DOCUMENT RESUME

ED 386 866 EC 304 255

| | |
|---|---|
| AUTHOR | Gunn, Barbara K.; And Others |
| TITLE | Emergent Literacy: Synthesis of the Research. Technical Report No. 19. |
| INSTITUTION | National Center To Improve the Tools of Educators, Eugene, OR. |
| SPONS AGENCY | Special Education Programs (ED/OSERS), Washington, DC. |
| PUB DATE | 20 Feb 95 |
| NOTE | 50p. |
| PUB TYPE | Information Analyses (070) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | *Beginning Reading; Cultural Differences; Cultural Influences; Disabilities; Early Experience; *High Risk Students; *Language Acquisition; Language Impairments; *Literacy; Literacy Education; Phonology; *Prereading Experience; Preschool Education; Primary Education; Printed Materials; Reading Research; Special Needs Students; Text Structure |
| IDENTIFIERS | *Emergent Literacy |

ABSTRACT

Research on the relationship between early childhood literacy experiences and subsequent reading acquisition is reviewed, with a focus on awareness and knowledge of print. Research studies included children, preschool age to age 7, who were identified as normally achieving, at risk, and linguistically diverse. One of the studies involved children with cognitive, physical, emotional, behavioral, learning, and developmental disabilities. Definitions of emergent literacy are presented, and common approaches for studying literacy development are identified. The following topics from the research literature regarding emergent literacy are considered: awareness of print, relationship of print to speech, comprehension of text structures, phonological awareness, and letter naming and writing. Attention is also directed to general areas of literacy experiences which facilitate knowledge, including cultural communication practices and community/home literacy experiences, and the contributions of interactive dialogue, storybook reading, and symbolic play to literacy knowledge. A chart identifies study author(s) and year, number and type of study participants, the emergent literacy dimension, and the study purpose. (Contains 26 references and 1 table.) (SW)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

EDRS

ED 386 866

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

National Center to Improve the Tools of Educators

College of Education
University of Oregon

# Emergent Literacy: Synthesis of the Research

EC 304255



BEST COPY AVAILAB

EDRS

Technical Report No. 19 produced for the National Center to Improve the Tools of Educators, University of Oregon

Funded by the U.S. Office of Special Education Programs

# Emergent Literacy: Synthesis of the Research

by
Barbara K. Gunn
Research Assistant
College of Education
University of Oregon

Deborah C. Simmons, Ph.D.
Assistant Professor
College of Education
University of Oregon

Edward J. Kameenui, Ph.D.
Associate Director
National Center to Improve the Tools of Educators
College of Education
University of Oregon

February 20, 1995

EDRS



# Emergent Literacy: Synthesis of the Research

Barbara K. Gunn

Deborah C. Simmons

Edward J. Kameenui

University of Oregon

EDRS



## Introduction

Although most preschool-age children cannot read and write in the conventional sense, their attempts at reading and writing show steady development during this stage (Hiebert, 1988). Typically, reading research in this developmental period has focused on discrete skills that are prerequisite to reading, such as letter-sound correspondences and letter naming. By highlighting the processes and products of initial reading instruction, however, this research has largely excluded the role that writing (van Kleeck, 1990) and early childhood literacy learning play in facilitating reading and writing acquisition. In contrast, the emergent literacy perspective, which emanated from cognitive psychology and psycholinguistics, takes a broader view of literacy and examines children's literacy development before the onset of formal instruction (Hiebert & Papierz, 1990; Mason & Allen, 1986; McGee & Lomax, 1990; Sulzby & Teale, 1991).

From an emergent literacy perspective, reading and writing develop concurrently and interrelatedly in young children, fostered by experiences that permit and promote meaningful interaction with oral and written language (Sulzby & Teale, 1991), such as following along in a big book as an adult reads aloud or telling a story through a drawing (Hiebert & Papierz, 1989). Through the concept of emergent literacy, researchers have expanded the purview of research from reading to literacy, based on theories and findings that reading, writing, and oral language develop concurrently and interrelatedly in literate environments (Sulzby & Teale, 1991). Thus, this contemporary perspective stresses that developmental literacy learning occurs during the first years of a child's life (Mason & Allen, 1986) and is crucial to literacy acquisition (McGee & Lomax, 1990).

The purpose of this chapter is to identify and discuss areas of emerging evidence on the relationship between early childhood literacy experiences and subsequent reading acquisition. We do not wish to minimize the role of oral

EDRS



language in early literacy development, for it serves as a companion to the development of reading and writing. However, our focus is on aspects of literacy acquisition that are related to awareness and knowledge of print. First, dimensions of literacy knowledge and literacy experiences are discussed, based on data from recent primary studies and reviews of emergent literacy research. Then areas of emerging evidence are examined for instructional implications for children entering school with diverse literacy experiences.

## Methodology

### Types of Sources

We reviewed 24 sources including 13 primary studies (Brown & Briggs, 1991; Crain-Thoreson & Dale, 1992; Dickinson & Tabors, 1991; Ehri & Sweet, 1991; Hiebert & Papierez, 1990; Hildebrand & Bader, 1992; Katims, 1991; Morrow, 1990; Morrow, O'Connor, & Smith, 1990; Roberts; 1992; Scarborough, Dobrich, & Hager, 1991; Snow, 1991; Stewart, 1992). Secondary sources included ten overviews of research (Copeland & Edwards, 1990; Mason & Allen, 1986; Pellegrini & Galda, 1993; Sulzby & Teale, 1991; Teale & Sulzby, 1987; van Kleeck, 1990; Hiebert, 1988; McGee & Lomax, 1990; Smith, 1989; Weir, 1989), and one quantitative synthesis (Stahl & Miller, 1989).

### Participant Characteristics

Participants in the research reviewed included children identified as normally achieving, at-risk, linguistically diverse, and, in one study (Katims, 1991), children identified with cognitive, physical, emotional, behavioral, learning, and developmental disabilities. Due to the emergent literacy focus, the age of the subjects ranged from preschoolers to seven-year olds, with the majority being preschool and kindergarten children.

EDRS



Measures

Morrow et al. (1990) observed that the measures selected for a study influence the findings and conclusions of that study. Measure selection is a significant consideration in any research design, but is particularly important in emergent literacy where researchers address issues raises by other researchers and relate data across studies to consolidate existing research (Sulzby & Teale, 1991).

Measures in the research reviewed reflected the observational/descriptive nature of emergent literacy investigations and included direct observation of literacy behaviors, parent/child questionnaires about home literacy activities, and researcher-developed measures to assess listening comprehension and letter and word knowledge. Other, less frequently used measures included Clay's (1966) Concepts about Print Test, the School-Home Early Language and Literacy Battery Kindergarten (SHELL-K), and standardized measures such as the Peabody Picture Vocabulary Test - Revised (PPVT-R) and the California Achievement Test (subtests of visual and auditory discrimination, sound recognition, vocabulary, and oral comprehension).

Overview of Emergent Literacy Research

Definitions of emergent literacy. Our review of research revealed numerous but complementary definitions of emergent literacy. Researchers agreed that emergent literacy (a) begins during the period before children receive formal reading instruction, (Stahl & Miller, 1989; Teale & Sulzby, 1987; van Kleeck, 1990), (b) encompasses learning about reading, writing and print prior to schooling (Sulzby & Teale, 1991), (c) is acquired through informal as well as adult-directed home and school activities, and (d) facilitates acquisition of specific knowledge of reading. Emergent literacy differs from conventional literacy as it examines the range of settings and experiences that support literacy, the role of the child's contributions

EDRS



(i.e., individual construction), and the relation between individual literacy outcomes and the diverse experiences that precede those outcomes.

