabulary needs; however, a more effective method is to prepare your own lists. It is not necessary for students to be able to pronounce each word in material they are reading. However, at each level of each content area, there are some very basic concepts that must be understood by the students. The technical vocabulary representing these basic concepts can become the word lists for assessing student vocabulary needs.

After you have chosen the vocabulary words, type them on an index card. Ask each of your students to pronounce all the words on the list. As the student says each word, observe his/her facial expression and note hesitations, repetitions, uncertainties, regressions, and mispronunciations (including incorrect stress and accent). Also, judge whether or not the pupil is able to move down the list smoothly at a minimum rate of one word every two or three seconds. If the pupil exhibits the behavioral characteristics noted above and/or is unable to say the words at the minimum rate, it is possible that he/she will have trouble in the particular content area being assessed.

The above procedure has been adapted from Aukerman (1972). It has the advantage of being easy to administer in a minimum of time. The
results should be viewed as an initial step in identifying students who are likely to have difficulty with particular content area books. This initial step will make it apparent that you have students who will need your help if they are to profit from the information contained in their content area books. If a student is unable to pronounce a representative sample of the technical words in a particular content area, he/she may find it difficult to learn from such books.

Merely pronouncing words should never be confused with reading (generating meaning), for the ability to pronounce a word successfully may be the result of successful application of phonics rather than a comprehension of the word's meaning. The concepts represented by some content area words may be beyond the student's present knowledge of the world, so you must remain ready to provide the necessary background and/or the appropriate experiences that will enable the student to build meaning for the concept in his/her mind. You may find Smith and Barrett (1974), Schulwitz (1975), and Duffy (1975) helpful in providing strategies and techniques to foster growth and refinement of vocabulary in content areas.

To summarize, it is recommended that you take a few minutes to select a representative sample of the technical vocabulary in a particular content area and ask your students to pronounce the words. Using vocabulary from your own content area books is far superior to using "ready made" word lists. As you determine student needs in content areas and take steps to meet those needs, the results of your labors will be evidenced by the improved attitudes and achievement of your pupils. And the best time to begin your efforts is now. Reflect and act!

Informal Tests of Specialized Vocabulary in Four Content Areas

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The forecasted career education quake has yet to shake our national educational landscape with cataclysmic force. Its tremors, however, are felt everywhere. The curriculum “faults” underlying the present educational scene portend the dynamic role that career education will play in marshalling educational change, so say leaders of the career education movement. Kenneth Hoyt (1975), for example, sees career education as a response to a call for educational reform. Sydney Marland (1973) speaks of career education not as a placebo or substitute for the “old curriculum,” but as a new context of learning. Within this context, Marland asserts, 

The academic skills are still the school’s raison d’etre. But we believe young people . . . will learn them better, with more ease and interest, because their mathematics, language arts, science and social studies have been related to purposes which students perceive as important to their own future lives. (p. 903) 

If this be the case, reading—the basic tool that embraces all the academic and vocational areas in one way or another—has a definitive role in the curriculum reformation implicit in career education. 

One of the “why’s” of reading-career education is quickly discernible. Henry Brickell (1975) says: 

It is one thing . . . to declare that every student has the right to read; it is another to declare that every student has a reason to read. Career choice, career entry, career continuation, career progress are all good reasons to read—reasons every student can understand. (p. 6) 

Career education thus provides a framework that can make reading experiences vital and meaningful. Reading, as Brickell (1975) suggests, is “the only skill that will be used in every job, the only skill that can free the mind and put bread on the table” (p. 6). If his comments appear to be zealously stated, they nevertheless serve to amplify the reading-career education connection. For the vast majority of students reading is and will continue to be the most efficient vehicle for learning. It can serve as the prime tool for exploring the world of work and in sharpening the thinking skills needed to cope in a highly technological society. The reading curriculum, within a career education context, therefore, must be carefully articulated if students are to experience the full benefits of the reading-career education connection.
Reading's role in career education should be mainly functional once students have acquired basic reading skills for learning. As career education specialists attempt to develop competent practitioners and independent learners of various careers, they must assume the responsibility for guiding students not only in what to learn, but also in how to learn it successfully. To the extent that reading serves as an essential tool in this process, career education programs can provide natural contexts for students to develop reading skills as needed—functionally—in the pursuit of occupational choices.

