Reading Horizons vol. 29, no. 2

Follow this and additional works at: https://scholarworks.wmich.edu/reading_horizons

Part of the Education Commons

Recommended Citation

READING HORIZONS

Volume 29, Number 2
January, 1989

Editor - Ken VanderMeulen
Reading Center and Clinic
Western Michigan University
Kalamazoo, Mich. 49008

READING HORIZONS has been published quarterly since 1960, on the campus of Western Michigan University in Kalamazoo. As a journal devoted to teaching reading at all levels, it seeks to bring together through articles and reports of research findings, those concerned and interested professionals working in the ever widening horizons of reading and related skills.

Copyright 1989
Western Michigan University
Kalamazoo, MI 49008
READING HORIZONS (ISSN 0034-0502) is published quarterly by the College of Education at Western Michigan University, Kalamazoo, Michigan. Second Class Postage is paid at Kalamazoo. Postmaster: Send address changes to WMU, READING HORIZONS, Kalamazoo, Michigan, 49008.

Subscriptions are available at $14.00 per year for individuals, $16.00 for institutions. Checks must be made payable to READING HORIZONS; published October, January, April, and July--No. 4 issue containing Title and Author Index. Rates are determined by costs and are subject to change.

Manuscripts submitted for publication should include an original and two copies, and must be accompanied by postage for return of original if not accepted. Manuscripts are evaluated without author identity. Address correspondence to READING HORIZONS, WMU, Kalamazoo, MI, 49008.

Microfilm copies are available at University Microfilm International, 300 Zeeb Road, Ann Arbor, MI, 48108. Back issues, while available, may be purchased from HORIZONS at $4.00 per copy.

All authors whose articles are published in HORIZONS must be subscribers. The content and opinions expressed in this journal are those of the authors and do not necessarily represent the points of view of the HORIZONS Advisory Board.
READING HORIZONS STAFF

Editor - - - - - Ken VanderMeulen

Editorial Advisors

Joe R. Chapel
Reading Center, Western Mich. Univ.

James W. Burns, Elementary Education, Western Michigan University

Jeanne M. Jacobson, Reading Center, Western Michigan University

Ronald Crowell, Reading Center, Western Michigan University

L. D. Briggs, Elementary Education, East Texas State University, Commerce

Evelyn F. Searls, College of Education, University of South Florida, Tampa

Mary Jane Gray, Elementary Education, Loyola University of Chicago

Donald C. Cushenbery, Professor Emeritus, University of Nebraska, Omaha

Katherine D. Wiesendanger, Graduate Reading Program, Alfred University, Alfred, New York

Richard D. Robinson, College of Education, University of Missouri, Columbia

Linda M. Clary, Reading Coordinator, Augusta College, Augusta, Georgia
# TABLE OF CONTENTS

**RESPONSE: AN INTERACTIVE STUDY TECHNIQUE,** Jeanne M. Jacobson  
Western Michigan University, Kalamazoo  
85

**MISCUE ANALYSIS FOR CLASSROOM USE**  
Susan B. Argyle, Slippery Rock University  
Slippery Rock, Pennsylvania  
93

**MICROCOMPUTER APPLICATIONS FOR CONTENT AREA VOCABULARY,** Stephen Phelps and Lawrence L. Smith, Buffalo State College, NY  
103

**PROMOTING LEARNING AUTONOMY: HELPING STUDENTS BECOME INDEPENDENT LEARNERS**  
Gwendolyn Y. Turner, Oklahoma State University, Stillwater, Oklahoma  
110

**THEY CAN ALL SOUND GOOD**  
Lorraine Mary Leidholdt, College of St. Benedict, St. Joseph, Minnesota  
117

**PARENTAL KNOWLEDGE OF READABILITY AND CHILDREN'S READING INTERESTS**  
Gary A. Negin, California State University San Bernardino  
123

**ADAPTING BASAL INSTRUCTION TO IMPROVE CONTENT AREA READING,** Donna E. Alvermann  
University of Georgia, Athens  
129

**CHILDREN AS STORYTELLERS**  
David Hayes, University of Pittsburgh at Johnstown, Pennsylvania  
139
RESPONSE:
AN INTERACTIVE STUDY TECHNIQUE

JEANNE M. JACOBSON
Western Michigan University
Kalamazoo, Michigan

In schools and colleges, learning is a shared responsibility. Students and teachers, with varying degrees of enthusiasm and success, work toward the shared goal of increasing student knowledge and understanding. Within the traditional pattern--teachers teach; students study--student learning has been enhanced by teachers' recognition of the importance of teaching students to use effective study techniques.

SQ3R--Survey, Question, Read, Recite, Review (Robinson, 1961) continues to be the most widely used study strategy, and a useful discussion of methods for introducing this technique, together with a review of related research, has recently been provided by Stahl and Henk (1987). A wealth of other study strategies have been developed, including those which expand the SQ3R format (Edwards, 1972; Spache and Berg, 1966), simplify it (Smith and Elliot, 1979), or vary it to focus on specific content areas (Fay, 1965; Pauk, 1974).

Although an array of useful techniques are available to encourage effective studying, this is an aspect of the learning process in which teacher and students typically do not interact. The teacher's role is usually limited to providing instruction in study strategies, encouraging their use, and using the results of tests as feedback on the effectiveness of study.

Moving beyond "teachers teach; students study"

The traditional pattern--students study--which is maintained in all of these strategies is, of course, an essential component of the learning process. But student isolation during the study process may have negative effects. Even if students understand a study strategy, and devote energy to its use, they may fail to understand, or may
misunderstand, what they have read. Actively engaged students who realize they do not understand the text will ask for clarification, but students who misunderstand what they have read will feel no need for explanation and their misunderstandings are likely to remain undetected.

The RESPONSE technique meets the need for a method to provide interaction between students and teacher as a component of the study process. The method may be used in conjunction with other study strategies, or it may stand alone. RESPONSE was originally devised to enhance the study process for college students, and the examples included here are taken from RESPONSEs written by graduate and undergraduate students in education courses.

The RESPONSE form

A RESPONSE form has a heading for name, date, and reading assignment. The remainder of the page is divided into three unequal sections: Important points (As you read, list essential information and state important ideas; cite page numbers.); Questions (As you read, note questions that occur to you. Cite page numbers of their source. Some questions will be ideas for discussion. For others, you will want an immediate answer; star* these.); New terms/concepts/vocabulary/names (List words, phrases, technical terms, names of people, basic ideas which are new to you. Cite page numbers. Star* items you would like to have defined or explained.) Directions for RESPONSE may be included at the top of the form. (Fill in the form as you read. It's for notes, questions, ideas; while it should be legible, it's not meant to be a neat, finished piece of writing. Limit yourself to a single sheet, front and back. Your RESPONSE will be returned to you, with comments, usually at the next session after you hand it in.)

*Important points

The largest section of the RESPONSE form provides a place for students to list the ideas from their reading which they have identified as most significant. It is important that students be instructed to state ideas, rather than simply listing topic labels; for example, "Readability formulas: usually based on sentence length and number of unfamiliar words" is a useful statement, whereas "Read-
ability formulas" is not.

*Questions*

RESPONSE is similar to many study strategies in encouraging students to generate questions, but here students are also expected to categorize their questions. Some will be questions which the student regards as interesting; these may be a form of musing about the text topics; e.g., "Why do so many teachers still use round robin reading?" "Do you think that new teachers tend to stick close to teaching manuals for the first couple of years, and as they get more comfortable with the material begin using other sources?" These questions often provide the basis for class discussions as well as a sharing of ideas between teacher and student.

Prompt answers to other questions, either written on the form or provided in class, help students when, for whatever reason, parts of an assigned reading seem intracatably puzzling to them. These are two questions (phrased as comments) from students in an introductory reading course: "I didn't understand the chart on page 324 on scheduling activities. Is the teacher reading silently while the children are doing their activities?" "I'm still unsure what derivational suffixes are and what they are used for (p. 216)." The page numbers recorded with the questions allow the teacher to respond efficiently, without having to scan an entire section of text to find the question's origin.

*New terms*

The smallest portion of the form provides a place for students simply to list terms, concepts, vocabulary and names which are new to them. Almost any book is likely to include vocabulary which is unfamiliar to some readers; texts typically include new concepts, and familiar words used in an unfamiliar way. Some students use the section to list the technical vocabulary which the author introduces, such as metacomprehension and automaticity. For other students, words whose use is not confined to professional texts, such as ambidextrous, vicarious, ensconced, commencements, pertinent, ambiguous, rhetorical, will be new. Current research suggests that referring students to dictionaries to determine word meanings is often not fruitful
(Miller & Gildea, 1987) and teachers should take seriously the agreement that any starred items are to be explained.

**Everyone asks questions**

By requiring students to make decisions about how to categorize their study notes, and which new topics need further explanation, the RESPONSE technique focuses student attention during the study process. The three-category RESPONSE format serves an additional useful function: it emphasizes the fact that everyone studying a topic has something to learn. Many students, even at the college level, cling to the idea that a successful student is someone who already knows all there is to know. Good students, according to this view, have no questions and encounter no terms or concepts which are new. The RESPONSE technique helps students reject this counterproductive idea because notes must be made in each of the three categories. Moreover, when questions from RESPONSE are shared and discussed, students see that interesting, important questions can be raised about any significant topic.

**What students know, and teachers don't**

Just as common-sensical as "teachers teach; students study" is the expectation that teachers know more about the text than students do. Yet there is one way in which students can provide more information about a text than the teacher can; students can find out where the points of confusion are. Precisely because teachers have background knowledge and understanding of topics in the text they will not find a well-written text confusing. But even the best of texts contain hidden pitfalls, and RESPONSE teaches the teacher where they are.

This point is illustrated by RESPONSEs based on the text on teaching reading by Dolores Durkin (1983). Because of students' RESPONSE forms, I know Durkin's assertion that kindergartners should be taught "the meaning of word" is often misread as a direction to teach kindergarten children definitions of words. In their acceptance of the commonplace idea that it is important to teach word meanings, students miss Durkin's sophisticated message that it is necessary to help children to develop a concept of what a word is.
The importance of requiring students to include page numbers when noting important points comes home to an instructor who is confronted with the news from several students that Durkin asserts "avoiding written words is important"! Amazing as it seems, this statement does appear in the text, but in context it is perfectly sensible. Durkin is providing information about how to teach children to identify words which have the same beginning sound, and she notes that this activity must be oral, since children could identify similarities based on visual clues if the written words were shown.

As soon as they have been used for one course, my texts are annotated with notes from RESPONSEs, indicating points of agreement, disagreement, confusion and minor inaccuracies. One student group helps the next in this fashion.