Definitions of Emergent Literacy Terms

The term "emergent" denotes the developmental process of literacy acquisition and recognizes numerous forms of early literacy behavior. While frequently discussed in the research we reviewed, these early literacy behaviors (or areas of knowledge) are characterized by terms that are defined in different ways by different authors. The following definitions of emergent literacy terms represent the most commonly used meanings of those terms, and will facilitate understanding of the review of emergent literacy.

Conventional literacy: reading, writing, and spelling of text in a conventional manner.

Conventions of print: knowledge of the semantic and visual structure of text.

Purpose of print: knowledge that words convey a message separate from pictures or oral language.

Functions of print: awareness of the uses of print from specific (e.g., making shopping lists, reading street signs, looking up information) to general (e.g., acquiring knowledge, conveying instructions, maintaining relationships).

Phonological awareness: conscious ability to detect and manipulate sound (e.g., move, combine, and delete), access to sound structure of language, awareness of sounds in spoken words in contrast to written words.

Dimensions of Emergent Literacy

Children begin school with diverse experiences and understandings of print: what it is, how it works, and why it is used. These experiences and understandings give rise to general literacy-related knowledge, as well as specific print skills and oral language competencies (Dickinson & Tabors, 1991; Mason & Allen, 1986). Our review revealed that through exposure to written language (e.g., storybook reading

EDRS



and daily living routines) many children develop an awareness of print, letter naming, and phonemic awareness. Additionally, through exposure to oral language, preschool children develop listening comprenension, vocabulary, and language facility. These initial understandings about print are particularly important considering that children who are behind in their literacy experiences upon entering school become "at risk" in subsequent years (Copeland & Edwards, 1990; Mason & Allen, 1986; Smith, 1989). For example, Scarborough et al. (1991) examined the relation of preschool development to later school accomplishment using parental reports about literacy activities in children's homes during their preschool years and assessments of reading achievement. They found that by the time poor readers entered school they had accumulated substantially less experience with books and reading than those who became better readers. Similarly, Ferreiro and Teberosky (cited in Mason & Allen, 1986) found that children who entered school without understanding the link between their oral language experiences and formal instruction did not advance at the same rate in learning to read and write as children who did make the connection.

Characteristics of Emergent Literacy Research

To understand the implications of emergent literacy for initial reading acquisition, it is helpful to examine the characteristics of the research in this area. To date, emergent literacy research is comprised of more descriptive and correlational studies than experimental investigations (Mason & Allen, 1986; Teale & Sulzby, 1987). This emphasis on descriptive research is not atypical of an area of emerging interest as such a phase is important for identifying the features and dimensions of the phenomenon of interest. One area, phonological awareness, has been the subject of extensive experimental research, and has garnered more attention and examination at the experimental level. This is reflected in both the

EDRS



level of sophistication and the detail of findings, and as such, we exempt phonological awareness from subsequent discussions of emergent literacy research.

Studies of emergent literacy have multiple foci (Sulzby & Teale, 1991; van Kleeck, 1990). To learn about the role of family environment and literacy development, researchers have relied upon descriptive research in the form of naturalistic observations. Ethnographic studies, for example, have described literacy artifacts in preschool children's environment and provided details about the literacy events to which they are exposed and in which they participate. Such studies are useful as they provide information about the literacy experiences of children from various cultures and backgrounds. Examples of ethnographic observation were found in Hiebert's (1988) overview of emergent literacy research, including studies examining the role of word games (e.g., Tobin, cited in Hiebert, 1988), storybook reading (e.g., Snow & Ninio, cited in Hiebert, 1988), and chalkboards (Durkin, cited in Hiebert, 1988) in familiarizing children with the functions of literacy.

A second type of naturalistic observation has looked more specifically at the nature of adult-child interactions surrounding literacy events (Mason & Allen, 1986; Scarborough et al., 1991; Snow, 1991; Teale & Sulzby, 1987) to discern how adults foster literacy development. One example is a longitudinal study of the relation between preschool literacy development and later school achievement. Here Scarborough et al. (1991) interviewed middle-class parents about adult reading, parent-child reading, and children's solitary book activities in the home. Similarly, Hildebrand and Bader (1992) investigated the family literacy-related activities of 59 parents of children ages three to 5-1/2 to determine the contributions parents make to the home literacy environment.

A third type of research has moved beyond descriptive methodologies to determine which aspects of preschool literacy experience best predict reading achievement. For example, Dickinson and Tabors (1991) administered the School-

EDRS



Home Early Language and Literacy Battery Kindergarten (SHELL-K) to a sample of five-year-olds to identify the components of their language and literacy development and the experiences that contributed to those components.

Descriptive, correlational methodologies and experimental designs are beginning to be used in complement to examine factors associated and causally linked with early literacy acquisition (Mason & Allen, 1986; Sulzby & Teale, 1991). As researchers continue to investigate factors that influence pre conventional reading and writing, measures of effectiveness and methods of assessment should become more refined and validated across studies, which should result in a more consistent examination of data. Moreover, as findings from descriptive studies are used to plan interventions and as the effects of those interventions upon literacy development are examined, the emergent literacy knowledge base will grow. To date, experimental interventions examining causal relations are limited; therefore, areas of emerging evidence should be interpreted with caution.

In this chapter, we focus first on converging themes in emergent literacy research and examine what is known about five areas of emergent literacy: awareness of print, relationship of print to speech, text structure, phonological awareness, and letter naming and writing. Next, we present conclusions about general areas of literacy experiences that facilitate that knowledge, including cultural communication practices and community/home literacy experiences. Finally, we examine the specific contributions of interactive dialogue, storybook reading, and symbolic play to literacy knowledge.

---

Insert Figure 1 about here

---

## Areas of Literacy Knowledge

Numerous frameworks have been set forth for categorizing areas of literacy knowledge (Mason & Allen, 1986; Morrow et al. 1990; Stahl & Miller, 1989; van Kleeck, 1990). Although these frameworks differ in structure, certain areas of literacy knowledge are common across the emergent literacy literature. The following structure, adapted from van Kleeck (1990) reflects those areas: (a) awareness of print, (b) knowledge of the relationship between speech and print, (c) text structure, (d) phonological awareness, and (e) letter naming and writing. Each of these areas develops concurrently and interrelatedly, and continues to develop across the preschool and kindergarten period. Moreover, acquisition of these skills is an important part of early childhood literacy development, and substantially affects the ease with which children learn to read, write, and spell (Hiebert, 1988; van Kleeck, 1990; Weir, 1989).

### Awareness of Print

Experiences with print (through reading and writing) give preschool children an understanding of the conventions, purpose, and function of print – understandings that have been shown to play an integral part in learning to read. Because certain terms are used differently across the emergent literacy research, the way we use a term may differ slightly from the way a particular author uses it; nonetheless the gist of the concept is retained. Generally, "awareness of print" has refers to a child's knowledge of the forms and functions of print. For this review, we define "forms" as knowledge of the conventions of print, and "functions" as the purposes and uses of print. In this section, each of these types of print awareness is discussed in relation to the contribution it makes to a child's literacy knowledge.

Conventions of print. Children learn about print from a variety of sources, and in the process come to realize that although print differs from speech, it carries

EDRS



messages just like speech (Morrow et al. 1990). Eventually, children learn that print - not pictures - carries the story. As preschool children listen to stories they learn not only how stories are structured semantically in terms of ideas but also visually in terms of their appearance on the printed page. That is, text begins at the top of the page, moves from left to right, and carries over to the next page when it is turned (Ehri & Sweet, 1991).