**The Reading Curriculum in Career Education**

There is consensus among reading people that students not only learn and refine reading skills **directly**, but need also be shown how to apply these skills **functionally** as dictated by the nature of the content in various subject areas. One-half of the reading curriculum in career education can be explained readily by visualizing a cone-shaped spiral, illustrative of "direct reading instruction" in basic skills. At the base of this cone in the elementary grades during career awareness, the spiral is wide and tight to represent heavy emphasis (Early, 1964; Vacca, 1976). As direct reading instruction continues through the grades into career exploration and career entry, the cone gradually tapers off as it spirals upward. Instruction is not as heavy as it is selective and appropriate to the specific needs of diverse learners. Complete a mental picture of the total reading curriculum in career education by overlaying the cone-shaped spiral with another one, "one that begins narrowly in the primary grades and becomes broader as it reaches the upper grades" (Early, 1964, p. 25). This spiral represents "functional reading instruction" where emphasis is on the adaptation of basic skills needed to learn content from a variety of sources and reading situations.

Operationally, then, direct instruction centers around a set of basic reading skills, arranged in a logical sequence and taught in a prescribed manner. Reading material is selected for its value in teaching the skills and providing practice once they are taught. The *New Rochester Occupational Reading Series: The Job Ahead* (SRA, 1963) is an example of an early program that proposes to develop basic skills directly through career-centered reading materials. *Careers: A Supplemental Reading Program* (Harcourt, Brace, Jovanovich, Inc., 1975) is a recent example of career-centered materials which also attempt to teach reading skills directly. *Careers* contains three levels for use in the intermediate grades. Each level is housed in a box and provides a sound filmstrip for orientation or motivation, story folders covering thirty-two careers, activity cards correlated to the story folders, and a set of management folders for the students.

Functional reading instruction, on the other hand, allows classroom teachers to guide those reading skills required to learn their subject matter. A functional emphasis, therefore, shows students how to apply basic reading skills that are actually needed to read a particular subject-centered
selection. Skills are not taught for the sake of teaching skills: nor are reading skills practiced in isolated drill. A functional reading approach does not come prepackaged in a box, a workbook, or a teacher's manual. It arises out of a teacher's own sense of structure and an ability to adapt instruction to materials actually read as part of class assignments. Herber (1970), Herber and Sanders (1971), Herber and Barron (1973), and Herber and Vacca (in press) have combined classroom-tested procedures and strategies with an extended research effort to develop a system of functional reading instruction in content areas.

The Reading-Career Education Connection:
A Whole Staff Responsibility

If reading instruction is to be incorporated into career education programs, a conscious effort must be made to develop its direct and functional components as students progress from stages of career awareness into various facets of career exploration and entry. During the career awareness years of a child's educational experience, direct reading instruction should be stressed as it is currently under present curriculum strategies. This means a systematic approach to the development of word recognition skills, basic comprehension, locational skills and versatility in reading where rate is adjusted to student purposes for reading. Whenever appropriate, reading materials should reflect the career interests and aspirations of children. Career education programs have the potential to infuse real-life situations into the direct reading instructional program. Children have the opportunity to develop reading power on materials that make sense; that unlock the world of work and create awareness and interest in the occupational possibilities that lie ahead.

As pupils move out of the awareness stage and into career exploration, teachers' responsibilities should shift accordingly. They should be prepared to "sneak" reading instruction into regular occupational settings and situations. If reading skills become an integral aspect of job success in certain career areas, a teacher must be trained to show students how to apply basic skills to job-related materials. Functional reading training, however, need not be solely task oriented. Students preparing for professional careers must be shown how to read a variety of content-specific material in an efficient and effective manner. Where reading skills are not particularly needed to function successfully in a career, a teacher probably would not incorporate reading skill training into his regular instructional routines.

There is no doubt that the reading development of young people will be facilitated through career education programs. Reading growth can be attained through direct and functional reading strategies. During early educational experiences, direct reading instruction should go hand-in-hand with career awareness activities. By teaching reading skills directly in a career-oriented atmosphere, educators will have the opportunity to capitalize on children's real-life interests and aspirations.

Moreover, a functional emphasis on reading instruction in the upper
grade levels will extend the reading development of students who view reading as a necessary tool for occupational success. Such an emphasis makes reading instruction a valuable process-centered activity to students who view reading as useful a means to an end, never an end in itself. Career education thus becomes, in the words of Theodore Harris (1975), a "curriculum reformation that makes reading a more functional part of the educative process" (p. 113).

REFERENCES


One of the important responsibilities of any teacher at any level is that of planning a sequential program of vocabulary development in each and every area of the curriculum. Vocabulary enlargement must be seen as being a part of the major language arts curriculum of every school in all content departments. All teaching which deals with oral and written words involves concept formation and hence additional words and phrases with their attendant meanings.

