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ABSTRACT
          Noting that children must be provided with the
opportunity to read various types of text as early as possible if
they are to develop into strategic and self-directed readers, this
paper presents research evidence to show that every text type makes
unique demands on readers. The first section of the paper discusses
reading in the school context, including the roles of text in
children's learning, and the teacher's role in using text as a
learning tool. The second section discusses different types of texts,
their characteristic properties, and differing comprehension
processes for different types of texts. The third section elaborates
on content area (social studies, science, and mathematics) texts and
the cognitive demands of each. The fourth section discusses research
evidence and some issues related to learning from texts. The last
section draws implications and proposes suggestions for improving
reading instruction. Contains 77 references. (RS)

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LEARNING FROM TEXTS AND READING INSTRUCTION

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In recent years, some shifts have occurred in literacy instruction in general and in reading instruction in particular. For instance, more and more classroom teachers are now trying to move away from basal series to the use of children literature as the basis for their reading programs. In Pappas' (1991) observation, in literature-based programs many teachers use fiction books as the only source for children's learning at the exclusion of other text types from different genres.

Operationally, those teachers seem to have been guided by beliefs that (1) narrative represents the children's basic way of making sense of their experiences (Hardy as cited in Huck, 1990; F. Smith, 1988); (2) narrative enables children to realize capacities to perform certain tasks which cannot be realized in non-narrative context (e.g., Egan 1993); and (3) learning can transfer from children's narrative-related experiences to other text types (Hicks, 1993).

The use of stories as the only source for learning in early grades has raised some concerns with regard to children's learning in later grades, because from fourth grade onward activities related to <u>nonnarative</u> (i.e., expository) text become an increasingly important part of school experience (Spiro & Taylor, 1987) as most of the knowledge acquired in school is gained via written expository prose (Meyer, Brandt, & Bluth, 1980).

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The concerns stem from the conviction that focusing on one single text type in elementary grades means limiting young learners' possibilities for gaining full access to multiple literacies that the culture has to offer (Gardner, 1993; Hicks 1993; Pappas, 1991, 1993). More importantly, data from National Assessment of Educational Progress has shown that, while succeeding with stories, children find difficulties in reading and writing expository text (NAEP, 1982 cited in de Castel, 1990).

This article will (1) describe reading in school context, (2) discuss different types of texts and their characteristic properties, (3) elaborate on content-area texts and the cognitive demands of each, (4) discuss research evidence and some issues related with learning from texts, and (5) draw some implications and propose suggestions for improving reading instruction.

I. READING IN SCHOOL CONTEXT

One of the primary purposes of education, according to Collins (1977, cited in Arlington & Strange, 1980), is developing in the learners strategies for acquiring knowledge independent of their teachers. The quest for students' sense of independence also manifests in the current notions of "strategic readers" (Paris, Wasik, & Turner, 1991) and "student's ownership of learning" as advocated by Whole-language proponents (e.g., K. Goodman, 1986).

Tierney (1984) has also indicated that there is a general agreement on the primary objective of reading instruction, that is, helping learners to become independent and self-initiating readers. In this way, the readers can, in turn, develop themselves into lifelong learners so that they can respond adequately to ever increasing literacy demands of real life in general and workplace in particular (Herber, 1970; Mikulecky, 1989).

In school context, reading development is commonly perceived as consisting of two stages: <u>decoding stage</u>-- during which beginning readers in first and second grades learn letter-sound correspondences, how to blend sounds to form words, and how to use context as an aid in word recognition-- and <u>fluency stage</u>, where they continue working on decoding skills to the point where word recognition becomes easy and no longer a barrier to acquiring meaning (Chall, 1983, cited in Samuels, Schermer, & Reinking, 1992). It is , therefore, only after they can read fluently are the children able to focus on the real focus of reading-- to read for meaning (Samuels, Schermer, & Reinking, 1992). Beginning reading (or "decoding stage") has been associated with "learning to read" and fluency reading with "reading to learn." In this paper, <u>learning from text</u> is used to refer to the latter.

