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ABSTRACT

One of a series of educational packages designed for implementation either in a workshop atmosphere or through individual study, this Hot Topic guide presents a variety of materials to assist educators in designing and implementing classroom projects and activities centering on the topic of research about teaching reading. The Hot Topic guide contains guidelines for workshop use; an overview of research-based guidelines for teachers and parents about teaching reading (parent involvement, emergent literacy, phonics, comprehension strategies,and the teacher's belief that all children can learn); and 7 articles (from scholarly and professional journals) and ERIC documents on the topic. A 68-item annotated bibliography of items in the ERIC database on the topic is attached. (RS)

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# HOT TOPIC
# GUIDE 26

## *What Works? Summary of Research about Teaching Reading*

REVISED EDITION

This Hot Topic Guide is one of a series of educational packages designed for implementation either in a workshop atmosphere or through individual study. With the comments and suggestions of numerous educators, this Hot Topic Guide series has evolved to address the practical needs of teachers and administrators. As you take the time to work through the contents of this guide, you will find yourself well on the way to designing and implementing a variety of classroom projects and activities centering on this topic.

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*by Carl B. Smith, Ph.D.*

ARTICLES AND ERIC DOCUMENTS

- What Does Research Say about Reading?
- Language Arts Principles: Teaching and Learning, K12 Constructivism
- Becoming a Nation of Readers: Recommendations and Abstract
- Interview: Unlocking the Mysteries, or toward 2001
- Literature and Literacy: A Review of Research
- Strategic Reading: A Brief Overview
- Turning Contemporary Reading Research into Instructional Practice

BIBLIOGRAPHY

A collection of selected references and abstracts obtained directly from the ERIC database.



Indiana University, Bloomington

School of Education

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# In-Service Workshops and Seminars:
## Suggestions for Using this Hot Topic Guide as a Professional Development Tool

### Before the Workshop:

- Carefully review the materials presented in this Hot Topic Guide. Think about how these concepts and projects might be applied to your particular school or district.
- As particular concepts begin to stand out in your mind as being important, use the Bibliography section (found at the end of the packet) to seek out additional resources dealing specifically with those concepts.
- Look over the names of the teachers and researchers who wrote the packet articles and/or are listed in the Bibliography. Are any of the names familiar to you? Do any of them work in your geographical area? Do you have colleagues or acquaintances who are engaged in similar research and/or teaching? Perhaps you could enlist their help and expertise as you plan your workshop or seminar.
- As you begin to plan your activities, develop a mental "movie" of what you'd like to see happening in the classroom as a result of this in-service workshop or seminar. Keep this vision in mind as a guide to your planning.

### During the Workshop:

- Provide your participants with a solid grasp of the important concepts that you have acquired from your reading, but don't load them down with excessive detail, such as lots of hard-to-remember names, dates or statistics. You may wish to use the Overview/Lecture section of this packet as a guide for your introductory remarks about the topic.
- Try modeling the concepts and teaching strategies related to the topic by "teaching" a minilesson for your group.
- Remember, if your teachers and colleagues ask you challenging or difficult questions about the topic, that they are not trying to discredit you or your ideas. Rather, they are trying to prepare themselves for situations that might arise as they implement these ideas in their own classrooms.
- If any of the participants are already using some of these ideas in their own teaching, encourage them to share their experiences.
- Even though your workshop participants are adults, many of the classroom management principles that you use every day with your students still apply. Workshop participants, admittedly, have a longer attention span and can sit still longer than your second-graders; but not that much longer. Don't have a workshop that is just a "sit down, shut up, and listen" session. Vary the kinds of presentations and activities you provide in your workshops. For instance, try to include at least one hands-on activity so that the participants will begin to get a feel for how they might apply the concepts that you are discussing in your workshop.
- Try to include time in the workshop for the participants to work in small groups. This time may be a good opportunity for them to formulate plans for how they might use the concepts just discussed in their own classrooms.
- Encourage teachers to go "a step further" with what they have learned in the workshop. Provide additional resources for them to continue their research into the topics discussed, such as books, journal articles, Hot Topic Guides, teaching materials, and local experts. Alert them to future workshops/conferences on related topics.

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## After the Workshop:

- Follow up on the work you have done. Have your workshop attendees fill out an End-of-Session Evaluation (a sample is included on the next page). Emphasize that their responses are anonymous. The participants' answers to these questions can be very helpful in planning your next workshop. After a reasonable amount of time (say a few months or a semester), contact your workshop attendees and inquire about how they have used, or haven't used, the workshop concepts in their teaching. Have any surprising results come up? Are there any unforeseen problems?
- When teachers are trying the new techniques, suggest that they invite you to observe their classes. As you discover success stories among teachers from your workshop, share them with the other attendees, particularly those who seem reluctant to give the ideas a try.
- Find out what other topics your participants would like to see covered in future workshops and seminars. There are nearly sixty Hot Topic Guides, and more are always being developed. Whatever your focus, there is probably a Hot Topic Guide that can help. An order form follows the table of contents in this packet.


# Are You Looking for University Course Credit?

**Indiana University's Distance Education program is offering new one-credit-hour Language Arts Education minicourses on these topics:**

Elementary:
Language Learning and Development
Varied Writing Strategies
Parents and the Reading Process
Exploring Creative Writing with Elementary Students

Secondary:
Varied Writing Strategies
Thematic Units and Literature
Exploring Creative Writing with Secondary Students

K-12:
Reading across the Curriculum
Writing across the Curriculum
Organization of the Classroom

### Course Requirements:

These minicourses are taught by correspondence. Minicourse reading materials consist of Hot Topic Guides and ERIC/EDINFO Press books. You will be asked to write Goal Statements and Reaction Papers for each of the assigned reading materials, and a final Synthesis paper.

*I really enjoyed working at my own pace.... It was wonderful to have everything so organized...and taken care of in a manner where I really felt like I was a student, however "distant" I was...."*
—Distance Education student

### Three-Credit-Hour Courses are also offered (now with optional videos!):

Advanced Study in the Teaching of:

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- Language Arts in the Elementary School
- Secondary School English/Language Arts
- Reading in the Secondary School

Writing as a Response to Reading
Developing Parent Involvement Programs
Critical Thinking across the Curriculum
Organization and Administration of a School Reading Program

### For More Information:

For course outlines and registration instructions, please contact:

Distance Education Office
Smith Research Center, Suite 150
2805 East 10th Street
Bloomington, IN 47408-2698
1-800-759-4723 or (812) 855-5847

# Planning a Workshop Presentation
## Worksheet

Major concepts you want to stress in this presentation:

1) ______________________________

2) ______________________________

3) ______________________________

Are there additional resources mentioned in the Bibliography that would be worth locating? Which ones? How could you get them most easily?

______________________________

______________________________

Are there resource people available in your area whom you might consult about this topic and/or invite to participate? Who are they?

______________________________

______________________________

What would you like to see happen in participants' classrooms as a result of this workshop? Be as specific as possible.

______________________________

______________________________

______________________________

______________________________

Plans for followup to this workshop: [peer observations, sharing experiences, etc.]

______________________________

______________________________

# Agenda for Workshop
## Planning Sheet

**Introduction/Overview:**

[What would be the most effective way to present the major concepts that you wish to convey?]

___

___

___

**Activities that involve participants and incorporate the main concepts of this workshop:**

1) ___

___

___

___

2) ___

___

___

___

**Applications:**

Encourage participants to plan a mini-lesson for their educational setting that draws on these concepts. [One possibility is to work in small groups, during the workshop, to make a plan and then share it with other participants.]

Your plan to make this happen:

___

___

**Evaluation:**

[Use the form on the next page, or one you design, to get feedback from participants about your presentation.]



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# End-of-Session Evaluation

Now that today's meeting is over, we would like to know how you feel and what you think about the things we did so that we can make them better. Your opinion is important to us. Please answer all questions honestly. Your answers are confidential.

1. Check ( ✓ ) to show if today's meeting was

   ❑ Not worthwhile ❑ Somewhat worthwhile ❑ Very worthwhile

2. Check ( ✓ ) to show if today's meeting was

   ❑ Not interesting ❑ Somewhat interesting ❑ Very interesting

3. Check ( ✓ ) to show if today's leader was

   ❑ Not very good ❑ Just O.K. ❑ Very good

4. Check ( ✓ ) to show if the meeting helped you get any useful ideas about how you can make positive changes in the classroom.

   ❑ Very little ❑ Some ❑ Very much

5. Check ( ✓ ) to show if today's meeting was

   ❑ Too long ❑ Too short ❑ Just about right

6. Check ( ✓ ) whether you would recommend today's meeting to a colleague.

   ❑ Yes ❑ No

7. Check ( ✓ ) to show how useful you found each of the things we did or discussed today.

   Getting information/new ideas.

   ❑ Not useful ❑ Somewhat useful ❑ Very useful

   Seeing and hearing demonstrations of teaching techniques.

   ❑ Not useful ❑ Somewhat useful ❑ Very useful

   Getting materials to read.

   ❑ Not useful ❑ Somewhat useful ❑ Very useful

Listening to other teachers tell about their own experiences.

- ❑ Not useful ❑ Somewhat useful ❑ Very useful

Working with colleagues in a small group to develop strategies of our own.

- ❑ Not useful ❑ Somewhat useful ❑ Very useful

Getting support from others in the group.

- ❑ Not useful ❑ Somewhat useful ❑ Very useful

8. Please write one thing that you thought was best about today:

9. Please write one thing that could have been improved today:

10. What additional information would you have liked?

11. Do you have any questions you would like to ask?

12. What additional comments would you like to make?

**Thank you for completing this form.**



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# What Works?

by Carl B. Smith, Ph.D.
Indiana University

What works? Every parent and teacher wants to find the ideas and techniques that help their children succeed in reading and writing. But as is true in any complex human endeavor it is not always clear what works to bring success.

Some strong voices, for example, emphasize a free-flowing approach to learning that appeals primarily to children's interests. Other strong voices emphasize the children's need for structure and logic in their learning environment. Each of these positions has support--otherwise how would they generate the following of teachers who lead students in one direction or the other.

One thing seems fairly clear: the role and the beliefs of the teacher are important to a student's success. If the teacher believes that all her students can be successful, they usually will. If the teacher has a wide repertoire of knowledge and skills, she will employ them in helping all children, no matter what her main instructional method may be. Even so, we ought to be able to guide teachers and parents as a result of the thousands of studies that have been aimed at determining what works in learning to read and to write.

## Synthesis of Research

Most helpful in answering the question, What Works? are syntheses of research. As consumers of research, we need to know what the accumulated evidence says about techniques and strategies that help most children achieve success. These syntheses appear periodically, sometimes published by the US Office of Education and sometimes published by other interested parties.

For example in 1985, the US Office of Education published a summary and a challenge in the book, Becoming a Nation of Readers. That was followed a year later by Research about teaching and learning (1986). There were separately funded summaries by Chall (197x) and by Adams (198x) that were major documents in trying to arrive at researched based guidelines for teachers and parents.

In this unit you will find other attempts to arrive at a synthesis, at least of certain aspects of learning to read. Though there is much on which we may never agree, it seems to me that the research summaries offer us a number of guidelines about teaching and learning.

We will try here to imitate the tone of the documents from the US Department of Education and provide guidelines that enable teachers and schools to take practical steps to help children. At the same time, we realize that we cannot reduce the teaching of reading to a limited set of steps and procedures. The learning environment at home and in school contribute their own powerful influence. The guidelines that we will state here, however, enable a teacher or a parent to examine what they do: "Am I acting in an appropriate manner?" "Does it make sense for me to change the way that I interact with children?"

## Guidelines for teaching and learning

Guideline #1: Parent Involvement

**What parents do at home to help their children learn contributes significantly to their children's academic success.**

Parents do create a curriculum in the home. If that curriculum includes reading to children, talking to them about books and the world, listening to them, and encouraging them to explore new ideas, they will be more likely to succeed than children from other homes. Those efforts improve children's performance no matter what the level of the family income.

We know that one of the best ways for children to improve their reading ability is to read a lot. Extensive reading is as likely to be fostered in the home as it is in the school. By working together, school and home can have a significant effect on the fluency of children's reading. That means that books have to be available in both places, and significant time has to be devoted to reading those books. Unfortunately, the average elementary school child spends only eleven minutes a day in extended text reading, but he or she spends more than 130 minutes a day watching television.

We conclude that teachers need to work hard at getting parents involved in the reading, and in the learning, of their children.

Guideline #1: Emerging Literacy at Home and in School

**Children should be encouraged to draw stories, to scribble messages, to discuss their thoughts, and to listen for the ideas of others.**

These types of activities help children become more confident and more competent in the use of their language. Parents and teachers of young children need to be especially attentive to the child's desire to communicate. Grammatical accuracy and correct spelling will come with time. First, children need to feel that

they have ideas that they can communicate to others. Gradually they will learn the standard conventions of grammar, punctuation, and spelling.

Teachers may refer to the child's emerging awareness of print and its real-world functions as "emergent literacy." The word "literacy" often replaces the words "reading" and "writing" in today's journals as researchers try to make us aware of the integrated relationship among listening, speaking, reading, and writing in the complex environment of printed messages. The use of the word "literacy" reminds us, then, that our involvement in printed communications leads us into interactions with others and with ourselves as we construct meaning.

Guideline #3: Phonics

**Learning phonics helps children to understand the relationship between letters and sounds and to break the code that links the words they hear with the words they see in print.**

Phonics should be taught early and taught as a tool to better reading, not as a series of isolated drills in the pronunciation of sounds. It should never interfere with the excitement of building meaning; rather, phonics intervention should act as a means of building meaning. Once the sound-symbol link has been established and the major sound-symbol patterns are learned, reading instruction can continue to expand through vocabulary building, comprehension strategies, and thinking skills.

Guideline #4: Comprehension Strategies

**Comprehension strategies should be used to help children view the reading passage as a complete message which they must formulate in their own minds.**

Strategic thinking in reading starts with a deliberate attempt to connect previous knowledge to the subject or theme of the text. For that reason teachers encourage children to open their minds to their prior knowledge, and to build background that prepares them for the topic at hand. This sense of connectedness is often referred to as "schema building," a process of creating the links and the frameworks that will make it feasible for children to comprehend what they read. "Useful approaches to building background knowledge to a reading lesson focus on the concepts that will be central to understanding the upcoming story, concepts that children either do not possess or may not think of without prompting." (*Becoming a Nation of Readers*, p. 50.)

Just as learners approach reading by building background, so they continue through the text by asking themselves questions and by monitoring their own



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comprehension. "Skilled reading is strategic. Becoming a skilled reader requires learning to control one's reading in relation to one's purpose, the nature of the material, and whether one is comprehending." (*Becoming a Nation of Readers*, p. 17.) It is quite clear from recent research that young readers and poor readers do not regularly see relationships between what they know and what they are reading on their own. They require the guidance of teachers, and the encouragement of their peers.

Following their reading, a discussion helps learners pull together the ideas they have experienced. Alternatively, a reader may respond to a selection in writing, perhaps even just for himself or herself. The evidence of today's studies, however, convinces us that the public exchange of ideas about a shared reading is one of the best ways of helping a variety of individuals decide what they now know and understand. Comprehending the message remains the goal of reading throughout the learner's engagement with it.

Even though we speak of a strategic approach in the general terms of building background, monitoring comprehension, and responding to reading through a group exchange, that does not mean that teachers have nothing to teach. "Teachers need to teach comprehension strategies directly." (*Becoming a Nation of Readers*, p. 81.) This means that teachers need to model thinking strategies for their students, and give students opportunities to examine them and to practice them. This directive seems particularly important in light of recent evidence which indicates very little actual teaching of comprehension is actually done in American classrooms.

Guideline #5: All Children Can Learn

**One characteristic that distinguishes effective classrooms from ineffective ones is the teacher's commitment to the belief that all children can learn to read. Effective teachers strive to see that every child masters basic skills and then goes as far beyond this basic level as possible.** (*Becoming a Nation of Readers*, p. 86.)

This commitment to helping the learner in a direct way means that the effective teacher of reading establishes goals and objectives in which all students can participate. Those are the community goals of the school and the class. After that, there are many opportunities for individual interests and personal learning to take place. However, how some teachers are able to maintain high levels of individual interest, while at the same time keeping a variety of students on target, is still one of the mysteries of teaching. Research has no simple prescription for how that is accomplished. Some of the central ingredients in a dynamic and effective classroom can be mixed together only by the artistry of the teacher.

Combining research evidence with the artistry of the teacher is what leads eventually to effectiveness in schools.

Conclusions

What works in learning to read and write involves complex issues, and they need to be discussed again and again to increase our understanding of them. Informal discussions and planned staff development time needs to offer teachers the opportunities for these discussions.

From the material contained in this learning unit, we can draw a number of conclusions that lead to action steps by teacher and parent:

1. Parents contribute important elements to reading success both early and alter in the child's school career. Schools need to openly encourage parents and offer them training programs to demonstrate emergent literacy practices and skilled reading practices.

2. Teachers and parents need to show children that reading is a joy and that it also takes work to become skilled, proficient readers and writers. Parents and teachers need to work together to promote this attitude of joy and to spend the time it takes to become skilled.

3. Certain knowledges and skills contribute to early success in reading. The ability to distinguish sounds in words (phonemic awareness) and the ability to recognize sound-symbol relationships (phonics) seem to contribute heavily to success in the early stages of reading development. Curriculum plans, therefore, need to include these elements in the early learning program. Parents and teachers also need the continuing education required to apply these knowledges and skills.

4. Teachers combine their knowledge of what works with their interpretations of the needs of particular students in order to put together a program that responds to those needs. Schools need to provide opportunities for teachers to share their successful experiences, thus expanding their interpretative skills.

Though it is demonstrable that some children will learn to read no matter what approaches are used with them, the majority of children require the guidance of a program and a teacher who contribute the science of research data and the humanness of personal enthusiasm and insight.

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# What Does Research Say About Reading?

R.A. Knuth and B.F. Jones
NCREL, Oak Brook, 1991

In 1985, David Pearson referred to "the comprehension revolution." In essence he was talking about the movement from traditional views of reading based on behaviorism to visions of reading and readers based on cognitive psychology.

What follows in this section are major findings from cognitive psychology regarding:

*New and old definitions of the reading process

*Important findings about reading and learning from cognitive science

*Characteristics of poor and successful readers

*Milestones in reading research

*Characteristics of successful teaching/learning environments

*Roles of schools and communities

These findings were developed by NCREL in collaboration with our Content Partner, the Center for the Study of Reading, University of Illinois, Urbana-Champaign, and the participants in Program 1, "Children as Strategic Readers."

*The traditional view of the learner as an "empty" vessel to be filled with knowledge from external sources is exemplified by this statue at the University of Leuven (Belgium).*



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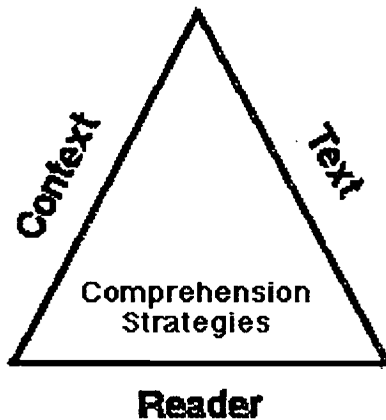
**Old and New Definitions of Reading**

| | Traditional Views | New Definition of Reading |
|---|---|---|
| Research Base | behaviorism | cognitive sciences |
| Goals of Reading | mastery of isolated facts and skills | constructing meaning and self-regulated learning |
| Reading as Process | mechanically decoding words; memorizing by rote | an interaction among the r the text, and the context |
| Learner Role/Metaphor | passive; vessel receiving knowledge from external sources | active; strategic reader, strategy user, cognitive a |




*Reprinted from the Guide to Curriculum Planning in Reading with permission from the Wisconsin Department of Public Instruction*

**Comprehension results from an interaction among the reader, the strategies the reader employs, the material being read, and the context in which reading takes place.**

# Important Findings from Cognitive Sciences

Most of the knowledge base on this topic comes from studies of good and poor readers. However, some of it is derived from research on expert teachers and from training studies.

1. Meaning is not in the words on the page. The reader constructs meaning by making inferences and interpretations.

2. Reading researchers believe that information is stored in long-term memory in organized "knowledge structures." The essence of learning is linking new information to prior knowledge about the topic, the text structure or genre, and strategies for learning.

3. How well a reader constructs meaning depends in part on metacognition, the reader's ability to think about and control the learning process (i.e., to plan, monitor comprehension, and revise the use of strategies and comprehension); and attribution, beliefs about the relationship among performance, effort,



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and responsibility.

4. Reading and writing are integrally related. That is, reading and writing have many characteristics in common. Also, readers increase their comprehension by writing, and reading about the topic improves writing performance.

5. Collaborative learning is a powerful approach for teaching and learning. The goal of collaborative learning is to establish a community of learners in which students are able to generate questions and discuss ideas freely with the teacher and each other. Students often engage in teaching roles to help other students learn and to take responsibility for learning. This approach involves new roles for teachers.

**Characteristics of Poor/Successful Readers**

| Characteristics of Poor Readers | Characteristics of Successful Readers |
| --- | --- |
| Think understanding occurs from "getting the words right", re-reading | Understand that they must take respo for constructing meaning using their knowledge |
| Use strategies such as rote memorization, rehearsal, simple categorization | Develop a repertoire of reading stra organizational patterns, and genre |
| Are poor strategy users: * they do not think strategically about how to read something or solve a problem * they do not have an accurate sense of when they have good comprehension or readiness for assessment | Are good strategy users: * they think strategically, plan, mo comprehension, and revise their stra * they persevere in the face of cont inadequate information, and stress * they have strategies for what to d when they do not know what to do |
| Have relatively low self esteem | Have self confidence that they are e learners; see self as agent, able to their potential |
| See success and failure as the result of luck or teacher bias | See success as the result of hard work and efficient thinking |

# Important Trends in Reading Instruction

1. Linking new learnings to the prior knowledge and experiences of students (In contexts where there are students from diverse backgrounds this means valuing diversity and building on the strengths of students)

2. Movement from traditional skills instruction to cognitive strategy instruction, whole language approaches, and teaching strategies within the content areas

3. More emphasis on integrating reading, writing, and critical thinking with content instruction, wherever possible

4. More organization of reading instruction in phases with iterative cycles of strategies: Preparing for reading-activates prior knowledge by brainstorming or summarizing previous learnings, surveys headings and graphics, predicts topics and organizational patterns, sets goals/purpose for reading, chooses

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appropriate strategies

Reading to learn-selects important information, monitors comprehension, modifies predictions, compares new ideas with prior knowledge, withholds judgement, questions self about the meaning, connects and organizes ideas, summarizes text segments

Reflecting on the information-reviews/summarizes the main ideas from the text as a whole, considers/verifies how these ideas are related, changes prior knowledge according to new learnings, assesses achievement or purpose for learning, identifies gaps in learning, generates questions and next steps

# Milestones in Reading Research

1. Evidence that meaning is not in the words, but constructed by the reader

2. Documentation that instruction in the vast majority of classrooms is text driven and that most teachers do not provide comprehension instruction

3. Documentation that textbooks were very poorly written, making information in them difficult to learn; subsequent response of the textbook industry to include real literature, longer selections, more open-ended questions, less fragmented skills, and "more considerate" text

4. Changes in reading research designs from narrowly conceived and well-controlled laboratory experiments with college students to (1) broadly conceived training studies using experimenters and real teachers in real classrooms and (2) studies involving teachers as researchers and colleagues in pre-service and in-service contexts

5. Publication of A Nation of Readers reaching out to parents, policymakers, and community members as legitimate audiences for direct dissemination of research information

6. Involvement of state education agencies in textbook selection, promoting "the new definition of reading," and developing statewide assessment programs that are research based; especially important are programs in Michigan, Wisconsin, and Illinois which have longer passages, more focus on comprehension, more than one right answer, strategy use, and assessment of prior knowledge.

7. Increasing dissatisfaction with standardized methods of assessing reading (Consequently, there has been a movement to develop alternative assessment strategies including miscue analysis, portfolios, and projects in the classroom.)

# Issues of Equity and Excellence

1. Although many students at risk come to school lacking in prior knowledge that is relevant to school achievement, teachers and schools do make a substantial difference. That is, providing students at risk with high quality instruction can drastically alter their academic performance.

2. Although pullout programs and tracking may be well intended, reading researchers increasingly argue

that such programs may actually create or extend inequities by segregating students at risk in poor quality programs. Indeed, some researchers contend that the learned helplessness that may characterize students at risk is a functional response to the demands of a dysfunctional situation.

3. An increasing amount of research indicates that student access to functional adult role models is vital for the development of self-esteem and metacognitive abilities. This can come from adult tutors or opportunities for students to participate in the world of work through work/study, shadowing, and apprenticeship programs.

## The Social Organization of the School

1. Approaches that teach reading as thinking (strategic reading) need time to develop so that teachers can adopt new beliefs, experiment with research-based methods, and refine new practices. This suggests that schools need to provide (a) sustained staff development programs which provide mentoring and coaching, and (b) environments that support experimentation and risk taking.

2. Reading performance is enhanced when schools have semipermeable boundaries. That is, when:

*Parents and other community members are involved in the life of the school as tutors, local experts, role models, and aides in schools

*Students and teachers have opportunities for learning out of school

*Community members take part in the redesign process

*******************************************************

## Activities for Teachers

The examples of excellence in this program clearly show that in world class schools teaching is a multidimensional activity. One of the most powerful of these dimensions is that of "teacher as researcher." Not only do teachers need to use research in their practice, they need to participate in "action" research in which they are always engaging in investigation and striving for improved learning. The key to action research is to pose a question or goal, and then design and implement actions and evaluate progress in a systematic, cyclical fashion as the means are carried out. Below are four major ways that you can become involved as an action researcher.

1. Use the checklist found at the end of this section to evaluate your school and teaching approaches.

2. Implement the models of excellence presented in this program. Ask yourself:

*What outcomes do the teachers in this program accomplish that I want my students to achieve?

*How can I find out more about the model classrooms?

*Which ideas can I most easily implement in my classroom?

*What will I need from my school and community?

*How can I evaluate progress?

3. Form a team and initiate a research project. A research project can be designed to generate working solutions to a problem. The issues for your research group to address are:

*What is the problem or question you wish to solve?

*What will be our approach?

*How will we faithfully implement the approach?

*How will we assess the effectiveness of our approach?

*What is the time frame for working on this project?

*What resources do we have available?

*What outcomes do we expect to achieve?

4. Investigate community needs and integrate solutions within your class activities. Relevant questions include:

*What needs does the community have in terms of reading and writing?

*What can be done (for example, training) by my class to meet community needs?

*What skills and resources does the community have that could benefit my students?

*What kind of relationships can my class forge with the community?