There is a definite relationship between vocabulary and comprehension since the ability to comprehend printed material is dependent upon a thorough understanding of the meaning of general and specialized words which occur in each content area. All learners possess five different kinds or types of vocabularies.

**KINDS OF VOCABULARY**

The first major type of vocabulary which a young child acquires is listening vocabulary. Gradually, the learner develops speaking vocabulary through imitation of words and phrases learned from other family members. Upon entering school, he starts the formation of his reading vocabulary through extended experiences utilizing various word attack skills. Gradually a writing vocabulary is established after a firm grasp of the meaning of words has been constructed. One's potential vocabulary includes all those words or phrases which could be understood when using many diverse word attack and comprehension techniques.

Many educators have come to believe that there is a high degree of relationship between level of vocabulary and mental as well as reading ability. The development of a good mind means a good vocabulary and a good vocabulary means a good mind according to (Dale and O'Rourke, 1971). They contend that it is more accurate to say that they are interactive - each is an inseparable part of the background and abilities of the learner.

Teachers in every content area (especially at the upper grade and high school levels) have an important responsibility for building the reading, writing, and potential vocabulary levels of each student. These skills cannot be developed in an incidental or haphazard manner. A part of every class period should be designated for vocabulary activities which are developed in a meaningful setting utilizing books and other materials which are at the instructional reading levels of the learners involved.
STRATEGIES FOR BUILDING VOCABULARY

There are numerous ways of building vocabulary which are natural outgrowths of innovative teaching practices. Some of these are described in the following sections.

1. During the pre-reading or readiness stage of every reading assignment, much attention should be given to the new and unfamiliar words or phrases which occur in the printed material. The number and kinds of words should be restricted to the learning and interest levels of the students. A pre-test of word meanings (involving multiple choice or matching exercises) can be administered to gain an impression relative to the depth of instruction which may be needed. A cloze test involving the completion of every fifth word which has been left out of a selection may be administered. This should provide valuable data for deciding words to be taught. Each teacher should determine that the final words selected are indeed key concepts which are vital to the understanding of the subject material presented.

Each word or phrase should always be placed in context in a sentence since many words in the English language have multiple meanings depending on the contextual patterns of the affected sentence (e.g., read, refuse). Audio and visual experiences using pictures, filmstrips, films, and drawings which illustrate the meaning of words should prove helpful to many students.

2. The use of learning activity packages may be appropriate for building vocabulary in the content areas. The four major parts may consist of behavioral objectives; a series of questions to be answered; a type of learning project (such as the use of a media device); and evaluation procedures. In other words, the teacher establishes the new vocabulary to be learned, how it is to be learned, and whether, in fact, it is learned. The evaluation step could consist of such tools as a completion of multiple-choice test; performing an actual demonstration which proves knowledge of designated words; or writing an essay examination.

Another effective way of building vocabulary is through the use of programmed materials. These programs can be either teacher-made or commercial in nature. New words and phrases can be presented in small units or frames with a corresponding set of definitions or synonyms. The student scores each frame and can check immediately to see if he or she is right. There are numerous programmed software of a commercial nature which are useful for building vocabulary. Examples of these materials would be Programmed Vocabulary (Appleton-Century-Crofts) and Spectrum of Skills (Macmillan).

3. Another effective way of building vocabulary is through the formation of a vocabulary notebook. They are to record new words, phrases, and concepts with the correct spelling, pronunciation, and meaning for each word. Appropriate illustrations for various sections of the notebook may prove to be an interesting and innovative activity for selected students.
5. Vocabulary development can be greatly enhanced through the systematic correct use of the dictionary. All students should understand that the dictionary is a complex work and the different aspects such as diacritical markings, multiple meanings, and preferred pronunciations should be explained and illustrated. A small dictionary should be available for every student for use with those words which are strange and unfamiliar.

6. The study of roots, prefixes, and suffixes can be invaluable in building vocabulary. (Stauffer, 1942) found that 24 per cent of the first 20,000 words in the Thorndike list have prefixes. For example, the reader should understand that "ab" means from; "con" means with; "pre" means before; and "trans" means across. A similar knowledge of suffixes and roots should help the learner derive a high level of meaning with respect to hundreds of words.

7. Crossword puzzles which are teacher-made and correlated with specific reading assignments can be stimulating and useful for students. The completion of such activities may be made easier for less motivated readers by providing a scrambled list of the intended words. Matching exercises involving words and their definitions may be valuable for specific reading assignments.

