

Nurturing Phonemic Awareness and Alphabetic Knowledge in Pre-kindergartners

Patricia L. Steinhaus

Abstract

Reading research continues to identify phonemic awareness and knowledge of the alphabetic principle as key factors in the literacy acquisition process and to indicate that they greatly facilitate decoding efforts. While research indicates that phonemic awareness and alphabetic knowledge are necessary to literacy acquisition, many early childhood educators express concern about the instructional strategies used to address learning in this area. Reading experts have tended to emphasize the learning of skills, while early childhood specialists have tended to emphasize instructional strategies over content. The study described in this paper attempted to integrate the differing perspectives of reading specialists and early childhood specialists by exploring the role that language, specifically dialogue, plays as an instructional strategy specifically focused on phonemic and alphabetic knowledge in a pre-kindergarten classroom. The findings of the study are discussed through the examination of three students whose approach to literacy was each very different. The paper concludes that effective instruction requires teacher focus, reflection, and intersubjectivity—willingness to allow the children's context to permeate the classroom context—and that an effective means of accomplishing this goal is through the use of dialogue.

Purpose

Reading research continues to identify phonemic awareness and knowledge of the alphabetic principle as key factors in the literacy acquisition process and to indicate that they greatly facilitate decoding efforts (Byrne & Fielding-Barnsley, 1995; Ehri & Robbins, 1992; Ehri & Wilce, 1985; Torgeson, Morgan, & Davis, 1992; Wagner, Torgeson, & Rashotte, 1994; Ball & Blachman, 1991; McGuinness, McGuinness, & Donohue, 1995; MacLean, Bryant, & Bradley, 1987; Bryant, MacLean, Bradley, & Crossland, 1990; Lundberg, Frost, & Peterson, 1988; Moustafa, 1995). There is also evidence that phonological awareness facilitates the child's discovery of the alphabetic principle represented in the decoding process and that the decoding process, in turn, facilitates further development of phonological awareness (Share, 1995; Goswami & Bryant, 1990; McGuinness, McGuinness, & Donohue, 1995; Wagner, Torgeson, & Rashotte, 1994).

While research indicates that phonemic awareness and alphabetic knowledge are necessary to literacy acquisition, the joint International Reading Association/National Association for the Education of Young Children (1998) statement and the National Academy of Sciences report (Snow, Burns, & Griffin, 1998) express concern about the instructional strategies used to address learning in this area. Their concern stems from the need to identify strategies that are consistent with what is known about child development and how children learn most effectively. Reading experts have tended to emphasize the learning of skills. Early childhood specialists have tended to emphasize instructional strategies over content.

The purpose of the study discussed in this paper was to attempt to integrate the differing perspectives of reading specialists and early childhood specialists and explore an instructional strategy that may be effective in addressing the acquisition of phonemic awareness and alphabetic knowledge in preschoolers. To that end, the study examined language as a function of children's specific learning of phonemic and alphabetic knowledge. Because of the cultural aspects of language and literacy, any explanation of literacy acquisition must emphasize the

sociocultural aspect of the process. The sociocultural perspective emphasizes that learning is constructed through interaction within a defined social context. Sulzby and Teale (1991) describe the social context of the process from a Vygotskian perspective that emphasizes “social interaction between a literate adult and the young child.” They claim, “children acquire literacy through conversations and supported purposeful engagements in literacy events” (p. 730).

The development of language (a cultural tool) and cognitive development are so closely related that it is nearly impossible to view the two individually. This connection is illustrated by the 1989 study described in *Narratives from the Crib* in which Nelson, Bruner, Feldman, and others participated. In their analysis of the data, three commonalities emerged with regard to the ways in which language facilitates learning. To paraphrase,

- Language provides the representational form that provides both the vehicle and tool for thought.
- The structure embedded in language offers a framework that facilitates the organizational process—the “operational framework.”
- The structure of language and the context in which it is used generally provide a further framework with which to organize the cognitive task—the contextual framework.