Attention to conventions of print is also seen in the development of written language. Children begin writing even before they can form letters, and this early writing reveals children's early attention to the conventions of written language (van Kleeck, 1990). Hiebert (1988) characterized this as a developmental progression in which early attempts at messages may take the form of scribbles that take on characteristics of the writing system, such as linearity. Eventually, the scribbling is superseded by letter-like forms which, in turn, are replaced by letters, generally familiar ones such as those in the child's name.

Functional and varied experiences in reading and writing print help children develop specific print skills, which appear to play an integral part in the process of learning to read (Dickinson & Tabors, 1991; Mason & Allen, 1986). Because of differences in parental support for literacy, however, children do not come to school with the same range of print related experiences (Mason & Allen, 1986). The failure of some children to pick up on physical cues to the nature of reading (e.g., sounds are arranged temporally, whereas writing is arranged permanently in space) means that teachers may need to assess children's level of understanding about print concepts and, when necessary, plan instruction to develop such understanding (Jagger & Smith-Burke, cited in Mason & Allen 1986). This may be accomplished by extending opportunities for children to interact with oral and written language in meaningful contexts such as story reading sessions in which book-handling skills are discussed (Weir, 1989).

EDRS



Purpose and functions of print. Children understand the purpose of print when they realize that words convey a message; they understand the function of print when they realize that messages can serve multiple purposes (van Kleeck, 1990). While knowledge about the conventions of print enables children to understand the physical structure of written language, the conceptual knowledge that printed words convey a message - that is, the printed words contain meaning independent of the immediate social context - also helps young children bridge the gap between oral and written language. Additionally, as a result of interacting with and observing adults in their environment using print, preschool children also understand the vocabulary of reading in instructional contexts such as read, write, draw, page, and story (Morgan cited in Weir, 1989; van Kleeck, 1990). When formal instruction begins, the child who has this vocabulary about print-related phenomena is more likely to understand the basic vocabulary in the classroom.

Print serves a broad variety of functions. The scope of print functions ranges from very specific (e.g., making shopping lists, reading product labels, writing checks, reading street signs, looking up information) to very general (e.g., acquiring knowledge, conveying instructions, and maintaining relationships). Because all preschool children are not exposed to the same range of print-related experiences, their knowledge of these functions varies considerably. This variation in knowledge of the functions of print is related to daily routines in the child's home; it will be developed more fully in a subsequent section on the role of family environment.

Developmental patterns. Our review of research revealed that conclusions about factors that promote the development of awareness of print (i.e., knowledge of the purposes and processes of reading and the ability to recognize print embedded in environmental contexts) are limited. Lomax and McGee (cited in Hiebert, 1988; Weir, 1989) analyzed developmental patterns of children ages three to six on a

EDRS



hierarchy of reading-related skills and the ability to recognize print embedded in environmental contexts. According to their model of developmental patterns, awareness of print preceded graphic awareness, followed by phonemic awareness, grapheme-phoneme correspondence knowledge, and word reading.

Specifically, pre kindergarten children demonstrated facility with only the early developing capabilities (e.g., awareness of print and graphic awareness), while gains by older children with succeeding capabilities (e.g. word reading) were reported to depend on proficiency with earlier skills. It appears that levels of preschool literacy competency do exist, and furthermore, these competencies may play a role in facilitating subsequent reading related skills (Weir, 1989).

Relationship of Print to Speech

The ability to map oral language onto print is important for early reading and writing experiences. Through interaction with others who model language functions, children learn to attend to language and to apply this knowledge to literacy situations. In English, the relationship between oral language (speech) and written language (print) uses the equivalence between phonemes and graphemes. However, since talking and reading are different processes and produce different outcomes (Akinnaso, cited in Mason & Allen, 1986), we cannot assume that children learn this equivalence solely by mapping their knowledge of oral language onto written language (Mason & Allen, 1986). Typically, it has been viewed as a developmental process, rather than an accumulation of discrete skills. Letter knowledge and phonological awareness are constituent skills in children's ability to realize this relationship (Ehri & Sweet, 1991; van Kleeck, 1990), but even before progressing to that level of knowledge, they may participate in less conventional forms of reading and writing that reflect their initial ideas about the relationship between speech and print (Hiebert, 1988; van Kleeck, 1990). For example, children may initially adopt a strategy in which they use one grapheme to represent one

EDRS



sound in an entire syllable or word, such as "Sio" to represent Santiago (Ferreiro, cited in van Kleeck, 1990). This may be followed by invented spelling which although not yet conventional, does adhere to the correspondence in the English orthography (van Kleeck, 1990).

Although the communicative function of oral language might make the acquisition of written language a natural process (Goodman & Goodman, cited in Mason & Allen, 1986), research suggests that written language acquisition can be problematic - due in part to basic differences between the linguistic properties of oral and written language.

Citing Perera's framework, Mason and Allen (1986) summarized the physical, situational, functional, form, and structural differences between oral and written language, and considered the impact of those differences on language instruction in the classroom.

For example, certain physical differences exist between written and spoken language. Print is processed by eye while speech is processed by ear (Kavanagh & Matingly, cited in Mason & Allen, 1986). This means, for example, that it may take six minutes to write a paragraph from a speech, but only one minute to read it.

Because of differences in early literacy experiences, children may come to school with varying concepts about the distinctions between the physical cues of reading and the aural cues of spoken language. For example, Ferreiro and Teberosky (cited in Mason & Allen, 1986) found that children varied in their ability to distinguish between oral conversation and a fairy tale or a news item when a researcher "read" to them from a storybook or a newspaper. Such failure to pick up on physical cues that differentiate written from spoken language can be problematic for beginning readers. To help children succeed in relating oral language to print, teachers may need to assess children's knowledge about the differences between

EDRS



speech and print, then clarify and expand their understanding (Jagger & Smith-Burke, cited in Mason & Allen, 1986).

Situational differences between oral and written language are apparent. Oral language most often occurs in a face-to-face context where the listener has the opportunity to ask for clarification or information. In written language or text, however, readers and writers are usually separated. Consequently, the writer must assume that the reader has the knowledge to process and comprehend the text. The reader in turn, must move backward or forward in the print to clarify information (Mason & Allen, 1986).

The multiple functions of language children use depends upon the context and the desired function of a given communication. Whereas oral language is generally used to express, explore, and communicate, written language is used as a means for expanding one's own thinking, by prompting comparisons and analysis (Mason & Allen, 1986). If children have not had extensive interaction with adults who model these language functions before coming to school, then the teacher must incorporate opportunities into the curriculum.

When English is seen in print form, each letter is a distinct visual form, and each word is distinct due to the spaces between the words (Mason & Allen, 1986). Other physical characteristics include indentation, punctuation, and capitalization. By contrast, in speech the boundaries between words and even phonemes may be obscured as Ehri (cited in Mason & Allen, 1986) illustrated in comparing the written "Give me a piece of candy" with the spoken "Gimme a pieca candy" (p.6).

Finally, spoken and written language differ in structure. For example, speakers tend to be more redundant than writers, and speech is also more informal than writing, as evidenced by the greater frequency of incomplete sentences, slang expressions, and meaningless vocalizations that function as place holders for thought in spoken language (Perera, cited in Mason & Allen, 1986). For children

EDRS



who come to school with differing exposures to the written and spoken discourse structures, awareness of the structural differences between spoken and written language may not be evident and, therefore, may negatively affect the transfer from listening to reading comprehension.

Given the differences between oral and written language, what are the instructional implications for children who have difficulty making the link between their oral language experiences and formal instruction in reading and writing? Several studies have suggested that when text is designed to resemble speech, beginning readers can process it more readily. Allen (cited in Mason & Allen, 1986) found that primary-grade children performed better on inferential comprehension tasks when the texts were closely linked to the children's oral language. Seventy children of varied reading ability read dictated, peer-written, and textbook stories. Allen observed that even the least able readers inferred well when reading their own texts, and they inferred somewhat better on peer stories than textbook stories. Similarly, Amstersam (cited in Mason & Allen, 1986) reported that children who repeated and later recalled natural language versus primerese versions of fables gave more complete recalls and fewer unnecessary repetitions of the text than children who used the language of the text.