SUMMARY
There is a high degree of relationship between level of vocabulary and mental and reading abilities. All content teachers should understand that there are five different types of vocabulary. Many lessons and strategies which have been described in this article should be employed to help students in building overall vocabulary abilities.

REFERENCES


Because most states now require that all prospective teachers must have formal instruction in the teaching of reading in order to qualify for certification, the reading teacher must be prepared (1) to justify the requirement and (2) to teach the sort of course which will be valuable to students in a broad diversity of subject areas. In the article which follows, Professor Billie Jo Rieck of West Liberty State College in West Liberty, West Virginia offers a workable method for presenting the required course in the teaching of reading to the broad variety of students who pass through it. Professor Rieck's method is practical and easily workable. It requires no great outlay of money. It involves teacher trainees directly in school experiences related to the teaching of reading. It is the sort of program which many teacher training institutions might adapt to their own purposes.

TEACHING SECONDARY READING METHODS — A DILEMMA

Teaching a reading methods course in half a semester to all secondary teacher trainees, including physical education and music majors, smacks of going into the arena to meet the hungry lions. From the first day, the comments and complaints and questions begin:

1. "Why do I have to take this course?" (Physical Education, Music, Business, Mathematics, Social Studies, Science, Art, English. These are listed in order of strength of complaint!)
2. "Is there really a reading problem?"
3. "I'm supposed to teach _________ not reading."
4. "Why does the elementary school promote the students when they can't read?"
Although my teaching background included several years of high school English and business subjects as well as elementary teaching, neither my teaching experience, nor college course work prepared me for my Reading 414 course! In fact, my attitude had been similar to theirs and many secondary teacher's. Almost by chance, I enrolled in my first reading course to find out why my high school students didn't enjoy the English textbooks, stories, and reading. Being an excellent reader, I couldn't believe that many of my students couldn't read, were reading below grade level, couldn't handle the reading level or concepts in the materials, or worst of all, didn't like to read. When I became convinced that the reading problem was real, I enrolled in the doctoral program and discovered my professional love, reading!

After eight years of teaching my Reading 414, I haven't completely eliminated the dilemma, but I have worked out a much more palatable approach for the students and myself! Immediate failure and common sense taught me that telling them about and lecturing on the reading problem was ineffectual. I had to develop a method to expose them to the reading problem and to create a positive attitude toward reading and the role of the secondary teacher in teaching reading skills. Each new semester and each new class is a challenge, but the complaints and questions are fewer and don't continue as long, the interest and acceptance are much higher, and my student ratings have gone up!

I'm sure that most college instructors of a secondary reading course have experienced the same reactions and/or problems. My approach is what I wish to share in this paper. I have structured the course hopefully to answer the student's questions before they can be asked and to expose them functionally, via discovery, that there is a need for all teachers to be involved in reading and the teaching of reading skills required for their subjects.

**IS THERE REALLY A READING PROBLEM?**
(Translated: Is this just another course to take?)

The textbooks, newspapers, journals, TV programs and most educators say so! But, unfortunately, most of my students just haven't reacted to the phenomenon of "Johnny can't read."

**STEP I: AWARENESS**

On the first day, I give each student a reading survey sheet. I ask about their reading interests, how much they read, how they rate reading as a source for gaining formation, their reading rate if they know it, and any reading problems or poor habits that they experience. THIS IS IMMEDIATELY SUMMARIZED AND PRESENTED AS A CLASS PROFILE TO ILLUSTRATE THE READING CHARACTERISTICS OF THEIR AGE GROUP. (I have found it amazingly consistent from semester to semester.)

I then give each student one of four carefully selected articles to read and be prepared to share with three other class members on the following
day. These articles all deal with some aspect of the secondary reading problem. They must be short, well written, current and factual!

The next day, the students share their articles in groups of four. THIS EXERCISE GETS THEM INTO PROFESSIONAL LITERATURE, STRESSES THE READING PROBLEM, AND DEMONSTRATES THAT A READING ASSIGNMENT NEEDN'T BE DISTASTEFUL.

The whole class then discusses the four articles, summarizes the problems, and reacts to them. I let them verbalize and sound off, but I just keep my reading opinions to myself at this time.

STEP II: REALITY

On the third day, I play several taped sections of local high school and junior high students taking an oral reading test. The class is given the test paragraphs and instructed to follow along and mark the errors. For example, one of the tapes has a sophomore who reads on the fourth grade level. Most of the class express shock that there are such poor readers in the schools.

STEP III: SELF-ANALYSIS

On the fourth day, I administer the Nelson Denny Reading Test for High School Students and Adults. The students are instructed to do their best so they will have an idea of their reading rate, vocabulary, and comprehension levels. The test is for diagnosis and does not affect their class grade.