Unlike learning to read which can generally be mastered by most students around sixth grade (Sticht & James, 1984 cited in

Carlisle, 1993), learning from text is an open-ended process. It continues to develop throughout life as a person gains new information, vocabulary, concepts, and general knowledge of the world in various content areas (Samuels, Schermer, & Reinking, 1992; Singer & Donlan, 1980).

In the elementary school, reading is generally treated as a separate curricular area with textbooks of its own, demarcated from the rest of the curriculum. According to Schmidt, Caul, Byers & Buchmann (1984), this treatment has created a tendency for reading to be taught as a skill separated from the reading comprehension necessary for the study of content-area domains such as social studies, science, mathematics , and art.

Roles of Text in Children's Learning

Research in emergent literacy (e.g., Harste, Woodward & Burke, 1984; Sulzby & Teale 1991) has made it clear that preschoolers actively learn how to make sense out of print (or textual) materials they encounter in their environment. Recent research by Pappas (1991) has provided further empirical support to the idea that just by virtue of being exposed to social uses of written text in various genres children as young as kindergartners can acquire relatively sophisticated literacy knowledge, including tacit knowledge about variability of text types as a function of authors' differing

communicative purposes.

In school, when young children learn to decode prints and to gain reading fluency, various easy-to-read texts are instrumental in children's reading development. Samuels, Schermer & Reinking (1992) have argued that such textual materials are important for children to read independently so that they can gain automaticity in words recognition.

Aside from their functions as textual models from which young readers learn about the functional potential of written language (Pappas, 1991), text can serve as a source of knowledge. This is especially true in later grades-- from fourth grade onwards-- when children have to deal with readings in various content-area subjects such as social studies, science, mathematics, etc.

Teachers Role in Using Text as a Learning Tool

Although written material is not the only avenue that leads to the acquisition of knowledge, in actuality, textual materials represent a primary learning source in school setting (Ambruster & Ostertag, 1993). More specifically, citing research by McCutcheon (1982) and Shannon (1982), Woodward, Elliot & Nagel (1986) stated that "as much as 90 percent of classroom instructional time is structured by instructional materials, especially textbooks" (p.51)

From teachers' part, the availability of professionally

produced learning materials is reassuring for various reasons: time efficiency, psychological security, coherence of treatment of content to be learned, etc. (Arlington & Strange, 1980).

While the significant role of commercially produced textual materials is acknowledged, some research has indicated that a great number of textbooks come with some flaws both in terms of basic assumptions on learning (Anderson, 1993) as well as exploitative-strategies for promoting optimal learning (Armbruster & Ostertag, 1993). Teachers' role here is, therefore, important to ensure that students can get the most out of their learning from text. For instance, with their knowledge about the content of the text in use, about the learners' general reading abilities and the goals of the content-area lesson, teachers can help orchestrate learning contexts which are conducive to productive interactions between the learners and textual materials.

Classroom Reality: Perspectives from Research

A comprehensive classroom observational study by Durkin (1978-79), which involved teachers in 39 classrooms in 14 school districts, provided evidence that teachers neglected comprehension instruction. Most of the instruction time was used to take care of other things: teaching word meanings, structural analysis, checking assignments, and assessment, which was carried out through teacher

questions.

'n a more recent study on reading and questioning in fourth-grade science and social studies lessons taught by nine teachers in two districts, Armbruster et al. (1991) found, among other things, that in a segment of 387 minutes of the lessons analyzed, there was no instances of explicit instruction in how to read and learn from texts; for both subject areas, the passages were read aloud-- rather than silently-- 91% of the reading events; less than 10% of the questions teachers asked required students to make an inference from the text they read.

A similar picture can also be seen in other studies. For example, Anderson (1993) has observed that in many reading lessons, children read and discuss stories everyday, but the discussion is typically shallow, superficial and "not mind-expanding" (p.34). He further commented that the instructional activities are generally limited to a recitation with primary emphasis on learners' getting main points of the stories. In middle and high schools, similar situations seem to prevail. For instance, F.R. Smith & Feathers'(1983a) observation study indicated that very little reading instruction occurred in the four classes they observed. They further reported that in all four classes, the instruction was focused on acquiring specific information by working on worksheets, without learners' engagement in text-processing other than

reiteration of information already discussed.