Cazden (1988) points out that classroom discourse is most often used as a part of the learning process to impart specific information, but it is not given focus as an instructional strategy for promoting intellectual engagement, challenge, or to scaffold learning. She emphasizes that internalization that is a result of scaffolding is consistent with the sociocultural theory of learning. Learning is not simply transferred from the more knowledgeable other to the learner, nor is it a process of the learner “discovering” the “right.” It is a process of, Cazden (1988) quotes Bruner, “go[ing] beyond the information given” (p. 108). Cazden’s (1988) discussion of the function of classroom discourse is consistent with the work of Clay (1998); Tharp and Gallimore (1988); Moll and Whitmore (1993); Palincsar, Brown, and Campione (1993); Chang-Wells and Wells (1993); and Rogoff

(1990) in which they examine classroom dialogue as a strategy for intellectual engagement or challenge. The specific learning content focused on in this paper is phonemic and alphabetic knowledge. It is evident that there is considerable variation in the meaning attributed to the two terms (Durkin, 1980, 1993; Goswami & Bryant, 1990; Share, 1995; Snow, Burns, & Griffin, 1998; IRA/NAEYC, 1998; Sulzby & Teale, 1991). The definition of the term phonemic awareness seems to be emerging as research continues to increase our understanding of the reading process. For the purposes of this paper, the term phonemic awareness is defined as “a child’s auditory discrimination of and conscious understanding that speech is composed of identifiable units such as spoken words, syllables, and sounds.”

The alphabetic principle is also a term for which a common definition is somewhat elusive (Neuman, Copple, & Bredekamp, 1999; Snow, Burns, & Griffin, 1998; Durkin, 1993; Sulzby & Teale, 1991; Goswami & Bryant, 1990). The commonality in views across the literature, however, is the child’s understanding that there is a systematic relationship between the sounds of letters in spoken words and their graphic representation.

The paper examines the role that language, specifically dialogue, plays as an instructional strategy specifically focused on phonemic and alphabetic knowledge in a pre-kindergarten classroom. The term dialogue, as opposed to discourse, is used throughout the paper because it reflects the intersubjective nature necessary in communication that facilitates the construction of knowledge. The definition of dialogue used is a verbal exchange that exhibits intersubjectivity, in this case focused upon phonemic and alphabetic knowledge. The definition is consistent with the work of Vygotsky (Cole et al., 1978), Clay (1998), Rogoff (1990), Cazden (1988), and Tharp and Gallimore (1988).

Methods

The research approach in this study was a qualitative one. Walsh, Tobin, and Graue (1993) suggest that the qualitative approach that is most useful for the field is that which Erikson termed “interpretive” (p. 464).

The elements of interpretive research require, among other things, that observations be contextualized, conducted in a natural setting, and be prolonged and repetitive.

Participants in the program were 4- and 5-year-old children who had been screened by school district personnel and determined to be eligible for participation by criteria established by the district. Environmental and social factors were considered as well as results obtained through play-based screening.

The data collected in this study were the teacher's and children's dialogue as they related to phonemic awareness. Data were collected through classroom observation of children. Observations were conducted for two hours each in morning and afternoon sessions of a pre-kindergarten classroom. Seventeen observations occurred from the end of October to mid-May. Observations were handwritten and recorded using audiotape. In addition, samples of the children's writing, drawing, and other literacy-related materials were collected.

A checklist of common phonemic awareness and alphabetic behaviors was developed from the literature cited. Dialogue was coded by phonemic/alphabetic behavior and charted for each child by observation sessions, visually representing the content of dialogue over time. The following is a list of the phonemic awareness behaviors:

- Names some letters.
- Recognizes letters in print.
- Knows some letter-sound relationships.
- Distinguishes initial letter in words.
- Distinguishes ending letter in words.
- Talks about letters.
- Attempts to re-read what he has written by paraphrasing.
- Attempts to re-read what he has written by decoding sounds.
- Recognizes rhymes (words that sound alike).
- Can produce a rhyme.
- Recognizes/talks about graphic characteristics of letters and words.