STEP IV: REALIZATION

On the fifth day, I give them their individual test results along with interpretation. I show them the class profile of the total scores as well as the ranges of the rate, vocabulary and comprehension. (I have done this for several semesters and the results are reasonably constant: of a class of 30, 2 or 3 will be 9th grade or lower, 15 will be high school level, and the remaining will be college level.)

Week one has ended! The students haven't gotten into a reading text-book or any reading theory, but they are aware of what current literature says. Some have discovered that they aren't reading very well! All are talking about reading and many are now asking, "What will I do if I get those students in my class who can't and won't read?"

WHY DO I HAVE TO TAKE THIS COURSE?

Some of the students have already personally answered this question. For those who request it, we supply a self-improvement, home study reading course. This course is designed to increase rate, comprehension, and reading interest. For the ones who read well, it is now time for theory and practice.

STEP V: READING

Through lecture, discussion, reading and media we now analyze how
secondary reading is unique, the general skills required, the specific skills needed in different subject areas, and why reading skills must be taught and reinforced after the sixth grade.

Each student is assigned to a public school classroom to observe and carry out reading assignments:

1. Observe a class or classes and fill out a checklist rating the teacher and student involvement in reading skills.
2. Interview the teacher and students concerning reading, reading problems, and attitudes toward reading. (See Journal of Reading, May 1977.)
3. Administer a short reading test to one or more students and analyze the results.
4. Construct and give a teacher-made test; after scoring, have the students react to the directions, type of questions, vocabulary, etc. Could they read and understand the questions that were written?

STEP VI: INTEGRATION AND APPLICATION

As the students carry out their classroom assignments and observations, we begin to work.

1. Study and analyze the reading process. (I used to do this first and it was disastrous. The students didn't have the background for immediately attacking reading theory.)
2. Construct reading skill exercises for the different subject areas and reading levels.
3. Write, teach, and evaluate lessons in which the reading skills are integrated into the subject lesson.
4. Build a personal bibliography for continued professional reading.
5. Build a bibliography of "good" books and materials which are multi-level, subject-oriented, and can be used for teaching and reinforcing reading skills.
6. Design and construct a learning center for use in the student teaching assignment. The center must have exercises which meet the individual needs of students, including those exceptional students in the classroom.
7. List reading problems and determine methods, techniques, and materials for their correction within the regular classroom.

THE CLASS IS OVER! The students now can tell me several reasons why students in high school can't and won't read; why elementary schools can't and shouldn't teach the higher level reading skills required in content subjects; why the schools can't keep poor readers in sixth grade forever; and how they plan to integrate reading skills into each lesson that they teach. (We stress integration rather than direct teaching of reading. Secondary teachers are responsible for content teaching.)

Both verbally and nonverbally, many of these students will become teachers who go into the classroom and convey that "Reading is important
to me, and in my class we are going to read and develop the reading skills necessary for effective learning of the subject!"

REFERENCES


Maslow, Abraham H.
*Motivation and Personality*

We have acquired much information about the body machine and some skill in controlling its responses and correcting its defects. In contrast, we know almost nothing of the processes through which every man converts his innate potentialities into his individuality. Yet without this knowledge, social and technological innovations are not likely to serve worthwhile human ends.¹

Most of what is now known about human motivation comes from psychotherapists treating patients. In this book, *Motivation and Personality*, Dr. Maslow contends that any theory of motivation worthy of attention must be more positively orientated, and must deal with “the highest capacities of the healthy and strong” as well as “the defensive maneuvers of crippled spirits.” In his writing here he attempts to construct a psychology of motivation for self-actualizing people. It is a very readable, systematic presentation of his views of human motivation, based upon a synthesis of holistic and humanistic principles, with primary emphasis upon the psychology of health.

In his study of the self-actualizing personality, Maslow uses the term, “gratification health.” He maintains that personal physical and mental health which enable persons to function with autonomy develop from gratification of the basic needs of safety, love, belongingness, and esteem. At the point in growth where these needs have been gratified, real development of individuality begins and the human being “proceeds to develop his own style, uniquely, using these universal necessities to his own private purposes.” This, then, promotes development from within rather than from without. Self-actualizing behavior is characteristically growth-motivated, not deficiency-motivated. Actions and creations become in a high degree simple, spontaneous, and self-disclosing.