Assigning RESPONSEs

RESPONSEs will be only one of several written assignments which students complete, and which teachers read and comment upon. It is necessary, therefore, to think through the assignment so that it does not burden either students or teacher. At the college level, there are advantages in requiring students to complete several RESPONSEs without specifying dates for submission. This makes it likely that some of the students will respond to each of the reading assignments. It is important to specify that individual students should submit RESPONSEs one at a time, and complete at least two before the final month of the course. Completion of extra RESPONSE forms may be made an option for students who find this method of study particularly productive, and may be used as an alternative for students who must miss a class session.

Another way to assign RESPONSEs is to divide a class into fourths and require members of each group to complete RESPONSE every fourth week, on a rotating basis. All students learn the technique, and reactions from heterogeneous student groups are likely to be typical of the total class. Alternatively, RESPONSEs to the same short reading assignments may be required periodically from all students in a class or group, and used as the basis for a discussion. If students bring completed RESPONSE forms to a group
meeting, listings of important points may be compared and discussed, questions may be shared and a group compilation of new terminology prepared. This method of using RESPONSEs reduces the amount of teacher writing which is necessary, since the forms are not collected until after the group meeting, and students may annotate their own forms when their questions are answered during group discussion. Some written teacher comments, however, should always be provided before a RESPONSE is returned.

Preparation of a RESPONSE form as a class or group activity prior to its assignment as an independent activity is useful with younger students, and students whose experience with study techniques is limited. The RESPONSE strategy is particularly appropriate for modeling in this way because the goal is to produce a series of notes in three categories, rather than a finished piece of writing. At the college level, RESPONSE forms, based on a reading of the course syllabus and course assignments, may be completed and discussed at the first class session.

Commenting on RESPONSEs

Clarifications, explanations, expansions, and supportive comments are all appropriate when teachers react to students' RESPONSE forms. This does not mean that nothing but praise is needed. "I disagree; we'll discuss" is a direct comment, as is "No; this is not what the text says" or "not what the author intended" - followed by a clarification. If a RESPONSE is incomplete, not thoughtfully prepared, or too brief, it may, of course, be returned without credit. When this happens, the teacher should follow up to make sure that the student understands what is required and is, if necessary, helped to produce a satisfactory RESPONSE.

There is a temptation to respond briefly, e.g., "Splendid!", to a thorough, thoughtful RESPONSE containing only questions which are the result of student musing. It's better to comment as well as praise. Sharing some of your own ideas in response to the questions is reinforcing as well as informative for the dedicated student. Another temptation is to react to starred questions and terms on the RESPONSEs of less skillful students by referring the students to the text. But the use of the RESPONSE tech-
nique implies a promise of helpful answers. The technique works best when the teacher is willing to take the time to provide requested information, either on the form itself, or in subsequent class instruction, or both.

**RESPONSE is a shared activity**

The RESPONSE technique differs from other study strategies in that students cannot use it alone. Teachers cannot simply give RESPONSE forms as an assignment, and do no more. As students study, they must take action which enables them to share their reactions to what they read with their teacher. The teacher must read thoughtfully, comment carefully, and return the RESPONSE forms without delay. The effort is productive for both student and teacher.

Most study strategies are named with an acronym which provides a mnemonic reminder of strategy steps. RESPONSE is not an acronym. The term was chosen because the activity is based on the student's response to a reading assignment, and the teacher's response to what the student has written. An additional reason for the choice of name was that response and responsibility are similar in derivation, and, in this conceptualization of the study process, related in meaning also. Spondere, in Latin, means to promise. Teacher and students are promising to work together, through structured messages going back and forth, when the RESPONSE technique is used.

The term can be used as an acronym, however, to provide a summary of directions. Here the underlined portion is directed to the students, the non-underlined are for the teacher, and the final capitalized sentence is for all.

**Record your notes as you read.**

*Each part of the form must be completed.*

*Star the questions and terms you need explained.*

*Prompt return of student responses makes them most useful.*

*Offer explanations, clarifications, comments and praise.*

*Note comments for total class by annotating your text.*

*Save returned RESPONSE forms with your class notes.*
EVERYONE - BOTH STUDENTS AND TEACHER - HAS RESPONSIBILITY FOR LEARNING.

REFERENCES


During oral reading, students often say something other than what is actually printed in the book. Such "miscues" can be used to help teachers make decisions about upcoming reading instruction. Deviations from text during oral reading are not simply random mistakes (Goodman, 1969), but form patterns that reveal useful information about children's reading abilities. A relaxed version of miscue analysis can take as little as ten minutes to administer and score. This kind of information provides a profile of the reader's strengths and weaknesses which in turn gives important clues as to the range of strategies students use during reading. Warning! Miscue analysis may be habit forming. Some teachers have commented that once they get started, they often take advantage of oral reading whenever it occurs, to jot and code miscues.

Usually considered only as a part of informal reading inventory as a package, miscue analysis is overlooked as a helpful tool in and of itself. Abbreviated forms can be conducted on the spot with nothing more than a pencil and a duplicate of the student's text. One might even code in pencil in their own manual. Time consuming individual diagnostic sessions are not necessary since coding can take place anytime oral reading occurs within the school day; during reading, social studies, science, etc. Reading samples taken from actual classroom settings helps to insure that the results are representative of students' daily performance. As an alternative to the common deficit model, miscue analysis of this sort is valuable for documenting what students already do well so that instruction can be designed to build on their areas of strength. Teachers can share findings with students individually or as a group to stimulate metacognitive awareness about effective strategies for processing print.

Although Goodman and Burke's Reading Miscue Analysis
(1972) is comprehensive, well accepted, and commercially available, reading clinicians and specialists have been more likely to use RMI than teachers because of the amount of time this version takes to administer and analyze. For example, the RMI suggests nine categories of analysis for every single miscue. For application within the hectic school day, teachers need a more economical miscue analysis that still provides relevant diagnostic information.

Classroom teachers can easily apply the general principles outlined in RMI without the extensive analysis suggested by Goodman and Burke (Harris and Smith, 1980). For instance, if a child seems to be reading words or letters backwards, analysis can be focused on reversals to determine if this is actually the most pressing problem and what percentage of miscues is reversals. Another area of concern is phonic knowledge. Miscue analysis can provide a picture of whether or not miscues have repeated phonic similarity in the beginning, the middle, and/or the end of the word. This helps teachers decide where to concentrate time and effort for follow-up instruction. One of the aims of reading instruction should be to develop students' use of complementary strategies that combine phonic knowledge with the larger context of the passage so that comprehension is achieved. This becomes a more realizable goal when the students' reading behaviors can actually be inventoried.

STEP BY STEP

In general, steps for using classroom miscue analysis are as follows:
1. Select material that is unfamiliar to your student. It could be part of a basal reading story or a subject area text. Even "good" readers usually miscue with new material.
2. Copy the reading selection and code miscues while the student is reading.
3. If you choose to administer on an individual basis, reduce student anxiety by telling them that this is not a "test". Students get used to your coding if you do it often enough.
4. Have the student read the passage out loud, without preparation. Tape recording allows more assurance that all miscues will be coded accurately but is often not
practical in a noisy setting.
5. Put miscues on summary sheet for analysis.

CODING

No two inventories have the exact same system for coding miscues, thus it isn't a case of the "right" way to mark miscues. Consistency in coding helps when it is time for analysis; therefore, just decide on a system that is easy to use. Keeping up with the reader is a consideration—your code should be kept simple. Checkmarks, circles, slashes, and underlining work well for these purposes. My adapted system is included as an example (Fig. 1). Remember that marking all miscues is recommended to allow a complete reconstruction of the whole session, even if some errors are not included in the final analysis. This is especially important if tape recording is not possible.

Figure 1
Possible Coding System

<table>
<thead>
<tr>
<th>Omission</th>
<th>the old tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion</td>
<td>the old tree</td>
</tr>
<tr>
<td>Pause</td>
<td>the old tree</td>
</tr>
<tr>
<td>Substitution</td>
<td>the old tree</td>
</tr>
<tr>
<td>Repetition</td>
<td>the old tree</td>
</tr>
<tr>
<td>Reversal</td>
<td>the old tree</td>
</tr>
<tr>
<td>Correction</td>
<td>the old tree</td>
</tr>
<tr>
<td>Word Supplied</td>
<td>the old tree</td>
</tr>
</tbody>
</table>

(by teacher)

ANALYSIS

Reading is a complex process that involves the interaction of all aspects of language. Therefore, significance is not attached to any single miscue but to the repetitions or patterns that become evident in the oral reading of a text. Twenty to twenty-five miscues should provide enough information for accurate analysis.

To organize miscues as to variety and frequency of
occurrence, miscues are transferred from the text on which the original coding was done, to a teacher-made summary sheet (Fig. 2). Remember yours can be made on the spot--effectiveness is not determined by a fancy form!

<table>
<thead>
<tr>
<th>Student's Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>B</td>
<td>M</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This kind of sheet is extremely valuable for documenting student progress and for exhibiting examples of reading behavior. Write in the correct word as it appeared in the book in the first column. Next to it write in the child's miscue as close as possible to what was actually said. It seems to be easiest if all the text and miscues are filled in before beginning the analysis.

The decision as to what to analyze should be guided by the overall goals of reading instruction. Comprehension, phonic knowledge and the development of independent readers can be translated into the categories of meaning change, graphophonemic similarity (beginning, middle, and ending), and self correction attempts. Insight into these aspects of miscue analysis can be achieved by asking three common sense questions about each miscue.

1. Meaning change. - Is the meaning changed by the miscues as finally produced by the reader? The answer could be yes, no, or partly.
2. Graphophonemic similarity. - Are the miscues graphically similar to the text in the beginning, middle, or end of the word?
3. Self correction. - Does the student try to "fix" his or her own miscues?

SETTING PRIORITIES

Numerous possibilities exist as to how the student's summary of miscues may read. One student may show ability to use content in such a way that meaning is preserved but miscues are not graphically similar to the text. Given the sentence "The girl ran quickly down the road", the student who reads "The girl ran quickly down the street" has not made a significant miscue because the underlying message is close to the original. Instruction that would encourage a more active use of text through rereading, prediction, confirmation, and making inferences would be appropriate in a case like this. Of more concern would be readers who have high percentages of graphic similarity but whose miscues repeatedly obscure meaning. Reading the same sentence "The girl ran quietly down the strad" would be typical of a child who has a single strategy for reading that consists of sounding out the words for accurate phonic representation.

Reading is a complex process that involves using a symbol system in order to understand the message. Readers come with personal experience, existing knowledge, preferences, and different levels of sophistication for turning those symbols into something that speaks to them. In this sense, reading is not a precise, symbol by symbol, or word by word progression. Meaning is an integral part of reading.