The following behaviors were included because they support and provide the context for the more specific behaviors:

- Talks about letters: General dialogue about letters.
- Talks about letter graphics: Dialogue about the distinguishing physical features of letter graphics.
- Talks about writing: Dialogue about writing in general, the process, the need to do it, its presence in the classroom.
- Talks about reading: Dialogue about reading, the process.

Results

The classroom in this study operated from the assumption that reading and writing are an integral function of the classroom culture or community and that everyone would participate in reading and writing on whatever level they were capable. All literacy behaviors were accepted.

The classroom routine included two daily story times, one that typically introduced activities and one that closed and summarized activities. The classroom had well-supplied writing, computer, and art centers. There was a classroom library, but books were also a part of the writing center, the dramatic play area, and the block area. The children's own emergent writing was carefully and attractively displayed throughout the classroom.

The group area housed the classroom library and displayed the calendar and the daily leader chart. The teacher posted the group-made lists, language experience charts, and group-meeting projects that supported the current topic of study. The dramatic play area included materials as well. In the art center was also a chart for classroom book check-out with a labeled pocket for each child and the storage of portfolios, which the children routinely review upon the completion of a topic. The environment and daily routine provided a kind of tacit instruction (Moll & Greenberg, 1990; Rogoff, 1990; Lave & Wenger, 1991; Cole et al., 1978).

The findings of the study, which follow, are discussed through the examination of three students whose approach to literacy was each very different.

Aaron

Aaron came to school with an understanding of the functions of reading. He came with the belief that he was already a functioning literate individual. Literacy was not a mystery that needed to be solved but a function that he was competent in fulfilling. Aaron was also a very social individual, and literacy seemed to be most meaningful for him when he could use it within the context of social interaction. Classroom observations suggested that he had a role model who read at home. The response from the parent survey indicated that Aaron used writing utensils at home and enjoyed doing so. The survey responses also indicated that he used books on a daily basis, implementing a variety of strategies for “independent” reading. The parent survey reported that he knew only four or five letters.

The record of classroom observations revealed a conversation with Aaron’s father early in February suggesting additional emerging knowledge of letters. The teacher shared information that Aaron had announced in the classroom that he was going to write the letters of the alphabet. He proceeded to do so—A through M. While the survey indicated that Aaron did not have any particular resources that related to letters, other than his books, Aaron’s father mentioned in conversation with the teacher that Aaron used a computer program that had the alphabet as its focus.

One of the first observations of Aaron was an episode between Aaron and his classmates on November 15 that demonstrated his level of sophistication with regard to literacy and his use of literacy as a part of social interaction:

Layne, Aubrey, and Aaron had taken responsibility for the project that was stationed at the writing center. They hailed their fellow classmates as they arrived in the classroom.

Layne: Hey, Sammi, Kari. Come over here. We have a question for you. Are you wearing new shoes?

Aaron: This is “YES.” And this is “NO.”

He pointed to the words as he said them.

But while Aaron’s behavior suggested word awareness, other data suggest that his understanding, at this point, was global in nature, recognition of the graphic patterns of the words rather than a connection between letters and their sounds. This conclusion was confirmed by observations made on December 13 in which Aaron recognized the names of a couple of his classmates while working on a sociogram with the teacher. At this point, Aaron was writing his name Aarn or Arn. The teacher continued to accept Aaron’s level of literacy without question.

On December 20, the children were asked to choose the ending to the story that had been read aloud to the group. Aaron recognized the word NO, pointed to it, and wrote it. In the dialogue that accompanied his work on this project, the teacher spelled the word NO for him, pointing at the letters as she said them and pointing out that the N was a letter that he had in his own name.