This author places all behavior into two categories: coping and expressive. He sees coping behavior as gratification-bent, tending to die out unless rewarded, as effortful and purposive. It is more often a functional response to a problem arising from the physical/cultural world. Expressive behavior is seen as effortless in most instances, often existing without reward or reinforcement, as arising from the nature of the inner character structure. Healthy, self-actualizing persons are viewed as essentially ver-

satile. They are able to be expressive when they desire to be. Also, they are able to cope, to control, to defer goals, or to delay pleasures when such actions are deemed desirable. They have a large reserve of responses, have retained capacities which help them to move toward full-humanness.

In his observations of self-actualizing people, Maslow has drawn some conclusions with implications for educators. He suggests that the motivational life of self-actualizing persons is different from others qualitatively as well as quantitatively. In general, they live within a wide framework of values, concerned with basic philosophical issues and ethical, eternal questions. They are problem-centered, rather than ego-centered. They are capable of intense concentration, possess a strong sense of "free will," and are remarkably self-governed and self-disciplined. They are not pawns to be moved about or beaten down by others; but, since they are growth-motivated, not propelled by deficiency motivation, they maintain a relative stability in the midst of frustrating, depriving circumstances. They possess an uncommon feeling of empathy for mankind, and can sustain deeper and more profound interpersonal relationships, than the general population. Their hostile reactions are not character based, arising out of low evaluations of others, but are usually reactive or situational. Self-actualizing people possess a pervasive sense of humor, closely allied to philosophy, more spontaneous than planned, and intrinsic to a situation rather than added to it. Trivialities and differences of what passes for morals, ethics, and values are transcended by a philosophic acceptance of the nature and self and human nature, and of a great portion of social life and physical reality. Self-actualizing individuals are more apt to enjoy differences than to be anxious or fearful about them. Generalizing further, the author infers that self-actualizing people are very different from average people, not only in degree, but in kind. He suggests that study of them yields a different kind of psychology than the "cripple" psychology and philosophy generated by study of "crippled, stunted, immature, and unhealthy specimens."

All people who work or associate with others in close daily relationships have within their hands powerful psychotherapeutic tools to stimulate conation in those others. They should be aware that every time they threaten, humiliate, unnecessarily hurt, dominate, or reject another they destroy a measure of that person's healthy self-motivation, promoting the creation of psychopathology. They should also recognize that each time they demonstrate kindness, helpfulness, decency, democracy, affection, and warmth they are exercising a therapeutic force. All the goals toward which they strive and institutional arrangements they support which gratify basic needs and foster, encourage, and produce good human relationships will help to build a society/milieu where the members have the greatest possibility of becoming sound, self-actualizing human beings.

There are two different ideal conceptions of family, law, society, and education now held by many: one is that they are restraining and controlling forms; the other is that they are gratifying and fulfilling. Perhaps, in order to achieve ideal health for the most persons, conceptions of in-
dividual psychology and theories of society need to undergo change. Maslow believes that:

... this ideal is not an unattainable goal set out far ahead of us; rather it is actually within us, existent but hidden, as potentiality rather than as actuality.

Ways need to be found and utilized to turn such potentiality into actuality.
QUICK REVIEWS

Homer Carter Reading Council


The use of readability instruments can prove to be more difficult than is commonly held. Due to the complexity and diversity of factors involved: i.e., the reader, interest, concepts, typography, orthography, structure, vocabulary, it is easy to misuse readability formulas. As few articles are written which do not vary in many of these factors from paragraph to paragraph, it is impossible to expect any one reading formula to give correct data for the entire article. The author sees the need for more research with readability formulas in regard to the measurement of concept burden and complexity. The counting of words and sentence elements is too frequently an indirect method, and has little application for complexities of concepts.


The idea that teachers bring about certain reading performance levels by their expectations is the basis for this well-written article. Braun offers several classroom episodes as examples of the phenomenon which seems to prevail although there is little empirical evidence that we can point to. The article is cause for serious self-analysis by teachers; in fact, we should all ask ourselves whether we are indeed causing behavior in others by the expectations we have for them.


Cambourne, moved by the quote from the book Improving Reading Research, by Farr, Weintraub and Tone, that “we look at other types of research (other than classical empirical design) and recognize them as valuable” took it upon himself to discuss thoroughly the controversial Goodman Model of Reading. The author seemed really interested in getting at rather than getting to Goodman.

No one yet has published a "Sexist Intelligence Quotient" test, until this interesting and rather surprising treatment of the controversial matter appeared. It may amuse some, and it may arouse a bit of reflection in others. The score interpretation, along with the rationale for the answers, accompanies the test. It is well worth the time to take, and we recommend you do.