Based on a series of interviews with teachers and their students, F.R. Smith & Feathers (1983b) reported that "a considerable amount of information [from content-area text] was presented through films, filmstrips, other books, articles, and by the teacher." (p.352) and only "little reading was assigned." (p. 353). The interviews further revealed that the majority of the students' perceptions of goals and expectations for learning differed from those expressed by the teachers.

As this admittedly brief review has indicated, reading instruction is fraught with uninformed practice. For example, rather than having learners engage in extended reading, where they deal with extended discourse, the teacher taught words meaning. Rather than engaging learners in discussing their understanding of the stories they read-- where each individual child can compare and contrast her individual understanding with that of others'-- the teacher encouraged children to find main points in stories. Rather than teaching students strategies to read the text, the teachers presented content of the text through other media.

II. TYPES OF TEXT AND COMPREHENSION PROCESSES

Attempts to identify different text types and comprehension processes they might demand of readers have been made by many

reading theorists and educators. For example, Spiro & Taylor (1987) compare and contrast children stories and nonstory texts along several dimensions: formal-linguistic expression; discourse function; underlying organizational structure; content; and relationship with other texts. These textual features not only make every text type different from the others but they also pose different demands of the readers.

A general consensus exists about the comprehension process: that comprehension is an active, generative process in which a reader "decodes" what is presented in the text and uses it to generate understanding by combining the input from the text with her preexisting knowledge and experience (Samuels, Schermer & Reinking, 1992; Santa, 1980).

Or, put differently, when reading a text, one produces three levels of cognitive representations: surface code, textbase, and the referential situation model of what text is about (Kintsch 1986; Graesser & Zwaan, 1995). The <u>Surface code</u> preserves the exact wording and syntax of clauses (Graesser & Zwaan, 1995). The <u>textbase</u> contains the explicit text propositions in a stripped-down form that preserves meaning but not the exact wording and syntax of the text. The <u>situation model</u> is a mental representation of the people, setting, actions, and events which are explicitly mentioned or inferentially suggested by the text (Graesser & Zwaan, 1995;

Kintsch, 1986). For example, in the case of reading stories, "mental representation" results from the reader's making inferences of the physchological and physical causes and consequences of focal events. (Trabasso, 1989; van den Broek, 1989).

In summary, when reading a text, the reader attends not only to what the words say but also to how those messages are framed in a particular genre.

Text Types

There are three big categories of text: narrative (e.g., short stories, novels, toilet dramas, etc.), procedural (e.g., manuals, recipes, etc.), and expository (e.g., essays, reports, etc.). Every type of text has its own purpose which differs from the rest. For instance, narrative text may have the primary function of entertainment and moral teaching (Graesser, Golding, & Kieras, 1991). Expository texts serve the main purpose of transmitting (factual) information (Weaver & Kintsch, 1991). Procedural texts carry the function of showing how things work or should be done (Bovair & Kieras, 1991).

As a writing form follows its purpose, every type of text has its own unique textual as well as underlying psychological properties (Pappas, 1991; Spiro & Taylor, 1987), which requires different cognitive processing on the part of the readers.

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Differentiation among the three types of texts can be made on several grounds: linguistic-textual representation, the reader's engagement with the text, and reader's attitudes towards the truth value of the informational/propositional content (Langer, 1990; Olson, 1979, 1988). For instance, using "truth value" as a parameter we can see how we, as a reader, approach the relative believability of informational content derived from each of the text types. When reading a story, we tend not to be too concerned about whether or not what is being talked about is factually true. In contrast, when we read a procedural text (e.g., a set of instructions to operate a computer), we readily assume that what is being said is factually true. Similarly, when we read an expository prose, we are concerned about the accuracy and precision of the representations contained in the text.

Comprehension Processes

As suggested in the foregoing paragraphs, when reading a text, the reader needs to, first of all, attend to the language as it is employed by the writer in order to understand what the text says. As this process takes place, a mental reconstruction of overall textual meaning is created. This reconstruction is subject to continual change and expansion as the reading act progresses and the reader takes in the textual information and relates it with preexisting

knowledge and a particular reading purpose that she might bring to the text.