From that point on, Aaron’s behavior indicated a greater attention to the letters that composed his name. Several samples in January document that he was writing his name with all the necessary letters. On occasion after that, his name appeared as AAORN or AARN or ARON, but for the most part, his behavior indicated a greater attention to individual letters. When he copied words, all the letters were present and in pretty much the right order.

For the most part, he had still not made a clear connection between the letter graphics and their names or sounds, but he continued to develop his understanding of one-to-one correspondence and that words did have a particular format. This observation was documented in the following excerpt from March 13:

Aaron has brought in his Pokeman cards. He draws a couple of Pokeman figures that are pictured and then sits back.

Aaron: I’m going to read my Pokeman book.

Aaron takes the calculator, and says he’s going to write Pokeman. He makes some entries on the calculator by pushing the entry keys.

Aaron: Does this spell Pokeman?

R: Aaron, the calculator has numbers on it, not letters. You can spell Pokeman on the computer.

Aaron insists that he can write Pokeman. He enters something into the calculator and then refers to his magazine and puts his finger on the print to see the name. At the end of March when the children make portfolio folders for the “PAPER” topic of study, Aaron writes PAP and below it, because he has run out of space, ER.

Literacy in and of itself, however, seemed almost secondary to Aaron. He used it as a tool to enhance his social relationships and to attempt to gain information. He often brought his Pokeman book or cards to school and shared a discussion of the literature with his friends. They talked about the different characters, what they looked like, what their names were, and what they could do. Towards the end of the school year, he attempted to write some words on his own. The teacher reported that he used the leader chart with great regularity to determine who was the classroom leader each day.

Reading seemed more important to Aaron than writing. He viewed reading as an activity for gaining information, primarily from pictures, as his use of the materials he brought from home indicated. He did not discuss the writing process except when the teacher initiated discussion. He talked about reading and writing in general, letters and their names, but not graphic characteristics—perhaps because he had already mastered the skill of graphic representation. It was not until the end of the school year that he began to recognize the connection between information gathering and print. He then began to attend more closely to the graphics of print and to understand his role as a creator of print.

Eric

Eric’s fine motor skills were exceptionally well developed, probably somewhat as a result of his incredible creativity. His mother reported through the parent survey that he had available a rather substan-

tial variety of writing utensils that he used at home. His drawings included both detail and action, though his creativity was not limited to drawing. His learning style seemed to be highly visual.

His mother also reported that he was read to nearly daily and enjoyed it greatly. He did not, however, attempt to read on his own. The data document early that he was aware that he was unable to read in a conventional manner. The survey response also indicated that Eric was able to say the letters of the alphabet and recognize the letters in his name. What the data indicate was that even though he was able to graphically produce all the letters of the alphabet, Eric’s knowledge of the connection between letter graphics and their names was present only when it was scaffolded. He could reproduce a letter given a graphic description, but initially he was unable to name even the letters in his name.

Even though Eric began the school year able to write his name very clearly and to copy whatever letters he chose, he did not initially exhibit much interest in utilizing this skill in creating his own words. As the year progressed, he recognized the value of using writing as a function to enhance his creativity. He also recognized literacy as a function for expressing affection. When his interest in including words began, he requested that the teacher write the words for him. As his interest grew, he often asked her to tell him the letter names and describe their graphic characteristics so that he could write them himself.

But it was not really until mid-December that Eric began to exhibit an interest in writing. On December 13, Eric approached the teacher and told her that he wanted to write “I love my mom. Hugs and kisses.” The ensuing instruction occurred as a part of the child’s desire to write a note to his mother. There was focus given to the nature of the orthographic system, and sound-letter relationships were addressed:

Teacher: “Mom.” What sound do you hear in “mom?”

Eric: I don’t know.

Teacher: Listen again. It’s in “My.”

Eric: Mmmmm

Teacher: Mmmm. That's it.