CASE STUDY

Halley is the kind of child who is under her chair more often than she is on it. A second grader, Halley did not qualify for any special services within her school system. Yet, she cannot seem to keep up with any of the three reading groups that her teacher has set up. One of the first grade teachers tried to fit Halley into one of her reading groups but Halley seemed to make little progress for the amount of disruption she caused. A series of diagnostic sessions that included an examination of visual and perceptual abilities, and a complete battery of psychological tests indicated that Halley seemed to be
within average ranges in all areas. Halley's miscue analysis is included with some of the instructional recommendations that resulted from the analysis and interpretation (Figures 3 and 4).

FIGURE 3 - Passage With Coded Miscues

The bees had been making honey all day long. At night it was cool and calm. I had slept well until I heard a loud noise near my window. It sounded as if someone were trying to break into my cabin. As I moved from my cot, I could see something black standing near the window. In fright I knocked on the window. Very slowly and quietly, the great shadow moved down and went away.

The next day we found bear tracks. The bear had come for the honey that the bees were making in the attic of the cabin.

(Johns, 1981)

Interpretation

After copying Halley's miscues to a summary sheet they can be analyzed for one or more of the following: graphic similarity, or how much the word she said looks and sounds like the word in the book; meaning change, or whether the word she said alters the meaning enough to interfere with comprehension; self-correction, or whether or not she attempts to correct her own miscues. Total the columns and determine percentages, but remember that the overall picture is more important than any individual pattern or numerical score.

Before examining the profile of Halley's miscues quantitatively, a general observation can be made. Scanning down the miscue column reveals that all but two of Halley's miscues are real words. This is a strength and implies that Halley is using her knowledge of oral language to produce actual words that she knows as she reads. A more troubled
## FIGURE 4 - SUMMARY SHEET

<table>
<thead>
<tr>
<th>TEXT</th>
<th>MISCUE</th>
<th>CHANGE</th>
<th>B</th>
<th>M</th>
<th>E</th>
<th>CORR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 beef</td>
<td>best</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>2 honey</td>
<td>hon</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 cool</td>
<td>cold</td>
<td>partial</td>
<td>✓</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 calm</td>
<td>climb</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5 trying..</td>
<td>yes</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6 cot</td>
<td>coat</td>
<td>yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7 black</td>
<td>back</td>
<td>yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8 bright</td>
<td>fight</td>
<td>yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>9 quietly</td>
<td>quickly</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10 great</td>
<td>greet</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>11 shadow</td>
<td>sound</td>
<td>yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>12 and</td>
<td>yes</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>13 down</td>
<td>done</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>14 went</td>
<td>what</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>15 away</td>
<td>was</td>
<td>yes</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>16 tracks</td>
<td>taking</td>
<td>yes</td>
<td>-</td>
<td>✓</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>17 bear</td>
<td>dear</td>
<td>yes</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>18 making</td>
<td>taking</td>
<td>yes</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>19 attic</td>
<td>atrak</td>
<td>yes</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>20 cabin</td>
<td>big bear</td>
<td>yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Total % 100 / 60 / 20/55/5
Another interesting aspect of Halley's reading behavior occurs in the category of meaning change. Ninety-five percent of her miscues were found to alter the intended meaning. Considering that there are one-hundred words in this passage, and nineteen of the words were changed enough to affect meaning, we can assume that it could be difficult for Halley to understand fully what the paragraph said. Looking at the original coded passage, the slashes show frequent and lengthy pauses between words. This choppy, word by word reading combined with the omission of almost an entire line is a signal that Halley is probably more concerned with decoding than with achieving meaning.

Preoccupation with accuracy can accompany a breakdown in the reading process. If Halley's attention is concentrated on individual sounds or words she may experience a kind of tunnelvision that blocks her idea of the text as a whole. Meaning is cumulative and needs to be actively constructed by putting the clues that are in the text together to find out what the author means. Otherwise, reading becomes an activity that is characterized by a halting sequence of calling out words, as Halley has shown.

Halley does have an ability to use her phonic knowledge. Her strength is in utilizing beginning and ending sounds, which is often the case with below level readers. But even in miscues like sound for shadow or was for away, Halley is using consonant clues from within the word to come up with her substitution. Rather than remedying her vowel deficit directly, recommendations were made to help Halley use her strengths in CLOZE passages that will also improve her ability to use vowels in context.

Figure 5 - Sample Close Passage "Alice in Wonderland"

Directions: This passage begins with Alice chasing a rabbit right into his rabbit hole. Words have been left out in some places. See if you can use the letter clues to help you write in words that make sense to finish the story.

In another moment, down went Alice after it, never once considering how in the world she was going to get
out. The r_____ hole went straight on for some way, then dipped s_____ ly down so that A didn't have a moment to think about stopping herself before f_____ down what seemed to be a very deep well. (Vacca, 1981)

Halley does not attempt to correct own own miscues enough. In the case of skipping over an entire line of print, Halley may be having trouble keeping her place during reading. A simple solution is a clear plastic bookmark that does not block her peripheral view of surrounding print (Smith, 1978). Self-correction attempts seem to increase dramatically after students listen to their own oral reading on tape and are encouraged to determine if what they heard made sense. Accepting meaningful substitutions that even look quite different from the word in the story helps a student like Halley believe that you mean it when you say that the aim of reading is to understand and make sense (look at miscue #3).

CONCLUSION

Teachers and students benefit when miscues are analyzed in a way that leads to classroom activities which add to the students' range of reading strategies. Occasionally students with puzzling reading problems present teachers with a need for more specific information about reading behavior. But since opportunities for observation, reflection, and problem solving are limited in the reality of a busy classroom, coding, analysis, and interpretation of readers' oral miscues provide access to understanding what goes on in readers' minds during reading. Classroom miscue analysis enables teachers to systematically examine reading behaviors that indicate students' reading strengths and weaknesses in a focused and manageable way. Informed insights gained from a quick and flexible version of miscue analysis can help both the students and teacher experience success.

REFERENCES


Microcomputers have become fixtures in most schools. It would be a rare elementary, middle, or high school which did not have a microcomputer lab, and many teachers now have at least one micro available in the classroom itself. With the proliferation of the microcomputer and its attendant software have come many potential uses in content areas (Blanchard & Mason, 1985). Vocabulary instruction is perhaps one of the most accessible and versatile areas in which the microcomputer can be a significant adjunct to content teaching.

Teaching Content Area Vocabulary

The key word in the sentence above is "adjunct." Unless a teacher is proficient in an authoring language such as Pilot or EZ-Learner, he or she is dependent on existing software. Preprogrammed software will not always fit a particular topic. A computer simulation such as Lemonade Stand may be useful in reinforcing concepts like assets and deficits (Balajthy, 1984), but the social studies teacher may not be able to find a simulation activity to fit a unit on the War of 1812, nor will the biology teacher be able to find a vocabulary program which neatly reinforces technical terms related to the study of genetics. Even if such programs existed, they would not "teach" by themselves.

In content areas, technical vocabulary is more than just "words" for which "definitions" must be learned. Whether it is a familiar word with a new meaning (such as culture in anthropology or biology) or a completely unfamiliar term (such as apogee, perigee or syzygy in astronomy), the words represent important concepts to be
mastered. Learning these terms and the concepts they represent requires many exposures in a variety of contexts (Beck & McKeown, 1983). Through reading, class lecture and discussion, experiments, problems, quizzes, and other kinds of exercises, students come to an understanding of new vocabulary. Effective vocabulary instruction helps students relate new words and concepts to their previous knowledge, develops elaborated understanding of those words and concepts, gets students actively involved in learning, and gives students strategies for independent vocabulary development (Carr & Wixson, 1986).

The initial responsibility for teaching remains with the teacher, but once vocabulary has been selected and presented to students in a manner consistent with Carr & Wixson's recommendations, there are three types of software packages which can provide additional reinforcing exposure and active student involvement. They are word processing programs, utility programs, and arcade-type games. The microcomputer can add to the variety of teaching and reinforcing activities available to the teacher; it can be used to provide written or "on screen" vocabulary exercises either for a whole class or for small groups and individual students who need extra reinforcement.

Types of Programs

Word processing. A teacher can use a word processing program such as Bank Street Writer (Broderbund) or FrEdwriter (Que Softswap Project) to create most of the same kinds of reinforcing activities which they might ordinarily have done by hand or typewriter. These exercises could be printed out for duplication and distribution in class, or they could be stored on disk so that students could retrieve them and work with them at the microcomputer. (Note: If this second option is chosen, the file or the disk should be "write-protected" so that students cannot inadvertently delete, alter, or otherwise spoil the exercise).

Matching activities, categorizing exercises, analogies, and quizzes can be quickly created at the computer, with the advantage of easy editing and revising available through word processing. Cloze passages can be quickly and accurately developed, and if the original text is stored intact,
different passages can be created by retrieving the original and deleting alternative words. Word processors can also be used in conjunction with utility programs to add text to word puzzles.

The teacher can reinforce context clues by giving students a list of words and then directing them to use the "find" command to locate them in text which has been entered in the word processor. As they see how the words are used in context, students can hypothesize the meaning of each and then check their guesses against the dictionary or against a glossary which has also been stored on disk. This kind of activity develops context and dictionary skills which can be used independently, one of Carr & Wixson's criteria for effective instruction.

Utilities. Utilities are programs which allow the user to plug variables into a predetermined format. For instance, with Crossword Magic (L & S Computerware), the teacher can use selected vocabulary and definitions to create crossword puzzles. These puzzles then can be printed out for duplication or called up and solved at the computer. Other examples are MECC Teacher Utilities I (Minnesota Educational Computing Consortium), which has programs for crossword puzzles and word searches, and Magic Squares (Southern Software) which creates self-correcting matching exercises.

Because of their relatively structured formats, utilities such as these are not as versatile or as challenging to the student as the types of activities which teachers can design with a word processor. Many of them restrict the number of words and the length of the definition "clues" that can be used. They may accommodate single words only, so terms such as square root or science fiction will appear as single words if they are included. Some, such as the MECC Word Find Program, simply create a puzzle but do not allow word lists or clues to be included.

On the other hand, most utilities are quick and easy to use. They require only a word list and brief definitions which are entered into the computer; the program does the rest. Utilities also allow the teacher to store, edit, and delete word lists. Used judiciously, students are generally enthusiastic about the "puzzle" format of the exercises.
and the self-correcting features of most of them.

Games. Arcade-type games can only be used at the computer keyboard, but they can be highly motivating for many students, especially poor readers who may be "print-shy" and unreceptive to other types of reinforcement. Word Attack (Davidson & Associates) is an example of a program which offers a variety of activities and allows the teacher to enter selected vocabulary with the program editor. Students have the option of a word display, which shows each word with its definition and an example sentence, a multiple choice quiz, a sentence completion activity and the game in which the player must "shoot" the correct word before the time runs out.