5. Establish "Community of Learners" support groups consisting of school personnel and community members. The goals of these groups are to:

*Share teaching and learning experiences both in and out of school

*Discuss research and theory related to learning

*Act as mentors and coaches for one another

*Connect goals of the community with goals of the school

## Activities for Schools, Parents, and Community Members

The following are activities that groups such as your PTA, church, and local Chamber of Commerce can



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do together with your schools.

1. Visit your school informally for discussions using the checklist on page 23.

2. Consider the types of contributions community groups could offer:

*Chamber of Commerce groups could sponsor field trips or opportunities for storytelling.

*Businesses could buy collections of literature for schools in need.

*Churches could sponsor reading groups to help motivate adults to read.

*Local fraternal organizations could help tutor students and provide a place for them to read.

3. Consider ways that schools and community members can work together to provide:

*Materials for a rich learning environment (e.g., real literature in print and audio form, computers)

*Opportunities for students and teachers to learn out of school

*Opportunities for students to access adults as role models, tutors, aides, and local experts

*Opportunities for students to provide community services such as surveys, newsletters, plays, and tutoring

*Opportunities for students to participate in community affairs

*Opportunities for administrators, teachers, or students to visit managers and company executives

4. Promote school and community forums to debate the national goals:

*Involve your local television and radio stations to host school and community forums.

*Have "revolving school/community breakfasts" (community members visit schools for breakfast once or twice a month, changing the staff and community members each time).

*Gather information on the national goals and their assessment.

*Gather information on alternative models of schooling.

*Gather information on best practices and research in the classroom.

Some of the important questions and issues to discuss in your forums are:

*Review the national goals documents to arrive at a common understanding of each goal.

*What will students be like who learn in schools that achieve the goals?

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*What must schools be like to achieve the goals?

*Revisit the Gallup poll taken on the national goals:

Do we agree with the goals, and how high do we rate each?

What is the reason for the pessimism about their achievement?

How are our schools doing now in terms of achieving each?

Why is it important for us to achieve the goals?

What are the consequences for our community if we don't achieve them?

*What assumptions are we making about the future in terms of Knowledge, Technology and Science, Humanities, Family, Change, Population, Minority Groups, Ecology, Jobs, Global Society, Social Responsibility? Discuss in terms of each of the goal areas.

5. Consider ways to use "Children as Strategic Readers" to promote understanding and commitment from school staff, parents, and community members for strategic reading.

# Checklist for Excellence in Reading Instruction

The items below are based on the best practices of the teachers and researchers in Program 1. The checklist can be used to look at current practices in your school and to jointly set new goals with parents and community groups.

**Vision of Learning**

*Meaningful learning experiences for students and school staff

*High enjoyment of reading, writing, and learning

*Restructuring to promote learning in the classroom

*High expectations for learning for all students

*A community of readers in the classroom and in the school

*Teachers and administrators committed to achieving the national goals

**Curriculum and Instruction**

*Curriculum that calls for a diversity of real literature and genre, a repertoire of learning strategies and organizational patterns for text passages

*Collaborative teaching and learning involving student-generated questioning and sustained dialogue among students and between students and teachers

*Teachers building new information on student strengths and past experiences

*Authentic tasks in the classroom such as writing letters, keeping journals, generating plays, author conferences, genre studies, research groups, sharing expertise, and so on

*Opportunities for students to engage in learning out of school with community members

*Real audiences (peers, community members, other students)

*Homework that is challenging enough to be interesting but not so difficult as to cause failure

*Appreciation and respect for multiple cultures and perspectives

*Rich learning environment with places for children to read and think on their own

* Instruction that enables readers to think strategically

**Assessment and Grouping**

*Performance-based assessment such as portfolios that include drafts and projects

*Multiple opportunities to be involved in heterogeneous groupings, especially for students at risk

*Public displays of student work and rewards

**Staff Development**

*Opportunities for teachers to attend conferences and meetings for reading instruction

*Teachers as researchers, working on research projects

*Teacher or school partnerships/projects with colleges and universities

*Opportunities for teacher to observe and coach other teachers

*Opportunities for teachers to try new practices in a risk-free environment

**Involvement of the Community**

*Community members' and parents' participation in reading instruction as experts, aides, guides, tutors

*Active involvement of community members on task forces for curriculum, staff development, assessment and other areas vital to learning

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*Opportunities for teachers and other school staff to visit informally with community members to discuss the life of the school, resources, and greater involvement of the community

**Policies for Students at Risk**

*Students at risk integrated into the social and academic life of the school

*Policies/practices to display respect for multiple cultures and role models

*Assessment practices that are culturally unbiased

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# Important Reading Resources

**Reading Recovery Program** is a supplementary reading and writing program for first-graders who are at risk of reading failure. Reading Recovery was originally designed and developed in Ohio and is now employed in several other states. The short-term goal is to accelerate children's progress in learning to read. The long-term goal is to have children continue to progress through their regular classroom instruction and independent reading, commensurate with their average peers, after the intervention is discontinued. Success is contingent upon the intensive, individual instruction provided by a specially trained teacher for 30 minutes daily. Illinois Reading Recovery Project, Center for the Study of Reading, 51 Gerty Drive, Champaign, IL 61820 (217/333-7213)

**Teaching Reading: Strategies from Successful Classrooms** is a set of six videotapes and accompanying viewer's guides developed by the Center for the Study of Reading. Each tape presents in-depth analyses of successful classrooms. The programs focus on exemplary teachers and students in order to provide viewers with real access to knowledge about effective reading practices. The aim of the program is to provide simulated field experiences for use in college-level education courses for preservice teachers and inservice workshops for practicing teachers. The classrooms featured are:

*Emerging Literacy, Ann Hemmeler (Kindergarten), Neal Elementary, San Antonio, TX

*The Reading/Writing Connection, Dawn Harris Martine (second), Mahalia Jackson Elementary, Harlem, NY

*Teaching Word Identification, Marjorie Downer (second/third), Benchmark Elementary, Media, PA

*Literacy in Content Area Instruction, Laura Pardo (third), Allen Street Elementary, Lansing, MI

*Fostering a Literate Culture, Kathy Johnson (third), East Park Elementary, Danville, IL

*Teaching Reading Comprehension: Experience and Text, Joyce Ahuna-Ka'ai'ai (third), Kamehameha Elementary, Honolulu, HI

Center for the Study of Reading, 51 Gerty Drive, Champaign, IL 61820 (217/333-2552)



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**Rural Wisconsin Reading Project (RWRP)** was a three-year project developed by NCREL, the Wisconsin Department of Public Instruction, and the Wisconsin Educational Communications Board that provided technology-supported staff development on strategic reading and teaching for 17 rural districts in central and west-central Wisconsin. The project's approach to develop strategic reading instruction was to treat human and organizational change as a long-term, evolutionary process rather than as a process of implementing an innovation. Two programs have arisen out of RWRP: (1) The Rural Schools Reading Project which applies what was learned from RWRP to address the access, time, and cost challenges of sustained, effective staff development for a network of rural schools (this project is on the list of programs that work from the National Diffusion Network of the U.S. Department of Education), and (2) The Strategic Reading project which is a single school application of the RWRP principles. NCREL, 1900 Spring Road, Oak Brook, IL 60521 (708/571-4700)

**Reciprocal Teaching** is an instructional strategy for teaching strategic reading developed by Annemarie Sullivan Palincsar that takes place in the form of a dialogue between teachers and students. In this dialogue the teacher and students take turns assuming the role of teacher in leading the dialogue about a passage of text. Four strategies are used by the group members in the dialogue: summarizing, question generating, clarifying, and predicting. At the start the adult teacher is principally responsible for initiating and sustaining the dialogue through modelling and thinking out loud. As students acquire more practice with the dialogue, the teacher consciously imparts responsibility for the dialogue to the students, while becoming a coach to provide evaluative information and to prompt for more and higher levels of participation. Annemarie Palincsar, 1360 FEB, University of Michigan, 610 East University, Ann Arbor, MI 48109.

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# GLOSSARY

**Coaching** Providing support in studying new skills, polishing old ones, and encouraging change.

**Collaborative Groups** A temporary grouping structure used primarily for developing attitude outcomes. Students of varying abilities work together to solve a problem or to complete a project.

**Comprehension Monitoring** Good comprehenders self-evaluate how well they understand while they read. If comprehension is not proceeding well, they have strategies for going back and improving their comprehension.

**Constructing Meaning from Text** A process in which the reader integrates what is read with his or her prior knowledge.

**Cooperative Learning** Students working together in small heterogeneous groups to achieve a common goal.

**Heterogeneous Groups** Groups composed of students who vary in several ways (for example, different reading levels).

**Homogeneous Groups** Groups composed of students who are alike in one or more ways.

**Interactive Phase** Sometimes called "guided practice" in this phase, the teacher attempts gradually to move students to a point where they can independently use strategies. It is a major part of a lesson.

**Metacognition** The process of thinking about and regulating one's own learning. Examples of metacognitive activities include assessing what one already knows about a given topic before reading, assessing the nature of the learning task, planning specific reading/thinking strategies, determining what needs to be learned, assessing what is comprehended or not comprehended during reading, thinking about what is important and unimportant, evaluating the effectiveness of the reading/thinking strategy, revising what is known, and revising the strategy.

**Modeling** Showing a student how to do a task with the expectation that the student will then emulate the model. In reading, modeling often involves talking about how one thinks through a task.

**Predicting** Anticipating the outcome of a situation.

**Prior Knowledge** The sum total of what the individual knows at any given point. Prior knowledge includes knowledge of content as well as knowledge of specific strategies and metacognitive knowledge.

**Scaffolding Instruction** Providing teacher support to students by modeling the thought processes in a learning episode and gradually shifting the responsibility for formulating questions and thinking aloud to the students.

**Strategic Learner** A learner who analyzes the reading task, establishes a purpose for reading, and then selects strategies for this purpose.

**Strategies** Any mental operations that the individual uses, either consciously or unconsciously, to help him- or herself learn. Strategies are goal oriented; that is, the individual initiates them to learn something, to solve a problem, to comprehend something. Strategies include, but are not limited to, what have traditionally been referred to as study skills such as underlining, note taking, and summarizing as well as predicting, reviewing prior knowledge, and generating questions.

**Text** Any segment of organized information. Text could be a few sentence or an entire section of a chapter. Typically, text refers to a few paragraphs.

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# References

Allington, R.L. (1991). How policy and regulation influence instruction for at-risk learners: Why poor readers rarely comprehend well and probably never will. In L. Idol, & B.F. Jones (Eds.), Educational Values and Cognitive Instruction: Implications for Reform (pp. 273-296). Hillsdale, NJ: Erlbaum.

Anderson, R.C., Osborn, J., & Tierney, R.J. (Eds.). (1984). Learning to read in American schools: Basal readers and content texts. Hillsdale, NJ: Erlbaum.

Anderson, R.C., Spiro, R.J., & Montague, W.E. (Eds.). (1977). Schooling and the acquisition of knowledge. Hillsdale, NJ: Erlbaum.

Anderson, R.C., Hiebert, E.H., Scott, J.A., & Wilkinson, I.A.G. (1985). Becoming a nation of readers: The report of the Commission on Reading. Urbana, IL: University of Illinois.

Banathy, B.H. (1990). Systems design of education: A journey to create the future. Englewood Cliffs, NJ: Educational Technology Publications.

Borkowski, J.G., Carr, M., Rellinger, E., & Pressley, M. (1990). Self-regulated cognition: Interdependence of metacognition, attributions, and self-esteem. In B.F. Jones (Ed.), Dimensions of thinking: Review of research (pp.53-92). Hillsdale, NJ: Erlbaum.

Brown, A.L., Palincsar, A.S., & Purcell, L. (1986). Poor readers: Teach, don't label. In U. Neisser (Ed.), The academic performance of minority children: New perspectives (pp. 105-143). Hillsdale, NJ: Erlbaum.

Collins, A., Brown, J.S., & Newman, S. (1989). Cognitive apprenticeship: Teaching students the craft of reading, writing, and mathematics. In L.B. Resnick (Ed.), Knowing, learning, and instruction: Essays in honor of Robert Glaser. Hillsdale, NJ: Erlbaum.

Durkin, D. (1984). Do basal manuals teach reading comprehension? In R.C. Anderson, J. Osborn, & J. Tierney (Eds.), Learning to read in American schools: Basal readers and content texts (pp. 39-38). Hillsdale, NJ: Erlbaum.

Durkin, D. (1978-79). What classroom observations reveal about reading comprehension instruction. Reading Research Quarterly,15, 481-533.

Herber, H.L. (1985). Developing reading and thinking skills in content areas. In J.W. Segal, S.F. Chipman, & R. Glaser (Eds.), Thinking and learning skills: Vol. I. Relating instruction to research (pp. 297-316). Hillsdale, NJ: Erlbaum.

Jones, B.F., Palincsar, A.S., Ogle, D.S., & Carr, E.G. (1987). Strategic teaching and learning: Cognitive instruction in the content areas. Alexandria, VA: Association for Supervision and Curriculum Development.

Jones, B.F. & Pierce, J. (in press). Students at risk vs the Board of Education. In A. Costa & J. Bell (Eds.), Mind Matters: Vol. I. Educating for the 21st century. Palatine, IL: Skylight Publishing.

Palincsar, A. (1987, April). Collaborating for collaborative learning of text comprehension. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Paris, S.G., & Winograd, P. (1990). How metacognition can promote academic learning and instruction. In B.F. Jones, & L. Idol (Eds.), Dimensions of thinking and cognitive instruction (pp. 15-52). Hillsdale, NJ: Erlbaum.

Pearson, P.D. (1985). Changing the face of reading comprehension instruction.

<+>The Reading Teacher, 39, 724-737.

ERIC

Pressley, M., Borkowski, J.G., & Schneider, W. (1987). Good strategy users coordinate metacognition, strategy use and knowledge. In R. Basta & G. Whitehurst (Eds.), Annals of Child Development, 4, 89-129.

Resnick, L.B. (1987). Learning in school and out. Educational Researcher, 16(9), 13-20.

Strickland, D.S. (1987). Using computers in the teaching of reading. New York: Teachers College Press.

Tierney, R.J., & Cunningham, J.W. (1984). Research on teaching reading comprehension. In P.D. Pearson (Ed.), Handbook of reading research (pp. 609-656). New York: Longman.

Weinstein, C.E., Goetz, E., & Alexander, P. (1988). Learning and study strategies: Issues in assessment, instruction, and evaluation. New York: Academic Press.

Wiggins, G. (1989). A true test: Toward more authentic and equitable assessment. Phi Delta Kappan, 70, 703-714.



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**Teaching and Learning**

**K–12**

**Constructivism**

**611-84340**
**611-93148**
**511-04192**
**611-91112**

**2-94145**
**612-92020**
**612-92120**

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**Principle 1: Learning is the process of making personal sense of the world.** (R. Sinatra, D.Ogle)

**Discussion:** Four principles derived from the constructivist philosophy explain how learners make sense of the world: (1) knowledge is made up of past constructions as learners interact with the environment; (2) construction of meaning occurs through assimilation and accommodation; (3) learning is an organic process of inventing instead of accumulating information; and (4) meaningful learning occurs through reflection and resolution of cognitive conflict (Fosnot 1989).

Learning begins when we have questions, experience ambiguity, and have a need to know. The desire to make sense of the world is inherent in humans from birth. Infants take in sensory data and try to give it meaning. They test their hypotheses and from the feedback they receive either confirm or modify their growing understanding. Because children do not have the same field of knowledge or experiences adults have, their meanings are different. Studies of early language acquisition make clear that children do not memorize and copy adult language but construct their own. For example, no matter how carefully parents model the sentence, "Mommy's going to school," children begin with the one-word "Mommygo" phrase to communicate. This innate drive to order and construct a meaningful system for language has been studied in children around the world. These studies have proven that children do not simply mimic adult language models, they construct their own and then modify them as they discover variances from adult speech (R. Brown 1973, C. Chomsky 1969).

**Comprehension**

Reading and writing are the basic processes of literacy by which learners actively construct meaning to establish relevant connections in text. Reading involves a transaction between the reader and a text during which the reader creates purposeful meanings (McNeil 1987, Irwin 1991). Comprehension may be regarded as the process of integrating a reader's prior experience with a writer's cues to construct meaning useful to the reader in that specific context (Irwin 1991).

**Ability**

Reading ability develops through extensive reading for a variety of individual purposes (R. Anderson et al. 1985 ). Children who read for meaning monitor their achievement and gain control over the process over time. At all levels, children build interpretations of what they read. It is important to encourage and support students' own personal responses and interpretations of their reading so they can increase the sophistication of their literary responses (Applebee, Lanzer, and Mullis 1986).

**Writing/Thinking**

When learners write, they integrate ideas with their prior experiences to construct and communicate messages for readers. Writing is an active process of creating meaning, a way of elaborating ideas so that they can be better retained and comprehended, and a way of learning and clarifying thought (McNeil 1987). Because reading and writing are so deeply connected, learners need appropriate writing tasks to increase their

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experiences with different types of thinking (Applebee, Lanzer, and Mullis 1986). Not only should writing occur in every course of the curriculum (Lloyd-Jones 1991), but it must be the centerpiece of language development because it is through clear writing that clear thinking emerges (Boyer 1991).

Where written language is important, children attempt to make sense of it through experimentation and feedback. Many studies of spelling development have identified clear patterns of increasing control over the conventions (Henderson and Beers, 1980). When children write regularly for their own purposes they develop an understanding of writing and the ability to write (Graves 1983, Calkins 1983).

Students also need engagement in nonverbal thought processes so that experiences, images, and memories provide an underlying meaning base for learning. If this base is impoverished, readers, listeners, and writers may fail to understand and clarify fully and richly (Broudy 1987). Boyer (1985) believes aesthetic literacy is as basic as linguistic literacy and believes that through such experiences as arts education, learners extend language and enlarge the store of images from which they construct meaning.

**Summary:** Learning is based on curiosity and the desire to discover meaning or to resolve ambiguity. The quest for meaning involves using and creating symbols that permit learners to make sense of the world. Learners use the symbol processes inherent in listening, speaking, reading, and writing and the nonverbal thought modes inherent in imagery and graphic and artistic representations to understand and produce meaning.

## References


Anderson, R.C., E. Heibert, J. Scott, and I. Wilerson. (1985). *Becoming a Nation of Readers: The Report of the Commission on Reading*. Newark, Del.: International Reading Association.

Applebee, A., J.A. Lanzer, and I.V. Mullis. (1986). *The Writing Report Card*. Princeton, N.J.: The National Assessment of Educational Progress at Educational Testing Service.

Boyer, E.L. (1985). "Art as Language: Its Place in the Schools." In *Beyond Creating: The Place for Art in America's Schools*, edited by the Getty Center for Education in the Arts. Los Angeles, Calif.: The J. Paul Getty Trust.

Boyer, E.L. (1991). "Introduction: Giving Dignity to the Teaching Profession." In *What Teachers Need to Know*, edited by D.D. Dill and Associate. San Francisco, Calif.: Jossey-Bass.

Broudy, H.D. (1987). "The Role of Imagery in Learning." Occasional Paper 1, The Getty Center for Education in the Arts. Los Angeles, Calif.: The J. Paul Getty Trust.

Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, Mass.: Harvard University Press.

Calkins, L.M. (1983). *Lessons from a Child: On the Teaching and Learning of Writing*. Exeter, N.H.,: Heniemann.

Chomsky, C. (1969). *The Acquisition of Syntax in Children from 5 to 10*. Cambridge, Mass.: MIT Press.

Fosnot, C.T. (1989). *Enquiring Teachers, Enquiring Learners: A Constructivist Approach to Teaching*. New York: Teachers College Press.

Graves, D. (1983). *Writing: Teachers and Children at Work*. Exeter, N.H. Heinemann.

Henderson, E.H., and J. Beers, eds. (1980). *Developmental and Cognitive Aspects of Learning to Spell*. Newark, Del.: International Reading Association.

Irwin, J.I. (1991). *Teaching Reading Comprehension Processes* 2nd ed. Englewood Cliffs, N.J.: Prentice Hall.

Lloyd-Jones, R. (1991). "What Teachers Need to Know About English." In *What Teachers Need to Know*, edited by D.D. Dill and Associate. San Francisco, Calif.: Jossey-Bass.

McNeil, J.D. (1987). *Reading Comprehension: New Directions for Classroom Practice*, 2nd ed. Glenview, Ill.: Scott, Foresman, and Co.




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**Principle 2: What students learn is heavily dependent on the understandings they bring to the learning task.** (R. Sinatra)

**Teaching and Learning**

**K–12**

**Prior Knowledge**

**611-87030**

**614-143**

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**Discussion:** Learners' comprehending and composing processes are influenced by the entire contexts of their past, present, and aspirational lives. The social context of learning has two dimensions—one is a situational context involving the immediate learning setting and the text itself; the other is a cultural and environmental context. The situational context includes the teacher, the reading setting, and the expectations arising from the text and task. The cultural and environmental context reflects the familial, social, political, and environmental factors that influence how learners learn (Bloome 1985; Irwin 1991; Mosenthal 1984; and Smith, Carey, and Harste 1982). Reading is a social process in that it is one of the means people use to accomplish everyday goals and to make sense of their lives (Mason and Au 1990). McNeil (1987) suggests that teachers need to be aware of three kinds of schemata: one is "domain" oriented, related to the specific background information needed to process a given text; another is "general world knowledge," which is related to the understanding of common social relationships and specific life situations; and the third is "knowledge of rhetorical structures," the conventions revealing the organizing and signaling patterns of text.

**Background Influence**

Many authors in the field of literacy also suggest that the background a reader or writer bring to an immediate text task will influence the outcome of that task. Background influence shapes the thinking and aspirational goals of young children in particular. Reading and writing are not singular acts but are social events that occur in settings where relationships between participants evolve (Heller 1991).

**Reading Aloud**

Reading to young children and involving them with print is an important way of showing children the social purpose for using language. These activities also help build schema for story and text structure. In fact, reading aloud to children as a social activity could be the most important readiness experience for reading (Anderson, Hiebert, Scott, and Wilkinson 1984; Durkin 1966; Teale 1984). Taylor (1983) examined the social contexts that six families brought to early reading and writing experiences for their children. She found that literacy was not only transmitted to the children by the parents, but the parents, in turn, were shaped by individual characteristics of the children. The processes involved in early reading and writing experiences were found to be highly dynamic and flexible.

**612-92122**

**Vocabulary**

Furthermore, Elley (1989) pointed out that young children can learn new vocabulary words from just one read-aloud session. Children from low socioeconomic backgrounds are generally read to less often (Heath 1982) with young children from such homes hearing story book readings about once a month if at all (Morrow 1988). When Pontecorvo and Zucchermaglio (1990) placed low and high socioeconomic Italian preschool children in social contexts in which they constructed language and argued with their teachers, their cognitive and reading and writing abilities improved.

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**Social Context**

The social context for writing is also influenced by what parents do in the home setting. Children are often not only encouraged to write but the forms and functions of writing are modeled (Heller 1991). Literacy events such as making lists and writing home messages emerge from daily encounters with print and often involve the four literacy processes of listening, speaking, reading, and writing. The use of print for play and practical purposes has been described as "natural, pleasurable, and highly practical" (Piazza and Tomlinson 1985). Such interaction and social literacy events are necessary ingredients of successful reading and writing growth for children (Teale 1982).

Social and situational contexts, therefore, have been regarded as the most influential for successful learning. Au and Mason (1983) found that comprehension difficulties for children of Polynesian-Hawaiian ancestry were not due to the text but due to the situational and cultural contexts. While reading researchers tend to define reading comprehension in terms of task, text, and subject contexts, the single most important context for classroom reading comprehension may be the interaction between students and teachers (Mosenthal 1984).

**Summary:** The personal knowledge students bring to a learning task is developed from the social and cultural contexts in which they live. Social and cultural contexts shape attitudes toward learning, ways of organizing and perceiving the world, and ways of using language.

### References


Anderson, R.C., E.H. Hiebert, J.A. Scott, and I.A.G. Wilkinson. (1984). *Becoming a Nation of Readers: The Report of the Commission on Reading*. Washington, D.C.: U.S. Department of Education.

Au, K.H., and J.M. Mason. (1983). "Cultural Congruence in Classroom Participation Structures: Achieving a Balance of Rights." *Discourse Processes* 6, 2: 145-167.

Bloome, D. (1985). "Reading as a Social Process." *Language Arts* 62, 2: 134-142.

Durkin, D. (1966). *Children Who Read Early: Two Longitudinal Studies*. New York: Teachers College Press.

Elley, W.B. (1989). "Vocabulary Acquisition from Listening to Stories. *Reading Research Quarterly* 24: 174-187.

Heath, S.B. (1982). "What No Bedtime Story Means: Narrative Skills at Home and School. *Language in Society* 11, 1: 49-76.

Heller, M.F. (1991). Reading-Writing Connections: From Theory to Practice. *New York: Longman.*

Irwin, J.I. (1991). *Teaching Reading Comprehension Processes*. 2nd ed. Englewood Cliffs, N.J.: Prentice Hall.

Mason, J.M., and K.H. Au. (1990). *Reading Instruction for Today*, 2nd edition. Harper Collins.

McNeil, J.D. (1987). *Reading Comprehension: New Direction for Classroom Practice* 2nd ed. Glenview, Ill.: Scott, Foresman, and Co.

Morrow, L.M. (1988). "Young Children's Responses to One-to-One Story Readings in School Settings." *Reading Research Quarterly*, 23, 1: 89-107.

Mosenthal, P. (1984). "Reading Comprehension Research from a Classroom Perspective." In *Promoting Reading Comprehension*, edited by J. Flood. Newark, Del.: International Reading Association.

Piazza, C.L., and C.M. Tomlinson. (1985). "A Concert of Writers." *Language Arts* 62, 2: 150-158.

Pontecorvo, C., and C. Zucchermaglio. (1990). "A Passage to Literacy: Learning in a Social Context. In *How Children Construct Literacy: Piagetian Perspectives*, edited by Y.M. Goodman. Newark, Del.: International Reading Association.




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Smith, S.L., R. Carey, and J.C. Harste. (1982). "The Contexts of Reading." In *Secondary School Reading: What Research Reveals for Classroom Practice*, edited by A. Berger and H.A. Robinson. Urbana, Ill.: National Conference on Research in English and ERIC Clearinghouse on Reading and Communication Skills.

Taylor, D. (1983). *Family Literacy: Young Children Learning to Read and Write*. Portsmouth, N.H.: Heinemann.

Teale, W.H. (1982). "Toward a Theory of How Children Learn to Read and Write Naturally." *Language Arts* 59, 6: 555-570.

Teale, W.H. (1984). "Reading to Young Children: Its Significance for Literacy Development." In *Awakening to Literacy*, edited by H. Goelman, A. Oberg, and F. Smith. Portsmouth, N.H.: Heinemann.