Eric: How do you make an "M."

Teacher: Well, look.

Eric: I...(pointing at the word mi [my] that he's written).

Teacher: That's [my]. That's [my]. So what goes in "Mom?"

Eric: uhhhh....Oh! This one?

Teacher: Yup. That's the same one. What letter is that?

The recognition and naming of letters were also addressed throughout the sequence. The teacher encouraged Eric to read what he was writing as they progressed in the writing activity.

In mid-March, the data document another extensive dialogue between the teacher and Eric. Eric had spent a good deal of the choice time on March 13 drawing a series of eight pictures. He came to the teacher and told her that he wanted to write "I Want to Be a Funny Boy." The result of the dialogue was that Eric dictated the story and the teacher asked him to write the title page. In the course of the dialogue, Eric revealed that he wanted to write funny stories like Robert Munsch. Eric had been involved in making the Robert Munsch chart that the class used as they read his books.

To summarize, Eric progressed over the school year from primarily drawing to incorporating writing on a routine basis. He was, at that point, more interested in exploring the functions of literacy than applying his energy in acquiring the requisite skills for using it independently, although it appeared as though the desire was emerging. He used literacy primarily as a tool for enriching the products of his creativity, but he, at that point, was more interested in what the tool could produce than how it worked. There seemed to be little dialogue around the teacher-planned activities in the classroom. Most of the teacher-Eric dialogue occurred around the projects that Eric himself designed.

Sammi

Sammi lived with both her mother and father in a joint custody arrangement. The parent survey that was

completed by her father indicated that Sammi was read to on a daily basis, that she had writing utensils available for use, that she attempted to read some books on her own—primarily from memory—and that she had some toys that involved the alphabet.

Sammi entered the classroom at the beginning of the year with well-developed fine motor skills. She was able to write her name from the start. The data reveal that Sammi's greatest interest in utilizing her literacy skills was in writing the names of the people in her family. On October 25, the teacher talked with the children during group time about the writing that some of them had done:

Teacher: Sammi, you wrote some names too. What did you write?

Sammi named the people in her family whose names she had written.

Teacher: Did you write Kenny? (her brother)

Sammi: K...E...N...N...Y. (Sammi spells the name.)

During the choice portion of the daily schedule, Sammi often spent some time in the writing center independently "writing notes" to her mother or father. On November 15, she drew a face and wrote the word DAD on two pages. The pages were folded, inserted into an envelope, and addressed to D...A...D. In this instance, her activity occurred near the end of the choice period of the schedule. She finished her note to her dad and began to join the group that was forming in the group area, but she then returned to the writing center stating "I need to write to mom, too. She likes pink." Her voice trailed off and became inaudible as she worked:

R: Tell me what it says.

Sammi: Me, Dad, Mom, [her brother], my dog.

R: What's your dog's name?

Sammi: Holly.

She spelled all the names, including the name of her dog. Sammi's skill in accomplishing this feat was revealing in a couple of ways. First, the ease with which she accomplished the task would support the observation that she wrote her family names often. It

also indicated that she possessed a knowledge of letter graphics and letter names and was able to correlate the two. In October, Sammi took a long strip of paper and wrote the entire alphabet to V on one piece and then continued with X...Y...Z and her name on a second piece of paper.

But while she had the ability to graphically record each of the letters, she seemed not to have the grasp of visual graphic patterns that some of the other children had. In February, while preparing valentines, she asked Eric whether the name that she had selected from the name ring was his name or Ed's. She recognized the E as the letter that started Eric's name, but she did not recognize the general graphic pattern of his name.

By mid-February, Sammi had begun to include others in her name-writing episodes. She wrote a note with the teacher's name on it and gave it to her. When Jacob gave her candy hearts with messages printed on them, she inquired as to its message and then put her name and Jacob's on a valentine to give to him. In May when a second sociogram was completed with the children, Sammi independently recognized and copied the names that she wanted included.