Aside from this general reading process, which applies to all reading act regardless of text types, the reader needs to set and employ a certain approach in response to particular type of text she is reading (Herber, 1984). For example, in order to learn from a procedural text, the reader must go through three sub-processes: procedure construction, which takes the representation of the text and constructs the declarative form of production rules; immediate transfer process, which assesses to see if the newly constructed rules are already known; and the acquisition monitor, which monitors if a new rule has been wholly learned (Bovair & Kieras, 1991).

Narrative comprehension, in contrast, demands something else. For instance, defining narrative as an event-based representation, Trabasso (1989) theorizes that in order for children to understand narrative , they must:

> ...know that the settings contain information about ongoing, constant conditions that constrain plans and enable future events to occur...understand that events cause changes in goal maintenance and emotional reactions, thoughts, cognitions and formation of goals and enable other cognitions and plans, that goals motivate the formation of other goals and cause actions

to occur, that actions enable actions and/or cause outcomes, and that outcomes, like events, cause other outcomes and enable actions, emotions, goals and cognitions. (p.70)

Trabasso further suggests that a coherent representation will result from inferences that the readers make of the causal relations between events depicted in the story.

III. CONTENT-AREA TEXTS

Generally, content-area texts are expository in form, as "one obvious purpose of content-area texts is to communicate specific instances of the generic concepts of their discipline" (Anderson & Ambruster, 1984, p.196). Within this broad category of text type, each content area develops its own structure and ways of thinking about its content (Singer & Donlan, 1980). These discipline-specific thinking patterns embody in various types of text units and text frames (Anderson & Ambruster, 1984).

Text units refer to the authors's purpose, including the questions being asked as well as their answers. Anderson & Ambruster identify six different text units, each defined as a function: (a) to describe, (b) to sequence events, (c) to explain, (d) to define and exemplify, (e) to compare and contrast, and (f) to relate a problem and its solution. The type of purpose or question addressed

by the author dictates the type of function or text unit employed, which is associated with certain corresponding words or phrases.

To illustrate, let us consider a biology writer as an example. Guided by, for instance, a general question "What is the digestive system?", a biology author will likely use words or phrases such as " refers to..." and opt for a "definition/example" structure as the most appropriate rhetorical form for this particular message.

Text frames, in contrast, refer to content-specific text structures. The structure of a text frame is very much influenced by the thinking patterns that are typical of the discipline being represented in the text. Every text frame has "slots" for associated features of the generic concept. To illustrate the point, let us again take a biology author as an example. Guided by typical features of discourse in biology-- e.g., describing particular biological systems in terms of location, component parts, and functions -- a biology author's response to the question "What is the digestive system?" will likely lead her to frame her text consistent with such discipline-specific generic concept that results in corresponding "slots" such as "Where is the digestive system located?" (location), "What are its component parts?" (component parts), and "What is the function of the digestive system?" (functions).

With the structuring nature of the notions of "text unit" and

"text frame" in operation, it should come as no surprise that every
domain in content-area discourse has its own discoursal conventions,
which, in consequence, require different cognitive-processing
strategies on the part of readers (Perfetti, 1991). At the same
time, however, those discipline-based conventions provide some
common grounds that make the interactions between the writers and
their reader become possible (Tierney, LaZansky, Raphael, & Cohen,
1991; Tierney & LaZansky, 1980).

Content-area texts and their demands on readers

As the title suggests, this subsection takes as its focus
various texts which are meant to be read for their contents rather
than for reading expereience _per se_. Stories and other literary
forms, which are usually meant to be read aesthetically (Rosenblatt,
1991), are not included in the content-area text category.