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**Teaching and Learning**

**K–12**

**Risk Taking**

**Principle 3: Learners must be provided opportunities and must be encouraged to take risks in using language.** (S. Tchudi)

**Discussion:** The skillful use of language is largely an unconscious process. Like swimming or walking or riding a bicycle, it draws on implicit knowledge of which the user is at best only dimly aware (Polanyi 1962). The myriad rules of language, from understanding single words to mastering complex rituals of social-linguistic interaction, are acquired by a Hegelian process of synthesis and antithesis leading to an upward spiral of language growth and mastery.

Language learners must be risk takers willing to attempt new language tasks in order to gain confidence in themselves as language users (Strickland 1991, Nelms 1991). Risk taking does not involve radical or quantum leaps into the unknown. Most language users, including second language learners, intuitively sense what is within their capabilities and willingly probe new language experiences that seem just slightly beyond their present competence (Krashen 1982, Piper 1993).

**Experimentation**

Feedback is a crucial part of the process in risk taking, but the most useful kind of corrective advice is that which occurs naturally as young people and adults test out their language in new settings and tasks (Barron 1990). The process is analogous to the scientific method, as language learners intuitively hypothesize about solutions to language problems, experiment with possibilities, and collect data from listeners and readers about their success. There remains some debate about how much *conscious knowledge* of these processes is desirable and about the value of *metacognition* (Donaldson 1978). Because of the inhibiting effects of over-correction or over-monitoring, many youngsters need to be "freed up" to experiment broadly and freely with language (Creber 1990). They need to be in a classroom community that encourages experimentation and reflection (Kirby and Kuykendall 1991). They also need to be encouraged to integrate their language skills with problem solving in math, science, and social studies (Kohl 1982), and they should be encouraged to explore creative expression (Bishop 1990) and to engage in projects that involve diverse kinds of thinking and creativity (Gardner 1982, Hampden-Turner 1981). "Risk-taking," then, is not mindless gambling or guessing; it grows from a planned pedagogy of experimentation, feedback, and support.

**Summary:** It is through experimentation and feedback of results that learners begin to see patterns. It is through trial, feedback, and subsequent recognition of patterns that language learning occurs.

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## References


Barron, M. (1990). "Whole Language: Learning the Natural Way." *Holistic Education Review* 3, 4: 3-11.

Bishop, W. (1990). *Released into Language*. Urbana, Ill.: National Council of Teachers of English.

Creber. (1990). *Sense and Sensitivity*. Exeter, U.K.: University Curriculum Center.

Donaldson, M. (1978). *Children's Minds*. New York: Norton.

Gardner, H. (1982). *Art, Mind, and Brain*. New York: Basic Books.

Goodman, Y. and S. Wilde (1992). *Literacy Events in a Community of Young Writers*. Portsmouth, NH: Heinemann.

Hampden-Turner, C. (1981). *Maps of the Mind*. New York: Collier-Macmillan.

Kirby, D., and C. Kuykendall. (1991). *Mind Matters: Teaching for Thinking*. Exeter, N.H.: Heinemann/Boynton-Cook.

Kohl, H. (1982). *Basic Skills*. Boston: Little, Brown.

Krashen, S. (1982). *Principles and Practices in Second Language Acquisition*. Oxford, U.K.: Pergamon.

Nelms, B.F. (1991). "Editorial: The *Whole* Language." *English Journal* 80, 2: 98-99.

Piper, T. (1993). *And Then There Were Two: Children and Second Language Learning*. Portsmouth, NH: Heinemann.

Polanyi, M. (1962). *Personal Knowledge*. Chicago: University of Chicago Press.

Strickland, K. (1991). "Toward a New Philosophy of Language Teaching." *English Leadership Quarterly* 13, 1: 2-4.




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**Principle 4: Learners construct meaning when engaged in context-rich units.** (R. Sinatra, D. Ogle)

**Teaching and Learning K–12**

**Importance of Context**

**Discussion:** Context-rich units are derived from literature, content area topical units, thematic units that fuse readings and learnings from a number of curriculum sources, language experiences, and computer software programs that feature word processing or desk top publishing. In these units, students genuinely use the processes of viewing, listening, speaking, reading, writing, and imaging to discuss, analyze, and reflect about the ideas and content of the unit. These units provide the holistic context from which students learn content, skills, and new vocabulary (See figure, page 3.95).

**Skills**

With immersion in a context-rich unit, a skills-through-application perspective rather than a skills-first, skills-out-of-context perspective is pursued (Walmsley and Walp 1990). Skills are used naturally, as strategies to help students comprehend, elaborate, and reflect upon literacy or content ideas. When students use such natural strategies as summarizing, creating semantic maps, using story structures, writing narratives and factual accounts, and keeping response journals to construct meaning, they are using specific skills labeled as main ideas, explicit details, sequencing, sentence types, and so on. Research suggests that the notion of separate skills and skills lists are artifacts of the comprehension process (Rosenshine 1980). Such a subskills orientation views reading comprehension as a static, passive process in which one answer found in the reading selection is correct (Irwin 1991).

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Skills instruction in context-rich units can be both intentionally planned and unplanned. The latter occurs in "teachable moments." Direct skills instruction that occurs during teachable moments is intrinsically meaningful to students because the teacher responds to real student concerns about issues, misconceptions, and meanings. While planned instruction occurs when materials and procedures are selected to attain a specific goal, such planned instruction can be done in natural contexts with actual text units (Baumann 1991).

**Summary:** Specific language skills are best learned when they are integrated into the elaboration or understanding of content-based units so that students perceive that specific skill instruction would increase their ability to communicate.

## References

Baumann, J.F. (1991). "Editorial Comments: Of Rats and Pigeons: Skills and Whole Language." *Reading Psychology: An International Quarterly*, 12, 1: iii-xii.

Irwin, J.F. (1991). *Teaching Reading Comprehension Processes*, 2nd ed. Englewood Cliffs, N.J.: Prentice Hall.

Rosenshine, B. (1980). "Skill Hierarchies in Reading Comprehension." In *Theoretical Issues in Reading Comprehension*, edited by R.J. Spiro, B.C. Bruce, and W. F. Brewer. Hillsdale, N.J.: Lawrence Erlbaum.

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Walmsley, S., and T. Walp. (January 1990). "Integrating Literature and Composing into the Language Arts Curriculum: Philosophy and Proctice." *Elementary School Journal* 90, 3: 251-274.
Weaver, C. (1994). *Reading Process and Practice.* 2nd ed. Portsmouth, NH: Heinemann.



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**Principle 5: Learners seek to establish order by discovering patterns, strategic principles, sequences, and rules.** (S. Tchudi)

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**Patterns/Schema**

Discussion: Nowhere in language learning is a learner's attempt to learn order and patterns more obvious than with very young children learning to talk. The patterns they learn and use are those that get attention. When parents "ooh" and "aah" over the first "da da" the child utters, the child learns that this is a pattern that gets attention and, thus, every time the child sees something he wants, the object becomes "da da."

This search for, and use of, language patterns continues throughout one's life. As infants begin to talk, they often learn that past tense is indicated by the addition of "ed" to a word. This pattern is then generalized and the child invents words in a very logical manner including "runned," "eated," and "bringed." Older students continue to learn and apply patterns in all phases of language development. They attempt to pattern their writing after favorite authors as they develop their own writing patterns.

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Thus, it is clear that the learning of language is, to a considerable extent, the learning of patterns. However, it is not just at the level of words and letters that the learning of patterns is important. Language patterns are also learned for sentence structures, phrases, stories, and books. The learning of figures of speech, idioms, and colloquialisms also involves patterns—or exceptions from expected patterns—that learners discover and use. It is the understanding and recognition of patterns that allows us to read, listen, speak, and write so that we can quickly understand and be understood by others who have learned similar patterns.

Learning language patterns extends to writing genre and the structure of texts. For example, children who have been read to and who listen to stories learn the structure of narratives at a very young age. The pattern of a story with a setting, problem, and resolution is one that many children learn from bedtime stories. Later, children learn about the patterns of organization for specific types of texts such as reference books; and as sophistication grows they learn the styles (patterns) of favorite authors. The sophistication of very young children in recognizing the styles of authors such as Dr. Seuss and Eric Carle is not surprising to 1st grade teachers.

The learning of language patterns is vital if students are to become competent language users. Teachers should develop instructional guidelines that encourage students to experiment with language, to reflect on the patterns they discover, and to test newly learned language patterns. This means that an effective language classroom should provide lots of experiences for students to explore a wide variety of language forms so that they have the opportunity to discover language variety and pattern. As they discover similarities and differences, students must be provided with many occasions to try out these patterns in risk-free activities so they are willing to invent such things as the spelling of words according to the patterns they have learned, the structure of sentences they write, and the organization of paragraphs and stories.

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The feedback that teachers provide students as they help them learn patterns that are more generally accepted should be supportive of the student's initial attempts. Those students who experiment more freely with language will develop into more competent language users.

**Summary:** Much of learning has to do with the recognition of patterns and order,which can be accomplished implicitly by leading students to discover patterns for themselves. Research supports the commonsense view that when learners discover for themselves the order in what they are learning, the patterns are usually learned to a deeper degree of understanding. Thus, we should encourage learners to take risks in attempting to discover patterns and to test newly learned patterns.

### Resources

Applebee, A. (1978). *The Child's Concept of Story*. Chicago: University of Chicago Press.

Bissex, G.L. (1980). *NYS AT WORK: A Child Learns to Write and Read.* Cambridge, Mass.: Harvard University Press.

Clay, M.M. (1972). *Reading: The Patterning of Complex Behaviour.* Auckland: Heinemann.

Dyson, A.H. (1985). "Individual Differences in Emerging Writing." In *Advances in Writing Research: Volume 1. Children's Early Literacy Development*, edited by M. Farr. Norwood, N.J.: Ablex.

Langer, J. (1984). "The Effects of Available Information on Responses to School Writing Tasks. *Research in the Teaching of English* 18, 1: 27-44.

Piaget, J. (1969). *The Mechanisms of Perception*. London: Routledge and Kegan Paul.

Sulzby, E. (1985). "Kindergartners as Writers and Readers." In *Advances in Writing Research: Volume 1*, edited by M. Farr. Norwood, N.J.: Ablex.



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**Principle 6: Language proficiency occurs through frequent and diverse practice in purposeful, functional settings.** (L. Sandel)

**Discussion:** Implicit in the practice principle is a provision for multiple ways through which the learner applies learnings in interpreting and communicating meaning through impressive (listening and reading) and expressive (speaking and writing) language. The learner constructs meaning to communicate through speaking and writing, aware of the purpose of the message and the receptive characteristics and needs of the audience. The learner constructs meaning as a receiver to derive the sender's meaning in listening and reading. The processes of reading and writing unfold in similar ways and tend to be used together. For example, a person receives a letter—via postal service or electronic mail—reads it, then answers it in writing, perhaps rereading portions of the letter while constructing the response. When reading and writing are taught together, the benefits are greater than when they are taught separately (Tierney and Shannahan, 1991). Because purpose, prior knowledge, and experience are integral to a reading or listening experience, learners need diverse opportunities to use language in many contexts.

Through the actualization of language, the learner uses language in such various activities as using computers, reading content area texts, preparing or following directions, interpreting dialogue in print, and using symbolic language in reading or creating graphics. Reading informational text is different from reading literature such as fiction or poetry. Teachers honor the difference between informational text (factual, serving a specific purpose) and literature (aesthetic, intriguing plot, emotion-evoking description) when students read a selection of fiction or poetry without searching for facts (De Groff and Golda 1992). Non-verbal language (body movement; nature signs of weather, seasons, and plants) as a means of communicating meaning is worthy of attention in building a conceptual framework for symbolic language in print (math, science).

To stimulate productive thinking, speaking, and writing as well as reflective listening, Goodman et al. (1989) suggest an "open inquiry" method. Because students go through stages in understanding a happening or event, teaching strategies should encourage the expansion of a learner's language and thinking. This construction of phases of student experience, identified as perceiving, ideating, and presenting, and appropriate teaching strategies of confronting, dialoguing, and rehearsing are, in essence, the framework for creating multiple ways of providing practice in learning.

Oral language activities in communication and learning should involve the student in interpreting the information in some way, not merely remembering and recalling it (Fisher 1990). Students' discussion in classroom is important to their learning. Research shows that students' verbal exchanges about content improve learning and increase their level of thinking (Marzano 1991). Scrutiny of children's talk reveals their natural ability to think about difficult ideas through metaphoric and analogic language: long narratives that use a story to explicate a difficult idea, or

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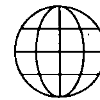
**Authentic Practice**



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**Interpretation**

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drawings as artists—beyond the restrictions of spoken language (Gallas 1994). Children understand best what they have had an opportunity to talk about or, additionally, to write about, sing about, draw, or dramatize (Thais 1986). Telling their own stories can be helpful to young children. Stories which are dramatized and performed, dictated and read, or written using invented spelling, become the center of the early childhood curriculum.

**Oral Language Activities**

Among suggested *oral activities* are: group discussions, individual oral presentations, panel and round table discussions, interviews, debates, storytelling or retelling, dramatizations, talking display (display with audiotape), and comparisons and contrasts. Oral language activities are effectively planned for individual or collaborative work with student pairs or groups. We are creating a new legacy, one of voice, empowerment, and interaction. Through our talk, we get together, get along, and get to the business of—learning (Cintorino 1993). Real language used for real purposes in oral language communication and learning supports the theory of a natural "basic" of learning as a process that focuses on communication (Sheppard 1985). Using interactive strategies helps children construct meaning, understand, reflect, increase quality and complexity of their responses and ultimately reread independently. Activities include retelling stories, discussing stories critically, role-playing, responding orally and in writing, or through expressive arts (drawing, drama) (Morrow et. al 1990, Routman 1991).

**Writing Activities**

*Writing activities*, in contrast to the fleeting nature of oral expression, provide opportunities to revise ideas, to add to them, to reread, and to restructure the material to make it one's own. Suggested writing activities include writing fact or fiction stories relating personal perspective to a content subject; writing poetry by adapting information or concepts; producing journals, logs, diaries, descriptions, books, booklets, and reports; and writing for radio, television, or newspapers.

Basic creative and critical thinking skills can identify a knowledge base (science, social studies). A semantic map gathers, shares, and relates ideas—moves to questions to answer—all the while encouraging "note-taking" through observation, sketching, word-play, writing poetry—or it serves to communicate information using writing to record, to relate, or to review. Journals can offer sketches or poetry, or "portfolios" can hold original art work or selected prints.

**Journals**

Journals in the classroom have many purposes, formats, and learning objectives for both the student as writer-reader and the teacher as reader-writer. Through the use of journals, students "learn how to write, and write to learn in ways that constitute thinking in the most productive sense of the word" (Macrorie, cited by Fulwiler 1987). Because students are encouraged to write personally and frankly about subjects they care about, teachers face the problem of invading student privacy in any dialogue-type journal. Helpful guidelines for teachers have been prepared to assist teachers while supporting and encouraging the use of a variety of journals (Fulwiler 1987).



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**Listening Activities**

Suggested *listening activities* include: responding to oral directions; responding to musical recordings; taking lecture notes; reacting to radio programs; and listening to variations of sound in tone and duration.

**Drama**

When teachers begin to keep track of the meanings children bring to school, we find that what they want to know as a class differs from what the adults in schools want them to know. Children's drawings, conversations, writings, and play tell of their interests and suggest that teachers construct a classroom environment and a curriculum that offer structures to build literacy in all disciplines, reflecting the knowledge that is grounded in a wide range of expressive opportunities (Gallas 1994).

The arts offer an expanded notion of classroom discourse that is not solely grounded in linear, objective language and thinking but rather a full range of expression (Gallas 1994). Children's knowledge, revealed through their art can be identified and subsequently expanded. The arts then, in this context, become central in the curriculum process (Gallas 1994).

**Drama**

Drama can be an effective instructional experience as young children create worlds to master reality and to solve real-life problems. To encourage dramatic play, teachers of young children should provide the place, equipment, and atmosphere for free expression. For many children, when dictated words do not sufficiently tell their stories or express their ideas or represent action to be expressed, transforming their own texts into dramas allows opportunities to find words for unarticulated ideas (Spodek and Saracho, 1993 Dyson 1993). "Adult writers may turn to media that seem to fit most comfortably the initial contents of our ideas before struggling to craft those ideas within the linear confines of print: we may draw, map, make gestures in the air, or even sprawl conversational language across a page. Written language emerges most strongly when firmly embedded within the supportive symbolic sea of playful gestures, pictures and talk" (Dyson 1993, p.39). Winn (1977) describes imaginative play as "the opportunity to become an active user rather than a passive recipient of experience." Drama as a learning medium and teaching technique (McCaslin 1990) is recommended as a strong motivator for reading and vocabulary building, for character interpretation through creating dialogue, for understanding social studies areas by selecting an episode for enactment, and for purposeful writing activities through script-writing. With different styles of writing, creative drama, and a classroom encompassed with books, children become more enthusiastic about reading and writing when given more time to reflect on a variety of experience.

**Summary:** Language is learned through experiences in the "real world" of communication. Reading, writing, listening, and speaking exercises should not be practice or drill divorced from purpose. Valuing of response in the classroom is evident when teachers (a) provide opportunities for response; (b) provide response models, and (c) receive children's responses (in all their diversity) (Martinez and Roser 1991). Only when students have something to gain from a communications setting are their role-generating,

skill-learning mechanisms fully active. In speech and writing, practice should then include rhetorical aim, audience, and feedback. In reading and listening, practice should have purpose and be beneficial. Since literacy tasks differ, there is need to balance the use of narrative and expository text, integrate subject matter areas, and use a variety of instructional grouping strategies. (See also: Authentic Instruction).

## References

Cintorino. M.A. (1993). "Getting Together, Getting Along, Getting to the Business of Teaching and Learning." *English Journal* 82, 1: 23-32.

De Groff, L. and L. Golda. (1992). "Responding to Literature: Activities for Exploring Books." In B.E. Cullinan (ed.) *Invitations to Read: More Childrens Literature in the Reading Program.* Newark, DE: International Reading Association.

Dyson, A.H. (1993). "From Prop to Mediator: The Changing Role of Written Language in Children's Symbolic Repertoires." In *Language and Literacy in Early Childhood Education.* New York: Teachers College Press.

Fisher, C.J., and C.A. Terry. (1990). *Children's Language and the Language Arts* (3rd ed.) Needham Heights, Mass.: Allyn & Bacon.

Fulwiler, T. (1987). *The Journal Book.* Portsmouth, N.H.: Boynton/Cook, Heinemann Educational Books.

Gallas, K. (1994). *The Languages of Learning: How Children Talk, Write, Dance, Draw, and Sing Their Understanding of the World.* New York: Teachers College Press.

Goodman, K., E.B. Smith, E. Merideth, and Y.M. Goodman. (1989). *Language and Thinking in School* (3rd ed.). New York: Richard C. Owen Publishers, Inc.

McCaslin, N. (1990). *Creative Drama in the Classroom* (5th ed). New York: Longman.

Martinez, M.G. and N.L. Roser. (1991). "Children's Responses to Literature." In J. Flood, J.M. Jensen, D. Lapp, J. Squire (eds.), *Handbook of Research in the English Language Arts:* 643-663. New York: MacMillan.

Marzano, R.J. (1991). "The Language Arts and Thinking." In J. Flood, J.M. Jensen, D. Lapp, J. Squire (eds.), *Handbook of Research in the English Language Arts:* 559-586. New York: MacMillan.

Morrow, O.M., O'Connor, E.M. and J. Smith. (1990). "Effects of a Story Reading Program on the Literacy Development of At-Risk Kindergarten Children." *Journal of Reading Behavior,* 20, 2: 104-141.

Sheppard, R. (1985). *Enhancing Learning Through Oral and Written Expression: Strategies for Subject Area Teachers.* Columbus, Ohio: The National Middle School Association.

Routman, R. (1993). "The Uses and Abuses of Invented Spelling." *Instructor,* 102, 9: 36-39.

Spodek, B. and O.N. Saracho. (1993). *Language and Literacy in Early Childhood Education.* New York: Teachers College Press.

Stice, C.F. and N.P. Bertrand. (1990). *Whole Language and the Emergent Literacy of At-Risk Children: A Two-Year Comparative Study.* Tennessee State University.

Thais, C. (1986). *Language Across the Curriculum in the Elementary Grades.* Urbana, Ill.: National Council of Teachers of English.

Tierney, R.J. and T. Channahan. (1991). "Research on the Reading-Writing Relationship: Interactions, Transactions and Outcomes." In R. Barr, M.I. Kamil, P. Mosenthal, and P.D. Pearson (eds.) *Handbook of Reading Research* 2: 246-280. New York: Longman.

Winn, M. (1977). *The Plug-in Drug.* New York: Viking.



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**Principle 7: Language acquisition is developmental. It takes place over a lifetime as young people and adults gain in maturity, experience, and cognitive skills.** (S. Tchudi)

**Discussion:** The foundations of a developmental view can be found in the work of John Dewey, who argued that school curriculums must build on children's experiences, and Jean Piaget, who first outlined broad patterns of children's mental and linguistic development. Such understanding causes us to redefine our sense of continuity or growth, resisting the temptation to specify a single language curriculum (Dixon 1976). Although we can recognize broad patterns of growth and can describe the sort of linguistic mastery we expect from schooling (Elbow 1990), most sound English language arts programs now focus on extending students' use of language, rather than fitting them to *a priori* patterns (Lloyd-Jones and Lunsford 1989). In general, researchers now recognize that language growth involves decentering—the ability to communicate with audiences of increasing distances from one's own immediate interests—and abstracting—the ability to make increasingly complex generalizations about one's experiences (Moffett 1983).

Reading, writing, listening, and speaking skills reflect these psycholinguistic principles. Over time and with practice, young people read more sophisticated books and make more complex responses to them (Purves, Rogers, and Soter 1990). Written documents grow in range, diversity, and "adultness" over time (Tchudi and Mitchell 1989). Fostering such growth requires careful teacher management, sometimes letting students make completely free choices for themselves, sometimes guiding them in directions deemed appropriate (Somerfield, Torbe, and Ward 1985). The teacher's role is that of facilitator of a student-centered program rather than administrator of a prescribed curriculum (Monson and Pahl 1991). Yet the curriculum need not be developed "from scratch" every year, for common developmental elements and patterns can be detected: certain books consistently appeal to young readers at certain ages; particular speaking and writing activities most strongly activate language growth at particular ages. The phenomenon of "kid watching" provides the teacher with guidance (Goodman 1986). Rather than relying on standardized tests or curricular imperatives, teachers can collect samples and document patterns of achievement (Weaver 1990). Such teacher research can even lead to the establishment of curricular benchmarks, in effect, demonstrating developmental patterns through the use of school- and classroom-based data rather than external measures and standards.

**Summary:** Broad developmental language patterns can be detected, but within them, each child will an follow individual pattern or history as she constructs skills that allow her to function successfully in appropriate language communities. We do not want to suggest age-related developmental norms; rather, research reveals a progression of language performances that are related to previous experience and developmental

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interests. As learners use language they adjust and expand vocabulary, syntax, reading, and forms of expression as personal needs and interests allow.

## References

Dixon, J. (1976). *Growth Through English.* Urbana, Ill.: National Council of Teachers of English and London, UK: National Association for the Teaching of English.

Elbow, P. (1990). *What is English?* New York: Modern Language Association.

Goodman, K. (1986). *What's Whole in Whole Language?* Toronto and New York: Scholastic.

Lloyd-Jones, R., and A. Lunsford, eds. (1989). *The English Coalition Conference: Democracy Through Language.* Urbana, Ill.: National Council of Teachers of English.

Moffett, J. (1983). *Teaching the Universe of Discourse.* Exeter, N.H.: Heinemann/Boynton-Cook.

Monson, R.J., and M.M. Pahl. (1991). "Charting a New Course with Whole Language." *Educational Leadership* 48, 6: 51-54.

Purves, A., T. Rogers, and A. Soter. (1990). *How Porcupines Make Love ii: Notes on a Response Centered Curriculum.* White Plains, N.Y.: Longman.

Somerfield, M., M. Torbe, and C. Ward. (1986). *A Framework for Reading.* Exeter, N.H.: Heinemann.

Tchudi, S., (1991). *The English Teacher's Handbook,* 2nd ed. Portsmouth, NH: Boynton Cook.

Weaver, C. (1990). *Understanding Whole Language.* Exeter, N.H.: Heinemann.



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**Principle 8: The most effective way to increase learning, particularly language learning, is to integrate concepts and disciplines.** (D. Ogle)

**Discussion:** Children are constantly trying to make sense of their environments and to communicate. For them to do this successfully they need to be in rich contexts where language is in abundance and where they can experiment and receive helpful feedback.

Studies of how children acquire language have confirmed the active, constructive nature of language learning. Children do not mimic adult language patterns as they begin to talk but rather try to make sense of the oral patterns they hear by constructing their own systems of language (Klima and Bellugi-Klima 1966). Recent research on how children learn to write and spell reveal similar constructive processes—rather than memorize the standard spellings they see in their environment, children engage in active experimentation with orthography as they "invent" spellings. With increasing practice and learning, children's spellings move from primitive to early phonemic to letter naming and finally to transitional and then standard spelling (Temple, Nathan, and Burris 1982; Henderson and Beers 1980). Studies of grammar teaching and learning with older students reveal similar patterns; direct instruction in rules and isolated aspects of language is not nearly as likely to lead to students' understanding and correct usage as are regular meaningful writing experiences (Hillocks 1986).

Research studies have confirmed not only the importance of language exploration but also the way in which the language modes interact as children learn. Early literacy develops as children explore both writing and reading. Eckhoff (1984) showed that the patterns children encounter in what they read shape their writing. Many studies have shown that children who listen to parents read to them become interested in written language and discover the patterns independently (Ferreiro and Teberosky 1982, Sulzby 1985, Teale 1982). Children who read widely are most likely to develop good vocabularies (Wilson et al. 1986). Shanahan (1984) also found that in the early grades reading and writing skills were highly correlated. Studies of more mature writers have demonstrated that they need to constantly reread what they have written to make sense of it; this has been termed "becoming one's own reader" (Tierney and Pearson 1983). Older children profit as writers when they read widely—and expert writers are useful guides for novices (Stewig 1980).

Research in language development, both oral and written, makes a strong case for integrated instruction. Children need to be immersed in meaningful experiences so that they want to use language to communicate and they must be given regular opportunities to experiment with a variety of forms of language expression. They need to be allowed to take risks and explore; and they need to be given guidance and feedback. Situations that stimulate children to want to engage in communication are generally those that are rich in meaning and purpose. Therefore, teachers need to be encouraged to create larger, meaningful experiences and units of instruction

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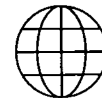

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in classrooms. Through such focus on meaning and negotiation of ideas, students' need to use language effectively becomes real and the opportunities for learning emerge naturally.

