



II. Language and Literacy

Background and Criteria

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The language and literacy domain includes the skills needed to understand and convey meaning and are presented in four components: Listening, Speaking, Reading, and Writing. Students acquire proficiency in this domain through experience with language, print, and informational text and literature in a variety of contexts. Over time students learn to construct meaning, make connections to their own lives, and gradually begin to analyze and interpret what they hear, observe, and read. They begin to communicate effectively orally and in writing for different audiences and varying purposes.

Note: Preschool-3 performance indicators are noted unless the indicator starts at a higher grade. In those circumstances, the performance indicator is written starting at the lowest grade with the grade level noted in parentheses.

A. Listening

- 1. Gains meaning by listening.**
- 2. Follows two-step directions.**

Teachers are under significant pressure to teach children prereading, reading, and writing skills; however, oral language—in particular listening—is one of the best ways to support growth in reading and writing (Jalongo, 2006; Bennett-Armistead, Duke, & Moses, 2005; Braunger & Lewis, 2005; Lonigan, 2005; Jalongo, 2007; Potocki, Ecalle, & Magnan, 2013). Listening comprehension is considered one of the skills most predictive of overall, long-term school success (Brigman, Lane, Switzer, Lane, & Lawrence, 1999). Considering that 60 to 90% of the talk in classrooms is produced by one person—the teacher (Jalongo, 2006)—listening skills are particularly important for young children to master to gain meaning in the school setting. Unfortunately, listening skills are also the least taught in the classroom (Smith, 2003) and has been referred to as the neglected or forgotten language art (Tompkins, 2005). As a result, it has been suggested that the three most important listening skills teachers need to help young children master are receiving the message (taking in verbal and nonverbal messages), attending to the message (engaging in and a desire to keep focused on the message), and assigning meaning to the message (interpreting or understanding the message through cultural contexts and personal and emotional processes) (Wolvin & Coakley, 2000).

Interestingly, prereaders and readers listen differently. Prereaders have significantly shorter memory spans and are more tuned into *meaning* than individual sounds (Nelson, 2007). For example, by age 3, most children have begun to listen to word order as a way to help them interpret sentences (Thal & Flores, 2001). By age 5, a child's receptive vocabulary soars to nearly 8,000 words, which, along with their beginning abilities to understand figures of speech (e.g., "raining cats and dogs," "slow as molasses"), significantly increases their listening comprehension (Tabors & Snow, 2001). In kindergarten, children gradually learn to follow one-step to multistep directions, and increase their ability to understand verbal explanations of phenomena that are not directly experienced (Public Broadcasting System [PBS], n.d.; Arizona

State Board of Education, 2005; Minnesota State Board of Education, 2005). Additionally, kindergarten children should be able to: a) listen to and understand age-appropriate stories read aloud, b) follow simple conversations, c) understand what is being taught in class (American Speech-Language-Hearing Association [ASHA], n.d.), and d) confirm understanding of information presented orally by asking questions and requesting clarification if something is not understood (Common Core State Standards [for English Language Arts and Literacy], 2010). In first and second grade, children learn to follow two- or three-step instructions (ASHA, n.d.), and begin to learn more about language play, including nursery rhymes, songs, and word games where new nonsense words may be invented. Such play may include all aspects of language such as sounds, meaning, and forms (PBS, n.d.). Third graders can follow even more complex instructional steps (3 to 4 steps) (ASHA, n.d.), and they expand on their use, understanding, and comprehension of language play by experimenting with verbal humor, riddles (word games built on some type of ambiguity), and irony (PBS, n.d.).

B. Speaking

1. Speaks clearly enough to be understood by most listeners.

According to the United States Preventive Services Task Force (2006), “speech and language delay affects 5 to 8% of preschool children.” These delays often persist into the school years and may be associated with lowered school performance and psychosocial problems. For example, children who have articulation and pronunciation difficulties at the age of 2-years, 6-months often later develop reading disabilities (Montgomery, Windsor, & Stark, 1991). And according to the American Speech-Language-Hearing Association (ASHA, n.d.), 3- and 4-year-olds who cannot be understood by their caregivers and who cannot correctly produce vowels and such sounds associated with the letters p, b, m, w, t, d, k, g, and f should be referred to a speech pathologist. In 4- and 5-year-olds, there should be very few pronunciation errors, and children should be able to use appropriate levels of volume, tone, and inflection; begin communicating in complex and compound sentences; and make fewer mistakes with irregular words in the past tense and plural forms (PBS, n.d.). However, many preschoolers are still making errors in their speech, such as saying “I goed” or “mouses” instead of “mice.” These types of “errors” really show the child has learned a rule or pattern in language structure (e.g., adding an *s* to make the plural for mouse or adding -ed to form the past tense for go) but they are overgeneralizing the pattern to situations in which English has irregular forms. Teachers do not necessarily need to correct these errors, but rather, they should simply continue to use conventional English and good modeling (Copple & Bredekamp, 2009). By ages 6 and 7, no pronunciation errors should be present, and children should be able to control and appropriately adjust speaking rate, voice pitch (i.e., high and low sounds), and volume. At this age, they should also speak and express ideas using most parts of speech correctly, with a range of complete sentences up to seven words in length. By third grade, children continue to control and adjust speaking rate, voice pitch, and volume appropriately; use complex sentence structures with subject-verb agreement in communication; use passive voice; and make fewer grammatical errors (Common Core State Standards [for English Language Arts and Literacy], 2010; PBS, n.d.).