Even in spring, the pictures of and notes to dad and mom continued. Sammi had taken her interest and skill to a new level, however. In April, in writing a story, she phonetically sounded out the word ME in a story about DAD.

Sammi seemed to use her literacy skill in very social ways, to connect with others and define social relationships. This interest expanded from her family alone to her teacher and her classmates as her relationships expanded throughout the year, but as the April story episode indicates, she was still connecting the use of her skills to her relationships with her family. She did not make a distinction between the different households in which she lived, but named all members of the family, at times making a conscious effort to include both parents in her work. There was a picture of MOM that was documented at the same time as the story of ME and DAD.

For Sammi, as for others, there seemed to be more dialogue around those independently designed activities than around the teacher-designed activities, which she completed easily and without much inquiry.

Discussion

Katz (1995) states:

The distinction between what children *can do* and what they *should do* is especially serious in early childhood education because most young children are eager to please their teachers and appear willing to do almost anything asked of them.... However, children's willingness and enjoyment are potentially misleading criteria for judging the appropriateness of pedagogical practices. Instead, estimates of the possible delayed impacts and cumulative effects of practices must be considered. (p. 107)

The fact that the acquisition of literacy is such a critical piece to all that follows in education makes the issue of identifying appropriate and effective instructional strategies that facilitate it one that must be addressed. While the way in which young children learn has not changed, our understanding of how they learn has deepened. Learning to read is a cognitive activity. Examining learning theory and using it as a means to validate or invalidate instructional strategies can be helpful.

Vygotsky (Cole et al., 1978) believed that learning occurred within the context of social interaction. He also believed that learning precedes and facilitates development and that language facilitates the process of thought or cognition.

Nelson (1996), in discussing the social construction of knowledge, states that the primary function of cognition for the child "is to make sense of her situated place in order to take a skillful part in its activities." She states that this process must be accomplished through a process of "collaborative constructionism in which the child's individual cognitive activity is as crucial as the interaction with the knowing social world." Rogoff (1990) emphasizes the need for the learning context to have an intersubjective nature.

Bruner's hypothesis is that one of children's first developmental tasks is to order the undifferentiated life components of action, thought, and affect (Bruner & Haste, 1987). He believes that language, especially narrative, is an effective means of accomplishing this task.

Cazden (1988) states that classroom language should be related to the child's experiences, used to negotiate shared meaning and understanding, and should be used to achieve cognitive engagement. She emphasizes the need for the teacher to be skilled in improvisation. Clay (1998) states, "Just as the listener tunes in to a speaker, so a teacher must observe, listen to and tune in to a learner" (p. 13).

Young children come to school in the early years with their own contexts and stories—those that they bring from their homes. These beliefs imply that one of the teacher's primary roles in instruction is to serve as a strategist and negotiator. She must determine the child's context (and functional developmental level) and negotiate a plan for facilitating the child's discovery of how the literacy knowledge that she brings to the classroom can be utilized (and extended in the child's zone of proximal development) within the functions of the classroom context—in other words, how the child's context can become a part of the classroom context and how the classroom context can become a part of the child's context in designing the learning that could occur.

The teacher in this study has considerable skill as a context negotiator. Eric's context was dominated by his creative energy. The teacher facilitated Eric's use of literacy in enhancing his creative projects. Aaron came to school from a context rich in the functions of literacy and one that allowed him to be a participant in those functions. Aaron was allowed to bring the tools of his home functions of literacy to class and weave them into the classroom curriculum as he grew in his understanding of what it was to function in a literate manner. Sammi is the enigma. She came to the classroom from a context in which it is obvious that literacy is important, and she came with considerable skills for her age. However, the context of her skills was extremely personal. It seemed more difficult to engage her in a literacy focus that challenged her existing skills. The teacher accepted Sammi's use of literacy in meeting her personal needs. Towards the end of the year, it became evident in the story-writing episode that Sammi was ready to expand her personal literacy context in a way that included some aspects of the school context in her encoding activity.