Muth (1987) has observed that content-area texts are generally
characterized by such features as heavy concept load, technical
vocabulary, unfamiliar content, and hierarchical patterns of main
ideas and details. More specifically, a comprehensive text-analysis
study by N.B. Smith (1964) has provided evidence that every
discipline has its own typical rhetorical organization, specialized
vocabulary, and graphical representations and symbols. This means
that for learning from text to happen, learners cannot

rely only on general reading skills but they should also approach the content-area text in a particular way consonant with the rhetorical constraints posed by a particular subject-matter domain under study.

Social Studies Text

Social studies is not a single discipline. It is an integration of contents, concepts, and generalizations drawn from various disciplines: history, geography, anthropology, political science, economics, and sociology (Pappas, Kiefer, & Levstik, 1995). According to these authors, in elementary social studies, children learn to recognize social data, build causal theories, draw conclusions, and make and challenge generalizations about human behavior.

The integrated nature of social studies embodies in multiple perspectives and purposes, which necessitate multiple patterns of textual organization. For instance, from her analysis of 60 social studies texts, N.B. Smith (1964) identified five high-frequency writing patterns: the cause-and-effect pattern; sequential events with dates; the comparison pattern; detailed statement-of-fact pattern. Beside the use of various text structures, it has also been noted that common in social studies text is the use of various non-linguistic representations: graphics, maps, atlases, globes, and

other pictorial representations (N.B. Smith, 1964; Singer & Donlan, 1980).

All of these discipline-determined discourse structures demand considerable cognitive processing on the part of readers. N.B. Smith argues that in order to learn from social studies text readers have to employ not only general reading strategies but also "special skills" on picture reading. More specifically, in order to acquire information from maps, for instance, readers should understand a set of conventions such as "...north-south, east-west direction;..longitude and latitude; using scales and keys; locating places; making inferences from symbolic and abstract representations" (Singer & Donlan, 1980, p.293).

Science Text

Integrated in nature like social studies, science is commonly seen as a categorical label to encompass several domains: biology, chemistry, physics, and geology (Pappas, Kiefer & Levstik, 1995). Unlike social studies which often seeks to understand and explain specific events, however, science is a search for explanatory laws and principles which are generalizable beyond specific events across time and space.

According to Pappas et al. (1995), in elementary school, science is treated not merely as a collection of facts and formulas

but it is more importantly seen as a way of knowing and doing-- a way of dealing with and ordering of experiences. In this way, children are provided with various ways of finding out about themselves and the world around them.

Textually, science text generally takes the organizational structure of "concept-focused" prose, which typically presents the topics within a textbook chapter in the order from simpler to more complex concepts. Descriptions of experiments and explanations of scientific processes-- which are also common features of science text-- are presented subsequently to foster scientific thinking (Catterson, 1990).

In N.B. Smith's (1964) text-analysis study it was also noted that a textual pattern for explaining a technical process-- which is commonly accompanied by diagrams--demands considerably sophisticated cognitive processing. Arguing for the point, she writes:

> This kind of reading requires a doubling
> techniques: reading the text and reading
> the diagram alternately as one feeds into
> the other.
>
> (N.B. Smith, 1964, p.35)

Mathematics Text

Pappas, Kiefer & Levstik (1995) define mathematics as " a science of patterns and relationships" (p.182). According to these authors, mathematics learning in elementary school is geared towards the acquisition of mathematical concepts ("conceptual knowledge"), facility with the symbolisms, rules, and methods of performing mathematics processes ("procedural knowledge"), and understanding of connections between symbols and the corresponding concepts ("connections between conceptual and procedural knowledge"). Pappas and colleagues pointed out that one of the most important objectives of mathematics instruction is to develop in the learners mathematical problem-solving abilities.

Parallel to this objective, Catterson (1990) has observed that mathematics text tends to be presented in "process-focused" prose, which targets its informational content at the development of problem-solving processes in the readers. Responding to this rhetorical constraint, the author of math text typically proceeds in the following direction: explaining concept, providing sample problems with step-by-step solutions, and then providing sample problems for the readers so that they can test their problem solving for themselves. N.B. Smith's (1964) depiction of "problem pattern"-- which she found typical in the 49 math (text)books she analyzed-- reads as the following:

(A)t the beginning, the situation is given,
or the condition under which the problem
took place is stated; then follows a series
of numbers or other mathematical values,
and finally the reader is asked or told
what to find (p.100).