These general manipulations of beginning reading instruction designed to lessen the differences between speech and print may be helpful for at-risk children. However, further research is needed to determine the specific sources of difficulty which at-risk populations experience in transferring speech to print, and how those children might best be helped (Mason & Allen, 1986).

Comprehension of Text Structures

As the ability to map oral language onto print is important for early reading and writing experiences, awareness of story grammar or text structures is important in facilitating children's comprehension of spoken and written language (Just &

EDRS



Carpenter; Perfetti, cited in van Kleeck, 1990). Children come to school with differing exposures to grammatical and discourse structures (Mason & Allen, 1986). Those who have had exposure to oral or written texts through storybook reading dialogue in the home may be sensitive to the schematic structure of stories from a very young age (Applebee, cited in van Kleeck, 1990). In fact, children recognize such features as formal opening and closing phrases (e.g., "Once upon a time") as early as two years of age. They also abstract a structure for the organization of stories and use this structure in their own comprehension and writing.

In their analysis of the writing of 16 kindergarten children, Brown and Briggs (1991) found that age, prior knowledge, level of social interaction, and environmental experiences influenced the participants' awareness of story elements. Moreover, repeated reading activities as well as reading a wide variety of discourse structures can influence the content and organization of children's stories by facilitating comprehension and developing story knowledge (Brown & Briggs, 1990; Mason & Allen, 1986; van Kleeck, 1990).

Although comprehension of text structures facilitates children's comprehension, few empirical investigations have been conducted in this area, thus limiting converging evidence.

Phonological Awareness

Phonological awareness is reviewed extensively in another chapter; however, in this chapter we review its role and integral relation to emergent literacy.

In an alphabetic writing system such as English, beginning readers must use the alphabetic code to understand the link between the sounds of speech and the signs of letters (Mason & Allen, 1986; Sulzby &Teale, 1991). Phonological awareness, or the ability to perceive spoken words as a sequence of sounds, is a specific auditory skill which is of crucial importance to reading ability in an alphabetic system. Because research has established a correlational, if not causal relation between

EDRS



phonological awareness and reading (Ehri & Sweet, 1991; Mason & Allen, 1986; Sulzby & Teale, 1991; van Kleeck, 1990), phonological awareness is often raised in discussions of early childhood literacy education (Sulzby & Teale, 1991). Indeed, of all the areas of literacy knowledge developed during the preschool years, none has been studied as extensively or related as directly to early reading as phonological awareness (van Kleeck, 1990).

However, Sulzby and Teale (1991) noted that while phonological awareness has long been tied to research and practice in the teaching of phonics and other decoding skills, it has been neglected in emergent literacy due to the tendency to view phonological awareness research as traditional and bottom-up in theory. Despite this perspective, some researchers have argued that the ability to deal with the codes of alphabetic language does not automatically arise out of environmental print awareness. Instead, they suggested that young children must be helped to notice that words encode sounds as well as meaning (Dickinson & Snow; Mason; Masonheimer, Drum, & Ehri, cited in Sulzby & Teale, 1991).

Precursory phonological awareness skills such as rhyming and alliteration can emerge in informal contexts before school, and are seen in young children who can neither read nor spell (Snow, 1991; van Kleeck, 1990). A general order for the emergence of other phonological awareness abilities typically begins when children divide sentences into semantically meaningful word groups. According to Fox and Routh (cited in van Kleeck, 1990), the ability to segment sentences into words emerges next, followed by the more phonologically based skill of segmenting words into syllables. The ability to segment words into phonemes comes last (in their study, one quarter of words were segmented into phonemes by age three years). This general order of emergence has been supported in other investigations; however, the children in those studies tended to be older (Ehri; Holden &

EDRS



MacGinitie; Huttenlocher; Liberman; Liberman, Shankweiler, Fisher, & Carter, cited in van Kleeck ,1990).

In contrast to the informal context in which they acquire other emergent literacy skills, most children require specific instruction to acquire the phonological awareness skill of segmentation, or the ability to segment words into their component phonemes, and often master it later than other foundations for print literacy (van Kleeck, 1990). It has also been suggested that general phonological awareness skills be taught in conjunction with letter-sound knowledge to facilitate reading acquisition. Based on their review of research on instruction in phonological awareness, Ehri and Wilce (cited in Sulzby & Teal, 1991) reported that young children can be taught phonological awareness prior to formal reading instruction if they have a certain amount of letter knowledge. Training studies reviewed by Mason and Allen (1986) also revealed the advantages of knowledge of letter-sound principles for reading and spelling. They reported that when children understand that words contain discrete phonemes and that letters symbolize these phonemes, they are able to use more efficient word recognition strategies than when they rely on non phonetic strategies.

Mason and Allen (1986) summarized their review of phonological awareness research by noting that instructional studies have led to improved outcomes in reading, but questions remain about how to employ information about word-and-letter recognition strategies to improve instruction. The authors concluded that while it is important for children to learn about letter-sound relationships, it should not be at the expense of reading comprehension opportunities or independent reading activities. Similarly, Sulzby and Teale (1991) proposed that without fundamental understandings of the functions and uses of literacy (e.g., storybook reading, language play, written language use in everyday practices), children may not profit from phonological awareness instruction. They suggested that future

EDRS



investigations of phonological awareness combine rigorous classroom-based research on phonological awareness training and its relation to overall early childhood curriculum.

EDRS



Letter Knowledge

Both phonological awareness and letter recognition contribute to initial reading acquisition by helping children develop efficient word-recognition strategies such as detecting pronunciations and storing associations in memory. Letter knowledge, like phonological awareness, may be acquired either though formal instruction or incidentally. Through incidental learning, for example, many children gain at least some concepts and skills related to the formal aspects of print prior to school (Hiebert & Papierz, 1990). They learn about the functions of written language in storybooks and poems while they learn about the forms (e.g., letter naming and visual discrimination) of written language (Hiebert, 1988).

Letter knowledge, which provides the basis for forming connections between the letters in spellings and the sounds in pronunciations, has been identified as a strong predictor of reading success (Ehri & Sweet, 1991) and has traditionally been a very important component of reading readiness programs (van Kleeck, 1990). Knowing the alphabet and its related sounds is associated with beginning literacy. In fact, letter knowledge measured at the beginning of kindergarten was one of two best predictors of reading achievement at the end of kindergarten and first grade - the other predictor was phonemic segmentation skill (Share, Jorm, Maclean, and Matthews, cited in Ehri & Sweet 1991). Furthermore, an analysis of the relationship between literacy development and participation in literacy activities at home revealed that children's exposure to letter names and sounds during the preschool years was positively associated with linguistically precocious performance on selected literacy measures (Crain-Thoreson & Dale, 1992).

Within the scope of this review, several reasons were offered for the effect of letter knowledge in reading acquisition. Based on observations of 5-year-old children in New Zealand, Clay (cited in Mason & Allen, 1986) concluded that:

EDRS



> ...before children learn to decode words in and out of context, they become able to use some letter-sound information to recognize, remember, and spell words. This is possible even if they are not taught the letter sounds, because the names of the alphabet letters provide clues to the phonemic representations in words (p. 18).