There were several "Sammi's" between the two classes. They were the children whose skills were

adequate, or more than adequate, allowing them to function within the classroom literacy environment without allowing the classroom context to permeate their personal context.

The dialogue data indicate that the greatest amount of dialogue occurred when cognitive dissonance was present or when functions entered a child's zone of proximal development. The mismatch between the child's context or functional level and the classroom context provided a point of engagement between the child and the teacher. This is possible only when there is intersubjectivity, when the child's and the classroom's contexts have permeated each other.

Finally, the disposition (Katz, 1995) of the teacher must be addressed. There must be an approach to teaching and learning that allows for and facilitates intersubjectivity and improvisation. It develops in an effective manner only when there is an attitude of reflection. The following remarks indicate the approach of the teacher in this study:

...I have re-examined why I do many things. I thought I had a literacy-rich environment before this process, with graphs and charts and webs. However *children* now add more to the environment. [Italics original]

I am more convinced than ever that information must directly relate to children's lives to become relevant for them. And they must have time to explore the many options that a topic suggests. The younger they are, the more tangible it needs to be.... At the same time, someone must be in their lives, a teacher or a parent, who asks critical thinking questions that confirm what a child knows and expands an understanding of an idea.

In her introduction to *Other People's Words*, Purcell-Gates (1995) states:

Members of these varied cultural groups, including teachers, curriculum designers, and the children are not perceiving the schooling experience in identical ways. They are in many ways living in different worlds though ostensibly engaging in the same activity—schooling—in the same place—the classroom. (p. 5)

Effective instruction requires teacher focus, reflection, and intersubjectivity—willingness to allow the

children's context to permeate the classroom context. An effective means of accomplishing this goal is through the use of dialogue.