It is not difficult to imagine what thinking processes required of learners in order to solve a typical mathematical word-problem. That is, in such a situation, the reader has to perform several different processes: getting the whole picture to grasp the situation as a whole; concentrating on the question at the end which asks what to find; deciding what formulas to use and computing procedures to employ in order to arrive at an acceptable solution; pulling out relevant data (symbols or figures) given in the text to be used in solving the problem mentally on paper.

In summary, very important general characteristics of content-area texts-- which make a sharp contrast with those one generally finds in literary readings-- are content-specific concepts, vocabulary words, and textual organizations. And because transfer of skills gained in learning to read is not automatic (Herber, 1984), children need to be taught how to read to learn from

those content-area texts.

Learning from Texts

Learning from text can be perceived as the production of new knowledge as a result of the interactions between information gleaned from the text and the reader's background knowledge of the topic under discussion, general knowledge about social relationships and causal structures, and knowledge about the organization of the text (Herber & Donlan, 1980; Pearson et al., 1992).

It has been well argued that learning will take place more readily when the task at hand is meaningful (F. Smith, 1988). Meaningful learning, according to Mayer (1984), has three basic cognitive processes: (a) <u>selecting</u> information, which involves paying attention to the propositional content of the text, and particularly focusing attention on information most relevant to the goal or task demands of the learing situation; (b) <u>organizing</u> information into a coherent mental structure (or building internal, logical relations between ideas in the text); and (c) <u>integrating</u> information by connecting the coherently organized information to preexisting cognitive structures.

IV. WHAT RESEARCH SAYS: ISSUES & PROMISES

This section concentrates on research related to several issues: acquisition of various genres; the match between what children learn from stories and what is required of them in reading other text types; and consistency between the generally occurring instructional practices with the general purpose of reading instruction.

Acquisition of multiple genres

Research by Harste, Woodward, & Burke (1984) has indicated that children as young as three years of age have tacitly learned that print can serve some communicative purpose. It is evident from the fact that they can differentiate drawing from writing. A recent study on narrative development among young children (e.g., by Hicks, 1990) points to a similar conclusion: children tend to structure events in genre-specific ways, according to social interactions they are engaged in. In Hicks' study, after being exposed to a silent movie, a number of young children were asked to assume three different roles and render verbally the movie they saw. The researcher found that the children demonstrated their abilities to produce three contrasting kinds of texts as demanded by different contexts of situation (i.e., roles) : a news report, an eventcast, and a story.

A study of story and non-story books reading (or reading "reenactment") by Pappas (1991) has also provided evidence that children as young as kindergartners clearly demonstrate their understanding of different purposes and structures of written genres (i.e., stories and nonstories). This research has led Pappas to conclude that young children can "process" both narrative and informational texts equally well. Along the same line, Newkirk (1989) argued that children's beginning writing reflects diverse forms and functions, approximating variability of conventional written genres. For instance , Newkirk has contended that list-making, which is common in children's early writing, is a precursor to exposition writing.

In summary, as review of the research has indicated, children acquire tacit knowledge of multiple genres from the wealth of literacy events surrounding them. The acquisition of different genres is not necessarily linear and sequential, as it depends more on the sorts of literacy experiences that individual children have rather than on the basis of relative complexity of textual properties of each genre.

The idea of limiting children's exposure to one single genre is, therefore, difficult to justify because such limitations will ill-prepare children in learning other text types in different genres.

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From living through stories to learning from texts

Rosenblatt (e.g., 1982; 1991) has argued that any reading event falls on the continuum between the aesthetic pole (reading event during which the reader's attention is primarily on the lived-through experience) and efferent pole-- the time when the reader's primary reading goal is information getting. Empirical evidence exists which shows that readers tend to process texts differentially as a function of their reading purposes and text types. Studying the ways in which students from various grades construct meanings when reading for literary-engagement and information-acquisition purposes, Langer (1990) found differences in thinking processes: the readers tend to make outward connections ("exploring horizons of possibilities") when engaging stories; and, in constrast, when reading expository passages they tend to maintain a focused point of reference, suggesting "downward diving" into the topic under discussion.