Language strategies are similar across the four components of language—listening, speaking, reading, and writing. For example, an effective reader focuses on a purpose for reading while an effective writer or speaker focuses on an audience and purpose for writing or speaking. In a like manner, an effective writer revises his writing while an effective reader constantly constructs meaning and revises meaning as he reads. Other language strategies can also be shown to be similar across the four language components (Tierney and Pearson 1983). Because the language strategies are similar, it makes sense to help learners understand these similarities. Learning the strategies in one domain enhances the learning of strategies in another domain.

Finally, most teachers are pressed for time to teach all that they are required to cover in their curriculum. It makes sense to maximize opportunities for learning by integrating language arts instruction and incorporating as much content into unified units of study as possible. Students must read, write, and talk about something. Too often the "something" is missing and language arts and reading instruction suffer from lack of clear meaning and purpose for students. When teachers have students write about stories they are reading that reflect a key theme of interest to students, those students are more likely to be engaged than when instruction consists of skill lessons and drills. When students can discuss two or three pieces of writing dealing with the same theme, their thinking and reasoning as well as their interest are deepened. Engaging students in drama, debate, and then writing as outgrowths of reading create learning opportunities. Many exciting suggestions for integrated instruction are now emerging in the professional literature. Assessments of these programs indicate that they have a great deal of power to produce quality learning (Cambourne 1988, Lytle and Botel 1988, Noyce and Christie 1989).

**Summary:** The integration of the language arts is highly recommended for several reasons—from conceptual to pragmatic. First, the nature of language learning makes clear the interrelationships among listening, speaking, reading, and writing both in how they are acquired and in the conditions that promote optimal growth in communication competence. Second, the various strategies that language users employ in constructing meaning are similar and can be most effectively developed together. Finally, for pragmatic reasons, time and energy can be saved when the natural connections among the language arts are maximized.



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## References

Cambourne, B. (1988). *The Whole Story: Natural Learning and the Acquisition of Literacy in the Classroom.* New York: Ashton Scholastic.

Eckhoff, B. (1984). "How Reading Affects Children's Writing." In *Composing and Comprehending*, edited by J.M. Jensen. Urbana, Ill.: ERIC/RCS.

Ferreiro, E., and A. Teberosky. (1982). *Literacy Before Schooling.* Exeter, N.H.: Heinemann.

Henderson, E.H., and J. Beers. (1980) *Developmental and Cognitive Aspects of Learning to Spell.* Newark, Del.: International Reading Association.

Hillocks, G., Jr. (1986). *Research on Written Composition: New Directions for Teaching.* Urbana, Ill.: NCTE/NCRE

Klima, E.S., and U. Bellugi-Klima. (1966). "Syntactic Regularities in the Speech of Children." In *Psycholinguistics Papers*, edited by J. Lyons and R. J. Wales. Edinburgh: Edinburgh University Press.

Lytle, S., and M. Botel. (1989). *PCRP II: Reading, Writing and Talking Across the Curriculum.* Harrisburg, Pa.: Pennsylvania Department of Education.

Noyce, R. M., and J. Christie. (1989). *Integrating Reading and Writing Instruction in Grades K-8.* Boston: Allyn & Bacon.

Shanahan, T. (1984). "The Nature of the Reading/Writing Relation: An Exploratory Multivariate Analysis." *Journal of Educational Psychology* 76, 466-477.

Stewig, J. (1980). *Read to Write: Using Children's Literature as a Springboard to Writing.* New York: Holt, Rinehart & Winston.

Sulzby, E. (1985). "Kindergartners as Writers and Readers." In *Advances in Writing Research: Volume I*, edited by M. Farr. Norwood, N.J.: Ablex.

Teale, W. H. (1982) "Toward A Theory of How Children Learn to Read and Write Naturally." *Language Arts* 59, 6: 555–570.

Temple, C., R.G. Nathan, and N.A. Burris. (1982). *The Beginnings of Writing.* Boston: Allyn & Bacon.

Tierney, R.J., and P.D. Pearson. (1983). "Toward a Composing Model of Reading." *Language Arts* 60, 5: 568-580.

Wilson, P., R. Anderson, and L. Fielding. (1986). *Children's Book Reading Habits: A New Criterion for Literacy.* Cambridge, Mass.: Bolt, Beranek, Newman.



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**Principle 9: Learning is essentially an individual process that begins with personal purposes or questions.** (R. Farr)

**Discussion:** If learning is an individually focused process students must be given opportunities to pose their own questions and to identify their own topics for reading and writing. Initially, teachers may help students to develop purposes for reading and writing, but if students' activities are not eventually based on individual purposes, they will not develop into effective readers and writers.

Teachers must plan reading and writing instruction grounded on the understanding that effective reading is based on what one wants to know, and effective writing is developed from knowing what one wants to say. For both reading and writing, the purpose dictates how the learner proceeds. When individuals do not develop their own purposes, reading and writing may become nothing more than classroom activities that must be performed, often with little thought. When students can articulate their own interests and needs, they are more likely to be motivated to delve deeply into their reading and writing and consequently learn more—and more fully.

This means that teachers must allow students to take ownership over the selection of reading and writing topics. The freedom to explore ideas that are generated from personal interests will foster greater language development than teacher-dictated reading and writing activities can hope to.

**Summary:** Learning takes place when an individual attempts to resolve a problem or answer a question. Thus, learning is not a group process, it is an individual process. This means that the development of individual learner purposes and questions should be the basis of instruction. When learners search for answers to questions they have posed, the result is deeper understanding.

**Teaching and Learning**

**K–12**

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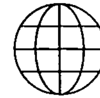

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### Other Resources

Duffy, G.G., L.R. Roehler, and J. Mason. (1984). *Comprehension Instruction: Perspectives and Suggestions*. New York: Longman.

Flood, J., and D. Lapp. (1991). "Reading Comprehension Instruction." In *Handbook of Research on Teaching the English Language Arts*, edited by J. Flood, J. Jensen, D. Lapp, and J. Squire. New York: Macmillan Publishing Company.

Nelson-Herber, J. (1985). "Anticipation and Prediction in Reading Comprehension". In *Reading, Thinking, and Concept Development*, edited by T.L. Harris and E. Cooper. New York: College Entrance Examination Board.

Siegler, R.S., ed. (1978). *Children's Thinking: What Develops?* Hillsdale, N.J.: Lawrence Erlbaum.

Tuma, D.T., and F. Reif, eds. (1980). *Problem Solving and Education: Issues in Teaching and Research*. Hillsdale, N.J.: Lawrence Erlbaum



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**Principle 10: From the time a child is born, learning is dependent on feedback.** (R. Farr)

**Discussion:** Children are constantly shaping their language development based on the feedback they receive from others. Parents reinforce some language patterns and attempt to extinguish others.

Feedback for and about students can be gathered in a variety of ways including, but not limited to, norm-referenced tests, performance assessments, student-work samples collected in portfolios, interviews, self-report analyses, and classroom observations. In addition to providing feedback to students, educators also need feedback about students' progress and development if they are to plan effective and timely instruction. It is vital that the feedback about students' language learning that educators receive is congruent with the feedback provided to the students. If the information provided to teachers and administrators is different from that provided to learners, it is unlikely that effective instruction will take place.

Therefore, feedback to students, teachers, and administrators must be based on both formal and informal assessment that is valid, reliable, efficient, and authentic. Such assessment must be based on the following criteria:

- Assessment should provide students, teachers, and administrators with congruent information about students' language development, even though the information may be summarized in different ways for each group.
- Assessment should be based on multiple samples of language behaviors, gathered over a period of time, and performed under a variety of conditions. Single sample assessments are not valid for planning language instruction.
- Assessment should include opportunities for students to self-reflect, should encourage student/teacher conferences, and should be based, at least in part, on student selection of what is to be assessed.

**Summary:** Feedback is essential to learning. Feedback is the information learners receive about their activities. Effective instruction is based on helping learners understand what it is they are to do, how well they have performed, and what they need to do to improve. Feedback provides the basis for learners to test hypotheses, to receive positive or negative reinforcement, and to understand their individual progress. While this may seem like a somewhat mechanistic view of learning, it is essential if learners are to become reflective about their own reading and writing.

**Teaching and Learning**

**K–12**

**Diagnostic Assessment**

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**611-93018**
**611-89010**

**614-106**
**614-225**

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**612-92086**

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## Other Resources

Farr, R., and M. Beck. "Formal Methods of Evaluation." (1991). In *Handbook of Research on Teaching the English Language Arts*, edited by J. Flood, J. Jensen, D. Lapp, and J. Squire. New York: Macmillan Publishing Company.

Gagne, R.M. (1974). *Essentials of Learning for Instruction*. New York: Holt, Rinehart and Winston.

Goodman, Y.M. (1991). "Informal Methods of Evaluation." In *Handbook of Research on Teaching the English Language Arts*, edited by J. Flood, J. Jensen, D. Lapp, and J. Squire. New York: Macmillan Publishing Company.

O'Flahavan, J.F., D.K. Hartman, and P.D. Pearson. (1988). "Teacher Questioning and Feedback Practices: A Twenty Year Retrospective." In *Dialogues in Literacy Research*, edited by J.E. Readence and R. S. Baldwin. Chicago, Ill.: National Reading Conference, Inc.



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# Becoming a Nation of Readers: Recommendations

From "Becoming a Nation of Readers: The Report of the Commission on Reading," prepared by Richard C. Anderson, Elfrieda H. Hiebert, Judith A. Scott, Ian A. G. Wilkinson with contributions from members of the Commission on Reading. Published 1985 by the National Institute of Education, U.S. Department of Education.

The more elements of good parenting, good teaching, and good schooling that children experience, the greater the likelihood that they will achieve their potential as readers. The following recommendations encapsulate the information presented in this report about the conditions likely to produce citizens who read with high levels of skill and do so frequently with evident satisfaction.

**Parents should read to preschool children and informally teach them about reading and writing.** Reading to children, discussing stories and experiences with them, and - with a light touch - helping them learn letters and words are practices that are consistently associated with eventual success in reading.

**Parents should support school-aged children's continued growth as readers.** Parents of children who become successful readers monitor their children's progress in school, become involved in school programs, support homework, buy their children books or take them to libraries, encourage reading as a free time activity, and place reasonable limits on such activities as TV viewing.

**Preschool and kindergarten reading readiness programs should focus on reading, writing, and oral language.** Knowledge of letters and their sounds, words, stories, and question asking and answering are related to learning to read, but there is little evidence that such activities as coloring, cutting with a scissors, or discriminating shapes (except the shapes of letters) promote reading development.

**Teachers should maintain classrooms that are both stimulating and disciplined.** Effective teachers of reading create a literate classroom environment. They allocate an adequate amount of time to reading and writing, sustain children's attention, maintain a brisk pace, and keep rates of success high.

**Teachers of beginning reading should present well-designed phonics instruction.** Though most children today are taught phonics, often this instruction is poorly conceived. Phonics is more likely to be useful when children hear the sounds associated with most letters both in isolation and in words, and when they are taught to blend together the sounds of letters to



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identify words. in addition, encouraging children to think of other words they know with similar spellings, when they encounter words they cannot readily identify, may help them develop the adult strategy of decoding unknown words by analogy with ones that are known. Phonics instruction should be kept simple and it should be completed by the end of the second grade for most children.

**Reading primers should be interesting, comprehensible, and give children opportunities to apply phonics.** There should be a close interplay between phonics instruction and reading words in meaningful selections. But most primers contain too few words that can be identified using the phonics that has already been taught. After the very earliest selections, primers should tell complete, interesting stories.

**Teachers should devote more time to comprehension instruction.** Teacher-led instruction in reading strategies and other aspects of comprehension promotes reading achievement, but there is very little direct comprehension instruction in most American classrooms.

**Children should spend less time completing work. books and skill sheets.** Workbook and skill sheet activities consume a large proportion of the time allocated to reading instruction in most American classrooms, despite the fact that there is little evidence that these activities are related to reading achievement. Workbook and skill sheet activities should be pared to the minimum that actually provide worthwhile practice in aspects of reading.

**Children should spend more time in independent reading.** Independent reading, whether in school or out of school, is associated with gains in reading achievement. By the time they are in the third or fourth grade, children should read independently a minimum of two hours per week. Children's reading should include classic and modern works of fiction and nonfiction that represent the core of our cultural heritage.

**Children should spend more time writing.** Opportunities to write more than a sentence or two are infrequent in most American elementary school classrooms. As well as being valuable in its own right, writing promotes ability in reading.

**Textbooks should contain adequate explanations of important concepts.** Textbooks in science, social studies, and other areas should be clearly written, well-organized, and contain important information and concepts. Too many of the textbooks used in American classrooms do not meet these standards.

**Schools should cultivate an ethos that supports reading.** Schools that are effective in teaching reading are characterized by vigorous leadership, high expectations, an emphasis on academic learning, order and discipline, uninterrupted time for learning, and staffs that work together.

**Schools should maintain well-stocked and managed libraries.** Access to interesting and informative books is one of the keys to a successful reading program. As important as an



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adequate collection of books is a librarian who encourages wide reading and helps match books to children.

**Schools should introduce more comprehensive assessments of reading and writing.** Standardized tests should be supplemented with assessments of reading fluency, ability to summarize and critically evaluate lengthy selections, amount of independent reading, and amount and quality of writing.

**Schools should attract and hold more able teachers.** The number of able people who choose teaching as a profession has declined in recent years. Reversing this trend requires higher admissions standards for teacher education programs, stronger standards for teacher certification, improved working conditions, and higher teachers' salaries.

**Teacher education programs should be lengthened and improved in quality.** Prospective elementary teachers do not acquire an adequate base in either the liberal arts and sciences or in pedagogy. They get only a fleeting introduction to the knowledge required for teaching reading. Teacher education programs should be extended to five years and the quality and rigor of the instruction should be increased.

**Schools should provide for the continuing professional development of teachers.** Schools should have programs to ease the transition of novice teachers into the profession and programs to keep veteran teachers abreast of advancing knowledge.

**America will become a nation of readers when verified practices of the best teachers in the best schools can be introduced throughout the country.**



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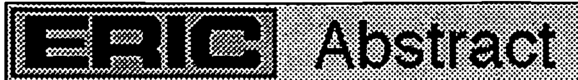


# Becoming a Nation of Readers: The Report of the Commission on Reading

Richard C. Anderson and others

National Institute of Education (ED), Washington, DC, 1985

Fulfilling a need for careful and thorough synthesis of an extensive body of findings on reading, this report presents leading experts' interpretations of both current knowledge of reading and the state of the art and practice of teaching reading. The introduction contains two claims:

(1) the knowledge is now available to make worthwhile improvements in reading throughout the United States

(2) if the practices seen in the classrooms of the best teachers in the best schools could be introduced everywhere, improvement in reading would be dramatic.

The first chapter of the report stresses reading as the process of constructing meaning from written texts, a complex skill requiring the coordination of a number of interrelated sources of information. The second chapter, on emerging literacy, argues that reading must be seen as part of a child's general language development and not as a discrete skill isolated from listening, speaking, and writing. The third chapter, on extending literacy, stresses that as proficiency develops, reading should not be thought of as a separate subject, but as integral to learning in all content areas.

The fourth chapter concerns the teacher and the classroom and notes that an indisputable conclusion of research is that the quality of teaching makes a considerable difference in children's learning. The next two chapters note that standardized reading tests do not measure everything, and that teaching is a complex profession. The last chapter contains seventeen recommendations for conditions likely to produce citizens who would read with high levels of skill and do so frequently with evident satisfaction.

In the afterword, Jeanne Chall comments on the history of the report, and three appendixes contain 260 references and notes plus lists of project consultants and the members of the National Academy of Education.

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**Unlocking the Mysteries, or toward 2001**
Interview with Scott G. Paris

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Dr. Scott Paris leads the way in the major research developments over the past four years on strategic reading. His research findings have appeared in *Contemporary Educational Psychology*, *Child Development* and *Journal of Educational Psychology*. His research findings suggest that strategies play a significant role in reading comprehension. The Wisconsin State Reading Association is fortunate to have Dr. Scott Paris add insights to the Fall Journal's theme: The Strategic Reader.

The editor conducted the interview.

***What is the most recent research suggestion to teachers of beginning readers?***

Recent research has made two important contributions to the instruction of reading and writing for beginning readers. First, we know that the old notions of readiness are probably incorrect. Children are ready to read, or at lest engage in literacy, as soon as they can talk. Research studies have shown that joint book reading between parents and children provides a foundation for listening and print awareness.

The rich social interaction between parent and child provides an understanding about text as well as satisfying social experiences revolving around oral language, print, and enjoyable stories. When parents share literacy with their children, it provides an unshakable foundation for children's early appreciation of the interest and value of text. By four or five years of age, most preschoolers are able to identify letters, sounds, words and to produce a combination of writing, scribbles and drawing that communicates a message.

These early accomplishments indicate cognitive and social awareness about literacy activities and the nature and convention of print. It helps children to provide these experiences before formal schooling and to begin reading and writing activities according to the child's interest and abilities.

The second primary finding from research on beginning reading has shown that early reading instruction does not have to focus on decoding and phonics alone. Language experience and whole language approaches that focus on the social and communicative aspects of reading and writing have had dramatic effects on young children's educational progress.

Research by Don Graves and Jane Hanson, for example, has shown that early writing experiences increase children's understanding of authorship and promote children's early literacy skills by combining reading and writing in meaningful activities. Comprehension and production of meaningful and personally significant text is as much a key to beginning reading as unlocking the mysteries of letter-sound combinations.

**How then, do the research suggestions for teachers in the intermediate grades differ and yet complement the suggestions for teachers of beginning readers?**

Research on reading and writing of older children also emphasizes the value of comprehension activities for children's development and appreciation of literacy. Instead of workbook exercises that provide skill and drill practice there is a growing emphasis on promoting children's understanding of the value of strategic reading. This involved awareness about strategies that facilitate understanding as well as practice in using these skills n meaningful text.

Durkin's research that illustrated the paucity of comprehension instruction provided in teachers' lessons or basal materials revealed a glaring weakness in reading instruction for the intermediate grades. Silent sustained reading and workbook exercises are simply not sufficient activities to teach all children about the richness of printed language and the strategies that can be used for composing and comprehending text.

Although the strategies are more sophisticated and are applied to more complex reading materials, the basic emphasis from beginning to intermediate reading focuses on (a) understanding the constructive and strategic aspects of reading, (b) engaging in meaningful and personally relevant tasks of reading and writing, and © working cooperatively with teachers and peers to construct and comprehend text so that the thinking strategies modeled by others can be incorporated into self-regulated and independent learning.

**Do the suggestions of researchers have an essential place in the upper grades?**

Research in the upper grades has focused on more complicated skills such as understanding the structure of text, composing essays and narratives, and using effective study skills. These aspects of reading and writing are developmental extensions of the skills and strategies that research has emphasized at earlier ages. In particular current research is investigating how comprehension of content area reading can be promoted by making secondary students more analytic and reflective readers.

The developmental sequence of understanding and strategy use that I have mentioned in these three questions reflects advances in research on cognitive development that has shown how children become better able to control their own thinking and reasoning from four to sixteen years of age. The acquisition of skilled reading and writing during this time period mirrors these cognitive developmental accomplishments. Indeed, research on topics such as math, science, and problem solving has shown that some of the same fundamental aspects of planful, thoughtful, self-regulated learning are important in all of these domains.

**If you had the opportunity to teach young children each day for a year, what ideas about teaching would you engage your students with daily?**

If I thought a classroom of students on a regular basis, I would try to instill in them some fundamental ideas about learning everyday. First, I would tell my students that I am proud of who they are and what they know, but that I expect them to learn much more everyday. I believe that

it is important for students to realize that teachers respect them, yet hold high expectations for their development.

Second, I would share with my students the reasons for learning particular information and the goals that I am trying to accomplish. I believe that it is important that teachers and students develop a cooperative attitude so that they are aware of the same objectives and try to reach them together.

Third, each day I would tell my students as much as I could about thinking, learning, and development so they understand the process of education and schooling that occupies so much of their lives. Children are curious to know how the mind works and how people develop. Explaining these phenomena to children is not easy, but it helps make the activities of the classroom more understandable.

**Do you feel there is more to building positive motivation and attitudes among readers than just developing rapport?**

Yes. I believe that motivating students involves more than developing rapport with them. Friendship is not nearly as important as mutual respect for encouraging and motivating students to learn. Two concepts--enablement and empowerment--capture what I feel is important about motivation.

As children learn new skills and strategies for solving the problems we give them in the classroom, they become enabled to achieve and to excel. They can learn independently and gain rewards for their accomplishments as they acquire these skills. The skills that enable their achievement provide a sense of empowerment, because students feel a growing sense of competence and confidence in themselves. Researchers have referred to this as self-efficacy, and it is an important component of self-esteem.

I believe that students develop the motivation to persist in the face of frustration when they feel that they are capable of overcoming difficulties. They develop positive attitudes and high expectations if people around them communicate an honest and positive set of expectations for their performance. Students who feel enabled and empowered do not feel threatened or anxious in the classroom. They take risks and seek challenges so they can learn even more.

**On the topic of research and its practical application, do you feel there's more useful information today about what constitutes effective teaching than ever before?**

There is undoubtedly more information on effective teaching today than there ever has been. Research during the past ten years has been particularly productive in the area of teaching and learning. There is even a growing field called "instructional psychology" that combines research in cognitive, developmental, and educational psychology into principles of effective instruction.

I think we are beginning to understand personal dilemmas and frustrations of teachers as well as the strength and power of effective instruction. Research has analyzed ways in which students

and teachers interact in the classroom to determine effective styles of teaching and the particular qualities of the students and teachers that contribute to effective interaction. Researchers at the institute for Research on Teaching at Michigan State University, for example, have made great strides in describing the dynamics of classroom teaching. This body of research is being translated into preservice and inservice programs of education for teachers that is valuable immediately.

**Would this be true about effective learning, also?**

Yes. I would agree that we have better research today on learning than ever before. Historically, research on learning followed paradigms from experimental psychology. We stopped using animal research as our model of learning a long time ago, but we are still moving away from research on esoteric or non-meaningful tasks.

During the past ten years, researchers have investigated academic learning in classroom settings, and I believe we have made grate strides in our knowledge about children's learning as a consequence.

The rise of information proceeding theories have given us new technology and information about thinking, and the cadre of researchers interested in academic learning has improved dramatically in numbers and quality. My guess is that some of the great advances in applied psychology during the next 20 years will be made in our understanding of effective teaching, learning, instructional technology, and student motivation.

**If we believe that reading and writing are fundamental abilities young people should possess, have we as educators done all we can to bring reading and writing together into successful classroom lessons?**

No. I think educators have been unsuccessful in designing curricula that teach students the similarities between reading and writing. Some language arts programs and while-language instruction for beginning readers have combined oral language, listening, reading, and writing in creative ways: but these seem to fall apart in subsequent grades. Reading and writing become divorced as the curriculum becomes compartmentalized. By the time students reach secondary school, they receive little specific instruction on reading and writing but instead use these as tools of application for learning in other subjects. Students who do not read or write very well by that time have little hope of gaining the skills that thy have not developed.

There are two ways to solve this problem. First, reading and writing can be combined in every subject area so that whether students are learning mathematics, biology, or social studies, they also receive instruction about effective strategies for reading and writing about the content areas.

The second possibility is to teach in a separate curriculum thinking strategies, problem-solving skills, or critical thinking skills, as they have been called, that also focus on reading and writing. The issue is not really which approach is better, because many students receive neither. The issue is how to provide the instruction in a comprehensible and economical manner to students so that



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they have ample opportunities to develop reading and writing skills throughout grades K-12.

**Some recent reports on public education in America conclude that the institution of public education in America is in need of a major overhaul. How would you address the needs of public education in America?**

During the past several years, we have seen numerous reports decrying and indicting the state of education in America. Every level of education from preschool programs to post-secondary colleges and universities has been reviewed and criticized. Obviously, there is a great deal of discontent with American education.

But I believe that one of the strengths of American education is cont constant evaluation by the public and researchers and an enduring dissatisfaction with the quality of instruction and materials available. As opposed to education in many countries around the world, American education is constantly scrutinized to revise and improve curricula and instructional approaches. I believe that such self-examination and revision inevitably leads to improvement and avoids stagnation. Yet, there are always areas in which progress is slower than we would like to see and trade-offs are made among recommendations.

I think it is a mistake to jump on the bandwagon of educational criticism. This has become a political fashion that has created divisive debate. Only in some instances have we used the national reviews to initiate effective reforms in the curriculum or teacher education. I think researchers and professional education organizations can combine their energies to focus on substantive issues that can be addressed concretely. For example, I think we can increase the effectiveness of the following issues in public education in America:

> We can provide students with better educational materials that are based on sound research rather than marketing techniques.
>
> We can improve professional development of preservice and inservice education. (The Holmes Group has provided many good suggestions.)
>
> We can restructure how teachers spend their time so that they engage students more often in meaningful instruction rather than administrative management and student counseling.
>
> We can design more effective programs of educational assessment so that the tests are useful for students, parents, and educators.

I realize that these problems are not small and will not be readily solved. Yet, they each focus on the dynamics of classroom interactions between teachers and students. I find these problems to be more easily addressed than far-reaching social issues such as teacher salaries, length of the school year, and teacher qualifications.

**The term metacognition is a buzz word today among educators aware of some of the**



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**research being done at our major research institutions. How significant is the concept of metacognition to the classroom teachers who will be teaching in the year 2000?**

Metacognition became a popular term about ten years ago and routinely elicits raised eyebrows or groans when introduced to parents and teachers. The terminology may sound awkward, but this focus on understanding our own mental processes is an extremely important topic that will have far-reaching implications for teaching and learning.

During the past ten years, the benefit of metacognition has been to direct researchers to address different types of questions involving learning and cognitive development. Researchers have asked, "How do children become planful, thoughtful, and strategic? How do they learn more about their own cognitive systems? How do children learn from others the kind of standards to internalize when they monitor their own behavior? And, how does self-awareness or reflection get translated into action?"

The basic issue is to understand how children appreciate the way their minds work and how they use this knowledge to enhance their own academic learning. Research studies have identified a wide variety of cognitive and instructional principles that depend on metacognition. These will be incorporated into theories of learning and development in the future and will become part of the knowledge that teachers acquire.

The more we understand about metacognition, the more we understand the ways students learn. So, I think it is a very important term for both researchers and educators. The terminology may change during the next 20 years, but the focus on how people understand and monitor their own mental processes will be an important issue for years to come.

*Dr. Paris was a keynote speaker at the WR\SRA Fall Conference in Green Bay, Wisconsin.*



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# Literature and Literacy: A Review of Research

Wayne Sawyer

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In very recent years there has been a great development of interest in the contribution of literature to reading development. In this paper I would like to review the major theoretical statements on this connection and the empirical evidence which has been put forward to support the notion of literature's having an important role in learning to read.