Ehri and Wilce (cited in Ehri & Sweet, 1991) hypothesized that letter knowledge enables beginning readers to adapt to the task of pointing to words as they read them and figure out how printed words correspond to spoken words. It may also enable them to remember how to read the individual words they encounter in the text. "This knowledge of letters provides the basis for forming connections between the letters seen in spellings and the sounds detected in pronunciations, and for storing these associations in memory in order to remember how to read those words when they are seen again" (p.446).

Although letter knowledge may be a strong component in preschool programs, children may also learn these skills at home. In a study of 59 parents of preschool children, Hildebrand and Bader (1992) found that children who performed high on three emergent literacy measures, including writing letters of the alphabet, were more likely to have parents who provided them with alphabet books, blocks, and shapes. The authors suggested that as children exhibit behaviors indicative of emergent literacy, parents and teachers can seize the teachable moments, and provide developmentally appropriate materials and interactions to further literacy development.

Whether letter knowledge is learned at home or at school, through word games or letters on the refrigerator, it appears to foster the development of subsequent reading strategies. However, further research is needed to provide more precise information about the kinds of instruction that are appropriate for children at varying stages of development and ability levels.

EDRS



In this section, we focused on emerging evidence in emergent literacy research and examined what is known about five areas of emergent literacy knowledge: awareness of print, relationship of print to speech, text structures, phonological awareness, and letter naming and writing. We also identified the following three areas of emerging evidence that have instructional implications for preschool and early elementary children.

#1 Experiences with print (through reading and writing) help preschool children develop an understanding of the conventions, purpose, and functions of print. These understandings have been shown to play an integral part in the process of learning to read.

#2 Children learn how to attend to language and apply this knowledge to literacy situations by interacting with others who model language functions.

#3 Phonological awareness and letter recognition contribute to initial reading acquisition by helping children develop efficient word recognition strategies (e.g., detecting pronunciations and storing associations in memory).

## Areas of Literacy Experiences

Development of literacy knowledge cannot be fully understood without understanding the contexts in which literacy is experienced (Mason & Allen, 1986; Teale & Sulzby, 1990). Some studies of emergent literacy have focused on the print-literacy environment of young children, while others have been interested in children's early literacy skills. Findings from both types of studies inform researchers about the role of contexts (i.e., culture, community, and family) in early literacy development and the kind of literacy knowledge children typically acquire during preschool years (van Kleeck, 1990). In the following section, we examine the social contexts that facilitate this knowledge, beginning with the larger context of culture, and then narrowing the focus to community/home environments, and finally family interactions.

EDRS



Communication Patterns and Practices in Culture and Society

The purposes for literacy vary both within and across countries, and those purposes affect literacy practices and achievement" (Mason & Allen, 1986, p. 5). For example, in Israel, Jewish children learn to read Hebrew in order to read the Bible, even though they do not speak Hebrew (Downing, cited in Mason & Allen, 1986). Similarly, in Japanese reading instruction, story selection is used to emphasize moral development (Sakamoto & Makita, cited in Mason & Allen, 1986), as in India where cultural values and socialization are stressed in reading primers. Therefore, "we cannot consider the literacy of a child or an adult without also considering the context and perspective or purpose in their culture" (Mason & Allen, 1986, p. 5).

Literacy acquisition is also influenced by societal expectations, and the value a culture places upon literacy for its members (Mason & Allen, 1986). For example, in Nepal, lower-caste children, particularly girls, are not encouraged to learn to read and write (Junge & Shrestha, cited in Mason & Allen, 1986). Similarly, minority cultures in the United States as in other countries have often received inadequate reading and writing instruction. Feitelson (cited in Mason & Allen, 1986) cautioned that in societies such as Israel that have accepted large numbers of families from underdeveloped countries, the literacy traditions of the main culture may be missing among immigrants. Yet, research on well-educated parents in mainstream cultures whose children make the transition to literacy does not inform educators about how to work with children from less-literate immigrant families (Mason & Allen, 1986).

Literacy values can also influence how children view the significance and function of written language and may provide a basis for their interest and success in reading and writing (Clay, cited in Copeland & Edwards, 1990). In observations of Maori and Samoan children in New Zealand Clay noted that while the two groups were about equal in oral language development at age 7, the Samoan children had

EDRS



made significantly better progress in reading than the Maori children -- progress that was equal to that of the Pakehas (the Maori word for New Zealand whites). Clay suggested that a critical difference was ..."the parental attitudes of Samoans favoring education and their influence as models for reading [at church] and writing letters home [to Samoa]" (cited in Mason & Allen, p. 6).

These studies reveal the impact of social expectations and context on literacy learning. What families and communities believe and value about literacy is reflected in the level of preparation children bring to formal instruction, and affects the role of schools in providing literacy experiences and instruction.

Community and Home Literacy Experiences

Literacy activities in the more immediate environments of home and community largely influence a child's literacy development (Morrow, 1990). Thus, a number of studies have documented the positive relation between children's literacy experiences at home and the ease with which children transition to school (Copeland & Edwards, 1990; Mason & Allen 1986; van Kleeck, 1990). However, family literacy environments differ along several dimensions. For example, although some development of print awareness seems to be common across cultures, significant differences exist in the quantity of exposure children have with written language, particularly storybook reading (Stahl & Miller, 1989).

Furthermore, parents' perceptions of the roles they can play in their child's literacy experiences also vary. In Heath's ethnographic study of Roadville (cited in Copeland & Edwards, 1990), a white working class community, and Trackton, a black working-class community, parents wanted their children to achieve in school, yet parents in both communities did not know they could help foster that success by writing extended pieces of prose or enriching their children's oral language experiences.

EDRS



Research cautions against using group membership as a yardstick for measuring children's literacy preparation. In a meta-analysis of nearly 200 studies, White (cited in van Kleeck, 1990) concluded that it was not socioeconomic status that contributed most directly to reading achievement, but rather other family characteristics related to context such as academic guidance, attitude toward education, parental aspirations for the child, conversations and reading materials in the home, and cultural activities. In the next section then, we examine more specific research on literacy experiences in the context of the family: parent-child interactions, and the role of imaginative play and storybook reading.

Storybook Reading

Throughout the literature, storybook reading or reading aloud to children emerges as a key component in facilitating early literacy acquisition (Hiebert, 1988; Mason & Allen, 1986; Morrow et al., 1990; Teale & Sulzby,1987). For example, Morrow et al. (1990) noted that numerous correlational studies have documented the relationship between reading to children and subsequent success on reading readiness tasks (citing Burrough, 1972; Chomsky, 1972; Durkin, 1974-75; Fodor, 1966; Irwin, 1960; Moon & Wells, 1979). Further, substantial evidence documents that children who are read to acquire concepts about the functions of written language in books (Hiebert, 1988; Mason & Allen, 1986). Children also learn that print differs from speech (Morrow et al., 1990; Smith, 1989) and that print, not pictures, contains the story that is being read. Mason and Allen (1986) observed that "...while additional research is needed to identify factors on the causal chain, a reasonable conjecture is that story reading at home makes important, if not necessary, contributions to later reading achievement" (p. 29).

Storybook reading takes on additional significance when one considers findings indicating that most successful early readers are children who have had contact at home with written materials (Hiebert, 1988; Hildebrand & Bader, 1992;

EDRS



Smith, 1989; Teale & Sulzby, 1987). It is evident that by the time poor readers enter school, they have had substantially less experience with books and reading than those who become better readers. Scarborough et al. (1991) asked parents of preschoolers about the frequencies of adult reading, parent-child reading, and children's solitary book activities in the home, and compared those responses to the children's reading achievement in second grade. Their findings indicated that the children who became poorer readers had less experience with books and reading than children who became better readers. Moreover, children entering school with meager literacy experiences, or less exposure to books and reading, had much to learn about print and were easily confused if they could not map words onto their oral language or could not recognize or distinguish letters (Dyson, cited in Mason & Allen, 1986).