Games are probably the most limited of the formats available for vocabulary activities; on the other hand, they may be the most appealing to certain students. Some programs come with pre-packaged word lists; unless the program allows the teacher to use the vocabulary he or she has selected, it will have little application in content areas.

WHY USE THE MICROCOMPUTER?

The microcomputer can speed up the creation of materials to be distributed to the whole class, but that is not their only value. Frequently, certain students may require more practice or differentiated practice in order to learn. Poorer readers may need additional reinforcement of terms which most students have learned through class discussion. Gifted students may enjoy the challenge of an analogy exercise which might be frustrating to others. Students with reading difficulties may find the computer less threatening than pencil-and-paper or textbook exercises. Students who have been absent or missed work may need review or make-up assignments.

In these instances the teacher can design vocabulary activities which can be completed at the computer, either in the classroom or the computer lab. Students can work at the computer either alone or in pairs. A single exercise can be edited into more than one version, so that it can be "personalized" for specific students. It would also be feasible for the classroom teacher to give a vocabulary list to a reading or resource teacher, who could then
design computer activities for those students receiving additional help.

Another advantage of "on-screen" vocabulary activities is the potential for giving students prompt feedback on their performance. Although not as fast as the immediate feedback of some programmed computer-assisted instruction, microcomputer vocabulary activities offer several correction/feedback options. Arcade-type games do give immediate feedback, and puzzles such as crosswords and magic squares are self-correcting. Some software allows students to check their work immediately on-screen against an answer key stored on disk. If a printer is available, students may print their finished work for teacher correction, or print a copy and check against a key stored in a computer file. It would also be possible for students to store their work on disk for subsequent teacher review.

Consider as an example a sixth grade social studies teacher in a large northeastern middle school. She is one of a four-teacher team responsible for 120 students. As part of a unit on "society and culture," she is teaching a chapter on how people use the physical environment.

The teacher begins by developing a "word web" around three terms previously learned: "society", "basic needs", and "environment". They discuss how these concepts are related, with reference to their own severe winter climate. To this web she adds several other terms such as "family group", "cooperation", "customs", and "resources". Students copy the word web in their notebooks.

At this point she introduces the reading assignment and tells students to be especially alert for the terms they have discussed. As homework, she gives them a vocabulary worksheet she has developed on the word processor. The worksheet features clusters of five terms, four of which are related. A student is to cross out the unrelated word and choose one of the four remaining as a "main idea" for the rest. The following is one such cluster:

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society</td>
<td>Family group</td>
</tr>
<tr>
<td>Hoover Middle students</td>
<td></td>
</tr>
</tbody>
</table>

A student should cross out "individual" and circle "society"
as the main idea. The following day, the students are divided into groups of three or four to compare their responses to the worksheet.

A group of students who missed these two classes because of a chorus rehearsal are given a copy of the word web and the reading assignment. When they have read the chapter, they go to the computer lab and load a copy of the vocabulary worksheet, two students to a computer. In this way they retain some of the benefits of the small group interaction. As each pair completes the worksheet, they check their responses against a key the teacher has stored on disk.

Several students on the team are receiving supplemental instruction from the school reading teacher. He uses the vocabulary given him by the social studies teacher to set up a Word Attack file. His students then can get additional practice with these terms on one of the computers in the reading lab.

At the end of the unit, students are given several options which they may complete for credit. Among these are vocabulary activities in the computer lab. One option is to use Crossword Magic to develop a crossword puzzle with unit vocabulary. Another is to develop analogies with the vocabulary. Crosswords and analogies would be stored on disk and available in the computer lab for other students to use as they prepared for their unit test. The teacher could also load them to the computer screen to check students' work.

In this example, the microcomputer does not teach content area vocabulary itself; it is used as a tool for providing reinforcement of vocabulary which a teacher has identified and presented in class. Such computer applications are often referred to as "drill-and-practice", which carries the connotation of busy-work, but these activities can be challenging and effective when used judiciously to follow up instruction.

Teachers obviously need to be aware of the full range of possibilities offered by the computer. When pre-programmed drill-and-practice routines are followed with little consideration for whether they are needed by students or congruent with curricular objectives, it is difficult to
justify their use. However, when a content teacher or reading specialist uses the computer to complement and reinforce classroom instruction, they have given the computer its best means of proving its effectiveness and its efficiency.

REFERENCES


After twelve years of schooling, many students still do not have mature and efficient strategies necessary for independent learning. In an effort to address this problem, most postsecondary institutions are offering courses in basic skills such as reading, study skills, and writing. (Power, 1976; Lederman, Ribaudo, and Ryzewic, 1985). What causes and solutions can be offered to address this issue? How can classroom teachers help their students to become more successful in their learning activities? This article discusses reasons why students have not been successful in using learning strategies, identifies effective learning strategies, and offers suggestions for helping students become independent learners.

Reasons for Failing to Apply Independent Strategies

A search of the professional literature on studying and learning reveals the following reasons for students failing to apply independent learning strategies: lack of instruction, blind training in applying strategies, weak metacognitive strategies, and resistance to changing existing behavior patterns. Students can become independent learners when they overcome these obstacles.

Lack of Instruction

Students have not received systematic instruction in developing advanced learning strategies (Baker & Brown, 1984; Simpson, 1984). As they move from the process of initial learning to read to the complicated process of reading to learn, they must receive direct instruction which will allow them to develop mature and efficient learning skills. They will not become independent learners without advanced instruction (Herber and Nelson-Herber, 1987). Direct instructional activities should include modeling,
practice, and application across the content areas (Duffy & Roehler, 1986; Vacca & Vacca, 1986). In its recent research on teaching and learning, the U. S. Department of Education (1986) reports that the teacher plays the most vital role in students' acquisition and use of effective learning and study strategies. Consequently, teachers need to be aware of the quality and type of instruction offered in learning skills.

Blind Training of Skills

While most elementary and intermediate reading series contain sections of teaching study skills, and students receive instruction in the use of these study and learning strategies, nevertheless, they are often unable to effectively utilize or regulate their own learning strategies. Brown, Campione, and Day (1981) suggest that blind training in study skills is the reason for this weakness. Blind training occurs when instructors do not explain the how, when, where, or why in employing a new learning strategy (Simpson, 1984). Students are aware of various strategies, but do not know how to select or apply them with different types of reading materials.

Weak Metacognitive Strategies

Students are expected to attend to, interact with, and elaborate on the underlying meanings of the text. However, they are unable to do this without effective metacognitive strategies. These strategies include the ability to plan, check, monitor, evaluate, and revise learning strategies in reference to the task, learning characteristics, available strategies, and the type of material assigned (Brown et al., 1981). Metacognitive awareness allows students to regulate their learning strategies and to revise them when a breakdown in learning occurs. One significant factor in developing metacognitive awareness of learning is allowing students to become more self-directed and less teacher-directed in completing learning tasks.

Resistance to Changing Behavior Patterns

Many students are resistant to replacing ineffective strategies that they know and use with more demanding ones. Studies which have investigated the learning strategies that students employ throughout the learning processes
have found that students usually have one general study strategy, and it is used regardless of the content or the reading demands of the text (Higginson, 1986; Shenkman and Curkras, 1986; Turner, 1987). However, direct instruction in using effective learning strategies can alter students' behavioral patterns (Brown, Campione, and Day, 1981).

Identifying Effective Learning Strategies

Brown (1981) states that by directly teaching students learning strategies and the control of those strategies, students will not only enhance their academic performance, but will be able to transfer this training to other appropriate learning situations. Therefore, before teachers can help students become independent learners, they must be assisted in learning effective use of learning strategies. These strategies can be defined as any cognitive, affective, or behavioral activity that students engage in to encode, retrieve, store, or use information (Weinstein and MacDonald, 1986).

Weinstein (1987) names the following categories as learning strategies which foster learning autonomy: rehearsal, elaboration, organization, comprehension monitoring and affective. Teachers can help students use the processes and techniques in each category to obtain and use information.

Rehearsal Strategies

Rehearsal strategies emphasize repetition and are used when students need to recall information. These include rereading, repeating, and underlining. They require no deviation or modification of the text. These strategies are effective for literal levels of understanding.

Elaboration Strategies

This category allows students to try to understand new information by bridging what is already known with the new information. Techniques include summarizing, paraphrasing, creating analogies, and relating events to personal feeling and attitudes. They help students build their background and acquire new information.

Comprehension Monitoring Strategies
Comprehension monitoring strategies are aspects of metacognition and as such, focus on helping students monitor their own learning progress. They help learners in checking learning outcomes, planning subsequent strategies, monitoring their effectiveness, testing, revising, and evaluating efforts for learning (Baker and Brown, 1984). According to Weinstein, a variety of learning strategies are used for comprehension monitoring; however, most focus on self-questioning, teaching others, applying principles, and examining concepts.

**Affecting Strategies**

These are techniques that students use to create and maintain an effective learning climate. These include developing relaxation methods for reducing anxiety, creating a study atmosphere free of distractions, scheduling for maximum learning, establishing goals, and selecting rewards for accomplishments. These strategies create conditions favorable for learning.

**Helping Students Improve Their Learning Strategies**

Any effort to help students improve their learning must begin with their own knowledge and awareness of themselves as learners, their awareness of the task demands, and their ability to select and regulate learning strategies. In order to help students become independent learners, teachers are offered the following suggestions:

**Administer a Learning Strategy Checklist**

Assign a reading selection along with a learning strategy checklist in which students identify the strategies that they use before, during, and after studying the selection. Include on this checklist a list of strategies from which students can identify the strategies they use when they do not comprehend sections of the reading selection. The checklist has been successfully utilized in research by Swanson (1985) and Turner (1987). Completing this activity will allow students to become aware of their existing practices, and can serve as a starting place for discussion and teaching effective learning strategies.

**Provide a Description and the Significance of the Strategy**
When introducing a learning strategy to students, identify how it is to be used, and why it is important. Students should be given examples of when the strategy can be used most effectively with various types of reading selections. Students should then be required to practice the strategy and identify when and why it is significant (Schmitt and Newby, 1986).

**Employ a Content Based Approach**

Use a content-based approach to teaching learning strategies (Nist and Simpson, 1987). This includes using selections from different content areas, guiding students through the process of making study plans, selecting appropriate strategies, applying the chosen strategies, and identifying fix-it (for use when comprehension fails) techniques. The content-based approach allows students to determine the demands of the text and regulate their strategies.