In *The Cool Web*, Aidan Warlow (1976) argued that "Children will overcome all sorts of linguistic obstacles . . . if the alternative world of the story is one that is desirable and comprehensive" (p. 102). Warlow, then, saw the importance of literature to literacy in what Genette (1980) or Chatman (1978) would call "Story." The interest of "what happens next" contained in the imaginary world of literature provides the drive to read and hence encourages literacy—both its acquisition and development. On the other hand, Gordon Wells (1982) has since argued that "hearing stories aloud familiarises [children] with the language of books and with the characteristic narrative structures that they will meet in story books at school" (p. 11). Thus Wells is describing the learning of "literary literacy," as it were, the acquisition of the structures of literature itself as a branch of reading. He effectively suggests that this is gained to an important extent through the learning of what Chatman (1978) would call "discourse" or Genette (1980) "narrative."

These are two distinct, but interwoven strands in the research of the connection between literature and literacy—the notions of learning to read through literature and learning to read literature. They are interwoven because increasingly researchers have been unable to study how and why children learn to read *through* literature without at the same time addressing the question of how they acquire a competence in dealing with literary structures.

## Theoretical Positions

Overwhelmingly, the question of literature's connection to literacy has been addressed as a question of the role of *narrative* in reading development, i.e., prose literature has been viewed and accepted as a vehicle of narrative. This seems such an obvious thing to accept and to state, but its implications are to see prose literature as a kind of subbranch of a larger genre (and thus to stress its continuity in many respects with oral traditions). Thus the "key-



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words" in a study of literature and literacy and their connections are "story"
and "narrative," though not necessarily in the sense espoused by Genette or
Chatman.
Probably the most famous, and pioneering, work in this tradition is *The*
*Cool Web* (1977), which declares its central theme to be the child's experi-
ence of reading, access to this experience being gained by stories read. *The*
*Cool Web* highlights Barbara Hardy's famous definition of narrative as "a pri-
mary act of mind transferred from art to life" (p. 12). In arguing that we go
to novels to find out about narrative, she stresses the continuum of narrative
from artistic fictions to the everyday, a recurrent theme in the collection. An-
other key statement in *The Cool Web* is Luria and Chukovsky's notion that
through stories the child becomes aware of the way secondary worlds operate
according to rules. In other words, stories become a vehicle for learning
about the way in which language structures experience, as well as about lan-
guage structures themselves—both very important reading lessons.
Possibly the most influential theorist of the connection between narrative
and reading development has been Margaret Meek, whose theory is partly
generated from empirical observation of learning to read. Her theorizing has
concerned itself both with the aspects of learning to read narrative and learn-
ing to read through narrative. She has shown the connections between stories
heard and stories told in early childhood (1976), arguing thus for the notion
of children's absorbing story structures. She has advocated the teaching of
reading through reading stories because "it is most natural to let them learn
by means of the imaginative drive to cognitive function—by reading stories"
(1980, p. 33). The strength of Meek's whole argument connecting literacy to
literature rests precisely here—if we view reading literature as an act of trans-
acting meaning which brings into play our experience of the world, of lan-
guage and of literature, then reading itself is an organizing of language, a
spectator role activity in Britton's (1970) rather than Harding's (1937) sense.
We create meaning through interpreting, imposing form as it were, "function-
ing cognitively."
In *Learning to Read*, Meek (1982) argues that successful early readers are
successful because they discover that stories are like play, not the least of the
connections being that both operate with rules. Stories are at "the heart of
learning to read" (p. 37) because they themselves teach the rules of narrative
organization. Meek has come increasingly to favor the use of narrative dis-
course theory with its roots in structuralism as one kind of framework for evi-
dence on how children learn to make prose mean. Structuralism should
provide such a framework precisely because it argues that "a theory of liter-
ature is a theory of reading" (Culler 1983, p. 140). Children learn to read,
Meek's argument runs, by interaction with "what they find to be significant
texts" (p. 141). The contribution of structuralist theory could be in consider-
ing what constitutes "significant text." Importantly, I believe, this is what the





researchers into the reading process do not do—what even the psycholinguists lack is deep consideration of the quality of the text itself, an answer to the question, "What difference does the kind of story and form of discourse make?" Can basal readers ever possibly teach the same reading lessons as "real" literature, or what the child considers "significant text"?

**Empirical Studies**

Increasingly, such theoretical positions are either being generated from, or finding support in, case studies of children learning to read.

Butler's (1979) Cushla was "taught" to read by "the provision of language and story" (p. 105). In Meek's terms, Cushla could be said to have become a reader by learning "first how a story works," compelled by the drive to answer the question "What happens next?"

Scollon and Scollon's (1981) study of their daughter Rachel, though not centrally a study of learning to read, does provide some important relevant implications. Their study of Rachel's orientation to literacy shows her own writing revealing understandings of conventions peculiar to narrative fiction that were derived from hearing stories read: distance between author and text, between author and character, aspects of point of view. Their early reading of stories to her thus provided a general orientation to literary conventions. This theme is echoed in the later well-known work of Heath (1982), who again was not centrally concerned with reading development, but who also suggests ideas about children learning the nature of literary texts from bedtime stories.

The Bristol Language Research Programme has included a study of how far differences in early language development account for differences in children's success in early schooling. On the three language measures—knowledge about literacy, oral language, and reading comprehension—only early experience of listening to stories was significantly associated with later language ability and it was associated with all three measures. Wells (1982), like Heath and the Scollons, speculates on the particular relationship between language and experience found in stories, arguing that in "listening to stories read aloud . . . the child is . . . beginning to gain experience of the sustained meaning-building organization of written language" (p. 5). Thus Wells is describing learning to read not only literature but learning to read generally through exposure to Story, as a genre of written language.

It is the drive of Chatman's "Story," Meek's "What happens next?" that enables this to happen. But as I argued in my opening paragraph, Wells has also effectively described the learning of literary narrative structures (as a subbranch of written language) through exposure to Story. His is an important research study that suggests the interconnection of learning to read literature and learning to read through literature.

Meek's (1983) own case studies of adolescent readers continually emphasize that a most important reading lesson is the discovery of the relationship between one's own "storying" and the story of the book. What teachers of these adolescents found to be most valuable was to draw connections between the student's knowledge of narrative shown in telling stories and their reading. What became significant was not a book's "readability" in the traditional word-length sense, but its narrative structures in a wider sense: points of view, secondary worlds, gaps in the text. Meek's team of teachers came to see the whole basis of literacy in "learning literature," in learning the convention of written structures. In "learning reading" from basal readers—and failing—their students had not learned "how to 'tune' the voice on the page, how to follow the fortunes of the hero, how to tolerate the unexpected, to link episodes" (p. 214).

All of these findings and arguments have recently been echoed by Docherty (1984), May (1984), and Graham (1984), among others.

Recently, another source of evidence has become available in the form of studies of young children's own oral stories. Fox (1983, 1985) and Dombey (1983) have shown their case study children to be using quite complex rules of narrative production, many echoing structures from stories heard. Both Fox and Dombey conclude that at school their children will see little connection between reading-scheme stories and their knowledge of more complex narrative conventions gained from "real" stories. The implications are that teachers need not choose simple texts nor simplify language for early readers if the story itself is one that the child wants to hear or read. Again, "learning to read must be inextricably tied to what is read" (Fox 1985, p. 380).

Williams and Jack (n.d.) have worked with children regarded as learning disabled on a program of extensive experience in story reading and writing, consciously operating on Hardy's assumption that narrative is a primary way by which people learn to mean. Of most immediate relevance has been the children's changed views of themselves as readers, and their learning to operate more sophisticated conventions of reading. Williams and Jack argue strongly that a necessary condition of these changes has been the complexity of the narratives being read.

## Issues

All of the research quoted stresses to varying degrees the interactive continuity between sense-of-narrative-form and the ability to read narrative. One ought to stress that this interaction is complex. There is no suggestion that it is other than a kind of circularity that includes children's own story making as well as stories-heard and stories-read interacting in such a way that each element works to produce another. The real importance of the research is in reminding us that children may bring to their reading a more complex sense of narrative structures than basal reading schemes allow.





One next step, of course, would be to use this knowledge in our evaluation of children's literature. The research shows that the learning of reading competencies depends on the kinds of texts to which children are exposed. Meek (1982) has urged in a seminal article that "literature for children may be seen as the significant model, the cultural paradigm of subsequent literature *in the experience of the reader.* Children's literature is undeniably the first literary experience, where the reader's expectations of what literature *is* are laid down. Books in childhood initiate children into literature; they inaugurate certain kinds of literary competences. . . . They offer a view of what it is to be literate" (p. 19). An approach to children's literature through a study of narrative structure could at least identify what reading lessons, what lessons about literature and what "competencies" are being taught by the book.

It would seem also that the question of "What happens next?" and its relevance to the drive to read needs to be studied more closely as an issue. In some respects the question "What happens next?" could be seen as the literary-narrative equivalent of the "getting our predictions answered" of the psycholinguists. A narrative-theory approach to children's reading material could perhaps answer such questions as whether certain structures work more on a pattern of generating questions than other structures do.

The final underlying point, of course, is that we cannot any longer separate "learning to read" and "reading to learn," as if one necessarily had to precede the other. In English classrooms in the past this separation manifested itself as reading lessons (with "exercises") and literature lessons (with literary criticism); and probably the literature lessons came late in one's schooling career anyway because one couldn't "do" them until one could "read." We are learning now that important lessons about reading are being taught by the material read so that basal reading schemes are being increasingly questioned not just for their often misplaced emphasis on phonics but for the paucity of their narrative structures and story interest. Janet and John's (or Dick and Jane's or Spot's) adventures are not likely to encourage an interest in reading, only to allow practice in the most basic mechanical processes—which could also be done with genuine stories at the same time as these are teaching children about written language structures. We can no longer afford to underestimate the importance of the role of narrative in reading. Narrative is a fundamental mode of meaning making through language for humans, and probably *the* main mode for children. We cannot present them with reading material that is too simplistic in its narrative organization when we know the complexity of narrative understanding of which children can be capable.

"Reading" ought not to be a school activity while "reading stories" remains a home one—"reading" cannot be "real work" while reading stories is "just fun." Another lesson to learn is to bring into our classrooms those very activities that the best practices in literature teaching have encouraged (but now as part of simply "reading") and "new model comprehension" activities such as text sequencing, cloze procedure, text prediction, etc. (e.g., Moy and



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Raleigh 1984). All of these activities are at base a way of teaching children about their reading processes.

The war between "top down" and "bottom up" theories of reading—between advocates of a psycholinguistic or subskills approach respectively—continues to be waged at the level of mechanical process. The important recent research into narrative which I have outlined above promises to open a new level of debate and pedagogy in reading—a debate about the material being read as well as the processes being used. Such research is already on the way to confirming solidly the connections between literature and literacy.

## References


Britton, J. *Language and Learning*. Harmondsworth: Penguin, 1979.

Butler, D. *Cushla and Her Books*. London: Hodder & Stoughton, 1979.

Chatman, S. *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca, NY: Cornell University Press, 1978.

Culler, J. Quoted in M. Meek. "How Do They Know It's Worth It? The Untaught Reading Lessons." In R. Arnold (Ed.), *Timely Voices: English Teaching in the Eighties*. Melbourne: Oxford University Press, 1983.

Docherty, M., "That's Not Right. Look! There's No Daddy in This Book." In J. Miller (Ed.), *Eccentric Propositions: Essays on Literature and the Curriculum*. London: Routledge and Kegan Paul, 1984.

Dombey, H. "Learning the Language of Books." In M. Meek (Ed.), *Opening Moves: Work in Progress in the Study of Children's Language Development*. London: University of London Institute of Education, 1983.

Fox, C. "Talking Like a Book: Young Children's Oral Monologues," In M. Meek (Ed.), *Opening Moves: Work in Progress in the Study of Children's Language Development*. London: University of London Institute of Education, 1983.

———. "The Book That Talks." *Language Arts*, 62(1985): 374–384.

Genette, G. *Narrative Discourse: An Essay in Method*. Ithaca, NY: Cornell University Press, 1980.

Graham, J. "Reading Literature with a Slow Learner." In J. Miller (Ed.), *Eccentric Propositions: Essays on Literature and the Curriculum*. London: Routledge and Kegan Paul, 1984.

Harding, D. W. "The Role of the Onlooker." *Scrutiny*, 6:3(1937).

Hardy, B. "Towards a Poetics of Fiction: An Approach Through Narrative." In M. Meek et al. (Eds.), *The Cool Web*. London: The Bodley Head, 1977.

Heath, S. B., "What No Bedtime Story Means: Narrative Skills at Home and at School." *Language in Society*, 11:1(1982).

May, S. "Story in its Writeful Place." In J. Miller (Ed.), *Eccentric Propositions: Essays on Literature and the Curriculum*. London: Routledge and Kegan Paul, 1984.

Moy, B., and M. Raleigh. "Comprehension. Bringing It Back Alive." In J. Miller (Ed.), *Eccentric Propositions: Essays on Literature and the Curriculum*. London: Routledge and Kegan Paul, 1984.

Meek, M. "Stories Are for Telling." *English in Education*, 10:1(1976).







———. "Prolegomena for a Study of Children's Literature." In M. Benton (Ed.), *Approaches to Research in Children's Literature*. Southampton: University of Southampton, 1980.

———. *Learning to Read*. London: The Bodley Head, 1982.

———. "What Counts as Evidence in Theories of Children's Literature?" *Theory into Practice*. 21:4(1983).

M. Meek et al. (Eds.), *The Cool Web: The Pattern of Children's Reading*. London: The Bodley Head, 1977.

M. Meek et al. *Achieving Literacy: Longitudinal Case Studies of Adolescents Learning to Read*. London: Routledge and Kegan Paul, 1983.

Scollon, R., and S. B. Scollon. "The Literate Two Year Old: The Fictionalization of Self." In R. and S. B. Scollon (Eds.), *Narrative, Literacy, and Face in Interethnic Communication*. Norwood, NJ: Ablex, 1981.

Warlow, A. "Alternative Worlds Available." In M. Meek et al. (Eds.), *The Cool Web*. London: The Bodley Head, 1977.

Wells, G. "Story Reading and the Development of Symbolic Skills." Paper presented at the Reading '82 conference, York University, Toronto, Feb. 18, 1982.

Williams, G., and D. Jack. "The Role of Story: Learning to Read in a Special Education Class." In *Revaluing Troubled Readers*, Occasional Paper Number 15, Program in Language and Literacy, College of Education, University of Arizona, n.d.


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# Strategic Reading: A Brief Overview

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Over the past few years, researchers have focused increasing attention on helping students become strategic readers. This attention has gone beyond simply teaching students comprehension skills and study skills. As Johnston (1985) put it, "Teachers need to be concerned about improving children's comprehension ability rather than just comprehension. This redirection focuses efforts on the development and teaching of strategic reading comprehension behaviors." In this endeavor, students are taught to actively control their own reading.

## Strategic Reading

Strategic reading seems to involve several elements. Strategic readers, obviously, use strategies, "systematic, goal-directed behavior(s) that can be generalized beyond the immediate task." Strategic readers are flexible in their use of those reading skills and strategies. Menges (1981) describes this flexibility when he says, "From experience with a large number of problems, learners discover strategies that apply across the whole class of problems. Or they may develop strategies for dealing with the process of learning itself."

This type of flexibility is considered to be characteristic of experts. Strategic readers also act consciously and intentionally. As Paris, Lipson, & Wixson (1983) suggest, "Strategic actions are, in a simplified sense, skills that are made deliberate." In addition, strategic readers are aware of the reasons for reading, the characteristics of the text, and their relative success with reading.

By contrast, readers who are not strategic may not know about strategies, may not realize the need to stop periodically to check their own comprehension, and may not understand the benefits of strategy use. In short, these students may not have well developed metacognitive skills.

Studies of strategic reading have largely centered in three overlapping areas: (a) examining differences in strategic reading among different groups, (b) identifying characteristics of strategic readers, and (c) attempting to teach readers to read strategically. Many of the early studies identified the characteristics of the strategic readers. Later studies have tended to focus more on attempts to develop strategic readers.



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### Differences Between Strategic and Non-Strategic Readers

Studies that have examined strategic and non-strategic readers' use of strategies have indicated differences primarily in terms of age or success in reading. In general, older readers and more successful readers have been more strategic readers. These differences have been specifically manifested in a number of ways.

First, some researchers have indicated that younger or less successful readers are not aware of task demands. For example, Myers and Paris (1978) found that young children "were unaware of many important parameters of reading. They were not sensitive to task dimensions or the need to involve special strategies for different materials and goals." Bristow (1985) added to these findings when she indicated that good and poor readers have different views of reading.

Second, other authorities have indicated that younger or less successful readers lack metacognitive development. Otto (1985) commented that "Poor readers' metacognitive development tends to lag behind their cognitive development in reading. Even when they seem able to perform satisfactorily under a teacher's supervision, they seldom or never reread purposefully when meaning is unclear, they report little or no awareness of an occasional lack of understanding, they do not realize the need for exact understanding when reading directions, and they seem unable to use reading as a versatile tool for learning and pleasure."

Third, many researchers have shown that strategic and non-strategic readers differ in how they understand what they read. Spring (1985) found that college freshman, good and poor readers, differed in the types of strategies that they used; good readers used comprehension strategies associated with understanding what they read, while poor readers more often used study strategies. Spring suggested that poor readers "May rely heavily on study strategies without first having completely understood the text material to be studied." Winograd (1984), who looked at how good and poor eighth grade readers approached summarizing texts, concluded that while most poor readers know the demands of the summarization task, some of the poor readers had difficulty identifying information that adults consider to be important.

Fourth, inappropriate placement in materials may be a factor that distinguishes good from poor readers. Poor readers are more often placed in material that is inappropriate for them. This misplacement detracts from strategic reading performance.

Fifth, several authors have also suggested that poor readers tend to exhibit learned helplessness. The learned helplessness is manifested in lower expectations of success and easily shaken confidence. Readers become very passive.

Sixth, researchers have described strategic and non-strategic readers as differing in their control of the learning situation. Simpson (1984) indicated that college sophomores who were poor





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readers "had a restricted range of strategies for learning from text and an even more naive concept of how to plan tasks or evaluate accomplishments." Menges suggested that "One difference between effective and ineffective learners is that effective learners generate their own strategies for coding, retrieving, and manipulating knowledge; they are in control of their learning process."

### Effective Strategic Readers

In addition to learning more about strategic reading through the comparison of successful and less successful readers, researchers have looked closely at the reading behavior of older and more skilled readers in order to identify characteristics of effective strategic readers. Smith (1982, 1985) identified several characteristics. First, "mature readers change tactics easily, quickly recognizing when one idea isn't working and coming up with another to try instead." Second, effective readers seem to feel ownership of a task. They feel that they are in control. Third, skilled readers use non-reading strategies such as taking breaks and they report having experienced dramatic breakthroughs following those breaks. Fourth, skilled readers feel a desire to talk to a knowledgeable other person to help with monitoring. By talking with this other individual they test their comprehension.

Anderson (1980) also studied skilled readers. He identified study strategies that were naturally used by these skilled readers. These strategies were contrasted with those recommended by experts: "The qualitative difference is great between strategies that students report using and those that the 'experts' advocate using." In addition to highlighting the importance of knowing the actual as opposed to the recommended use of strategies, Anderson gave the possible explanations that the use of the strategies is situational, and that strategies have a cost in time and effort.

### Teaching Students to Be Effective Strategic Readers

While many studies have focused on identifying characteristics of good and poor readers, a number of the more recent studies examined ways of teaching students to be more strategic readers. These studies focused on several related variables.

First, many stressed the importance of increasing student awareness of strategies. Paris, Cross, and Lipson (1984) used an approach called *Informed Strategies for Learning*, which stressed children's awareness and use of effective reading strategies. They argued that direct instruction and increased awareness lead to better strategy use. Armbruster and Anderson (1981) proposed teaching about four variables affecting the act of studying: (a) the study task, (b) materials, (c) the student's characteristics, and (d) strategies.

Second, other studies have focused on ways of increasing



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student involvement. Jenkins, Heliotis, Haynes, and Beck (1986) found superior performance of a task that required active student response (restatements as opposed to individual and group questioning). Miller (1985) found general self-instruction training to facilitate monitoring activity. She found self-verbalization to be especially important. Smith and Dauer (1984) and Haggard (1985) suggested the use of marginal coding as a way of increasing active monitoring. In addition, many attempts to increase involvement have focused on questioning. For example, Dreher and Gambrell (1985) suggested teaching children to use a self-questioning strategy.

Third, studies have stressed the importance of providing structure. Holmes (1985) found the combination of a structured inferencing strategy and sequentially ordered materials to be most effective with disabled readers.

Fourth, studies have shown the modeling of strategic reading behaviors to be important. Palincsar and Brown (1985) presented a technique of reciprocal teaching, where the teacher and the students alternate roles. Heller (1986) and Thurmond (1986) also recommended ways of modeling strategic reading.

Fifth, authorities have highlighted the importance of practice. Taylor, et al. found practice to be more effective with poor readers than a particular phrase reading strategy. Dreher and Gambrell found practice to be an essential element in having students write their own main idea questions. Simpson stressed the importance of application practice with the students' own texts.

## Questions About the Teaching of Strategic Reading

While researchers and teacher educators have provided many suggestions for helping students become strategic readers, several questions have not been resolved. The first is a logical one. Is it effective to teach strategic reading, or must it be learned? The studies mentioned above seem to indicate that strategic reading can be taught.

Unquestionably the strategies can be taught, but is that enough? Strategic reading involves more than just strategy use. For example, Spring (1985) suggested that the interaction of a number of factors is critical. In addition to teaching students to use strategies, students' general knowledge and background may need to be improved. Then, the question becomes whether strategic readers and non-strategic readers are similar enough to determine that what the former do naturally and spontaneously can and should be taught to the latter. The two groups may not be sufficiently similar. Young readers may be unable to control their reading enough to read strategically. Less skilled readers may be too preoccupied with the act of reading to be strategic. If the groups are not sufficiently similar, many of the studies purporting to improve strategic reading may be, instead, promoting the learning of isolated strategies. While



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the strategies work under teacher direction, they do not provide for the necessary student control.

Second, what is the importance of the total reading situation, particularly the effect of the difficulty of the material? Erickson, Stahl, and Rinehart (1985) found that poor readers did monitor their comprehension when given appropriate reading material, but did not monitor when given difficult material. Smith (1985) found that skilled readers got only limited benefit from strategies when faced with very difficult, unfamiliar material. These readers were able to summarize passages, but they did not understand the text.

Third, what are the costs of strategic reading? Since strategic reading requires more time and effort than simply reading, what are the trade-offs? Particularly for non-strategic readers, when and how do the benefits outweigh the costs?

As can be seen in this brief review, much is known about strategic reading and strategic readers. More information is being generated, and possible teaching approaches are being identified. The development of strategic readers has the potential to be a very fruitful avenue for research and practice.

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**References**


Anderson, T. H. Study strategies and adjunct aids. *Theoretical Issues in Reading Comprehension.* Hillsdale, NJ: Erlbaum, 1980.

Armbruster, B. B. & Anderson, T.H. (1981) Research synthesis on study skills. *Educational Leadership,* 39, 154-156; 1981.

Bransford, J. D., Vye, N. J., & Stein, B. S. A comparison of successful and less successful learners: Can we enhance comprehension and mastery skills? *Promoting Reading Comprehension.* Newark, DE: IRA, 1985.

Bristow, P.S. Are poor readers passive readers? Some evidence, possible explanations, and potential solutions. *Reading Teacher,* 39, 318-325; 1985.

Brown, A. L. Metacognitive development and reading. *Theoretical Issues in Reading Comprehension.* Hillsdale, NJ: Erlbaum, 1980.

Brown, A. L. & Palincsar, A. S. *Reciprocal Teaching of Comprehension: A Natural History of One Program for Enhancing Learning.* Technical Report #334. Cambridge, MA: Bolt, Beranek & Newman. (ERIC Document Reproduction Service No. ED 257 046; 1985.

Brukowsky, I.S. & Willows, D. M. Cognitive-motivational characteristics of children varying in reading ability: Evidence for learned helplessness in poor readers. *Journal of Educational Psychology,* 72, 408-422; 1980.

Chi, M. T. H. & Glaser, R. *Problem Solving Ability.* Learning Research and Development Center, University of Pittsburgh. (ERIC Document Reproduction Service No. ED 257 630; 1985.

Dreher, M. J. & Gambrell, L. B. Teaching children to use a self-questioning strategy for studying expository prose. *Reading Improvement,* 22, 2-7; 1985.

Erickson, L. G. Stahl, S. A., & Rinehart, S. D. Metacognitive abilities of above and below average readers: Effects of conceptual tempo, passage level, and error type on error detection. *Journal of Reading Behavior,* 17, 235-252; 1985.

Haggard, M. R. An interactive strategies approach to content reading. *Journal of Reading,* 204-210; 1985.




BEST COPY AVAILABLE

Heller, M. F. How do you know what you know? Metacognitive modeling in the content areas. *Journal of Reading*. 29. 415-422: 1986.

Holmes, B. C. The effects of a strategy and sequenced materials on the inferential comprehension of disabled readers. *Journal of Learning Disabilities*. 542-546: 1985.

Jenkins, J. R., Heliotis, J., Haynes, M., & Beck, K. Does passive learning account for disabled readers' comprehension deficits in ordinary reading situations. *Learning Disabilities Quarterly*. 9. 69-76: 1986.

Johnston, P. Teaching students to apply strategies that improve reading comprehension. *Library School Journal*. 65. 635-645: 1985.

Menges, R. J. Instructional methods. *Modern American College*. San Francisco: Jossey-Bass. 1981.

Miller, G. E. The effects of general and specific self-instruction training on children's comprehension monitoring performances during reading. *Reading Research Quarterly*. 20. 616-628: 1985.

Myers, M. II. Paris, S. G. Children's metacognitive knowledge about reading. *Journal of Educational Psychology*. 70.680-690: 1978.

Otto, W. Metacognition and reading instruction. *Journal of Reading*. 28. 573-575: 1985.

Palincsar, A. S. & Brown, A. L. Interactive teaching to promote independent learning from text. *Reading Teacher*. 39. 771-777: 1986.

Paris, S. G., Cross, D. R., & Lipson, M. Y. Informed strategies for learning: A program to improve children's reading awareness and comprehension. *Journal of Educational Psychology*. 76. 1239-1252: 1984.

Paris, S. G., Lipson, M. Y., & Wixson, K. K. Becoming a strategic reader. *Contemporary Educational Psychology*. 8. 293-316: 1983.

Raphael, T. E. & McKinney J. An examination of fifth-and eighth-grade children's question-answering behavior: An instructional study in metacognition. *Journal of Reading Behavior*. 15. 67-86: 1983.