This suggests that it runs counter to efficient reading strategies if we expect students to transfer the way they read stories to other text types.

Teaching the lessons and the kids

Evidence from instructional studies by F.R. Smith & Feathers (1983b) and Armbruster et al. (1991) reviewed earlier suggests that

teachers tend to neglect comprehension instruction because they are preoccupied with the desire to cover the contents of the subject matter under study. The allegation concerning lack of opportunities for children to be intensively engaged in reading has recently gained support from Stodolsky's (1989) study (cited in deCastell, 1990). In her observational study of 39 fifth-grade math and social studies classes, Stodolsky found that higher challenges--that is a more demanding, higher-level treatment of content-- occurred when learners work alone or in a group rather than when teachers were directly involved.

In light of this evidence, it seems unrealistic to expect children to learn to be independent readers when they are not given appropriate instructional assistance and sufficient opportunities to be intensively engaged in reading the textual materials.

V. IMPLICATIONS AND SUGGESTIONS

This chapter centers on some implications derived from the foregoing discussion. First three "levels" of implications-- approach, design, and procedures-- will be discussed. Some suggestions for improving reading instruction will then follow.

Approach

Following the lead suggested by Richards and Rogers (1986) the term approach here is used to refer to literacy theories and the nature of literacy learning.

As suggested in foregoing sections, literacy is embedded in social use of reading and writing various genres for various communicative purposes. As members of their culture children acquire multiple genres simultaneusly as they observe and participate in various literacy events in their social lives. Just like the way they use speaking styles and registers in response to the social context in which they find themselves (Halliday, 1975), children also learn, albeit tacitly, the social rules of different written genres from their environment (Harste et al., 1984; Pappas, 1991).

Given this thinking, and in light of research evidence discussed earlier (e.g., Hicks, 1991; Newkirk, 1989; Pappas, 1991), the claim that narrative is primary and the rest secondary seems to be no longer tenable. In consequence, children should no longer be viewed as "narrative bound," but rather they should be placed in their full status as "competent semioticians" (Pappas, 1993), which are entitled to access to full literacy acts and artifacts the culture can offer.

Design

Parallel to the notion of children as capable symbol users,
literacy instruction should provide children with a wide range of
opportunities to participate in social use of various genres in ways
similar to what they see others using literacy for real life
purposes. In this way, literacy instruction can serve the children
with high degree of relevance-- both horizontally relative to their
present needs, as well as vertically in relation to their forseeable
future needs in response to real life demands. When children find
realistic purposes in what whey are doing, the chances are good that
children will take ownership of their learning and they may in turn
become self-motivated and self-directed.

This line of thinking suggests that in order to help children
develop into self-motivating and self-directing learners, literacy
instruction must "teach independence" (Singer & Donlan, 1980).

Classroom Procedures: Some Guiding Objectives

Consistent with the literacy approach and instructional design
described above, I am proposing the following guiding objectives.
First, reading instruction should provide children with
opportunities to be meaningfully engaged in reading various text
types from various genres. Second, instructional practice centers on
learners. Third, reading instruction should "empower" the learners.

In order to further translate those objectives, the following elaboration is presented.

Meaningful learning through various genres

In order for learning from text to be meaningful, reading activities should have a reasonably valuable purpose external to themselves. To ensure this, together with learners, the teacher should make explicit the purposes for all reading (and reading-related) activities conducted in class. For instance, the teacher can devise some _other_ activities which require learners to read the text in order to perform the activities.

In this way, the reading process has a clear focus.

Learning to be in charge

Instructional interventions should be "empowering" in that the result of instruction should make learners more independent in dealing with similar textual demands both in content-related reading across subject matters as well as in a similar situation outside the classroom.

This means that the teacher should always remind herself of the "locus of control" so that she can gradually release the learning responsibility to learners.