References

- Ball, E. W., & Blachman, B. A. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly*, 26(1), 49-66. (ERIC Journal No. EJ422743)
- Bruner, J., & Haste, H. (Eds.). (1987). *Making sense: The child's construction of the world*. New York: Routledge.
- Bryant, P. E., MacLean, M., Bradley, L. L., & Crossland, J. (1990). Rhyme and alliteration, phoneme detection, and learning to read. *Developmental Psychology*, 26(3), 429-438. (ERIC Journal No. EJ412181)
- Byrne, B., & Fielding-Barnsley, R. (1995). Evaluation of a program to teach phonemic awareness to young children: A 2- and 3-year follow-up and new preschool trial. *Journal of Educational Psychology*, 87(3), 488-503. (ERIC Journal No. EJ517171)
- Cazden, C. B. (1988). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann. (ERIC Document No. ED288206)
- Chang-Wells, G. L., & Wells, G. (1993). Dynamics of discourse: Literacy and the construction of knowledge. In E. A. Forman, N. Minick, & C. A. Stone (Eds.), *Contexts for learning* (pp. 58-90). New York: Oxford University Press. (ERIC Document No. ED383404)
- Clay, M. M. (1998). *By different paths to common outcomes*. York, ME: Stenhouse.
- Cole, M., John-Steiner, V., Scribner, S., & Souberman, E. (1978). *L. S. Vygotsky: Mind in society*. Cambridge, MA: Harvard University Press.
- Durkin, D. (1980). *Teaching young children to read*. Boston: Allyn and Bacon.
- Durkin, D. (1993). *Teaching them to read*. Needham Heights, MA: Simon & Schuster.
- Ehri, L. C., & Robbins, C. (1992). Beginners need some decoding skill to read words by analogy. *Reading Research Quarterly*, 27(1), 12-26. (ERIC Journal No. EJ437489)
- Ehri, L. C., & Wilce, L. S. (1985). Movement into reading: Is the first stage of printed word learning visual or phonetic? *Reading Research Quarterly*, 20(2), 163-179. (ERIC Journal No. EJ311460)
- Goswami, U., & Bryant, P. (1990). *Phonological skills and learning to read*. Hove, UK: Erlbaum.
- International Reading Association & National Association for the Education of Young Children. (1998). Learning to read and write: Developmentally appropriate practices for young children. *Young Children*, 53(4), 30-46. (ERIC Journal No. EJ567836)
- Katz, L. G. (1995). *Talks with teachers of young children*. Norwood, NJ: Ablex. (ERIC Document No. ED380232)
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Lundberg, I., Frost, J., & Peterson, O. P. (1988). Effects of an extensive program for stimulating phonological awareness in preschool children. *Reading Research Quarterly*, 23(3), 263-284. (ERIC Journal No. EJ373262)
- MacLean, M., Bryant, P., & Bradley, L. (1987). Rhymes, nursery rhymes, and reading in early childhood. *Merrill-Palmer Quarterly*, 33(3), 255-281. (ERIC Journal No. EJ361475)
- McGuinness, D., McGuinness, C., & Donohue, J. (1995). Phonological training and the alphabet principle: Evidence for reciprocal causality. *Reading Research Quarterly*, 30(4), 830-852. (ERIC Journal No. EJ511638)
- Moll, L. C., & Greenberg, J. B. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L. C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 319-348). New York: Cambridge University Press.
- Moll, L. C., & Whitmore, K. F. (1993). Vygotsky in classroom practice: Moving from individual transmission to social transaction. In E. A. Forman, N. Minick, & C. A. Stone (Eds.), *Contexts for learning* (pp. 19-42). New York: Oxford University Press. (ERIC Document No. ED383404)
- Moustafa, M. (1995). Children's productive phonological recoding. *Reading Research Quarterly*, 30(3), 464-476. (ERIC Journal No. EJ508084)
- Nelson, K. (Ed.). (1989). *Narratives from the crib*. Cambridge, MA: Harvard University Press.
- Nelson, K. (1996). *Language in cognitive development*. New York: Cambridge University Press.
- Neuman, S. B., Copple, C., & Bredekamp, S. (1999). *Learning to read and write*. Washington, DC: National Association for the Education of Young Children.

- Palincsar, A. S., Brown, A. L., & Campione, J. C. (1993). First-grade dialogues for knowledge acquisition and use. In E. A. Forman, N. Minick, & C. A. Stone (Eds.), *Contexts for learning* (pp. 43-57). New York: Oxford University Press. (ERIC Document No. ED383404)
- Purcell-Gates, V. (1995). *Other people's words: The cycle of low literacy*. Cambridge, MA: Harvard University Press.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Share, D. L. (1995). Phonological recoding and self-teaching: Sine qua non of reading acquisition. *Cognition*, 55(2), 151-218. (ERIC Journal No. EJ513997)
- Snow, C. E., Burns, S. M., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: U.S. Department of Education. (ERIC Document No. ED416465)
- Sulzby, E., & Teale, W. (1991). Emergent literacy. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 727-757). White Plains, NY: Longman.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life*. Cambridge, MA: Cambridge University Press.
- Torgeson, J. K., Morgan, S. T., & Davis, C. (1992). Effects of two types of phonological awareness training on word learning in kindergarten children. *Journal of Educational Psychology*, 84(3), 364-370. (ERIC Journal No. EJ452406)
- Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (1994). Development of reading-related phonological processing abilities: New evidence of bidirectional causality from a latent variable longitudinal study. *Developmental Psychology*, 30(1), 73-87. (ERIC Journal No. EJ478196)
- Walsh, D. J., Tobin, J. J., & Graue, M. E. (1993). The interpretive voice: Qualitative research in early childhood education. In B. Spodek (Ed.), *Handbook of research on the education of young children* (pp. 464-476). New York: Macmillan. (ERIC Document No. ED361107)