Simpson, M. L. The status of study strategy instruction: Implications for classroom teachers. *Journal of Reading*. 28. 136-142: 1984.

Smith, S. L. Learning strategies of mature college learners. *Journal of Reading*. 26. 5-12: 1982.

Smith, S. L. Comprehension and comprehension monitoring by experienced readers. *Journal of Reading*. 28. 292-300: 1985.

Smith, R. J. & Dauer, V. L. A comprehension-monitoring strategy for reading content area materials. *Journal of Reading*. 28. 144-147: 1984.

Spring, C. Comprehension and study strategies reported by university freshmen who are good and poor readers. Instructional Science. 9. 157-167: 1985.

Taylor, N. E., Wade, M. R., & Yekovich, F. R. The effects of text manipulation and multiple reading strategies on the reading performance of good and poor readers. *Reading Research Quarterly*. 20. 566-574: 1985.

Thurmond, V. B. Analytical reading: A course that stresses thinking aloud. *Journal of Reading*. 29.729-732. 1986.

Winograd, P. N. Strategic difficulties in summarizing texts. *Reading Research Quarterly*. 19. 404-425: 1984.






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# TURNING CONTEMPORARY READING RESEARCH INTO INSTRUCTIONAL PRACTICE

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If the 1960s and 1970s were the years that reading educators discovered that comprehension was really being tested, not taught, and that the "Great Debate" between phonics and whole-word instruction didn't matter much anyway, then what have we learned in the 1980s? Many things, of course, thanks to a quantum increase in the amount and sophistication of reading research. The past era of reading research, which focused on more global aspects of instruction such as the effectiveness of the general approach the teacher used or the books the children read, might be likened to viewing reading instruction with a low-powered objective of a microscope. While this perspective might have been helpful for teachers choosing between instructional approaches which were markedly different from each other (e.g., i/t/a, synthetic phonics, and the linguistic approach), such benefit is now limited because, as noted by Pearson (1985) and Goodlad (1983), both instruction and instructional materials have become homogeneous and eclectic to a high degree.

Contemporary reading research, as through the microscope's more high-power objective, sheds light on finer aspects of reading instruction, providing viewpoints on reading and teaching which teachers can use in making smaller but still significant modifications in their instructional practices. Two of these "finer" aspects, modelling and direct teacher explanation, seem to be the key mediators of research and practice. This article highlights four promising areas of contemporary reading research as well as the instructional practices implied by recent findings.

Direct Teacher Explanation

Paris and his colleagues (Paris, Libson and Wixson, 1983; Paris, Oka and DeBritto, 1983) assert that any type of instruction should provide students with three kinds of knowledge; (a) declarative - knowing that a skill works, (b) procedural - knowing how to perform the skill, and (c) conditional - knowing when and why a skill should be used to accomplish different purposes (Paris, Lipson and Wixson, 1983, pp. 303-304). Paris contends that of the three, conditional knowledge is the most important because it provides the metacognitive insight necessary for skill transfer. Since research is documenting that commercial materials teachers use often do not include the how, where, when, and why for skill learning (Hare and Milligan, 1984; Johnston and Byrd, 1983), Roehler and her colleagues trained teachers to use direct explanation as a basis for skill instruction (Roehler and Duffy, 1984; Roehler, Duffy and Meloth, 1984). In addition, students in these studies were asked, what were you learning to do today, how do you do that, and why is it important? Positive results of these training studies suggest that direct explanation fosters greater student awareness for skill learning and nudges the teacher to model and practice a skill before students apply it to a text.

The instructional implications from the previous discussion are evident. Skill instruction should now include the how, why, when, and where of skill learning and application. Contemporary research helps us see that good teaching involves the teacher directly modeling for the students the thinking processes required for a skill. For example, suppose a teacher wanted to determine the explicitly stated main idea of a paragraph. A possible instructional script would be as follows:

> Today, class, we are going to learn how to find the main idea of a paragraph when it is stated in a sentence somewhere in the paragraph. The main idea of a paragraph states in a general way what the whole paragraph is talking about. It is important to know how to find the main idea because the main idea tells us the most important information that we should remember from a paragraph. Let me show you how I find the main idea in the paragraph I have written on the board.

> Many kinds of products are made from different parts of the bamboo plant. Paper and animal food are made from bamboo leaves. Buckets, flutes and fishing rods are made from bamboo stems. Medicine is made from bamboo juice.

When I read the second, third and fourth sentences, I see that each of these sentences tells about a specific product made from a specific part of the bamboo plant. These sentences that state specific information are called detail sentences. But when I read the first sentence, I see that it says "many kinds of products", not just a specific product, are made from bamboo. I now see that this sentence states in a general way what the whole paragraph is talking about because the phrase, "many kinds of products," includes animal feed, medicine, etc. Therefore, this is the main idea sentence of this paragraph. So, the most important information that I want to remember from this paragraph is "many kinds of products are made from bamboo." This is how I determine the main idea of paragraphs when I read chapters in my health, science and social studies texts.

But not all main ideas are found in the first sentence of a paragraph. Sometimes they are found in the middle or at the end of a paragraph. Watch as I read the next paragraph that I have written. . . (same explanations but the main idea would be located in another position).

This script makes explicit what is to be learned, why the learning is important, how the learning is acquired, and when/where it is used. Although time consuming, this type of instruction readily demonstrates process as well as relevancy of the learning.

Direct teacher explanation is an instructional practice suggested by three other areas of contemporary reading research: reading-writing connections, top level test structures, and main idea identification. In each instance, both modeling and direct teacher explanation seem to provide the necessary link by which practices recommended by research can become methods which work in classrooms.

## Reading-Writing Connection

Like reading, writing is a language/thinking process

which involves the structuring of meaning. The movement to emphasize writing concurrently with reading has received impetus from Smith (1982) and Karlin and Karlin (1984), who have shown that acquiring writing skills assists student development of reading comprehension skills. The federal government through NEH grants for integrated language arts projects and the media, through positive reports of successful writing projects (e.g. Time, 1980) have helped to sustain this momentum.

Parallel to developments in content reading instruction, which aims to help students read to learn, research in writing has focused on helping students also see writing as a tool for learning. Studies by Rhea (1985) and Edelsky and Smith (1984) have shown that when students write for "natural" or "authentic" purposes, their writing was more truthful, more varied, and much more satisfying to both teachers and students. Authentic writing can be contrasted to the bland, decontextualized writing that too often goes on in schools in that authentic writing frequently has another audience in mind beside the teacher (e.g., parents, peers, editors, media personalities, etc.). Authentic writing may also be thought of as writing which is done by people in the world of work, from business memos to scientific journals.

Authentic writing seems more likely to occur when a writer has been reading the same type of text s/he is trying to write. Smith's (1982) research suggests that a developmental step of "reading like a writer" takes place before an author can realize and use all the conventions required in producing a certain type of text. Just as children writing "The End" at the conclusion of an original story shows they have been reading or listening to stories, when children write "The End" at the conclusion of a different type of text (essay, poem), it is evident that they have not been reading these types of texts.

To develop this sense of "authentic" writing, teachers need to explain and model the type of writing expected from students. For example, suppose a teacher wanted her students to write fables. Using the direct explanation model, the teacher would read several fables to her class. Following the reading of the fables, the teacher would explain the basic components needed for this style of writing. After the explanation, the teacher would write a

fable on the board modeling the necessary writing processes. This explanation and modeling should make explicit the critical components needed for this type of writing. The fables previously read should be examined in the light of these critical components to point out the room for deviation from as well as conformity to the pattern. This modeling and analysis can help students view a genre as a set of possibilities for writing instead of a set of limits.

## Top-level Text Structure

Recent research has demonstrated that students who display a sensitivity to a text's top-level structure (e.g., sequence, description), tend to (a) recall more important detail information (Elliot, 1980; McGee, 1982; Taylor & Samuels, 1982), (b) organize their recalls (either oral or written) according to the text's overall structure (Hiebert, Englert and Brennan, 1983; Meyer, Brandt and Bluth, 1980; Taylor, 1980), and (c) show a transfer from text-structure training to their own writing of expository prose (Taylor and Beach, 1984). Since expository prose assumes increased importance as students progress through their school years, instruction regarding these top-level structures should be considered: Description, sequence, enumeration, compare-contrast, and problem/solution.

Text structure training should begin by using "pure" examples of each text structure. If examples cannot be located in texts, then examples will need to be generated by the teacher. Each text structure should be explained by the teacher. The teacher would stress how certain key words in a text (e.g., first, second, same, different, etc.) signal a specific structure, enumeration. Once a text structure has been identified, the teacher would model how she uses this structure to identify the most important information in a text. S/he would then model how s/he rehearses this important information to prepare for class discussions of texts as well as writing research reports. Following teacher explanation and modeling, students would be given another text (same text structure) to practice identifying and rehearsing the most important information.

Once students are familiar with this text structure strategy, they should be expected to apply the strategy independently when reading content-area texts. The teacher should continually reinforce the use of this text structure

strategy by helping students to organize their writing (papers, essay questions) as well as class discussion and/or questions according to this strategy.

Main Idea Identification

A text strategy taught throughout all grade levels is identifying the main idea of expository text. Baumann (1982a) suggests that many students find this to be a difficult task. A possible reason for this difficulty is that commercial materials used by teachers seem to vary in how main idea is defined (Winograd & Brennan, 1983).

Hare and Milligan (1984) analyzed four well known basal reading series to evaluate instructional explanations for main idea identification. Although all the series agreed on what main ideas are, where they are found and how they are useful, all the series seemed to avoid the issue of how one determines the main idea of a text. Overall, main idea instruction was characterized by mentioning rather than by true explanation.

Baumann and Serra (1984) analyzed various social studies texts to determine how often main ideas are directly stated in these texts and if most main idea statements are found at the beginnings of paragraphs. They found that for all texts surveyed, 44% of the passages contained simple main ideas, 30% contained delayed completion main ideas, and 26% contained inferred main ideas. Concerning main idea placement, 63% of the simple main ideas were found in the first sentence, 21% appeared in the middle of the paragraph, and 12% appeared in the last sentence. But when all passages were analyzed, only 29% had main ideas stated in the first sentence position.

Because of the many problems inherent in commercial programs and texts, direct explanation of this skill by teachers is crucial. Using natural text (paragraph or passage), the teacher needs to explain how s/he determines if a paragraph has an explicitly stated main idea sentence. Instruction should begin with texts that do have directly stated main idea sentences. Following sufficient teacher explanation and modeling as well as student practice sessions, implicit main idea instruction should be given. Using natural texts also will sensitize students to the fact that main ideas are not always found in the first sentence

position and many times students will need to generate their own main idea statements.

When students are competent at this strategy, they could then be shown how their strategy assists in writing a text summary, developing a chapter outline and in taking notes for future study.

## Conclusion

The four areas of contemporary reading research which have been the focus of this article--using direct explanation to enhance the reading/writing connection as well as to teach top-level text structure and main idea identification--are not the only promising or interesting ideas under scrutiny by reading professionals. Nor do they offer to reading teachers the guarantee that, if taught, all comprehension problems would be resolved. Rather, the implication is that teaachers do not need to substitute one whole approach to teaching reading for another, like phonics for linguistics, as was done so often in the past to improve reading instruction. Improvement will more likely be the result of teachers modeling and giving direct explanations of specific reading strategies which have been demonstrated to be effective for improving comprehension.

## REFERENCES

Baumann, J.F. (1982). Research on children's main idea comprehension: A problem of ecological validity. Reading Psychology, 3, 167-177.

Baumann,J.F. & J.K.Serra. (1984). The frequency and placement of main ideas in children's social studies textbooks. Journal of Reading Behavior, 16, 27-40.

Belloni,L.F. & E.A.Jongsma. (1978). The Effects of Interest on Reading Comprehension of Low Achieving Students. Journal of Reading, 22, 106-109.

Bergquist, L. & M. Kensock. (1981). Reluctant Readers are Formed--Not Born. Ohio Reading Teacher, 16, 1981,9-13

Edelsky, C. & K. Smith. (1984). Is that writing--or are those marks just a figment of your curriculum? Language Arts, 61, 24-32.

Eliot, S. (1980). Children's knowledge and use of organizational patterns of prose in recalling what they read.

Journal of Reading Behavior, 12, 203-212.

Goodlad, J. (1983). A Place Called School. NY: McGrawHill.

Hare, V.C. & B.Milligan. (1984). Main idea identification: Instructional explorations in four basal reader series. Journal of Reading Behavior, 16, 189-204.

Hiebert,E.H., C.S.Englert, & S. Brennan. (1983). Awareness of text structure in recognition and production of expository discourse. Journal of Reading Behavior, 15, 63-79.

Johnston,P. & M.Byrd. (1983). Basal readers and the improvement of reading comprehension ability. In Niles & Harris (Eds.), Searches for meaning in reading/language processing and instruction. Rochester, NY: N. R. C.

Karlin, R. & A.R.Karlin. (1984). Writing for Reading. Reading Horizons, 24, 124-128.

McGee, L. Awareness of text structure: Effects on children's recall of expository text. (1982). Reading Research Quarterly, 17, 1982, 581-590.

Meyer,B., D.Brandt & G.Bluth. (1980). Use of top-level structure in text: Key for comprehension of ninth-grade students. Reading Research Quarterly, 16, 72-103.

Peris, S.G., M.Y.Lipson & K.K.Wixson. (1983). Becoming a strategic reader. Contemporary Educational Psychology, 8, 293-316.

Paris,S.G., E.P.Oka, & E.M.Britto. (1983). Beyond decoding: Synthesis of research on reading comprehension. Educational Leadership, 41, 78-83.

Pearson, P. (1985). Changing the face of reading comprehension instruction. The Reading Teacher, 38, 724-738.

Rhea, P. (1986). Writing for natural purposes. English Journal, 75, 43-50.

Roehler,L.R. & G.G.Duffy. (1984). Direct explanation of comprehension processes. In Duffy, Roehler, & Mason (Eds.), Comprehension Instruction, perspective and suggestions. N.Y.: Longman.



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Roehler,L.R., G.G.Duffy, & M.Meloth. (1984). The effects and some distinguishing characteristics of explicit teacher explanation during reading instruction. In Niles & Harris (Eds.), Changing perspectives on research in reading/language processing and instruction. Rochester, NY: The National Reading Conference.

The Righting of Writing. Time, May 19, 1980, 88-92.

Smith, F. Writing and the Writer. (1980). NY: Holt, Rinehart, and Winston.

Taylor,B. (1980). Children's memory for expository text after reading. Reading Research Quarterly, 15, 399-411.

Taylor, B. & R. Beach. (1984). The effects of text structure instruction on middle-grade students' comprehension and production of expository text. Reading Research Quarterly, 19, 134-146.

Taylor, B. & S. Samuels. (1983). Children's use of text structure in the recall of expository material. American Educational Research Journal, 20, 517-528.

Winograd, P. & S. Brennan. (1983). Main idea instruction in the basal readers. In Niles & Harris (Eds.), Searches for meaning in reading/language processing and instruction. Rochester, NY: The National Reading Conference.

# BIBLIOGRAPHY

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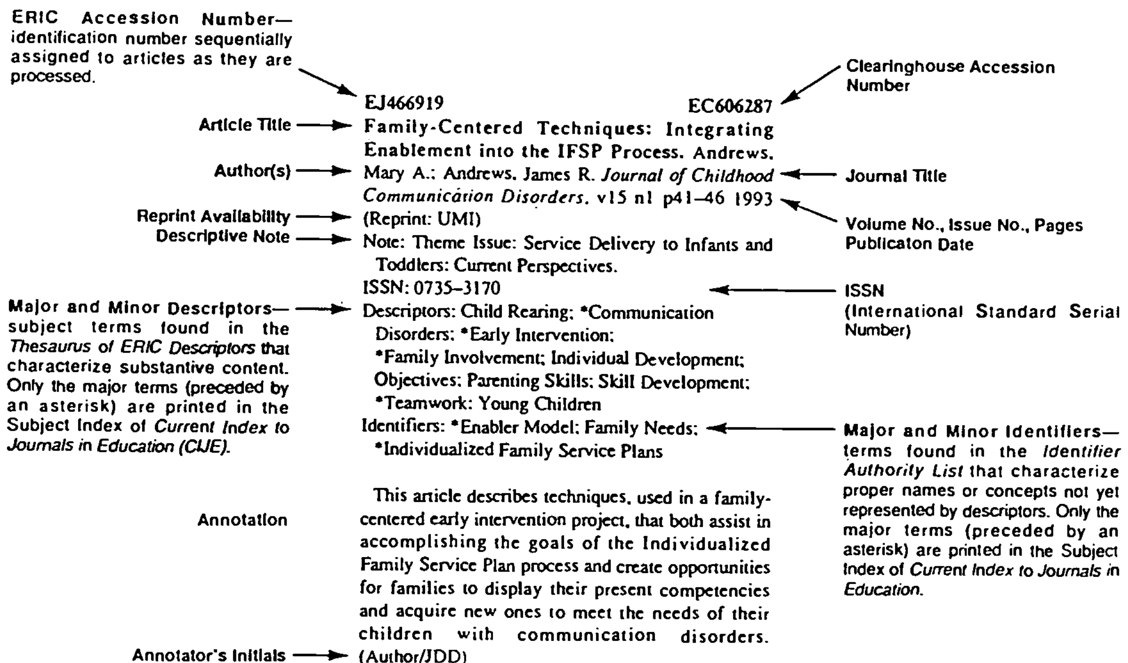


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# The Following Abstracts on "What Works?" are from the ERIC Educational Resources Database

AN: ED392237
AU: Dombey,-Henrietta
TI: **Eight Lessons from Research into Literacy.**
PY: 1992
NT: 18 p.; In: Perspectives on Reading. CLE Working Papers 2. For complete volume, see FL 023 547. This paper formed the basis of a talk to the Centre for Language in Education.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: This article explores research evidence on the teaching of reading from eight specific points: (1) readers engage in a complex, multi-level process that involves knowledge of sound-symbol relations, spelling patterns, vocabulary, sentence structures, propositional meanings, and realms of meaning beyond individual propositions; (2) literacy learning is not to be simply and straightforwardly equated with teaching in school; (3) it is an active process, driven and shaped by the learner's intentions; (4) it operates most characteristically on a number of different linguistic levels simultaneously and is not made easier by being broken down into apparently simpler elements that are then taught separately; (5) Children vary in the amount of direct literacy teaching they need, but all do much of their literacy learning tacitly, implicitly; (6) there are many important literacy lessons that only powerful texts can teach; (7) literacy is laden with the values of the social context that both surrounds and is shaped by it; (8) there is no substitute for watching how, when, where, and why children learn reading and writing and responding to the efforts of adults to help them. It is concluded that successful literacy teaching can only be accomplished when these eight research foundations are followed. (Contains references.) (Author/NAV)

AN: EJ516969
AU: Newton,-Douglas-P.
TI: **The Role of Pictures in Learning to Read.**
PY: 1995
JN: Educational-Studies; v21 n1 p119-30 Mar 1995
AV: UMI
AB: Maintains that pictures are one constant aspect of children's books. Reviews research on whether pictures hinder or facilitate the development of reading skills in young children. Provides suggestions on when and where pictures might provide instructional support. (CFR)

AN: EJ516135
AU: Torgesen,-Joseph-K.; Barker,-Theodore-A.
TI: **Computers as Aids in the Prevention and Remediation of Reading Disabilities.**
PY: 1995
JN: Learning-Disability-Quarterly; v18 n2 p76-87 Spr 1995
AV: UMI
NT: Special issue: Technology for Persons with Learning Disabilities: An International Perspective.
AB: This article provides examples of ways computer-assisted instruction can help children with learning disabilities (LD) learn to read more effectively. Computer programs providing training in phonological awareness, specific context-free word identification skills, and reading of connected text are described, and preliminary evidence of their instructional effectiveness is presented. (Author/PB)

AN: EJ514832
AU: Pressley,-Michael; And-Others
TI: **The Comprehension Instruction That Students Need: Instruction Fostering Constructively Responsive Reading.**
PY: 1995
JN: Learning-Disabilities-Research-and-Practice; v10 n4 p215-24 1995
AB: This study reviews research indicating that specific instruction in reading comprehension strategies is effective in improving comprehension for students, including those with learning disabilities. The reading strategies of highly competent readers are identified, and effective application of transactional strategies instruction with weak second-grade readers and weak middle-school and secondary readers is reported. (DB)

AN: EJ514642
AU: Juel,-Connie
TI: **The Messenger May Be Wrong, but the Message May Be Right.**
PY: 1995
JN: Journal-of-Research-in-Reading; v18 n2 p146-53 Sep 1995
AV: UMI
NT: Special issue: The Contribution of Psychological Research.
AB: Suggests that abandoning controlled vocabulary texts on the assumption that reading is a psycholinguistic guessing game was wrong. Claims that the current emphasis on strategy instruction, scaffolded reading experiences, and the use of writing to foster letter-sounds may provide good outcomes for those teachers and children who dreaded reading instruction in dull texts and even duller workbooks. (RS)

AN: EJ514637
AU: Perfetti,-Charles-A.
TI: **Cognitive Research Can Inform Reading Education.**
PY: 1995
JN: Journal-of-Research-in-Reading; v18 n2 p106-15 Sep 1995
AV: UMI
NT: Special issue: The Contribution of Psychological Research.
AB: Discusses four clear contributions of cognitive research that deserve special attention: (1) skilled readers read words rather than skip them; (2) less skilled readers do rely on context; (3) skilled readers use phonology in reading; and (4) children learn to read successfully by learning how their writing system works. (RS)

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AN: EJ513997
AU: Share,-David-L.
TI: **Phonological Recoding and Self-Teaching: Sine qua non of Reading Acquisition.**
PY: 1995
JN: Cognition; v55 n2 p151-218 May 1995
AB: Elaborates the view that phonological recoding, or print-to-sound translation, is a self-teaching mechanism enabling learners to acquire the orthographic representations necessary for visual word recognition. Discusses developmental properties of phonological recoding, reviews evidence on the importance of cognitive abilities underlying the development of phonological recoding, and examines issues relevant to phonemic awareness and early reading instruction. (BC)

AN: ED386869
AU: Smith,-Sylvia-Barrus; And-Others
TI: **Phonological Awareness: Curricular and Instructional Implications for Diverse Learners. Technical Report No. 22.**
CS: National Center To Improve the Tools of Educators, Eugene, OR.
PY: 1995
NT: 24 p.; For a related document, see EC 304 257.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: This review focuses on areas of converging evidence concerning the importance of phonological awareness and the corresponding curricular and instructional implications for diverse learners. Five areas of converging evidence are identified: (1) phonological processing ability explains significant differences between good and poor readers; (2) phonological awareness (a component of phonological processing) is a unitary construct with multiple dimensions; (3) phonological awareness has a reciprocal and causal relation to reading acquisition; (4) phonological awareness is a necessary but insufficient skill for early reading acquisition; and (5) phonological awareness is teachable and promoted by attention to instructional design variables. The curriculum design principles of conspicuous strategies, mediated scaffolding, strategic integration, primed background knowledge, and judicious review are then discussed in terms of application to developing phonological awareness. The review notes that similar levels of procedural details were not found for each design principle despite strong support for the underlying idea of phonological awareness. (Contains 14 references and 2 figures.) (DB)

AN: ED386868
AU: Smith,-Sylvia-Barrus; And-Others
TI: **Synthesis of Research on Phonological Awareness: Principles and Implications for Reading Acquisition. Technical Report No. 21.**
CS: National Center To Improve the Tools of Educators, Eugene, OR.
PY: 1995
NT: 72 p.; For a related document, see EC 304 258.
PR: EDRS Price - MF01/PC03 Plus Postage.
AB: This research synthesis identifies areas of convergence in reading research regarding the importance, dimensions, and effects of phonological awareness on the reading acquisition process. It also highlights similarities and differences between normal achievers and diverse learners. The following five areas of research convergence are identified: (1) phonological processing ability explains significant differences between good and poor readers; (2) phonological awareness is a general ability with multiple dimensions; (3) phonological awareness has a reciprocal relation to reading acquisition; (4) phonological awareness is necessary but not sufficient for reading acquisition; and (5) phonological awareness is teachable and promoted by attention to instructional variables. Also discussed are issues of construct validity, the importance of explicit teaching of phonological awareness, the value of combining phonological awareness instruction with instruction in letter-sound correspondences, and the value of providing intense and explicit instruction in phonological awareness to diverse learners who may potentially have reading disabilities. A table allows comparison of the major studies reviewed. (Contains 32 references and 4 figures.) (DB)

AN: ED386864
AU: Dickson,-Shirley-V.; And-Others
TI: **Text Organization and Its Relation to Reading Comprehension: A Synthesis of the Research. Technical Report No. 17.**
CS: National Center To Improve the Tools of Educators, Eugene, OR.
PY: 1995
NT: 60 p.
PR: EDRS Price - MF01/PC03 Plus Postage.
AB: This research review focuses on the effects and implications of text organization, both physical presentation and text structure, and on reading comprehension, with special emphasis on the comprehension of diverse learners. The review includes students in kindergarten through college, who are high and low readers and comprehenders; low performers/achievers; remedial readers; normal achievers and general education students; and students who have learning disabilities (LD), dyslexia, behavior disorders, and mild mental retardation. The research indicates that reading comprehension is enhanced by text organization, students' awareness of text organization, students' strategic use of text organization, and explicit instruction in the physical text presentation and/or text structure. Text organization includes the visual, physical organization (e.g., heading, location of main idea) as well as less visible text structures (e.g., narrative and sequence). Attention is directed to implications for learning of well-presented text, and instruction in and student strategic use of text structure. A chart of research studies reviewed identifies study author(s) and year, number and type of study participants, the type of text organization, and the study purpose. (Contains 22 references.) (SW)

AN: ED386862
AU: Chard,-David-J.; And-Others
TI: **Understanding the Primary Role of Word Recognition in the Reading Process: Synthesis of Research on Beginning Reading. Technical Report No. 15.**
CS: National Center To Improve the Tools of Educators, Eugene, OR.
PY: 1995
NT: 47 p.
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: Evidence regarding the centrality of word recognition to the reading process is considered, based on a review of research on beginning reading from 15



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secondary sources. The research includes diverse learners who are low performers, learning or reading disabled, remedial readers, high achievers, culturally disadvantaged, language delayed, and linguistically diverse. The characteristics, contexts, and conditions of learners and learning are discussed. Evidence from a variety of models and frames of reference in beginning reading research is presented, including cognitive, instructional, and educational psychology; linguistics; and special education. Four areas of convergence from the studies reviewed are identified, with implications for word recognition: reading comprehension is dependent on strong word recognition skills; strong word recognition requires understanding that words can be spoken or written, print corresponds to speech, and words are composed of phonemes; alphabetic understanding facilitates word recognition; and phonological recoding combined with word frequency mediates word recognition. A chart identifies study author(s) and year, number and type of study participants, the beginning reading dimension, and the purpose of the study. (Contains 27 references.) (SW)