To assist children to develop capabilities to take charge in

their own learning, the teacher can explicitly teach the students various learning strategies--i.e., actions deliberately selected to achieve a particular goal (Paris, Wasik, & Turner, 1991)-- to learn from various content-area texts. For this purpose, the teacher should use multiple texts, and demonstrate to the ~~learners how~~ to approach different texts using different techniques before, during, and after the reading act, and provide the learners with concrete, direct and/or vicarious experiences in doing the same.

In this way, the learners have the opportunity to see and learn for themselves how some strategies can enhance their comprehension of content-area texts and how to learn from texts (Ogle, 1989).

Learning to be independent

In order to become independent readers, learners need to develop both various ways of learning new content as well as awareness of their own learning process and achievement of their learning objectives. The teacher can play a role on this by, for instance, working with students in developing purposes for reading. The teacher can also help learners develop reading strategies by modeling, "cognitive coaching" processes, in which she demonstrates processing textual information by thinking aloud. By doing this, the teacher provides a direct, concrete model both in the forms of

observeable behavior and thinking processes for the learners to see and follow.

In order to support learners' independence, the coaching should be performed in a way consitent with the principle of "gradual release of responsibilty": demonstration by the teacher followed with direct explanation; guided engagement by learners with teacher's support; and then independent practice by learners to be followed with evaluation and reflections by both learners and the teacher. In this way, learners can gradually master the "operation" and then , upon repeated opportunities to perform it with teacher's support, they internalize it for their independent use.

Suggestions

Keeping in mind the ultimate purpose of reading instruction-- i.e., helping children to develop into independent, strategic readers-- and consistent with the "guiding objectives" outlined earlier, I am proposing the folowing suggestions.

o <u>Introduce to children all types of text (narrative, procedural, and expository) from the first year of their schooling</u>

Exposure to and engagement with various types of genres will open up "multiple entries" for children's learning. According to Gardner (1993), individuals-- alone and collectively-- benefit from instruction utilizing a variety of entry points.

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In other words, besides an entry through narrative, it is necessary that children are encouraged to use other viable entries such as hands-on experience through the use of procedural text, and "windows of logic" (Gardner, 1993, p.184) through expository text.

o <u>Encourage children in early grades to read a great deal of informational and procedural texts as a source of knowledge</u>

Emphasizing the function of informational and procedural text as a source of knowledge is important to ensure that children see utility value of what they read. The teacher can do this by, for instance, providing learners with text-based or text-inspired post-reading activities. Collaborative writing on a group-selected topic drawing information from multiple texts is a good example for this purpose.

Early experience with "functional reading" will likely motivate the children to further learn from text, as the experience gives them sense of personal relevance.

o <u>Teach children how to read and learn from text</u>

Reading is meaning-making. This means that the children need to <u>read the text</u> in order to construct the understanding from the text. Teachers should show the children how she reads text-- not explaining the content of text by other means, such as video

presentation, slides, etc.

As children read text more and more, the chances are good that they will develop a larger interpretive scheme, which, in turn, will help them read more and with better comprehension.

CONCLUDING REMARKS

The paper has attempted to lay out some research evidence to show that every text type makes a unique demand on readers, necessitating the latter to respond to it in a certain way. Given this thinking, arguments have been advanced to support the idea that, eventually, we would do students disservice if we continued focusing on a single type of text as currently practiced in some schools. Put another way, if we want children to develop into strategic and self-directed readers, we must provide students with a great deal of opportunities to read various types of text as early as possible, so that they can continue developing the tacit knowledge of literacy they have acquired since their preschool age.

Responding to the findings of some classroom research reviewed in chapter IV, I proposed an alternative approach, design, and some "guiding objectives" for reading instruction. These objectives include the ideas of creating meaningful contexts for students engagement with various text types, relinquishing learning responsibility to students, and promoting students' independence in

learning. To further translate these general instructional objectives, some more practical, fundamental suggestions have also been presented: (a) early introduction of learners to procedural and expository texts in addition to narrative, which seems to have so far been treated in a very special way; (b) deliberate encouragement of children to treat different texts differently; and (c) provision of "cognitive modelling" and numerous opportunities for learners to read the text with cognitive as well as affective involvement consonant with the text type and reading purposes.

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