The author was asked to comment on the subject of literacy in England and United States. He states that people are no longer satisfied to accept for their children a minimum functional ability to read and write. The standards expected from schools have steadily risen. Reading Series were born because teachers have too many children to teach at once; therefore, since teachers go on using them, four protective defenses are essential: (1) Children should be provided with the best series from the literary point of view; (2) They should be helped to "proper" books with all possible speed; (3) No one series or teaching method should be used, but a number of them; and (4) The Reading Series and the method used with them should only be part of the reading environment. Many proper books should always be available whether or not they can read them.

Teachers and librarians should apply themselves with greater skill and vigor to the real task that is theirs: to lead children on from a superficial reading skill decoding–to an appreciation of those books that yield the deepest meanings and greatest pleasures.


The author, concerned that black children as a group in this country are not learning to read well, showed in her study that it is not the language of the black children which interferes with their learning to read, but the reaction of their teachers' ignorance of this language. "Teachers need to be adequately trained to understand the dialects of the children they teach, and especially, to recognize meaning equivalence; and must also learn acceptance of black dialect as a complex grammatical system."

In view of the fact that secondary students who are referred to remedial reading teachers are still dropping out of school, ways must be found for content teachers to help students master their textbook materials in the classroom. The suggestions offered in this article are intended to provide the means by which reading people can provide practical assistance to the content area teacher. Using these quick and easy evaluative devices, the content teacher can obtain sufficient information from which to make effective instructional decisions.

Earle, Richard (editor), Classroom Practice in Reading, 122 pps., International Reading Association, 800 Barksdale Road, Newark, Delaware, 1977.

The direct teaching of reading skills or processes in the classroom is the topic of this new set of articles. The volume, in five sections, is organized according to a diagnostic/prescriptive model of classroom instruction. The five major steps in this process are development of the instructional system, followed by evaluation, materials selection, methods, and management.


Marjorie Empacher makes a strong case for the diagnostic training of undergraduate students in reading. While major clinical courses and training are usually reserved for graduate students, the author sees a very real need for all pre-service teachers to receive much greater course work in reading than is usually given.

Due to mainstreaming trends, accountability, public expectations, and marginal budgets, today's classroom teacher must be well prepared in the teaching of reading.

Salem State College has designed a diagnostic training program that allows its pre-service education majors to experience clinical and diagnostic work in a lab-class, the goal of which is to give students the best possible training in reading before entering the classroom.


Goodman chastises Peter Mosenthal's criticism of him (RRQ, Vol. XII, #1), and reprimands the Research Quarterly for
publishing Mosenthal's "Psycholinguistic Properties of Aural and Visual Comprehension as Determined by Children's Abilities to Comprehend Syllogisms." The author retaliates on seventeen counts of misrepresentation in that article. He says Mosenthal doesn't know much about his (Goodman's) research and doesn't think RRQ with its excellent reputation has any business printing such misrepresentations. Goodman welcomes a viable critique of his work. Mosenthal certainly didn't provide one!

Guthrie, John T. (editor), Cognition, Curriculum, and Comprehension, 300 pps., International Reading Association, 800 Barksdale Road, Newark, Delaware, 1977.

The editor of this comprehensive volume has collected papers from an interdisciplinary seminar on "The Development of Reading Comprehension." In his preface, Guthrie says "In the history of reading, scientific inquiry and practices of teaching have never been closer together than they are today. From many disciplines, researchers are embracing the challenge of explaining reading comprehension as it occurs in complex, everyday situations." Topics included in this collection include language comprehension and fast decoding, purpose in reading, syntax and semantics, child language research, an applied behavior analysis approach, design for developing comprehension skills, and fundamental cognitive processes, among others.


As a reading consultant to schools, the author suggests five criteria which should be used in the choice of new texts. He discusses with total clarity what textbook selection committees should pay close attention to: the readability level; the burden of new concepts introduced; background information assumed by the text writers; the smoothness in organization; and the format or style of presentation of the text. This is must reading for all middle and secondary school content teachers.


Nat Hentoff is a writer on educational concerns and the author of novels for children. Reading educators should be ready to answer his charges "If the schools aren't ready to put their house in order, others are ready to do it for them." He suggests "Parents, teachers, and administrators should work together to set clear learning goals from kindergarten on."

Core vocabulary is used differently with different approaches. Traditional readers of 1940 and 1950 taught instant recognition of core words as whole words one by one. Sentence reading and story reading followed. Critics suggested a second way—urging that only core words which followed predictable spelling patterns be taught. The third approach is the whole language approach. The core word is learned through natural sounding sentences rich with contextual clues. How can a teacher determine which children are ready in advance and which are not? The rule of thumb for mastery is identification of 80 percent of the words in the text list.