AN: ED386860
AU: Baker,-Scott-K.; And-Others
TI: **Vocabulary Acquisition: Synthesis of the Research. Technical Report No. 13.**
CS: National Center To Improve the Tools of Educators, Eugene, OR.
PY: 1995
NT: 55 p.
PR: EDRS Price - MF01/PC03 Plus Postage.
AB: Recent research on vocabulary development is reviewed, highlighting issues related to diverse learners. The review included studies of students who are low performers; learning or reading disabled; remedial readers; high achievers; and students who are culturally disadvantaged, language delayed, and linguistically diverse. Areas of convergence in the research literature on vocabulary acquisition are identified: vocabulary size differences among students; factors that contribute to individual differences in vocabulary development, including generalized linguistic differences, memory deficits, and poor word learning strategies; successful methods to improve the vocabularies of students with diverse learning needs; and the relation between vocabulary knowledge and reading achievement. Issues concerning the direct instructional approach to word meanings are discussed, along with the use of semantic mapping/features analysis and keyword and computer-assisted methods. A chart provides information on the studies reviewed, identifying the author(s) and year, number and type of study participants, the vocabulary dimension, and the purpose of the study. (Contains 34 references.) (SW)

AN: EJ501968
AU: Allen,-Denise
TI: **Teaching with Technology. Software That's Right for You.**
PY: 1995
JN: Teaching-PreK-8; v25 n8 p14-17 May 1995
AV: UMI
AB: Recommends software to help teachers plan curriculum in the areas of comprehensive language arts ("Cornerstone"); writing and information ("Keroppi Day Hopper"); creative writing and imagination ("Imagination Express"); reading ("Jo-Jo's Reading Circus"); math ("Careers in Math: From Architects to Astronauts") and nature ("Eyewitness"). Provides details of each program and addresses to contact for more information. (BAC)

AN: ED381747
AU: Kibby,-Michael-W.
TI: **Student Literacy: Myths and Realities. Fastback 381.**
CS: Phi Delta Kappa Educational Foundation, Bloomington, Ind.
PY: 1995
AV: Phi Delta Kappa, 408 N. Union, P.O. Box 789, Bloomington, IN 47402-0789 ($1.25 plus processing fee).
NT: 27 p.
PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
AB: Suggesting that too many educators and parents believe the myth of declining student literacy, this fastback puts student literacy in focus by examining trends in reading achievement from 1840 to the 1990s. The fastback discusses "then-and-now" studies, test restandardization studies, and the National Assessment of Educational Progress, concluding that unqualified statements that proclaim a decline in literacy are wrong. The fastback also examines some of the instructional issues obscured by "quick-fix" remedies implemented in response to the perceived decline in achievement--the need for (1) more reading instruction for all students; (2) more difficult texts, especially for average and better readers; (3) more critical analysis and synthesis of information from multiple texts; and (4) more emphasis on meaningful vocabulary throughout the grades. (RS)

AN: ED380947
AU: Bailey,-Jane-M.; And-Others
TI: **Language Arts Topics Papers.**
CS: College of William and Mary, Williamsburg, Va. School of Education.; Washington-Warren-Hamilton-Essex Counties Board of Cooperative Educational Services, Hudson Falls, NY. Southern Adirondack Educational Center.
PY: 1994
AV: College of William & Mary, School of Education, Center for Gifted Education, 232 Jamestown Rd., Williamsburg, VA 23185 ($10 plus 10% shipping and handling).
NT: 79 p.
PR: EDRS Price - MF01/PC04 Plus Postage.
AB: This document brings together six papers on language skills and language arts teaching of gifted students. "The State of the Art Issues in Language Study for High Ability Learners: Thinking about Language with Gifted Children" (Michael Clay Thompson) considers two areas traditionally included in discussions of language study--grammar and vocabulary--and a third area that should be included--the study of aesthetic language structures that interact with and have an impact on syntax. "Reading, Language, and Literacy Development" (Jane M. Bailey) points out that meaning is the linking concept among reading, language, and literacy, and contends that the role of schools is to provide first, a knowledge base upon which students can build networks of connectors and second, a curricular environment to pose the necessary ambiguities to extend those networks. "Teaching with Writing: The State of the Art" (Colleen Kennedy) describes a writing pedagogy that helps



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students understand the extended audience and larger purpose of writing, by integrating writing with the teaching of content areas throughout the curriculum and from kindergarten through college. "Issues in Contemporary Oral Communication Instruction" (Ann L. Chaney) offers a working definition of oral communication, a review of pedagogical implications, and suggestions for adaptation of concept and skill instruction to gifted elementary and middle school students. "The Concept of Change: Interdisciplinary Meaning and Inquiry" (Linda Neal Boyce) explores the concept of change in several disciplines, identifies key resources that focus on change, and examines the way the concept of change has been applied in the National Language Arts Project for High Ability Learners. "Creating a New Language Arts Curriculum for High Ability Learners" (Joyce VanTassel-Baska) presents a framework for developing a language arts curriculum that makes meaning through inquiry, uses multicultural literature, is conceptually oriented, incorporates all major strands of the language arts, and highlights gifted education features. (Each paper contains references.) (JDD)

AN: ED380783
AU: Strech,-Lorie-L.
TI: **Ability Grouping for Elementary Reading Instruction and Its Relationship to the Balanced Literacy Approach.**
PY: 1995
NT: 73 p.; M.Ed. Project, California State University, Long Beach.
PR: EDRS Price - MF01/PC03 Plus Postage.
AB: This paper discusses implications of ability grouping in elementary reading instruction according to current research, and how such research can be applied to the classroom practice of "guided reading" within a balanced literacy program. The paper suggests that the "balanced literacy" approach from New Zealand is basically the same as whole language with the added component of guided reading, in which students are placed in homogeneous ability groups. The paper discusses definitions; presents a history of the balanced literacy approach and ability grouping in reading instruction; addresses issues, controversies, programs, and contributors; and offers a synthesis and analysis of existing research. The paper concludes that (1) there is not adequate evidence to apply all of the findings of research on ability grouping in traditional classrooms to the type of ability grouping in traditional classrooms; (2) the balanced literacy approach appears to be in line with whole language philosophies; (3) implementation of a balanced literacy program takes a large portion of the instructional day and involves risks for teachers and students. Recommendations in the paper include: teachers need to prioritize literacy; content areas should be integrated into the balanced literacy classroom; administrators should establish inservice training in the balanced literacy approach; and future researchers should conduct both quantitative and qualitative research on specific effects of ability grouping within a balanced literacy classroom. Contains 93 references. Appendixes present suggested teaching sequences, a framework for literacy learning, descriptions of work areas in a learning to read classroom, an example of a running record, and a daily schedule. (RS)

AN: ED379626
AU: Ruddell,-Robert-B., Ed.; And-Others
TI: **Theoretical Models and Processes of Reading. Fourth Edition.**
CS: International Reading Association, Newark, Del.
PY: 1994
AV: International Reading Association, 800 Barksdale Rd., P.O. Box 8139, Newark, DE 19714-8139 (ISBN-0-87207-437-4, paper: $60 members, $75 nonmembers; ISBN-0-87207-438-2, cloth: $75 members, $100 nonmembers).
NT: 1,290 p.
PR: Document Not Available from EDRS.
AB: Serving as a source of questions for researchers to investigate and a resource for professors and their students, this book presents 51 essays that discuss where the reading field has been, is now, and might be going. More than 80% of the essays are new or revised from the third edition. Essays in the book include "Professional Connections: Pioneers and Contemporaries in Reading" (Harold L. Herber); "Learning about Literacy: A 30-Year Journey" (P. David Pearson and Diane Stephens); "Children's Language and World: Initial Encounters with Print" (Jerome C. Harste and others); "Language Acquisition and Literacy Processes" (Robert B. Ruddell and Martha Rapp Ruddell); "Literacy Research in Community and Classrooms: A Sociocultural Approach" (Luis C. Moll); "Children's Emergent Reading of Favorite Storybooks: A Developmental Study" (Elizabeth Sulzby); "Viewpoints: The Word and the World--Reconceptualizing Written Language Development or, Do Rainbows Mean a Lot to Little Girls?" (Anne Haas Dyson); "Word Recognition" (S. Jay Samuels); "Becoming Literate through Authentic Tasks: Evidence and Adaptations" (Elfrieda H. Hiebert); "Comprehension of Text Structures" (P. David Pearson and Kaybeth Camperell); "Learning to Learn from Text: A Framework for Improving Classroom Practice" (Robert J. Tierney and P. David Pearson); "Problem-Solving Schema with Question Generation for Comprehension of Complex Short Stories" (Harry Singer and Dan Donlan); "A Dual Coding View of Imagery and Verbal Processes in Reading Comprehension" (Mark Sadoski and Allan Paivio); "Research in Reader Response, Naturally Interdisciplinary" (James R. Squire); "Readers as Writers Composing from Sources" (Nancy Nelson Spivey and James R. King); "Metacognition and Executive Control" (Ruth Garner); "Instructing Comprehension-Fostering Activities in Interactive Learning Situations" (Ann L. Brown and others); "Toward a Theory of Automatic Information Processing in Reading, Revisited" (S. Jay Samuels); "Modeling the Connections between Word Recognition and Reading" (Marilyn Jager Adams); "The Substrata-Factor Theory of Reading" (Harry Singer); "A Cognitive Process Theory of Writing" (Linda Flower and John R. Hayes); "Reading as a Meaning-Construction Process: The Reader, the Text, and the Teacher" (Robert B. Ruddell and Norman J. Unrau); "The Transactional Theory of Reading and Writing" (Louise M. Rosenblatt); "Reading, Writing, and Written Texts: A Transactional Sociopsycholinguistic View" (Kenneth S. Goodman); "Parallels between New Paradigms in Science and in Reading and Literacy Theories: An Essay Review" (Constance Weaver); and "Literacy as Curricular Conversations about Knowledge, Inquiry, and Mortality" (Jerome C. Harste). (RS)



ERIC Full Text Provided by ERIC

AN: EJ497017
AU: Peat,-David-W.
TI: **Towards Minimizing Social, Cultural, and Intellectual Disruptions Embedded in Literacy Instruction.**
PY: 1994
JN: Interchange; v25 n3 p261-79 Sep 1994
AV: UMI
AB: To explain the concept of literacy, the Integrative Systems Model of Literacy is developed, illustrating how understanding literacy has direct applications to both instruction and research. The model's utility in reconciling opposing concepts of literacy is shown, presenting practical suggestions for literacy instruction which minimize social, cultural, and intellectual disruption. (Author/SM)

AN: EJ496027
AU: Dimino,-Joseph-A.; And-Others
TI: **Synthesis of the Research on Story Grammar as a Means to Increase Comprehension.**
PY: 1995
JN: Reading-and-Writing-Quarterly:-Overcoming-Learning-Difficulties; v11 n1 p53-72 Jan-Mar 1995
NT: Mini-Theme: Direct Instruction Reading.
AB: Reviews research on the effectiveness of story grammar in promoting the comprehension of narrative text in students with learning disabilities and at-risk students. Offers instructional recommendations for successful implementation of this strategy. (RS)

AN: EJ494576
AU: Dowhower,-Sarah-L.
TI: **Repeated Reading Revisited: Research into Practice.**
PY: 1994
JN: Reading-and-Writing-Quarterly:-Overcoming-Learning-Difficulties; v10 n4 p343-58 Oct-Dec 1994
NT: Mini-Theme: Individual Differences in Reading and Writing.
AB: Summarizes findings about repeated reading since the 1970s and details the most recent findings. Argues that, because of strong evidence of the effectiveness of repeated reading, the many facets of this procedure should be integrated into the fabric of daily literacy instruction. Offers specific suggestions for applications including applications geared to children with reading problems. (SR)

AN: ED376443
AU: Anderson,-Richard-C.
TI: **The Future of Reading Research. Technical Report No. 600.**
CS: Center for the Study of Reading, Urbana, IL.
PY: 1994
NT: 18 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Providing a context for discussion rather than an insider's point of view, this report discusses the current state of reading research. The report reviews differing visions of educational reform of reading instruction espoused by supporters of phonics and by supporters of the whole language approach. The report then proposes four criteria for use in selecting future research projects--attack the most important problems, attack problems whose solutions will lead to the greatest advance in knowledge, attack problems the field can solve, and attack problems whose solutions can be implemented readily. The report concludes with a discussion of five areas for future research: (1) the nature of reading; (2) learning to read and write; (3) the acquisition of knowledge; (4) critical reading and thinking; and (5) the education of reading teachers. (RS)

AN: EJ485211
AU: Kiefer,-Barbara
TI: **The Literature-Based Movement: Yesterday, Today and Tomorrow.**
PY: 1994
JN: Emergency-Librarian; v21 n5 p8-13 May-Jun 1994
AV: UMI
AB: Discusses literature-based classrooms and influences on students' reading habits. Highlights include beliefs about learning and teaching, including a comparison of the transmission model and the transactional model of education; the importance of literary experiences for language development and literacy learning, including phonological development; and efferent reading and aesthetic reading. (Contains 48 references.) (LRW)

AN: EJ480984
AU: Rekrut,-Martha-D.
TI: **Peer and Cross-Age Tutoring: The Lessons of Research.**
PY: 1994
JN: Journal-of-Reading; v37 n5 p356-62 Feb 1994
AV: UMI
AB: Offers an overview of research findings on peer and cross-age tutoring, including what elements of reading are amenable to tutoring, the effects of the age and ability of tutors, gender pairing, and tutor training. (SR)

AN: EJ468599
AU: Pearson,-P.-David
TI: **Teaching and Learning Reading: A Research Perspective (Focus on Research).**
PY: 1993
JN: Language-Arts; v70 n6 p502-11 Oct 1993
AV: UMI
NT: Themed Issue: Reading Instruction Today.
AB: Synthesizes research on the basic processes and instructional factors that influence literacy development. Points out patterns of agreement and disagreement among literacy scholars and practitioners. Presents an agenda for reading research of the future. (RS)

AN: EJ459558
AU: Nicholson,-Tom
TI: **Reading Wars: A Brief History and an Update.**
PY: 1992
JN: International-Journal-of-Disability,-Development-and-Education; v39 n3 p173-84 1992
NT: Theme Issue: Reading Difficulties.
AB: The debate among major theorists of the whole-language approach (Kenneth Goodman and Frank Smith) and their critics (e.g., Philip Gough) is summarized. It concludes that the Goodman/Smith theoretical position has not stood the test of time, though some of their instructional recommendations may be valid for other reasons. (Author/DB)

AN: ED373319
AU: Flowers,-Pearl; Roos,-Marie-C.
TI: **Literature-Based Reading Programs: Elements for Success.**
PY: 1994
NT: 49 p.
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: This paper reviews the literature and research on literature-based reading programs (as an alternative to basal reading instruction) that have proven successful and identifies key elements of such programs. The first part of the paper contains an introduction, a statement of the problem, the significance of the problem, a description of the procedures to be used, and definitions of terms. The second part of the paper presents a review of the literature and research related to literature-based reading programs. The last part of the paper includes a summary, conclusion, and recommendations. The paper concludes that the success of literature-based reading programs is well-documented and that such programs serve as a viable approach to teaching reading at the elementary level. Recommendations offered in the paper include: (1) literature-based reading instruction should be introduced at the earliest grades; (2) librarians, teachers, and parents need to cooperate in carrying out effective literature-based programs in their schools; (3) longitudinal studies should be conducted to determine the long range effect of literature-based reading programs on academic achievement; and (4) teachers should provide an environment in which students view themselves as good readers who can enjoy and profit from various kinds of materials. Contains 58 references. (RS)

AN: ED371291
AU: Abromitis,-Barbara
TI: **The Role of Metacognition in Reading Comprehension: Implications for Instruction. Literacy Research Report No. 19.**
CS: Northern Illinois Univ., DeKalb. Curriculum and Instruction Reading Clinic.
PY: 1994
AV: NIU Reading Clinic, Graham 119-Northern Illinois University, Dekalb, IL 60115.
NT: 31 p.
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: Metacognition has received recent attention by researchers and teachers alike because of the possibilities for successful instruction and intervention for readers at all levels. This paper explores the area of metacognition as it relates specifically to reading comprehension. The paper addresses six areas: (1) the definitions of metacognition, metacomprehension and metalinguistic awareness; (2) the significance of metacognition in the cognitive processing of written text by good and poor readers; (3) the teacher's role in developing metacognitive abilities; (4) specific strategies that have successfully increased metacognitive skills; (5) ideas for assessing metacognitive abilities both for research and instruction purposes; and (6) recommendations for future study of the role metacognition plays within the reading process. Contains 87 references. (RS)

AN: ED370090
AU: Weaver,-Constance
TI: **Phonics Revisited.**
PY: [1994]
NT: 14 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Various lines of research demonstrate that children do not need intensive phonics instruction to develop the functional command of letter/sound patterns that they need as readers. The fact that children normally learn highly complex processes and systems by merely interacting with the external world is perhaps the most important reason why children do not need systematic and intensive phonics instruction. Other reasons (based on research) are: (1) English is an alphabetic language, but by no means a phonetic one; (2) spelling/sound relationships are extremely complex, so complex that commonly taught phonics generalizations are not reliable; (3) patterns of letters are much more consistent than the relationships between single sounds and syllables; (4) it is much easier for young children to hear and grasp syllables and syllable-like units in written language than to hear separate letter sounds; (5) proficient reading involves using everything readers know to get words and construct meaning from text; (6) too much emphasis on phonics encourages children to use "sound it out" as their first and possibly only independent strategy for dealing with problem words; (7) many emergent readers are not good at learning analytically, abstractly, or auditorily; (8) research purporting to demonstrate the superiority of intensive systematic phonics over incidental phonics (most of which is pre-1967) is not very impressive; and (9) more recent research comparing whole language classrooms with traditional skills-based classrooms (including those that emphasize phonics) has found that children develop phonics skills as well or better in whole language classrooms as measured on standardized tests. (Contains 41 references.) (RS)

AN: ED370082
AU: Shearer,-Arleen-P.; Homan,-Susan-P.
TI: **Linking Reading Assessment to Instruction: An Application Worktext for Elementary Classroom Teachers.**
PY: 1994
AV: St. Martin's Press, Inc., 175 Fifth Avenue, New York, NY 10010 ($18.66).
NT: 271 p.
PR: Document Not Available from EDRS.
AB: A field-tested "worktext," this book applies current theory to classroom practice by providing, in each chapter, a brief explanation of major concepts followed by guided practical experience in administering, scoring, and interpreting reading assessment techniques. The book emphasizes the use of assessment and diagnosis for instructional decision-making; stresses the use of informal assessment techniques but also includes coverage of standardized test scores; provides both classroom tested results in interpretations of data; and includes numerous "hands-on" activity worksheets. Chapters in the book are: (1) Assessment and Diagnosis Defined; (2) Self-Evaluation; (3) Structured Observations and the Interview; (4) Using Standardized Test Scores; (5) Identifying Problem Readers; (6) Informal Reading Inventory; (7) Evaluating Comprehension Strategies; (8) Assessment of Word-Recognition Knowledge and Spelling Stages; and (9) Grouping and Instructional Decision Making. Directions for the Directed Listening-Thinking Activity, directions for the Language Experience Approach, and extra forms are attached. (RS)



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AN: ED368145
AU: Shaughnessy,-Michael-F.; And-Others
TI: **Gifted and Reading.**
PY: [1994]
NT: 15 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: This article reviews the literature and practice (especially in New Mexico) concerning reading instruction of gifted children. It considers early or "precocious" reading, instruction in the early grades, and identification of the gifted in New Mexico. Reading teachers in New Mexico are urged to be aware of specific conflicts in the area of gifted identification and gifted instruction. The seven intelligences identified by H. Gardner are listed. The appropriateness of traditional basal reading programs for this population is questioned. A variety of literacy activities are encouraged, including guest speakers in the classroom, tie-ins of books with television or movies, student creative writing, investigatory activities, and activities which develop higher order thinking skills. (Contains 14 references.) (DB)

AN: ED366908
AU: Zhang,-Zhicheng
TI: **Literature Review on Reading Strategy Research.**
PY: 1993
NT: 18 p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (New Orleans, LA, November 10-12, 1993).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Reading strategies that have been identified and recommended by recent literature can be classified into four categories: cognitive strategies, compensation strategies, memory strategies, and test-taking strategies. Research indicated that the use of appropriate strategies may improve reading comprehension. Research has also suggested that readers could be trained to learn and use reading strategies, which raised the need to incorporate reading strategy instruction into the school curriculum. Reading strategy instruction is making its way into regular classrooms. The integration of reading strategy instruction with cooperative learning has changed the traditional pattern of reading as an individual activity. Group efforts, peer cooperation, and teacher-student interaction become an important part of the new reading strategy instruction approach. Considering the large number of students in a regular reading class, this seems to be a feasible solution. (Contains 32 references.) (RS)

AN: ED362831
AU: Tzung-yu,-Cheng
TI: **Comparing the Use of Computers with Traditional Print in Reading Instruction: What the Research Says.**
PY: 1993
NT: 21 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Studies comparing computer-assisted instruction with traditional print were reviewed in order to determine what researchers have discovered about using computers in reading. The research findings were then compared and integrated through using the following five categories: interaction, attitude, instructional control, time on task, and efficiency. Most studies indicate that the subjects are more interactive with, and positive toward, computers. Computers help monitor successful learning. Computer groups spend more time on task; however, this is due to the special features used in computers. No definite answer supported either mode of presentation in efficiency. However, the review suggests that the quality of software and hardware may influence computer efficiency and more studies are needed in different instructional situations and subject areas. (Contains 32 references.) (Author/RS)

AN: ED350849
AU: Field,-Mary-Lee
TI: **Reading Research: A Guide to Classroom Practices and Teaching Tools.**
PY: 1992
NT: 17 p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages (26th, Vancouver, British Columbia, Canada, March 3-7, 1992).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Research on six major issues in reading is organized into charts and a bibliography. For each of the six areas (schema theory, reading strategies and processes, comprehension studies, culture and reading, methods for teaching reading, cognitive/metacognitive issues), relevant research is summarized in a chart. Each chart contains two sections, one describing the classroom practices supported by the research and one listing specific tools, ideas, techniques, definitions, or teaching aids suggested in the literature. Each bibliographic item cited in the summary is annotated in the accompanying bibliography. Key terms in reading research are defined in an introductory section, and a 26-item non-annotated bibliography is appended. (MSE)

AN: ED348650
AU: Lopez,-Pamela
TI: **Metacognitive Strategies for Teaching Reading to Elementary Students.**
PY: 1992
NT: 19 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: This literature review examines studies in the field of metacognition and reading comprehension on the elementary level. It discusses sources in the areas of metacognitive theory, field experimentation, and specific learning and teaching strategies which have emerged from experimentation. The 25 sources are taken from published journals and ERIC documents. Metacognitive theory hypothesizes that reading comprehension is enhanced by the use of metacognitive strategies. Field experiments of this hypothesis show conflicting results. The controversy has not been resolved, but specific strategies (including activating prior knowledge, self-questioning, and teacher modeling) have been developed on the basis of positive experimental results. (Author/SR)

AN: ED348174
AU: Slavin,-Robert-E.
TI: **Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis. Report No. 1.**
CS: Center for Research on Elementary and Middle Schools, Baltimore, MD.
PY: 1986
NT: 127 p.