An investigation of the effects of a storybook reading program on the literacy development of urban at-risk children focused on how school instructional programs might address meager literacy experiences (Morrow et al., 1990). Children in four experimental classes followed a daily program of literature experiences that included reading for pleasure, story retelling, repeated reading of favorite stories, interactive story reading, and recreational reading. While students in four control groups followed the district prescribed reading readiness program emphasizing letter recognition and letter-sound correspondence. The experimental groups scored significantly higher than the control groups on story retells, attempted reading of favorite stories, and comprehension tests. However, no significant differences existed between the groups on standardized measures of reading readiness.

Based on these findings, Morrow et al. (1990) suggested that a blend of approaches, coupling some elements of more traditional reading readiness programs with a strong storybook reading component, may be a sound choice for development of literacy instruction package. These findings have implications for

EDRS



preliterate children, in general, and at-risk learners, in particular. Without sufficient storybook reading experience in early childhood - whether at home or at school - students may be missing a key part of the initial foundation of reading. In the following section, we look at the nature of the research on these print experiences, the activities that comprise storybook reading, and the role of interactive dialogue.

Research on storybook reading. Sulzby and Teale (1991) noted that historically, storybook reading has received more research attention than any other aspect of young children's literacy experiences. While it continues to be a significant area of study, they suggested that storybook reading research has evolved in at least four significant ways. First, the methodology has become descriptive in an effort to analyze what goes on during the activity. That is, researchers have moved toward methods that analyze the language and social interaction of storybook reading to gain clues about causal as well as correlational relationships. Second, much of the early storybook reading research focused on the one-to-one or one-to-few readings that typifies parent-child readings at home. By the including group storybook reading sessions simulating classroom settings, several studies have examined the similarities and differences between home and school literacy situations. A third change has been the focus on children's independent reading attempts in addition to the focus on adult-child interactions in order to infer what concepts the child is using in reading situations.

Finally, descriptive methodologies and experimental designs are being used in a complementary manner. Information from descriptive studies is being used to design intervention studies and to examine the effects of those interventions upon children's literacy development. These shifts in storybook reading research expand upon previously reported data and serve to inform us about how storybook reading

EDRS



contributes to children's writing, intellectual, emotional, and oral language development (Sulzby & Teale, 1991).

What happens during storybook reading. Storybook reading practices are characterized by routines that help explain how storybook reading contributes to literacy learning (Sulzby & Teale, 1991). These routines appear to have developmental properties, with the adult acting as a scaffold - initially controlling those elements of the task that are beyond the child's ability, then gradually guiding and confirming the child's independent reenactments and attempts at decoding (Mason & Allen, 1986; Sulzby & Teale, 1991).

Based on their review of literacy acquisition in early childhood, Sulzby and Teale (1991) described these developmental properties in the context of parent-child reading sessions: (a) labeling and commenting on items in discrete pictures, (b) weaving an oral recount of the pictures in order, (c) creating a story with the prosody and wording of written language, and (d) attending to and decoding the actual printed story. More specifically, they highlighted several studies that clarified the applicability of the scaffolding concept for describing changes in storybook reading.

In an examination of the structure and content of picture book interactions of 30 mothers and their 12-, 12-, or 18-month-old infants, DeLoache and DeMendoza (cited in Sulzby & Teale, 1991) observed that the content of mother-child interactions varied as a function of age; the older children's input became increasingly verbal, and the information supplied by the mother became increasingly complex. Sulzby and Teale (1991) found similar changes in the patterns of parent-child readings in eight Hispanic and Anglo families. The parent would frequently focus the very young child on specific objects or characters in the pictures of the books as opposed to the entire story. Then, as the children became toddlers, the parents would expand by telling the main points or reading selected parts of a story (Sulzby & Teale, 1987).

EDRS



Similarly, in their analysis of emergent literacy research, Mason and Allen (1986) reviewed descriptive studies reporting on parent-child reading routines. Harkness and Miller (cited in Mason & Allen, 1986) also observed mother-child interactions during storybook reading. Although questions or comments to initiate book reading interactions continued throughout book reading sessions, mothers gradually increased the length of time between each interchange by reading longer text sections. Likewise, Ninio and Bruner (cited in Mason & Allen, 1986) analyzed mothers' dialogues that accompanied picture-book reading to young children. They found that mothers directed their children's attention to particular features in a book, asked questions, provided labels, and gave feedback by repeating or extending children's remarks.

In sum, the scaffolded routines of storybook reading create predictable formats that help children learn how to participate in and gradually take more responsibility for storybook reading activities. These routines, as well as the language and social interactions that surround the text, appear to explain what makes storybook reading such a powerful influence in literacy development (Sulzby & Teale, 1991).

Interactive dialogue. While access to print in storybook reading may facilitate literacy acquisition, it has been suggested that how the parent reads to the child is also important (Morrow et al., 1990; Teale & Sulzby, 1987). General consensus has been reached on the key role that adult mediation appears to play in literacy growth (Mason & Allen, 1986; Morrow, 1990; Morrow et al., 1990; Stahl & Miller, 1989; Sulzby & Teale, 1991; Teale & Sulzby, 1987). Thus, the language and social interaction between a parent (or older sibling) and child during shared book experiences may aid in (a) developing language skills (Snow, 1991), (b) familiarizing the child with conventions of print (Dickinson & Tabors, 1991; Stahl & Miller, 1989), and (c) serving as a model of reading (Morrow et al., 1990).

EDRS



In a review of recent studies on the importance of verbal interactions during storybook reading Mason and Allen (1986) found that the quality and quantity of interactions, not just the presence of reading materials and a story time routine shaped early reading development. They described the effects of verbal interactions in a study comparing early readers with nonearly readers (Thomas, cited in Mason & Allen, 1986). Early readers talked more frequently about literacy with family members, their interactions contained more instances of extending a topic, and they exhibited more accountability (requiring the completion of a language interjection). Because storybook reading is a social activity, children encounter an interpretation of the author's words, which is subsequently shaped by the interpretation and social interaction of the child and the adult reader (Morrow et al., 1990).

The ways in which adults mediate storybooks for children are as varied as the range of settings in which this activity takes place. Parents of early readers (Thomas, cited in van Kleeck, 1990) and parents of children who are successful in school (Heath; Wells, cited in van Kleeck) do more than read books and elicit labels, objects, and details of events. They guide children to relate information in books to other events, and engage them in discussing, interpreting, and making inferences (Teale & Sulzby, 1991; van Kleeck, 1990).

These representations of storybook reading as a scaffolded activity are consonant with Hiebert's (1988) premise that during story reading, adults act as scaffolds for children by connecting story elements with what the child already knows, by asking questions, and by encouraging the children to ask questions. Vygotsky's (1966) theory (cited in Morrow, 1990) that children learn higher psychological processes through their social environment and specifically with adult guidance within a child's "zone of proximal development" also reinforces the idea that children acquire literacy behaviors by interacting/collaborating with an adult aided by their encouragement and assistance (Morrow, 1990).

EDRS



In this section, we examined the social contexts that facilitate literacy knowledge, beginning with the larger context of culture, then narrowing the focus to community/home environments, and family interactions. We also identified the following two broad areas of emerging evidence:

#1 Socioeconomic status does not contribute most directly to reading achievement. Rather, other family characteristics related to context are more explanatory such as academic guidance, attitude toward education, parental aspirations for the child, conversations in the home, reading materials in the home, and cultural activities . (Note: this conclusion was derived by White from his 1982 meta-analysis, (cited in van Kleeck, 1990), and has been reinforced by recent literature on socioeconomic status and academic achievement.)