**Shift Responsibility to Students**

Gradually increase the students' responsibilities for planning, monitoring, and evaluating learning strategies used with the content area reading selections. Shifting the responsibility for directing the learning activities from the teacher to the students will allow the students to ultimately structure the learning activities themselves and apply the processes independently (Herber and Nelson-Herber, 1987).

**SUMMARY**

According to Herber and Nelson-Herber (1987), students' independence in learning is developed by design, not by chance. Teachers can help students improve their learning by understanding the reasons why students have not been successful, identifying strategies that promote active participation in the learning process, and teaching students how to become more responsible for their own learning. Ultimately, students become independent learners when they plan, monitor, apply, and evaluate their own learning processes.
REFERENCES


Higginson, B.C. (1986, Dec.) An investigation into the self-selected study strategies used by college bound secondary students: Implications for the college reading specialist. Paper presented, Austin, TX: N.R.C.


At one time or another every elementary classroom teacher hears a child's oral reading performance which makes him/her feel uncomfortable. Hesitations, repetitions, improper use of intonation skills and word mispronunciations abound. Inconsistent rate and rhythm make comprehension of the text nearly impossible for the listener.

One typically associates this type of reading with children who have below grade level reading achievement. However, this need not be the case. In rooms where teachers understand the variables of fluent texting behavior and use techniques which incorporate the principles of effective practice and learning, listeners will not be able to distinguish between the oral reading performances of the highest and lowest achievers. Differences in their performances will be minimized or eliminated. All can sound good!

**Fluent Texting Behavior**

Fluent texting behavior is an observable, measurable reading performance which sounds like fluent speaking. Sherman (1979), in his Model of Reading and Learning, describes it as the overlay of language skills to the reading task. To fluently text printed material, readers apply their inherent knowledge of the sound, syntactic, and semantic cue systems of speech to the graphic code of language.

The English language uses a range of sounds that are represented in print by letters or combinations of letters. Fluent texters learn this sound/spelling system and apply it during reading when encountering unfamiliar words. They also apply their knowledge of the prosodic features of language; pitch, stress, and juncture.

In addition, fluent texters use their syntactic knowledge. Syntactic clues include phrase markers (e.g., prepositions)
and punctuation. Syntactic phrase boundaries marked by function words signal to the reader that a unit or cluster of words is ahead. Fluent texters, making use of these signals, adjust their use of the prosodic features of language and pronounce the phrase as a cohesive syntactic unit. In addition to using this internal knowledge of spoken language, fluent texters attend to punctuation marks, the external or graphic signalers of major syntactic boundaries, in a similar fashion. Once again, fluent texters use these marks to adjust their use of the prosodic features of language, and thereby maintain the rhythm and flow of the sentence patterns.

Not only do fluent texters use the sound/spelling system and the syntactic systems of language, but they also use information from the semantic or meaning system. This system includes knowledge of word meanings and concepts acquired throughout life. In order to gain an author's intended message as well as convey it to listeners, fluent texters call forth all the information they have about the text topic and apply it during the reading.

In essence, then, to fluently text printed materials, readers apply all their knowledge of spoken language in conjunction with their knowledge of the graphic code of language. They then produce a reading which sounds like fluent speaking and demonstrate fluent texting behavior.

**Determining Fluent Texting Proficiency**

Teachers can easily determine children's fluent texting proficiency by examining their oral reading rate. Rate is an observable, measurable sign of the adequacy of the foundation skills which must be integrated for oral reading fluency to occur. Rate, when viewed as an indicator of the proficiency of fluent texting behavior, is not just a measure of how quickly one reads. Karlsen (1969) explains that "Reading rate becomes a significant bit of information if viewed not just as a measure of speed but as a measure of decoding efficiency." (p. 178) In other words, Karlsen feels that rate is an indicator of readers' efficiency in processing and pronouncing words, and therefore is a valuable source of information about readers' word recognition ability.
Gough (1972) proposed that in addition to being related to decoding efficiency, rate is also related to comprehension. "If it takes too long to read a given word, the content of the immediately preceding words will have been lost from the primary memory, and comprehension will be prevented." (p. 532)

Findings from a study done by the author (1983) support both Karlsen's and Gough's points of view. In a comparison of reading performance of fourth graders who were either proficient, average, or deficient in reading comprehension, rate was used as a variable of fluent texting behavior, a reading performance assumed to be related to word recognition skill and reading comprehension. Significant differences (p.=.05) in rate were found between the three reader groups with the proficient readers averaging more words-per-minute than each of the other groups. In a bivariate correlational analysis of the data, rate was found to be significantly related to word recognition skill both at sight (r=.82, < .05) and also decoded (r.64 < .05). Rate then, because of its relationship with word recognition skill, was found to be a measure of decoding efficiency as Karlsen (1969) proposed. In addition, rate was found to be significantly related to reading comprehension (r.=.71, < .05), supporting Gough's (1972) contention that comprehension and rate are related.

The high, positive correlation of rate, word recognition and comprehension implies that an increase in proficiency in one of the skills will be related to a corresponding increase in the others. Therefore, the classroom learning environment should be structured for this end.

Methods to Develop Fluent Texting Behavior

There are several techniques that will improve oral fluent texting behavior while improving rate, word recognition and/or comprehension. One method is imitative reading, where students listen to a tape recorded story several times while following along in the text. Students eventually read the story on their own, imitating the performer's intonation as closely as possible. This technique, however, uses an entire text and requires large blocks of time.

Choral reading is another excellent technique. In this method, students interpret a poem or story in groups of
two or more, improving their speaking skill while at the same time improving their fluent texting behavior. However, choral reading is a group activity which makes monitoring and measuring individual progress difficult.

There is a third technique which improves rate, word recognition, and comprehension skill while boosting reader self-confidence and motivation to read. Unlike the previous two it is designed for individual use and requires only small amounts of time.

This third technique is the "method of repeated readings" (Samuels, 1979). It was first used with remedial readers, who after a few days of using it, demonstrated a significant increase in both reading rate and word recognition accuracy. Additionally, both of these improved skills transferred to other reading passages. Herman (1985) completed a study in which she used the method of repeated readings with less able, nonfluent intermediate grade students. She, like Samuels, found that the readers not only improved their rate of reading and word recognition accuracy, but improved their text comprehension. She also found that the improved rate and word pronunciation accuracy transferred between passages read. However, her readers did not demonstrate a significant improvement in phrasing ability. (The reason for this is discussed later.)

The method of repeated readings can be easily implemented in the classroom. The procedure is as follows:

1. The student reads a short selection (at his/her instructional reading level) to an aide who records the reading rate and number of word recognition errors on a graph.
2. The student then rereads and practices this selection several times by him or herself.
3. The selection is then reread to the same person who once again records the rate and number of word recognition errors on the same graph.
4. The student and aide compare the rate and number of word recognition errors for the two readings. If the child's rate has reached his normal rate of speaking, a new passage is selected and the procedure is repeated. Guszak (1985) provides another rate guide for teacher use. He suggests a minimum oral rate of 60 words per minute for
first graders, 70 for second graders, 80 for third graders, and 90+ for those in fourth grade or above.

As can be seen, the method requires little special training to implement. In addition it is efficient and cost effective. Teachers will have to initially train aides in the use of the procedure, but once the training is accomplished their involvement need only be for guidance in passage selection.

**Further Benefits**

Not only does the method of repeated readings improve fluent texting behavior and enhance learning through improved reader self-confidence and motivation, but it easily modifies to accommodate several components of effective practice. Hunter (1984) suggests that initial practice be guided and accompanied by feedback. The method of repeated readings provides for this because an aide monitors student performance, correcting word mispronunciations while recording rate and number of word recognition errors graphically. Hunter also proposes that a short, meaningful amount of material be practiced at one time. This, too, is accomplished because the passages are short. However, to even further assure full meaning, teachers should allow the readers to select materials in their areas of interest.

Furthermore, for effective learning, Hunter suggests that teachers provide models of the behavior they seek. This modeling step, which highlights the critical components of a skill, was absent in Samuels' original description, and in Herman's (1985) study. Their readers, therefore, had no model of fluent texting behavior to emulate. Perhaps this is the reason why Herman's subjects did not improve in their phrasing ability. Teachers, then, must build this in, prior to Step #1 in Samuels' procedure where they model the correct use of the prosodic features of language.

By using the method of repeated readings as a strategy to improve readers' fluent texting behavior, rate, word recognition accuracy, and comprehension can all be improved. In addition, the learnings will transfer and students' motivation to read will improve. Students at the lower achievement levels in reading no longer have to read in a nonfluent manner, signaling their deficiencies to others. Teachers who understand the variables of fluent texting behavior and
who use methods which incorporate the principles of effective learning and practice, can have an entire class of fluent texters. Therefore, when one listens to children read orally in such a classroom, s/he will not be able to distinguish the high achievement level readers from the low. They will all sound good!

REFERENCES


Sherman, George B. "Introduction to Reading Diagnosis: A Diagnostic Model." Course handout, Michigan State University, East Lansing, Michigan, June, 1979.
Parents can play an integral part in developing their children's reading skills. Supportive parents understand the value of encouraging reading by providing interesting books at appropriate difficulty levels. However, little research is available which investigates parents' knowledge of their children's interests or parents' ability to choose books of appropriate difficulty for their children.

This study investigated children's reading interests and the extent to which their parents knew these interests. Additionally, the study examined the ability of parents and children to select books at appropriate reading levels.

Method

Subjects

The subjects included fourth-grade students who were chosen at random from a population of students reading at a fourth-grade instructional level. Instructional level was determined by classroom teachers through the use of the criterion-referenced test which accompanies the Houghton Mifflin Reading Series (1976). The test measures phonics knowledge, vocabulary, and comprehension. Instructional level was also verified by the classroom teachers after working with the students for two months. Of the 35 subjects, 21 were girls and 14 were boys.

The second group of subjects consisted of 35 parents, either the father or mother, for each student. It was believed that the parent who volunteered would probably be more familiar with and interested in the child's reading interests. All parents who eventually participated were women. The parents classified themselves as having middle-class socioeconomic status.
Materials

An interest inventory, the Multi-Dimensional Screening Device for the Identification of Gifted and Talented Children by Bella Kranz (1978), was chosen. This inventory uses an open-ended format.

Three books were chosen from the Encyclopedia Brown Mystery Series by Donald J. Sobol. Mystery books were chosen because they are of high interest to both girls and boys at the fourth grade level. All three books were paperbacks with identical type size, similar length, and a similar number of illustrations. These books were also chosen because of their readability levels. Using the Fry Readability Formula (1977), Encyclopedia Brown Gets His Man was placed at the second grade level, Encyclopedia Brown Shows the Way was placed at the fourth grade level, and Encyclopedia Brown Finds the Clues was placed at the sixth grade level.