When individualization becomes the total educational program for the child instead of an effective method for teaching some content areas, some skills, and some children, the schools are in danger of becoming uniform throughout the nation, not unique. The authors point out the value of individualization, but caution teachers about losing the primary unit of interaction—the class. The interaction of the class has much value in reading, writing, mathematics, science, and social studies instruction.


Readiness is multidimensional. Reliance on a single criterion of age to determine readiness is folly; reliance on a diagnosis of the child’s language level is more useful. Parents and teachers need to learn how to create experiences that will allow children to grow at their own rates. They need to recognize readiness when it is present so instruction may proceed.

McNinch, George H., and Mark G. Richmond, “Teachers’ Perceptions of Their Principal’s Role in Elementary School Reading Instruction” Reading World (October 1977) 17:55-63.

Taking their cue from the recent papers proposing a stronger instructional role for administrators connected with reading programs, these authors have developed and used survey instruments to determine teachers’ attitudes on the matter. Their findings indicate a need for more and closer supervision and leadership in reading programs. Appendix A offers teachers a
measurement questionnaire to use in schools, the results of which would serve as strong suggestions to the administrators.


In answering Goodman’s charges, Mosenthal maintains he didn’t question Goodman’s data, merely how he arrived at it. Saying he was not attacking internal principles but bridge principles (those that connect certain theoretical entities that can’t be measurable behavior), author Mosenthal maintains Goodman has established only the first step in formulating a research paradigm with his taxonomy. and hopefully, Goodman will become aware that another research phase is possible.


We believe Ortiz describes an original approach to questioning for comprehension, and we further believe that if the methods described are used regularly in classroom work, beneficial changes in learning styles are almost certain to result. In a unique account, the author explains her own progression from discovery of questioning for concentration and purpose to the use of questions to help students master text reading. Questioning is a skill which should be emphasized, rather than merely finding answers.


This study compares comprehension scores drawn from oral reading performance with post oral-reading cloze test scores. Results showed a persistent relationship and findings that provide corroboration for the theories and methodology of miscue analysis.


This article is for anyone who deals with middle school children. Practical ideas dealing with getting them started, finding ample materials, and other solutions to typical problems abound in the article. Encouraging, enthusiastic, and realistic, the author has obviously spent a great deal of time and thought on reluctant middle school readers.

The author is an English-reading coordinator in New York, and he makes a strong case for better understanding and communications between reading supervisors and teachers. An especially cogent suggestion is to clarify relations and positions with written job descriptions for personnel at all levels. This reviewer can add only one thought to the set of ideas: learn to give one another undivided attention when listening during interviews. It could obviate many of the other recommendations.

Seitz, Victoria, Social Class and Ethnic Group Differences in Learning to Read, 35 pps., International Reading Association, 800 Barksdale Road, Newark, Delaware, 1977.

This is the first in a series of IRA publications on the development of the reading process. The purpose of the present volume, according to Dr. Seitz of Yale University, is to discuss alternative testable hypotheses which might account for the poorer reading performancy of lower-class children. Separate consideration is given to ethnicity, which is often confused with class, according to the author.


Strange and Allington give excellent advice to the content teacher who is making reading assignments in the textbook. They recommend a careful pre-assignment analysis of the word difficulty, sentence complexity, paragraph (importance to goal) use, and abstract concept load. It is a well organized and persuasive article, but we cannot help wishing that articles like this did not need writing in the first place.


The books reviewed in this article by the Learning book review editor are recommended as superior books for purchase by parents. Many topnotch publishers are bringing hardback and paperback versions out in the same season. This set of reviews covers 20 hardbacks and 16 paperbacks.

The particular value of this article is its practicality. The author not only outlines the use of cassette tapes for individualization of teaching, but gives many ideas for implementation of measurement and progress evaluation.


Many excellent suggestions are given in this article for organizing systematic help to make reading improvement an all-school phenomenon through the initiative of the English teachers. We are painfully aware of the fact that most content teachers already believe English teachers are the only people who give instruction in reading. and we think that English teachers who qualify themselves to teach improvement of reading in all content areas will truly be operating above and beyond the call of duty.


The significance of this study is best shown in the following quotes from the Summary and Conclusions: 1) an increase in reading is likely to increase reading achievement as measured by standardized tests; and 2) the influence of the amount of reading activity is apparently stronger than that of IQ on reading achievement as measured by standardized tests.
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