#2 Storybook reading, as well as the nature of the adult-child interactions surrounding storybook reading, affects children's knowledge about, strategies for, and attitudes towards reading.

## Summary

Our review of the emergent literacy literature suggested that early childhood literacy experiences affect successful reading acquisition along several dimensions. These literacy experiences are, in turn, influenced by social contexts and conditions as diverse as the individual literacy outcomes they help to shape. The challenge for the preschool or elementary classroom teacher is clear: They are charged with designing and delivering reading instruction that not only builds on what the individual child knows, but also accommodates the myriad individual literacy backgrounds present in the classroom.

To summarize, five areas of emerging evidence have implications for addressing those differences and making a closer match between a child's literacy background and classroom instruction:

EDRS



•Experiences with print (through reading and writing) help preschool children develop an understanding of the conventions, purpose, and functions of print.

•Children learn how to attend to language and apply this knowledge to literacy situations by interacting with others who model language functions.

•Phonological awareness and letter recognition contribute to initial reading acquisition by helping children develop efficient word-recognition strategies (e.g., detecting pronunciations and storing associations in memory).

•Socioeconomic status does not contribute most directly to reading achievement. Rather, other family characteristics related to context are more explanatory such as academic guidance, attitude toward education, parental aspirations for the child, conversations in the home, reading materials in the home, and cultural activities .

•Storybook reading, as well as the nature of the adult-child interactions surrounding storybook reading, affects children's knowledge about, strategies for, and attitudes towards reading.

EDRS



## References

Brown, D. L., & Briggs, L. D. (1991). Becoming literate: The acquisition of story discourse. Reading Horizons, 32(2), 139-153.

Clay, M. (1979b). Stones - The Concepts About Print Test. Portsmouth, NH: Heinemann Educational Books.

Copeland, K. A., & Edwards, P. A. (1990). Towards understanding the roles parents play in supporting young children's development in writing. Early Child Development and Care, 56, 11-17.

Crain-Thoreson, C., & Dale, P. S. (1992). Do early talkers become early readers? Linguistic precocity, preschool language, and emergent literacy. Developmental Psychology, 28(3), 421-429.

Dickinson, D. K., & Tabors, P. O. (1991). Early literacy: Linkages between home, school, and literacy achievement at age five. Journal of Research in Childhood Education, 6(1), 30-46.

Ehri, L. C., & Sweet, J. (1991). Fingerpoint-reading of memorized text: What enables beginners to process the print? Reading Research Quarterly, 26(4), 442-462.

Hiebert, E. H. (1988). The role of literacy experiences in early childhood programs. The Elementary School Journal, 89(2), 161-171.

Hiebert, E. H., & Papierz, J. M. (1990). The emergent literacy construct and kindergarten and readiness books of basal reading series. Early Childhood Research Quarterly, 5(3), 317-334.

Hildebrand, V. L., & Bader, L. A. (1992). An exploratory study of parents' involvement in their child's emerging literacy skills. Reading Improvement, 29(3), 163-170.

Katims, D. S. (1991). Emergent literacy in early childhood special education: Curriculum and instruction. Topics in Early Childhood Special Education, 11, 69-84.

EDRS



Mason, J., & Allen, J. B. (1986). A review of emergent literacy with implications for research and practice in reading. Review of Research in Education, 13, 3-47.

McGee, L. M. & Lomax, R. G. (1990). On combining apples and oranges: A response to Stahl and Miller. Review of Educational Research, 60(1), 133-140.

Morrow, L. M. (1990). Preparing the classroom environment to promote literacy during play. Early Childhood Research Quarterly, 5, 537-554.

Morrow, L. M., O'Connor, E. M., & Smith, J. K. (1990). Effects of a story reading program on the literacy development of at-risk kindergarten children. Journal of Reading Behavior, 22(3), 255-275.

Pelligrini, A. D., & Galda, L. (1993). Ten years after: A reexamination of symbolic play and literacy research. Reading Research Quarterly, 28, 163-175.

Perera, K. (1984). Children's writing and reading: Analyzing classroom language. Oxford, England: Blackwell.

Roberts, B. (1992). The evolution of the young child's concept of word as a unit of spoken and written language. Reading Research Quarterly, 27(2), 125-138.

Scarborough, H. S., Dobrich, W., & Hager, M. (1991). Preschool literacy experience and later reading achievement. Journal of Learning Disabilities, 24(8), 508-511.

Smith, C. B. (1989). Emergent literacy - an environmental concept. The Reading Teacher, 42(7), 528.

Snow, C. E. (1991). The theoretical basis for relationships between language and literacy in development. Journal of Research in Childhood Education, 6(1), 5-10.

Stahl, S. A., & Miller, P. D. (1989). Whole language and language experience approaches for beginning reading: A quantitative research synthesis. Review of Educational Research, 59(1), 87-116.

EDRS



Stewart, J. (1992). Kindergarten students' awareness of reading at home and in school. Journal of Educational Research, 86(2), 95-104.

Sulzby, E., & Teale, W. (1991). Emergent literacy. In R. Barr, M. L. Kamil, P. B. Mosenthal, & P. D. Pearson (Eds.), Handbook of reading research (Vol. 2, pp. 727-757). New York: Longman.

Teale, W. H., & Sulzby, E. (1987). Literacy acquisition in early childhood: The roles of access and mediation in storybook reading. In D. A. Wagner (Ed.), The future of literacy in a changing world (pp. 111-130). New York: Pergamon Press.

van Kleeck, A. (1990). Emergent literacy: Learning about print before learning to read. Topics in Language Disorders, 10(2), 25-45.

Weir, B. (1989). A research base for pre kindergarten literacy programs. The Reading Teacher, 42(7), 456-460.

EDRS



## Author Note

Barbara K. Gunn, College of Education; Deborah C. Simmons, College of Education; Edward J. Kameenui, College of Education.

We would like to acknowledge Scott Baker, David Chard, Shirley Dickson, Sylvia Smith, and Katie Tate for their contributions to this manuscript. Preparation of this manuscript was supported in part by The National Center to Improve the Tools of Educators (H180M10006) funded by the U. S. Department of Education, Office of Special Education Programs.

Correspondence concerning this chapter should be addressed to Deborah C. Simmons, Division of Learning and Instructional Leadership, College of Education, University of Oregon, Eugene, OR 97403-1215. Electronic mail may be sent via Internet to Deborah_Simmons@ccmail.uoregon.edu.

Table 1. Description of Emergent Literacy Studies
**Primary Studies**

| Author | Emergent Literacy Dimension | Participants | Purpose |
|---|---|---|---|
| Brown & Briggs (1991) | Story writing / text structure. | Kindergarten students N=16 | Examine kindergarten literacy development through writing |
| Crain-Thoreson & Dale (1992) | Story reading / letter names and sounds. | Linguistically precocious children N=25 (Studied from 20 months-4.5 years) | Examine relation between language and literacy skills |
| Dickinson & Tabors (1991) | Impact of settings and experiences on early literacy development. | 5-year old children N=3 | To use multiple measures to assess early language and literacy development |
| Ehri & Sweet (1991) | Print knowledge and fingerpoint-reading. | Children proficient in English N=36 M=5.1 years | To investigate kinds of print-related knowledge needed for fingerpoint-reading. |
| Hiebert & Papierz (1990) | Emergent literacy focus in reading basal activities. | N/A | To examine reading instruction in the early childhood component of basal reading activities. |
| Hildebrand & Bader (1992) | Home literacy environments. | Parents of preschool children N=59 | To examine relation between parents involvement in literacy activities and their child's emerging literacy behaviors. |
| Katims (1991) | Development of emergent literacy behaviors in young children with disabilities. | Children identified with disabilities N=21 M=5.3 years | To determine if exposure to structured, print-rich environments would develop pre-literate behaviors in children with disabilities. |
| Morrow (1990) | Role of physical environment in classroom learning experiences. | Preschool children N=170 | To determine the effects of physical design changes in preschool classroom play centers on children's literacy behaviors during play time. |
| Morrow, O'Connor' & Smith (1990) | Storybook reading. | At-risk Chapter I kindergarten students N=62 | Effects of a storybook reaading program on the literacy development of urban at-risk children. |