Procedures

Students were tested individually. Each student was asked to complete the interest inventory and to rank the books in order of difficulty. Students were told that they would be given as much time as needed.

As a student completed the tasks, his or her parent worked individually in a separate room. This prevented students from communicating with their parents about the tasks. Each parent was asked to complete the interest inventory by predicting the answers she felt her child would provide, then the parent was asked to rank the three books in order of difficulty.

Results and Discussion

The first set of results pertains to the answers on the interest inventories. Results were calculated based on parent-student pairs. Responses to questions were scored according to the percentage of agreement. In the case of partial agreement on questions that could have had more than one answer, partial credit was given based on a student's total number of responses. For example, if a student answered a question with four responses and the parent listed five responses, with two that agreed, the
amount of credit given was 2/4 or 50 percent agreement. In cases where a child or parent answered a question with a broad reply and the other responded in specific terms, full credit was given. Table 1 reports the overall percentage of agreement for each pair. The mean overall agreement for all 35 pairs was 45.75%. Therefore, parents knew their children's interests less than half of the time.

Table 1
Agreement on Interest Inventory

<table>
<thead>
<tr>
<th>Parent-student group</th>
<th>% agreement</th>
<th>Parent-student group</th>
<th>% agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42.8</td>
<td>17</td>
<td>35.0</td>
</tr>
<tr>
<td>2</td>
<td>49.3</td>
<td>18</td>
<td>45.2</td>
</tr>
<tr>
<td>3</td>
<td>55.7</td>
<td>19</td>
<td>57.0</td>
</tr>
<tr>
<td>4</td>
<td>46.7</td>
<td>20</td>
<td>67.7</td>
</tr>
<tr>
<td>5</td>
<td>53.0</td>
<td>21</td>
<td>50.9</td>
</tr>
<tr>
<td>6</td>
<td>50.0</td>
<td>22</td>
<td>23.6</td>
</tr>
<tr>
<td>7</td>
<td>40.4</td>
<td>23</td>
<td>34.3</td>
</tr>
<tr>
<td>8</td>
<td>41.0</td>
<td>24</td>
<td>63.6</td>
</tr>
<tr>
<td>9</td>
<td>45.7</td>
<td>25</td>
<td>16.6</td>
</tr>
<tr>
<td>10</td>
<td>45.2</td>
<td>26</td>
<td>27.7</td>
</tr>
<tr>
<td>11</td>
<td>58.2</td>
<td>27</td>
<td>48.7</td>
</tr>
<tr>
<td>12</td>
<td>51.6</td>
<td>28</td>
<td>50.0</td>
</tr>
<tr>
<td>13</td>
<td>51.1</td>
<td>29</td>
<td>53.0</td>
</tr>
<tr>
<td>14</td>
<td>38.0</td>
<td>30</td>
<td>42.7</td>
</tr>
<tr>
<td>15</td>
<td>51.2</td>
<td>31</td>
<td>29.7</td>
</tr>
<tr>
<td>16</td>
<td>40.7</td>
<td>32</td>
<td>59.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
<td>44.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>54.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Table 2 shows the mean overall agreement on each item of the interest inventory. There were two questions where agreement was well above the mean. Question #3 concerns parts of the newspaper that students read. Agreement of parents with their children reached 91.8%. Additionally, students agreed among themselves by frequently noting that they were interested in the comics. Question #7 concerns sports. Parents agreed with their children 72.1 percent of the time. Parents of both girls and boys were equally able to identify their children's favorite sports.
Discouraging results were also found. Question #14 concerns what students like to do when they are alone. The findings indicate that only 53.2 percent of the students had parents who knew these interests. On question #4, relating to the best books that the students read within the year, parents answered correctly only 39.2 percent of the time. This indicated that parents and children did not discuss reading materials often. The lowest degree of agreement (20%) was on question #9. This question concerns students' interests besides sports, hobbies, and collections. Parents also completed this question with more information than their children, indicating that children had less varied outside interests than their parents believed.

Table 2 - Item Analysis

<table>
<thead>
<tr>
<th>Item</th>
<th>Ave. % agreement</th>
<th>Item</th>
<th>Ave. % agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37.2</td>
<td>8</td>
<td>43.8</td>
</tr>
<tr>
<td>2</td>
<td>37.8</td>
<td>9</td>
<td>20.0</td>
</tr>
<tr>
<td>3</td>
<td>91.8</td>
<td>10</td>
<td>30.9</td>
</tr>
<tr>
<td>4</td>
<td>39.2</td>
<td>11</td>
<td>43.8</td>
</tr>
<tr>
<td>5</td>
<td>57.1</td>
<td>12</td>
<td>46.1</td>
</tr>
<tr>
<td>6</td>
<td>45.4</td>
<td>13</td>
<td>31.4</td>
</tr>
<tr>
<td>7</td>
<td>72.1</td>
<td>14</td>
<td>53.2</td>
</tr>
</tbody>
</table>

Results from the interest inventories indicated very few differences between boys and girls, which was contrary to many previous studies. Wolfson (1960), Chiu (1983), and Lamb and Arnold (1976) all found differences between the sexes. In this study, the largest difference in interests was that five boys read about war and none of the girls did. This study is, however, in agreement with previous studies by Rudman (1955), Chiu, and Lamb and Arnold in that boys and girls this age are interested in mystery.

The second set of results pertains to the rankings of the three books. Each book was assigned a number for the purpose of analysis: 1 for the second-grade book, 2
for the fourth-grade book, and 3 for the sixth-grade book. The rankings were analyzed in two parts using t-tests.

First, the responses of parents and students were compared to the correct ranking for all three books. A t-test yielded a significant difference (t=3.16, df=208, p <.001), indicating that parents were better at ranking books by difficulty. Yet, overall, parents were correct when ranking the books only 50.5 percent of the time compared to 30.5 percent for the students.

Second, the responses of parents and students were compared to the correct ranking for each of the three books. Table 3 reports these results. Parents were correct more often than students in identifying the easiest book (57% vs. 34%) and the hardest book (60% vs. 34%), but were no better when identifying the most appropriate book (34% vs. 23%). A significant difference was found between parents and students for the easiest book (t=1.93, df=68, p <.05) and for the hardest book (t=2.172, df=68, p <.05), but not for the most appropriate book.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>\bar{x}</td>
<td>sd</td>
</tr>
<tr>
<td>Easiest (second grade)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.571</td>
<td>.502</td>
</tr>
<tr>
<td>Students</td>
<td>.343</td>
<td>.482</td>
</tr>
<tr>
<td>Most appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(fourth grade)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.343</td>
<td>.482</td>
</tr>
<tr>
<td>Students</td>
<td>.229</td>
<td>.427</td>
</tr>
<tr>
<td>Hardest (sixth grade)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.600</td>
<td>.497</td>
</tr>
<tr>
<td>Students</td>
<td>.343</td>
<td>.482</td>
</tr>
</tbody>
</table>

Table 3 - Scores compared to correct answers

Conclusions

The purpose of this study was to answer two questions -- 1) How well do parents know their children's interests?, and 2) Are parents or students better able to select books at various levels of difficulty? In regard to the first question, it was concluded that parents were not very familiar with their children's interests, since they
agreed with their children less than half the time on the interest inventory. In regard to the second question, it was concluded that neither parents nor students were successful in selecting a book at the most appropriate level, even though parents were better at identifying books at the extremes of a continuum which ranged from easy to hard.

If parents wish to encourage reading by providing their children with interesting books at appropriate difficulty levels, it is recommended that parents observe their children more carefully and communicate with their children more often. In addition, it is recommended that parents seek help from readings specialists so that they may better select books at the appropriate difficulty level.

REFERENCES


ADAPTING BASAL INSTRUCTION
TO IMPROVE CONTENT AREA READING

DONNA E. ALVERMANN
University of Georgia
Athens, Georgia

Expanding basal reading instruction so that students will develop the ability to read effectively in the content areas is a recognized concern and legitimate goal of middle school teachers. This article offers suggestions on how teachers can achieve that goal by adapting the procedures recommended in their present basal manuals. Specifically, adaptations are suggested in three common basal procedures: setting the purpose, developing a vocabulary, and discussing the selection. Each adaptation can serve as a bridge for helping students apply what they learn in basal reading instruction to content area reading.

Background

Basal instruction typically follows the basic steps of a directed reading lesson. First, the teacher involves students in the lesson by tapping their relevant background knowledge, introducing key vocabulary, and reaching a common purpose for reading the selection. Second, students read and discuss the selection. Third, the teacher guides students through a series of skill related activities. Finally, if time permits, students engage in extension or enrichment activities designed to foster independence in applying the information and skills learned in a basal lesson. Setting purposes, developing vocabulary, and discussing selections are three activities common to both basal and content reading instruction. In fact, it is this commonality that makes adapting basal instruction to improve content reading feasible. Making the recommended adaptations calls for minor procedural changes in how students are taught to set purposes for reading, acquire new vocabulary, and discuss what they have read. A discussion of how these changes can be made within the existing framework of a directed reading lesson.
follows. Practical suggestions are made for modifying the current practice so that basal instruction can be a bridge to content area reading.

Expanding the Purpose Setting Activity

Reading to determine whether an author had a hidden, or perhaps unconscious, purpose for writing a particular text is considered the mark of a good critical reader (Devine, 1986). This ability to see beyond an author's obvious or stated purpose is especially helpful in content area reading. In social studies classes, for instance, students are required to make judgments or draw conclusions about what they read. Students cannot be expected to judge the validity of what they read unless they have been taught to check an author's credentials, recognize different points of view, and sense when biased or emotive language is influencing their thinking. Traditionally, when these critical reading skills are taught as part of a basal lesson, they are in the section labeled skills development; rarely do they receive the systematic day in and day out attention needed for students to become proficient in their use. By making slight modifications in the basal lesson, however, teachers can ensure that students' attention is focused on the need to read for multiple purposes at all times, not just when the skills development calls for it.

Checking an author's credentials Frequently the teacher's edition of a basal reader will include for each selection a short description of the author's background and interests. To make this information relevant to students, have them look for certain telltale clues in a selection that point to the author's background of experience. For example, if the author spent her summers along the rocky Maine Coast, have students note the number of ways this experience is reflected in her writing. Making students aware of the need to check an author's credentials is an important step in teaching them to question the authority of their textbook writers. Here, the aim is to produce an attitude of healthy inquiry, not one of negative criticism.

Recognize different points of view. Another way of expanding the purpose setting activity beyond what is presented in basal manuals, involves giving students the task of determining an author's point of view. Once students
are able to master that task, it becomes an easy next step to involve them in comparing two or more authors' points of view.