ERIC

PR: EDRS Price - MF01/PC06 Plus Postage.
AB: This report reviews research on the effects of between- and within-class ability grouping on the achievement of elementary school students. The review technique, known as "best-evidence synthesis," combines features of meta-analytic and narrative reviews. Overall, evidence does not support assignment of students to self-contained classes according to ability, but grouping plans involving cross-grade assignment for selected subjects can increase student achievement. Research particularly supports the Joplin Plan, cross-grade ability grouping for reading only, and forms of nongraded programs involving multiple groupings for different subjects. Within-class ability grouping in mathematics is also found to be instructionally effective. Ability grouping is held to be maximally effective: (1) when it is done only for one or two subjects, with students remaining in heterogeneous classes most of the day; (2) when it greatly reduces student heterogeneity in a specific skill; (3) when group assignments are frequently reassessed; and (4) when teachers vary the level and pace of instruction according to students' needs. (An 18-page reference list is appended). (Author/RH)

## Alternative Assessment

AN: ED379353
AU: Shepard,-Lorrie; And-Others
TI: **Second Report on Case Study of the Effects of Alternative ssessment in Instruction. Student Learning and Accountability Practices. Project 3.1. Studies in Improving Classroom and Local Assessments.**
CS: National Center for Research on Evaluation, Standards, and
Student Testing, Los Angeles, CA.
PY: 1994
NT: 121 p.; Papers presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 4-8, 1994).
PR: EDRS Price - MF01/PC05 Plus Postage.
AB: Three papers are presented that summarize current project findings from a study of the actual effects of introducing new forms of assessment at the classroom level. All focus on aspects of performance assessment as an alternative to traditional assessments. "Effects of Introducing Classroom Performance Assessments on Student Learning" by Lorrie A. Shepard, and others, examines effects of performance assessment on the learning of third graders in 13 classrooms. "'How Does my Teacher Know What I Know?' Third Graders' Perceptions of Math, Reading, and Assessment" by Kathryn H. Davinroy, Carribeth L. Bliem, and Vicky Mayfield uses interviews with students in the classrooms of the larger study to explore student ideas and attitudes. "How 'Messing About' with Performance Assessment in Mathematics Affects What Happens in Classrooms" by Roberta J. Flexner reviews work with the teachers of the study's classes. Eighteen tables and six figures in the three papers present study findings. (Contain 77 references in all.) (SLD)

AN: ED378546
AU: Manzo,-Anthony-V.; And-Others
TI: **Informal Reading-Thinking Inventory: An Informal Reading Inventory (IRI) with Options for Assessing Additional Elements of Higher-Order Literacy.**
PY: 1995
AV: Harcourt Brace and Co., 6277 Sea Harbor Dr., Orlando, FL
32887 ($33.25).
NT: 215 p.
PR: Document Not Available from EDRS.
AB: Focusing on better assessing the thinking, or meaning-making, aspects of reading that are emphasized in current views of the reading process, this book presents the Informal Reading-Thinking Inventory (IR-TI) which offers options to enhance assessment beyond assessing students' listening level, oral reading of words, and basic comprehension. The inventory in the book offers a separate means of assessing student reading and thinking "beyond the lines" and an option to measure students' metacognition. The first part of the book is the manual for administering and interpreting the IR-TI, including a discussion of purposes and components, how the IR-TI was developed, preparation to use the IR-TI, administration of the word lists and passages, completion of the cumulative record form, and determination of reading and listening levels. The second part of the book presents teacher's recording forms for the word lists, and two different forms of the passages for each of the grade levels from one to nine, inclusive. The third part of the book presents materials for the student, including word lists, both passage forms, and rating cards. Contains 70 references. Appendixes present a 31-item list of no-charge inventories and lists, and an informal writing inventory.
(RS)
AN: ED377682
AU: Thrond,-Mary-A.
TI: **Meaningful Assessment: An Annotated Bibliography.**
PY: 1994
NT: 11 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: The annotated bibliography contains citations of nine references on alternative student assessment methods in second language programs, particularly at the secondary school level. The references include a critique of conventional reading comprehension assessment, a discussion of performance assessment, a proposal for a multi-trait, multi-method approach to documenting student learning, guidelines for performance-based assessment in second languages, an examination of qualitative analysis in the classroom, a view of alternative assessment as a means for decision-making, a collection of symposium papers on equity in assessment, an article on capturing authentic intellectual performance during assessment, and an analysis of classroom conditions conducive to authentic assessment. (MSE)



ERIC

AN: ED377523
TI: **Portfolios and Your Child: Some Questions and Answers for Parents and Families.**
CS: Vermont State Dept. of Education, Montpelier.
PY: 1994
NT: 9 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Noting that portfolios contain the students' best efforts at writing and mathematics problem-solving skills, this pamphlet discusses issues surrounding Vermont's portfolio assessment program from the parent's point of view. The pamphlet discusses reasons to use portfolios, how portfolios differ from traditional ways of looking at students' writing and math skills, what goes into a portfolio, how portfolios are evaluated, how the results of portfolio assessment are used by various entities, special needs students, and what parents and family members can do to help. (RS)

## Computer Assisted Instruction in Reading

AN: EJ521363
AU: Greenlee-Moore,-Marilyn-E.; Smith,-Lawrence-L.
TI: **Interactive Computer Software: The Effects on Young Children's Reading Achievement.**
PY: 1996
JN: Reading-Psychology; v17 n1 p43-64 Jan-Mar 1996
AB: Investigates the effect on reading comprehension when reading shorter and easier narrative text and longer and more difficult texts on the printed page as compared to reading the same narrative texts using interactive CD-ROM software displayed by the computer. Finds that reading from computers increased comprehension when subjects read longer and more difficult narratives. (PA)

AN: EJ519815
AU: Heimann,-Mikael; And-Others
TI: **Increasing Reading and Communication Skills in Children with Autism through an Interactive Multimedia Computer Program.**
PY: 1995
JN: Journal-of-Autism-and-Developmental-Disorders; v25 n5 p459-80 Oct 1995
AV: UMI
AB: An interactive, child-initiated software package was used in teaching reading and communication skills to 3 groups of children (n=30), including 20 children with autism and mixed disabilities. Results suggest that such programs may stimulate reading and communication, but that interventions must be individualized and include detailed planning and monitoring from teachers, parents, and clinicians. (Author/PB)

AN: ED392025
AU: Tillman,-Gail
TI: **Will Implementing Reading Computer Assisted Instruction Compared to Traditional Reading Instruction Produce More Effective Comprehension at the Elementary School Level?**
PY: [1995]
NT: 81 p.
PR: EDRS Price - MF01/PC04 Plus Postage.
AB: A study examined whether implementing reading computer assisted instruction compared to traditional reading instruction will produce more effective comprehension at the elementary school level. Subjects, 30 fifth-grade boys and girls in a low socioeconomic area of Brooklyn, New York, were divided into experimental and control groups. Subjects in the experimental group used a computer 1 day a week for 9 weeks to read and answer questions on reading passages. Subjects in the control group read and answered questions on reading passages using handouts. Results indicated that both groups increased their reading comprehension scores, and that no statistically significant differences in reading comprehension between the groups existed. Results also indicated that even though both groups had an overall positive attitude toward reading and computers, the experimental group's positive attitude seemed more definite. The implication for instruction is that if a group of students is given access to computer assisted reading instruction, reading scores and reading comprehension will increase. (Contains 37 references, 8 appendixes of data, and 4 survey instruments.) (RS)

AN: ED392024
AU: Simic,-Marge, Comp.; Essex,-Christopher, Comp.
TI: **The Computer as an Aid to Reading Instruction. Hot Topic Guide 27. Revised Edition.**
CS: Indiana Univ., Bloomington. School of Education.
PY: 1996
NT: 56 p.; For earlier edition, see ED 333 393.
PR: EDRS Price - MF01/PC03 Plus Postage.
AB: One of a series of educational packages designed for implementation either in a workshop atmosphere or through individual study, this Hot Topic guide presents a variety of materials to assist educators in designing and implementing classroom projects and activities centering on the topic of the computer as an aid to reading instruction. The Hot Topic guide contains guidelines for workshop use; an overview/lecture on the computer as an aid to reading instruction; and 6 focused documents and articles from scholarly and professional journals. A 29-item annotated bibliography of items in the ERIC database on the topic is attached. (RS)

AN: EJ516137
AU: Leong,-Che-Kan
TI: **Effects of On-Line Reading and Simultaneous DECtalk Auding in Helping Below-Average and Poor Readers Comprehend and Summarize Text.**
PY: 1995
JN: Learning-Disability-Quarterly; v18 n2 p101-16 Spr 1995
AV: UMI
NT: Special issue: Technology for Persons with Learning Disabilities: An International Perspective.
AB: This study investigated the role of online reading and simultaneous DECtalk (a text-to-speech computer system) aiding in helping 192 above-average and below-average readers comprehend expository prose. Results showed significant differences among grades, reading levels, and modes of responses to the reading passages, but not for the experimental conditions. High student motivation was found. Similar results were obtained in a replication with poor readers. (Author/PB)



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AN: EJ516136
AU: Lundberg,-Ingvar
TI: **The Computer as a Tool of Remediation in the Education of Students with Reading Disabilities--a Theory-Based Approach.**
PY: 1995
JN: Learning-Disability-Quarterly; v18 n2 p89-99 Spr 1995
AV: UMI
NT: Special issue: Technology for Persons with Learning Disabilities: An International Perspective.
AB: A strategy for using computers in remediating dyslexia is illustrated, drawing on the relationship between phonological skills and word recognition. Dyslexic students (n=83) who underwent computer training with speech feedback gained more in reading and spelling performance than did students in conventional special education settings (n=59). (Author/PB)

AN: EJ516135
AU: Torgesen,-Joseph-K.; Barker,-Theodore-A.
TI: **Computers as Aids in the Prevention and Remediation of Reading Disabilities.**
PY: 1995
JN: Learning-Disability-Quarterly; v18 n2 p76-87 Spr 1995
AV: UMI
NT: Special issue: Technology for Persons with Learning Disabilities: An International Perspective.
AB: This article provides examples of ways computer-assisted instruction can help children with learning disabilities (LD) learn to read more effectively. Computer programs providing training in phonological awareness, specific context-free word identification skills, and reading of connected text are described, and preliminary evidence of their instructional effectiveness is presented. (Author/PB)

AN: EJ516078
AU: Wise,-Barbara-W.; Olson,-Richard-K.
TI: **Computer-Based Phonological Awareness and Reading Instruction.**
PY: 1995
JN: Annals-of-Dyslexia; v45 p99-122 1995
AV: UMI
AB: Elementary students (n=105) with problems in word recognition were given computer-assisted instruction involving either only reading words in context, or reading words in context and completing exercises involving individual words (to increase their phonological awareness). The latter group showed significant gains on tests of phoneme awareness and rapid word recognition. (Author/DB)

AN: EJ508076
AU: Chu,-Meei-Ling-Liaw
TI: **Reader Response to Interactive Computer Books: Examining Literary Responses in a Non-traditional Reading Setting.**
PY: 1995
JN: Reading-Research-and-Instruction; v34 n4 p352-66 Sum 1995
AV: UMI
AB: Investigates the responses of three first-grade boys to interactive computer books. Shows that the children demonstrated high interest in reading the computer books, and indicates that transactional reading experiences can take place in an electronic reading environment. (SR)

## Constructivism

AN: ED362967
AU: Baker,-Otis
TI: **How Constructivist Theory and Research Inform Educational Policy.**
PY: 1993
NT: 10 p.; Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: This paper describes how the Missouri Department of Elementary and Secondary Education is using constructivist theory and research to inform educational policy and practice. The state's most concentrated and comprehensive effort in this direction is Project Construct, a unified instructional approach for children ages 3-7. The project consists of the following components: (1) a curriculum framework based on Piaget's belief in child autonomy as the aim of education; (2) formative and summative student assessment that is aligned with the curriculum framework; (3) a teacher-evaluation process that recognizes the use of constructivist classroom practices; and (4) a continuing program to educate early childhood and primary teachers in constructivist theory and practice. The project has resulted in collaboration among state-level policymakers, the educational research community, and public school educators. Constructivist theory has also influenced state policy recommendations for preschool and primary education, contributed to the creation of the Practical Parenting Partnerships program, and influenced the development of a comprehensive outcome-based plan to ensure that high school graduates have the knowledge, skills, and competencies necessary for productive citizenship in the next century. The appendix contains a list of Project Construct's student domains, areas, and goals. (LMI)

AN: ED362556
AU: Gorrell,-Jeffrey
TI: **The Discovery of Personal Meaning: Affective Factors in Learning.**
PY: 1992
NT: 28 p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (21st, Knoxville, TN, November 11-13, 1992).
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: Learner-centered principles espoused by the American Psychological Association (APA) built on research of the last three decades suggest that learning does not simply entail coordinated cognitive processes. These 12 principles portray factors associated with learning as essential parts of the portrayal of learners as active creators of their own best answers and solutions. Some of the issues related to active, volitional learners are summarized, with attempts to integrate then in terms of the discovery of personal meaning. The following types of personal meaning that may occur are considered: (1) increased sense of relation of new knowledge to personal events in the learner's life; (2) increased sense of self as learner; (3) increased sense of efficacy related to the capability to use knowledge; and (4) increased expectancy for success and sense of commitment to



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extend learning. The paper is organized around the idea that the discovery of personal meaning in learning is a vital part of the learning process. The learner is an active constructor of such meanings and may find them more durable than the particular knowledge gained in cognitive fashion. One table lists types of personal meaning that may be acquired. An attachment lists the APA principles. (Contains 61 references.) (SLD)

AN: ED362213
AU: Wilson,-Brent-G.
TI: **Constructivism and Instructional Design: Some Personal Reflections.**
PY: 1993
NT: 20 p.; In: Proceedings of Selected Research and Development Presentations at the Convention of the Association for Educational Communications and Technology Sponsored by the Research and Theory Division (15th, New Orleans, Louisiana, January 13-17, 1993); see IR 016 300.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Some personal reflections on instructional design and its relation to constructivism are explored. Instructional design in its present form is out of sync with the times in that its orientation, methods, and research base are behavioristic, or positivistic. However, a constructivist theory of instructional design is possible, particularly if constructivism is recognized as a philosophy rather than a strategy. To better fit the needs of practitioners, instructional design theories need to be better grounded in a broad understanding of learning and instructional processes. Generic principles and specific heuristics are needed for dealing with recurring problems and situations in instructional design practice. In addition, instructional design theories need to reflect instructional design as a profession. The theories of instructional design need to be adjusted or replaced with better ones that fit the newer understandings of learning and instruction. (Contains 81 references.) (SLD)

AN: ED362180
AU: Li,-Ming-Fen
TI: **Empowering Learners through Metcognitive Thinking, Instruction, and Design.**
PY: 1993
NT: 14 p.; In: Proceedings of Selected Research and Development Presentations at the Convention of the Association for Educational Communications and Technology Sponsored by the Research and Theory Division (15th, New Orleans, Louisiana, January 13-17, 1993); see IR 016 300.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: A perspective is presented for designing instruction in metacognition, drawing on how human beings acquire metacognitive skills and how these skills are interwoven with other thinking skills. An instructional designer must consider the dynamic and integrative nature of metacognition. Traditionally, learning theories, instructional theories, and instructional design theories are treated as distinct entities. Recent exploration of constructivism has made it seem possible to integrate learning and instructional theories. Learners, teachers, and instructional designers all need to engage themselves fully in the roles they play. Teachers need to guide, rather than control, student learning. Instructional designers must reflect on the complex relationship between learning and instruction. Learners need to be given the responsibility to direct, manage, or even design their own learning. The metacognition of teachers will enable them to perceive their instruction in a more reflective and dynamic way. Empowering teachers will empower learners. In a learning-centered environment, learners and teachers become the main actors of the learning drama. (Contains 26 references.) (SLD)

AN: ED362160
AU: Cole,-Peggy
TI: **Learner-Generated Questions and Comments: Tools for Improving Instruction.**
PY: 1993
NT: 18 p.; In: Proceedings of Selected Research and Development Presentations at the Convention of the Association for Educational Communications and Technology Sponsored by the Research and Theory Division (15th, New Orleans, Louisiana, January 13-17, 1993); see IR 016 300.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: It is argued that increased use of learner-generated questions and comments can benefit every stage of the instructional process. A strategy is proposed that integrates design into the implementation of instruction. The emerging interest in learner-generated questions has followed the paradigmatic shift in psychology from behaviorism to constructivism. The generative/constructivist learning model is consistent with encouraging learners to become independent by learning how to learn. Developing the ability to monitor one's own comprehension, articulate questions, and explore answers requires time and practice that can be afforded through student journals written as homework. The use of the journal writing approach in a community college setting is described. The superiority of journal writing to the use of adjunct questions is described. A vehicle like the student journal allows the learner to share questions and comments, while the teacher is able to monitor comprehension, identify misconceptions, and empower the learner to complete the task. Recommendations are given for implementing student journal writing. Two tables compare questions and journal entries. (Contains 59 references.) (SLD)

AN: ED358410
AU: Jaeger,-Michael; Lauritzen,-Carol
TI: **The Construction of Meaning from Experience.**
PY: 1992
NT: 17 p.; Paper presented at the Annual Meeting of the National Council of Teachers of English (82nd, Louisville, KY, November 18-23, 1992).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Constructivists view thinking and learning differently from other learning theorists: they believe that learners do not acquire knowledge that is transmitted to them; rather, learners construct knowledge through intellectual activity. Sharp contrasts exist between a "transmission" model of instruction and the constructivist perspective. The transmission model is teacher directed, ignores prior knowledge, depends on external motivation, and involves isolated skill teaching. The constructivist perspective offers student directed learning, uses prior knowledge of students, generates knowledge, offers students intrinsic motivation, and capitalizes on context. Tenets of a constructivist perspective include: (1) learners come to school with a wealth of prior knowledge; (2) learners make meaning of their world by logically linking pieces of knowledge, communication, and experiences; (3) these belief systems are often incomplete explanations



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or misconceptions; (4) learners hold to their belief systems and are resistant to change; (5) direct instruction is unlikely to change belief systems; (6) learning takes place when confrontation with new experience yields dissonance; (7) a social context facilitates these processes; and (8) learning takes place best in a meaningful context. From the constructivist perspective, the role of the teacher becomes one of facilitating, guiding, and coaching. (A figure representing an "objectivist" lesson plan, and a figure contrasting the constructivist and transmission models are included. (Contains 22 references.) (RS)

AN: ED352610
AU: Oldfather,-Penny
TI: **Sharing the Ownership of Knowing: A Constructivist Concept of Motivation for Literacy Learning.**
PY: 1992
NT: 18 p.; Paper presented at the Annual Meeting of the National Reading Conference (42nd, San Antonio, TX, December 2-5, 1992).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: "Sharing the ownership of knowing" (a constructivist concept of motivation for literacy learning) is a dynamic classroom interaction in which a teacher's constructivist epistemological stance facilitates students' sense of their own construction of meaning and the integrity of their own thinking. Sharing the ownership of knowing was one of several interactive processes identified within the classroom of a constructivist teacher who was the subject of a qualitative study of student motivation. The study was initiated in a small academic community in a southern California school. As a participant-observer, the author of the study shared the thinking and experience of 31 students in a student-centered whole language fifth- and sixth-grade classroom. After analyzing the data, the participant-observer identified connections between self-expression, constructivism, and epistemological empowerment. The concept of epistemological empowerment is a dimension of students' motivation for literacy learning that may be present in social constructivist classrooms as the teacher shares the ownership of knowing. Those who are epistemologically empowered may become more engaged as literacy learners when they become aware of their own construction of meaning. (Nineteen references are attached.) (RS)

AN: ED350665
AU: Wadsworth,-Barry
TI: **Promoting Constructivist Teaching & Learning: Problems and Possibilities. A School Committee Perspective.**
PY: 1992
NT: 7 p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 20-24, 1992).
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: The potential for the coherent integration of the cognitive and affective aspects of student development through a constructivist approach is discussed in this paper. Educators should be concerned with students' learning with regard to developing values and characteristics, especially respect and responsibility. The obstacles that hinder the creation of constructivist schools are described, some of which include the politics of state-level policy formation, the hierarchical nature of local decision-making, control by compromising superintendents, adversarial teacher-board relationships, dissatisfied teachers, and apathetic parents. Strategies for bringing constructivism into school systems at several levels include hiring visionary principals and superintendents, providing teacher retraining programs, and enlisting community support. (LMI)

<u>**Older but Still Useful References**</u>

AN: EJ359142
AU: Gray,-Mary-Jane
TI: **Comprehension Monitoring: What the Teacher Should Know.**
PY: 1987
JN: Clearing-House; v61 n1 p38-41 Sep 1987
AV: UMI
AB: Reviews the literature relevant to the subject of comprehension monitoring and offers ideas from the reading research for how students can improve their comprehension and how teachers can tell if students understand what they read. (JC)

AN: EJ327813
AU: Clary,-Linda-M.
TI: **Twelve "Musts" for Improved Reading Comprehension.**
PY: 1986
JN: Reading-Horizons; v26 n2 p99-104 Win 1986
AV: UMI
AB: Summarizes research conducted at the Center for the Study of Reading at the University of Illinois and points out what it means to daily reading instruction. (FL)

AN: EJ327196
AU: Silvern,-Steven
TI: **Parent Involvement and Reading Achievement: A Review of Research and Implications for Practice.**
PY: 1985
JN: Childhood-Education; v62 n1 p44,46,48-50 Sep-Oct 1985
AV: UMI
AB: This research review identifies parental roles and practices that have been shown to promote reading readiness, receptivity to reading instruction, and increased achievement in reading. Reviews studies of intervention and involvement programs designed to expand or alter parental practices in improving children's reading attitudes and achievement. (DST)

AN: EJ326504
AU: Bristow,-Page-Simpson
TI: **Are Poor Readers Passive Readers?** Some **Evidence, Possible Explanations, and Potential Solutions.**
PY: 1985
JN: Reading-Teacher; v39 n3 p318-25 Dec 1985
AV: UMI
AB: Indicates that passivity in poor readers seems to be tied to several interrelated factors, including frustrating materials, repeated failures, and differences in teacher treatment of good and poor reading groups. Suggests that direct training can mitigate these problems. (FL)



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AN: EJ297934
AU: Wiesendanger,-Katherine-D.; Birlem,-Ellen-D.
TI: **The Effectiveness of SSR: An Overview of the Research.**
PY: 1984
JN: Reading-Horizons; v24 n3 p197-201 Spr 1984
AV: UMI
AB: Reviews research concerning sustained silent reading and lists factors that are important in determining whether such a reading program is successful. (FL)

AN: ED279997
AU: Miller,-Becky-Iden
TI: **Parental Involvement Effects Reading Achievement of First, Second, and Third Graders.**
PY: 1986
NT: 43 p.; Exit Project, Indiana University at South Bend.
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: A review of research data focused on the effects of parental involvement on children's reading achievement and ways in which parents can help promote children's reading achievement. The review included 35 studies (which are briefly summarized) of (1) parents' attitudes about their involvement in their child's education, (2) the positive effects of parent/teacher interaction on children's reading achievement, (3) parental practices at home that influence children's reading achievement, (4) the effects of parental involvement in the classroom on children's reading achievement, and (5) ways to educate parents about guiding their children in effective reading activities. Results of the review indicated that children's achievement can be increased through parental involvement and parent/teacher interaction. Parent attitude surveys revealed that most parents want to be involved in their children's education. Reading to children and listening to them read for 10 minutes daily were found to be the most significant ways parents could increase their children's reading achievement. Findings also indicated that parents can also affect children's achievement by playing educational games, going to the library, and viewing educational television programs with them. Results showed that educating parents to guide their children's reading at home often increases children's reading achievement. (Lists of recommendations for parents and teachers are included, as well as a four-page bibliography.) (JD)

AN: ED273928
AU: Alvermann,-Donna, Ed.; And-Others
TI: **Research within Reach: Secondary School Reading. A Research-Guided Response to the Concerns of Educators.**
CS: Appalachia Educational Lab., Charleston, W. Va.
PY: 1986
NT: 283 p.; For a related document on mathematics, see ED 225 842.
PR: EDRS Price - MF01/PC12 Plus Postage.
AB: Intended for secondary school teachers in all subject areas, this book synthesizes and translates reading-related research on a variety of specific topics. Each chapter in the book opens with a question or questions posed by teachers, then proceeds to a discussion of the research and practice pertaining to the issues raised. Each chapter ends with a summary and a list of references. Each chapter can be read independently. Questions raised in the 13 chapters of the book deal with the following areas: (1) reading programs, (2) effective schools and effective teaching research, (3) developing lifetime readers, (4) learning from text, (5) comprehension and thinking skills, (6) vocabulary, (7) readability, (8) objectives and materials, (9) integrating oral and written language, (10) grouping, (11) teacher decision making, (12) metacognition, and (13) staff development. A 27-page bibliography concludes the document. (FL)

AN: ED273924
AU: Mason,-Jana-M.; Allen,-JoBeth
TI: **A Review of Emergent Literacy with Implications for Research and Practice in Reading. Technical Report No. 379.**
CS: Bolt, Beranek and Newman, Inc., Cambridge, Mass.; Illinois Univ., Urbana. Center for the Study of Reading.
PY: 1986
NT: 99 p.
PR: EDRS Price - MF01/PC04 Plus Postage.
AB: Defining emergent as the process of becoming and literacy as the interrelatedness of reading and writing in young children's development, this paper reviews emergent literacy research and relates it to beginning reading and writing instruction. The first section of the paper describes the social and linguistic contexts for literacy, reviewing research that shows communication patterns and practices and parent-scaffolding of literacy for preschool children to be critically important events for literacy development. The second section deals with oral and written language distinctions and describes why literacy is not a simple extension of oral language. The third section reviews research on the acquisition of emergent reading and writing skills and knowledge, while the fourth presents examples of landmark instructional studies that adopt an emergent literacy perspective. (Author/FL)

AN: ED272842
AU: Faman,-Nancy-J.
TI: **A Look at Reading and Writing as Similar Language Skills: A Review.**
PY: [1985]
NT: 24 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Four similarities between reading and writing and their corresponding instructional significance are examined in this literature review. Each of the four reviewed topics is prefaced by general instructional suggestions based on research cited in the review. Topics and suggestions are as follows: (1) linguistic--whenever possible, the processes of reading and writing should be integrated within the framework of classroom instruction; (2) cognitive--by virtue of the interrelationship between thought and language, reading and writing should be integrated across all content areas to enhance students' skills in thinking and learning; (3) affective--strategies that take into account students' interest, attention, and motivation are necessary for effective language skill development, since each of these variables influences students' ability to use their language skills to maximum potential; and (4) instructional--instruction should emphasize the complementary nature of reading and writing as mutually facilitative, not mutually exclusive, language skills. The review ends by presenting a model of reading and writing as similar language skills. A three-page reference list is appended. (HOD)



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AN: ED245195
AU: Pearson,-P.-David, Ed.; And-Others
TI: **Handbook of Reading Research.**
PY: 1984
AV: Longman Inc., 1560 Broadway, New York, NY 10036 ($45.00).
NT: 899 p.
PR: Document Not Available from EDRS.
AB: Intended for reading educators and researchers, this handbook characterizes the current state of methodology and the cumulative research-based knowledge of reading. The book's three sections cover methodological issues, basic reading processes, and instructional practices. The 25 chapters discuss the following topics: (1) reading research history, (2) reading research traditions, (3) design and analysis of reading experiments, (4) ethnographic approaches to reading research, (5) building and testing models of reading processes, (6) reading assessment, (7) reading process models, (8) word recognition, (9) schema theory and comprehension processes, (10) listening and reading, (11) text structure, (12) metacognitive skills and reading, (13) sociolinguistic study of reading, (14) social and motivational influences on reading, (15) figurative language, (16) individual differences and underlying cognitive processes, (17) early reading from a developmental perspective, (18) beginning reading instruction, (19) word identification, (20) research on teaching reading comprehension, (21) studying, (22) readability, (23) classroom instruction in reading, (24) managing instruction, and (25) oral reading. Biographical notes are provided for approximately 40 contributors. (HTH)

AN: ED227093
AU: Emans,-Robert
TI: **Teaching Behaviors in Reading Instruction: A Review of the Research and Critique.**
PY: 1983
NT: 49 p.; Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education (Detroit, MI, February 24, 1983).
PR: EDRS Price - MF01/PC02 Plus Postage.
AB: This paper summarizes research findings on teacher behavior and its relationship to student reading achievement. Research studies included in the review identified actual teaching behaviors, included observations of teacher-learner interactions, were limited to elementary school, and were conducted between 1966 and 1972. Subjects covered in the studies include: (1) instructional time and student achievement; (2) direct instruction; (3) classroom climate and teacher management; (4) teacher praise and criticism; (5) teacher expectations; (6) teachers' use of questions; (7) specialized subject matter teaching behaviors; and (8) changing teacher behavior through interactive inservice programs. A discussion is presented on the research methodology used in these studies, the general reliability of research findings, and significant and recurring findings brought forward by this review. A list of 126 references is included. (JD)

AN: ED281140
AU: Tierney,-Robert-J.; Pearson,-P.-David
TI: **Schema Theory and Implications for Teaching Reading: A Conversation. Reading Education Report No. 67.**
PY: 1986
NT: 19 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
AB: Research discoveries over the past 15 years concerning reading comprehension have had a significant impact on reading instruction, particularly schema theory. This theory, based on prior learning, which states that the reader uses the text to construct a meaning within his or her own mind, affects what teachers can do to help students improve comprehension. A conceptual rather than a definitional or contextual approach should be used to teach vocabulary, because it shows students how particular vocabulary items relate to other concepts they already know. Further, teachers should encourage students' initiative in reading, and encourage them to pause and think while reading. In this way, teachers can help children select schemata for understanding a new selection. Schema theory also affects the ways teachers can help children extend beyond the text and interact with it at more complex levels, by emphasizing the importance of helping students get background knowledge and of respecting the reader's role in creating meaning. (JD

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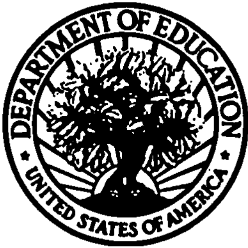

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