Primary Studies Continued

| | | | |
|---|---|---|---|
| Roberts (1992) | Development of the concept of *word* as a unit of spoken and written language. | K-2nd grade students N=32 | (1) To describe development of concept of *word* related to beginning reading. (2) To investigate relation betweeen cognitive development and acquisition of concept of word. |
| Scarborough, Dobrich, & Hager (1991) | Preschool literacy activities on the home | Poor and normal readers N=56 (Studied from preschool-grade 2) | To examine the relation between preschool literacy experience and later reading achievement. |
| Snow (1991) | Role of oral language development and reading acquisition. | Low-income families with preschoolers N=80 | To describe environmental supports for literacy development in the home and at school for children from low-income families. |
| Srewart (1992) | Children's awareness of learning to read. | Kindergarten students N=56 | To investigate children's awareness of how they are learning to read. |

Table 1. Description of Emergent Literacy Studies
**Secondary Studies**

| Author | Emergent Literacy Dimension | Participants | Purpose |
|---|---|---|---|
| Copeland & Edwards (1990) | Writing. | Studies reflected varied populations of preschool to primary-age children. | To examine the social aspects of young children's writing development. |
| Hiebert (1988) | Preschool literacy experiences. | Studies reflected varied populations of preschool to primary-age children. | To provide an overview of emergent literacy research and its importance for beginning reading programs. |
| Mason & Allen (1986) | Social/linguistic contexts of literacy, oral and written language, and early reading and writing skills. | Studies reflected varied populations of preschool to primary-age children. | To review emergent literacy research and studies on reading acquisition. |
| McGee & Lomax (1990) | Beginning reading instruction. | Studies reflected varied populations of preschool to primary-age children. | Response to Stahl & Miller's (1989) meta-analysis of reading instruction approaches. |
| Pellegrini & Galda (1993) | Symbolic play and literacy. | Studies reflected varied populations of preschool to primary-age children. | To review research on the ways in which symbolic play is related to emergent literacy. |
| Smith (1989) | Preschool literacy experiences. | Focus on preschool children. | To discuss the concept of emergent literacy. |

Secondary Studies Continued

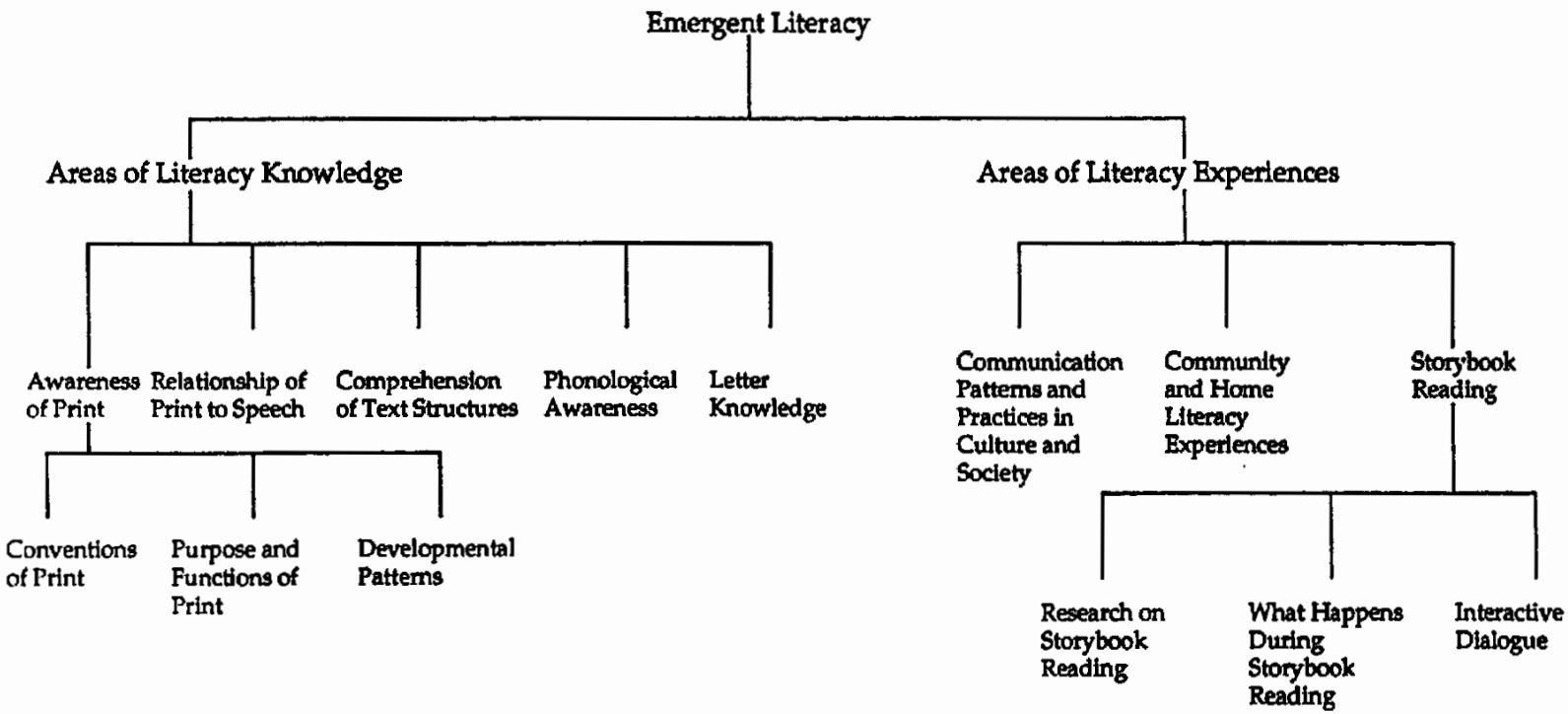
| | | | |
|---|---|---|---|
| Stahl & Miller (1989) | Beginning reading instruction. | Studies reflected varied populations of preschool to primary-age children. | Meta-analysis of reading instruction approaches. |
| Sulzby & Teale (1991) | Storybook reading, writing, metalinguistic awareness, phonemic awareness | Studies reflected varied populations of preschool to primary-age children. | To review recent research on emergent literacy. |
| Teale & Sulzby (1987) | Storybook reading. | Studies reflected varied populations of preschool to primary-age children. | To discuss recent research on the role of access and mediation in storybook reading. |
| van Kleeck (1990) | Preschool literacy experiences. | Studies reflected varied populations of preschool to primary-age children. | To discuss recent research on emergent literacy. |
| Weir (1989) | Prekindergarten literacy programs. | Preschool children. | To discuss implications of recent research on emergent literacy for prekindergarten programs. |

EDRS



## Figure Caption

Figure 1. Overview of Chapter on Emergent Literacy.


Emergent Literacy
Areas of Literacy Knowledge
Areas of Literacy Experiences
Awareness of Print
Relationship of Print to Speech
Comprehension of Text Structures
Phonological Awareness
Letter Knowledge
Conventions of Print
Purpose and Functions of Print
Developmental Patterns
Communication Patterns and Practices in Culture and Society
Community and Home Literacy Experiences
Storybook Reading
Research on Storybook Reading
What Happens During Storybook Reading
Interactive Dialogue