Determining an author's point of view rests on the ability to identify his or her feelings and ideas about a topic. Because an author usually does not state those feelings directly, it is up to the reader to infer them. Assist students in making the appropriate inferences by having them read to find evidence, or clues, related to how the author feels about a topic.

After students have identified the author's point of view, they should decide whether it coincides with their own ideas and feelings. If not, they may want to argue why the author's point of view is acceptable—providing students with opportunities to express agreement or disagreement with various points of view sharpens their skills as critical readers. This sharpened awareness lessens the possibility that students will accept unquestioningly the ideas presented in their content area texts, or in newspapers and television.

Sensing biases or emotive language. Helping students sense when an author is not using language forthrightly is still another way of expanding purpose setting in the typical basal lesson. Teaching students that biased language often belies an author's stated purpose is another way of teaching them to identify hidden purposes for writing.

In basal selections that contain biased or emotive language, teachers can have students note the "charged" words and then replace them with more neutral words. A comparison of the original version with the neutralized version will point out the power of language when it is used to stimulate positive or negative feelings in readers. An exercise in which students note their own reactions to words like scaly or slime will point up the range of individual differences in readers' responses.

Developing independence in vocabulary acquisition

In basal reading instruction, developing vocabulary is a highly structured and teacher guided activity. The key vocabulary that are introduced are rarely technical terms, and more often than not they are in the students' listening vocabulary. That is, students have developed concepts for
the key vocabulary and only need to make the connection between the spoken and written representation of the words.

As structured as vocabulary development is in most basal reading series, it is still impossible at the upper grade levels to teach all the words students will need to know in order to comprehend their content area reading assignments. Students need to learn how to determine the meanings of unfamiliar words independently. One procedure for developing this independence in word meaning makes use of the concept of categorizing. Research (Graves, 1986; Stahl, 1986) has show that categorizing words (e.g., associating the "new" and the "known") along a variety of dimensions is an effective way to increase vocabulary knowledge. Pairing synonyms with their antonyms and using analogies are two types of categorizing activities that can be done as part of the regular basal vocabulary lesson. Although teacher guidance is a necessity at first, over time, students are expected to assume greater and greater responsibility for categorizing the new words they encounter (Pearson, 1985).

Pairing synonyms with antonyms. The idea of pairing synonyms with their antonyms as a way of establishing the meaning of a new word is derived from Carnine and Silbert's (1979) technique of successively presenting pairs of words that differ minimally in meaning. By pairing, instead, words that differ maximally in meaning, as is the case of synonyms and antonyms, Powell's (1986) recommendation to teach vocabulary through opposition is heeded. According to Powell, the power of teaching opposites "... distinguishes, intensifies clarity, and controls comprehension" (p. 619). Research (Kimble, 1968) also has confirmed the effectiveness of using opposites to evoke word associations.

Pairing synonyms with their antonyms is a strategy that is easily integrated within the current basal practice of introducing key vocabulary in context. Present the same list of words, but rather than provide clues to those words in sentences, ask students to match appropriate synonym/antonym pairs with the new words. For example, the synonym/antonym pair for the new word submit would be yield/resist. This early recognition task could later give way to the more difficult production task of asking students to supply either the synonym or antonym. This strategy is aimed at helping students acquire vocabulary meaning independently.
It is not recommended as a replacement for current basal practices -- only as a variation on them.

Using analogies. Like the categorization strategy described above, using analogies is most effective when taught in conjunction with the contextual method, popular in many basal series. Analogies taught by themselves typically involve only definitional learning. However, with a slight modification in procedure, teachers can combine analogical reasoning and the contextual method. For instance, using the same words from the paired synonym and antonym example, ask students to complete the following sentence: "Because the thieves refused to yield or _______ to his questioning, the sheriff believed they also would oppose or _______ the lie detector test."

In definitional form, the analogy would look like this:

```
yield: submit :: oppose: resist
```

A point to keep in mind when presenting vocabulary through analogies is the need to focus students' attention on the appropriate attributes of the known term (Baldwin, Luce, & Readence, 1982). For example, an analogy that uses the word yield to explain submit will only be understood if students associate the attributes of "giving up" with the word yield.

Making certain that students have multiple exposures to a new word is a critical factor in improving comprehension. In Stahl's (1986) review of the literature, providing only one or two exposures to a word is insufficient. Using analogies embedded within the context of a to-be-read selection is another way of developing students' breadth of knowledge in vocabulary learning. It is also a way of enabling them to derive meaning independently, a skill that is vital to their understanding of content area texts.

Enabling Students to Be Active Discussants. According to the 1984 National Assessment of Educational Progress in reading (see The Report Card, 1985), 40% of the thirteen year olds had not acquired the skills necessary for drawing generalizations about key ideas from content area texts. Even more disturbing was their lack of proficiency in reacting critically to what they read or in questioning their interpretations of text in the face of opposing arguments. The results prompted the authors of The Reading Report Card
to recommend an increased emphasis on teaching comprehension using higher level reading skills. They suggested that classroom discussion was one way of improving those skills.

Reacting to the need for teaching higher level skills, Farrar (1986) noted, "examining one's own opinions, judgments and reactions in relation to what the author has presented and applying that knowledge to new situations marks a qualitative jump from the...comprehension of the basal reader (p. 46). Farrar further observed that students benefit from discussions in which they bring text based knowledge to bear on current issues and problems. Following are two ways to modify a typical basal discussion. For a fuller description of how these modifications have been used, see Alvermann, Dillon, & O'Brien (1987).

Issue oriented discussion. The purpose of an issue oriented discussion is to inform students' of others' feelings and beliefs about a particular topic. An issue oriented discussion can also help students analyze, evaluate, or even modify their ideas. Because responsibility for much of the talk lies with the students in an issue oriented discussion, it is necessary to modify the typical basal reading discussion. Instead of discussing segments of the text, as in a basal discussion, students should be encouraged to read the entire selection and then discuss it.

One activity that is appropriate for structuring an issue oriented discussion is Group Reading for Different Purposes (GRDP) (Dolan & Dolan, 1979). The procedure follows:

1. Assign all students the same material to read silently
2. After the students have completed the reading assignment, divide them into groups of four and give each group a task on a 3X5 index card. Tasks might include:
   (a) find three statements of fact and three of opinion
   (b) present an alternative argument to the one given in the text
   (c) test the truth of the author's statements by referring to other sources
   (d) devise a set of questions that can only be answered by consulting additional sources
3. Remind students that although discussion takes place in the small groups, the major forum for discussion is the whole class after the tasks described above have been
completed. A spokesperson may be appointed from each small group to summarize the group's ideas for the class.

Because Group Reading for Different Purposes is a big departure from the way discussion is conducted in traditional basal instruction, students may be reluctant at first to take responsibility for initiating their own small group discussions. This is usually not a problem, however, once students have engaged in the activity and feel comfortable in completing the tasks on the index cards.

Problem solving discussion. To use problem solving in a discussion as it is intended, students must read in depth about a topic or concept. Most basal selections do not encourage this type of reading. However, the enrichment activities for most selections do contain suggestions that can be used to guide small groups of interested students in their search for more information about a particular topic. To prevent these enrichment activities from foundering because of inadequate time to supervise them, teachers may opt to use the development discussion strategy, which was developed by Maier (1963) for the purpose of exposing students to the process of group problem solving. It operates on the notion that students who have a say in formulating a problem will be able to solve it if they break the big problem into manageable parts and work as a group to solve one common problem part at a time. Students work in small groups to find solutions to a problem and to obtain evidence for keeping or rejecting their solutions. They also use higher level thinking skills in evaluating the product of their efforts.

Steps for implementing a developmental discussion involve the teacher directly at the beginning and end of the activity. In the interim, students are expected to work independently as they complete well structured tasks. To use the developmental discussion strategy, begin by reviewing the selection briefly with students and then formulate a problem together. It is a good idea to model problem solving questions in a way that encourages students to use both their background knowledge and the information in the selection. For example, ask, "How does the idea that _____ apply to _____?" It is crucial that students have a voice in formulating the problem they will be solving. It is also
important that they break the big problem into manageable parts.

As students work independently in their small groups to solve the smaller problem parts, they may use the following questions to guide their discussion:

- What do we already know about this problem part?
- How much of what we know is relevant to solving the problem?
- What other information do we need to solve the problem?
- What are some possible solutions?
- Which of these solutions make sense based on what we know or what information we can gather?

After the students have completed their work on the first problem part, the teacher may suggest that they share their thinking, to this point, with the class. Because more than one small group works at the same time on a common problem part, students have the opportunity to observe the different ways a problem can be solved. Eventually, a new problem part is identified, and the process begins again.

Two major limitations of this approach to discussion are evident. First, basal selections do not always lend themselves to a problem solving approach. Second, the success of the developmental discussion strategy rests on an assumption that students have had some experience discussing and working independently in small groups. On the positive side, the benefits students derive from formulating their own problems and then solving them through the discussion process are not trivial, especially when viewed within the context of content area reading. Also, teachers benefit from using the developmental discussion strategy. They learn, for instance, how to change from being information givers to discussion facilitators.

Summary

Adapting basal reading instruction to improve students' critical reading of content area texts is a goal worthy of pursuing, especially among middle school teachers. Fortunately, with only minor adaptations, teachers can help students make the necessary adjustments that are associated
with moving from basal reading to content area reading. Because the demands made on students in terms of working independently are greater in content area classes than in basal reading groups, it is important to help students refine and extend the skills introduced in the basal. Setting multiple purposes for reading, developing vocabulary strategies, and engaging in issue oriented or problem solving discussions are three adaptations that promote independence in learning from content area texts.

REFERENCES


Pearson, P.D. (1985). Changing the face of reading compre-
hension instruction. The Reading Teacher, 38, 724-738.
Teachers who tell stories to their students know well the values of doing so. These teachers, by carrying on one of the oldest forms of entertainment are also serving notice to their students that the pictures created by each story resides in their heads. In this age of visual media, from television to picture books, children are still given the opportunity to develop mind illustrations to accompany the narratives the teachers tell. I am always heartened when, at the conclusion of the storytelling classes, most of the attending teachers and librarians pledge to tell, as well as read, stories to their students.

An important value of storytelling is that it taps a basic element of literacy, what Applebee (1978) has called sense of story. As one gains a sense of how stories are similarly structured through hearing them told or read, s/he comes to have expectations about how any given story will progress. Knowing story structure allows one to concentrate on the events themselves, interpreting them, predicting them; in short, thinking about them, and comprehending them.

While listening to stories requires making mental illustrations and invites internalization of story structure, the telling of stories demands blending thought and language to the enhancement of both. The rewards for children who learn this art form, retelling favorite stories or creating new ones include an increasingly mature language fluency, expanded vocabulary, a bridge to their own written narratives, and the confidence to speak in front of groups.

There is no procedure to having children become storytellers, but there are principles which raise the probability that it will happen for your students. (1) Make storytelling activities fun, non-threatening; laugh with your students and have a good time. They will too. (2) Choose activities which lead to the final goal of children telling stories, but
move gradually, to build confidence based on early success. (3) Beginning with small groups, implement activities which make participation easy, before they must "go it alone." I call these the three G's of storytelling--Have Goodtimes, move Gradually, and begin with small Groups.

The Five Types of Storytelling Activities

1. Teacher-Telling Activities

Teachers who want their students to tell stories must tell stories themselves. We all love to hear professional storytellers who sing and juggle their ways through enchanting stories. But the teacher need not become a singer or juggler to tell stories. One needs to become comfortable in telling stories to kids. A few suggestions follow.

You need first to find a story you like, read it a few times, say it aloud to yourself and then tell it to the class. When you forget a part, improvise. In time, telling becomes easier and your students will look forward to hearing stories told. Stories from all cultures are available at the local libraries. Begin with selections from the following collectors: Aleksandr Afanasev (Russian Tales), Virginia Haviland (Series of stories from many cultures), Joyce Arkhurst or Harold Courlander (West African Folk Tales), Rosemary Minard (stories with girls as principal characters), Virginia Tashjian (Armenian Tales), Richard Chase (Appalachian Tales), and the Grimm Brothers, Hans Christian Andersen, and Charles Perrault. For a full discussion on telling stories in the classroom, see Baker & Green (1977), Farnsworth (1981), or Hayes (1981).

You need not limit stories to Language Arts class, one can create stories in all areas of the curriculum. Teachers can teach math and science concepts by embedding them in created stories. A sixth grade teacher told a continued story to social studies students which involved a long journey. The students mapped the progress of the traveler, learning geography along the way.

Another activity which teachers of second to sixth grade students have found successful might be called Round Robin Writing. Here the teacher has the students sit in circular groups of six to eight. S/he then tells a story, stopping before its resolution. Each member of each
group then writes a sentence toward a group-created story ending. It is a fun activity and serves to integrate the language arts. The student must listen to the story, read what the others in the group have written, write a sentence consistent with the flow of the story, and, teacher willing, tell rather than read the ending.

The important thing is that telling stories becomes a natural activity in the classroom. The teacher tells them, and not only in reading class. To children, storytelling should become something that they will wish to try also.

2. Student Involvement Activities

Children need to move from listener role to assume a part in the retelling of stories. This progress is most likely if the teacher follows the "three G's" principles--move gradually from easier to harder demands, use group support, and keep the spirit on having a good time. The following describes five ways to gradually involve children in story retelling.

Sound and Motion Stories. Perhaps the easiest way for children to become involved in story is to have them respond, verbally or nonverbally, to cues within a story being told. Some stories have been invented for this purpose (See Kraus, 1971), but many folkstories lend themselves to sounds and actions which children can contribute to the telling. You simply need to provide directions for your students to supply the roar of a lion, the crying of a princess, the whistling of the wind, the galloping of horses and the like. Children may make a silent sign when they hear a certain word in the story. A little thought when preparing a story will yield a good deal of fun and involvement from your students.

Nonverbal activities. Children of all ages can learn to express themselves through body movement, gesture, and facial expressions. Children usually will respond to these activities when they are part of a group. You might begin with children nonverbally expressing simple concepts like answering a phone, being caught in an elevator, or winning a game. Charades, also, is a great activity for developing nonverbal communication skills.
Reader's Theatre. This activity calls not for movement but for oral expression. In its simplest form children sit or stand in a group and read a folkstory which has been written in play form. One child in the group acts as narrator and each child reads a character's lines. As this activity develops children learn to use intonation to highlight the mood of the story.

Reader's theatre is a valuable activity because it gives children the opportunity to practice using their voices in a strongly supportive situation. They work within a group, have a script to read from and rehearse until they are comfortable with the story's interpretation. Children quickly come to note their progress in voice communication. Some teachers integrate this activity with writing by having their students rewrite a folktale in the play format they will use for Reader's Theatre.

Illustrated Retelling. This activity is adapted from Circle Story Activity, introduced by Simpson (1981). In an Illustrated Retelling, the teacher puts his/her students into groups of five to seven. The students read a folkstory and represent its plot through a series of pictures drawn or painted on a mural. The story is then retold to the rest of the class, with each group member retelling that part s/he illustrated. Here the students maintain group support yet are not responsible for retelling an entire story, but for the less threatening task of retelling part of one. A side benefit of this activity, of course, is that it promises visual reinforcement for those children still internalizing story structure. Most importantly to our goal, children begin to see themselves as storytellers.

Acting. There are three main levels of activities in which children in some way retell a story through dramatics. You may decide to involve all children in all three types, or, keeping the Three G's in mind, may place particular students in levels according to their of ease at performing. We use Grimm Brothers' tales for these activities but folktales from any culture can be found with which to conduct them.

In the first level of dramatics, one child in the group acts as narrator and reads the story. The others in the group take character parts and nonverbally interpret their actions. Like the pantomime activity described above, non-
verbal drama develops movement expression while allowing children to participate in a non-threatening situation.

At the second level, the narrator in the group does not read the story but uses his/her narration to keep the action going. The actors use both dialogue and movement. This format takes practice to coordinate the natural flow of narration and dialogue.

In the third level, there is no narration. Now the actors present a short play in which the story is retold. Children find creative ways to integrate character and plot within the framework of the story. Besides being fun, there is the value in building children's confidence to stand before their peers. Creative children may decide to construct props to go along with their skits. Teachers should remember to help all participants to know the meaning of the lines they are speaking, so they can improvise if they get stuck—a key attribute of the successful storyteller.

3. Story Structure Discussions

Involving children in telling stories includes talking about the structure of stories. It may be enough for young children to know that stories have beginnings, middles, and ends, but older children can come to appreciate what makes a good story interesting, how structure contributes to plot. As an introductory activity, the teacher should share with students the basic elements of a narrative—

1. a character or characters in a situation
2. a complication to the situation
3. events leading to a climax
4. a conclusion

When these points are understood, a discussion about a well-known story can begin, and the events mapped on the chalkboard. For example, Cinderella is the main character whose situation is forlorn and predictable until the complication of her desire to attend the ball changes her attitude. A series of events, including her attempts at dress making, the appearance of her fairy godmother, her presence and flight from the ball, leads to the climax of the slipper being placed so gently on her foot. The story's conclusion is the long familiar one of royal wedding and living happily ever after. Continue this activity with other stories your students know.
Story Chains. An excellent strategy to teach story structure is to put students in groups, wherein each group creates a character in some situation and, in story chain fashion, passes it on to the other groups for their contributions of complication, series of events, and conclusion. Four stories are created and shared in this way.

Story Flow. Children need the opportunity to see how stories, though structured similarly, can flow in many directions. As an example, let us say that two brothers are staying at home without a babysitter for the first time. Children would certainly think of complications that could arise from that situation— from funny to frightful. Each complication leads to a series of events and to conclusions real and fantastic. The activity provides a structure for children who have a chance to write their own stories.

4. Storytelling Practice

When children are comfortably involved in story, they'll need practice in actually telling stories. Remembering the Three G's, start with an activity as nonthreatening as possible. The 50-second story is such an activity.

Here you will tell a very short, unembellished story to your class. Try to limit the time to under a minute. A good example is "Why goats don't climb trees," from a gifted storyteller from Virginia, Michael Parent.

Once upon a time Goat decided he wanted to learn to climb trees. He went to Cat and asked for lessons. Obliging him, Cat gave Goat the first lesson on getting a good grip on the tree trunk with claws or hooves as the case might be. After some practice Goat got the knack of it. Cat told Goat to return on the morrow for the next lesson.

That afternoon, Cat walked by the very same spot and saw Goat teaching Dog the very same lesson he had learned on that very same morning. Cat immediately told Goat that he would get no further lessons on climbing trees. And that is why goats today still do not climb trees.

Following this short telling, place your students in pairs and give each child a chance to retell the story to his/her partner. Then suggest that each teller embellish the story, exaggerate it, describe character motives, or change
it in any way. After each child retells the story to his/her partner, ask for volunteers to tell the story to the class.

Students should have plenty of opportunity to tell stories to small groups of children before they are expected to storytell in front of the entire class. Time should be spent discussing guidelines for choosing, practicing and telling a story. Some children will be ready before others, but as in other situations, merely watching their peers tell stories will help to motivate even reluctant children.

5. Storytelling Center

The fifth type of activity is that old reliable, the center. If you are serious about your students telling stories, you will find a corner of the classroom in which to set up a storytelling center. Suggestions of how to equip the center with props include puppets, a flannel-board and flannel figures, a tape recorder with collections of stories told by the students, illustrations of stories and other artwork, collections of folkstories, collections of stories created by the students, a rug or comfortable chair. Teachers and students may think of other enhancements.

Storytelling does involve some time and effort by the teacher. Yet its benefits are great. Children who are telling stories are those who are reading them and creating them in their writing. Children learn to use their language in a fluent, confident manner through telling stories. Children who are telling stories may well seek out stories told in their families and communities and are in touch with that great cultural link between past and future. Storytelling is not a lost art; there has been a resurgence of this creative pastime in our country. Give your students an opportunity to be part of it.

REFERENCES


Farnsworth, Kathryn. "Storytelling in the Classroom--Not an Impossible Dream." Language Arts, 58(Feb. '81), pp. 162-167


Kraus, Joanna H. Seven Sound and Motion Stories. Rowayton, Conn.: New Plays, Inc., 1971.
READING HORIZONS is a unique publication which serves as a forum of ideas from many schools of thought. Although it began as a local newsletter in 1960, HORIZONS is now written by and for professionals in all the United States and Provinces of Canada. It is truly an eclectic venture in sharing reports, research findings, and ideas on the teaching and improvement of reading at all academic levels.

READING HORIZONS is a program of the College of Education at WMU. The staff depends on subscriptions to keep this journal in operation. We carry eight or more significant articles in each issue, we sell no advertising space and we keep our rates at a level with costs. If you are already a subscriber, please give this page to a colleague. We invite subscriptions. Make your check payable to READING HORIZONS, and mail to: Editor--READING HORIZONS, Reading Center & Clinic, Western Michigan University, Kalamazoo, MI, 49008.

Enclosed is my check in the amount of ______________________
(One year, $14.00, two years, $26.00, and three years, $36.00)
Please mail my journals to the address below:

Name

Address

City  State  Zip

In all of education, there is no more crucial or basic skill than that of reading. Every teacher should learn enough about the process of reading to help all students improve.