2. Follows rules for conversations.

Children learn very early about how conversations work (taking turns, looking attentively, using facial expressions) as long as they observe and interact with conversing adults (Nelson, 2007). Additionally, one of the first tasks that must be achieved when engaging in a communicative interaction is a determination of the amount of shared knowledge that exists between the speaker

and the listener (Ninio & Snow, 1999; Siegal, 1999). Although young children are capable of modifying their conversations to meet the needs of their listeners, they often require help in determining what those needs are (Ninio & Snow, 1999). And while they often do not provide enough information due primarily to their limited vocabulary knowledge, young children, nevertheless, will respond with more detail when told that their conversational partner does not have the relevant information (e.g., De Temple, Wu, & Snow, 1991; Ricard & Snow, 1990).

By the age 3, children's speech habits reflect a common grounding that is often in line with the maxims of conversation as prescribed by Grice (1975; e.g., 'be relevant and informative,' 'speak the truth'). For instance, even very young children have already acquired expertise in saying what they mean (Snow, Pan, Imbens-Bailey, & Herman, 1996) and demonstrate substantial ability in adjusting their speech to the characteristics of listeners (Baldwin, 1993; O'Neill, 1996). Additionally, Common Core Standards [for English Language Arts and Literacy] (2010) suggest that beginning in kindergarten, children are expected to participate in collaborative conversations with peers, follow agreed-upon rules for discussions (taking turns, listening to others, etc.), and continue a conversation through multiple conversations.

Once in the primary grades, children have the ability to take multiple points of view which vastly expands their communication and conversational skills. They gain greater control of language and subsequently use it to think and to influence others' thinking. Better language skills are also associated with better social skills with peers, such as using less physical aggression and being better able to collaborate (Dickinson, McCabe & Sprague, 2003; Werner, Cassidy, & Juliano, 2006; Copple & Bredekamp, 2009). Once in the primary grades, children can engage in interactive and reciprocal conversations with adults and other children and effectively use the power of verbal communication, including humor (Copple & Bredekamp, 2009).

Finally, it should be noted that children's ability to follow rules of discussion is also related to their ability to follow rules in general. See the research summary for Personal and Social Development, in particular the research for the performance indicator "Follows classroom rules and routines" for further information.

3. Uses expanded vocabulary and language for a variety of purposes.

Vocabulary knowledge is important for a number of reasons, particularly listening and reading comprehension. It is estimated that a child needs a vocabulary of about 8,000 to 9,000 words in order to independently read and understand text. In order to independently understand spoken language and engage in fluent conversation, the vocabulary demands are somewhat smaller—about 6,000 to 7,000 words (Nation, 2006). Additional studies demonstrate the importance of vocabulary knowledge to not only reading comprehension skills (Feldman & Kinsella, 2005; Pearson, Hiebert, & Kamil, 2007; Lane & Allen, 2010) but also reading decoding skills (Lane & Allen, 2010). In other words, the more words the reader knows, the easier it will be to decode, figure out a word and its meaning, and to understand what is read.

Language development is one of the most important milestones that occurs during the preschool years (Dickinson & Tabors, 2001). Current research indicates that high-quality preschool experiences can have a positive impact on children's language and emergent literacy skills (Barnett, 2007). Specifically, the more opportunities children have to use language and receive quality feedback on their language, the more likely children are to develop rich vocabularies and more complex sentence structures (Dickinson & Tabors, 2001). Preschoolers learn from 6 to 10 new words a day (Tabors & Snow, 2001). This rapid growth in vocabulary also plays a significant

role in a child's social–emotional development. Having a vocabulary for expressing emotions—the ability to name a feeling—makes it possible for children to better understand and manage their emotions (Copple & Bredekamp, 2009). By age 5, a typical child knows 4,000 to 5,000 words, and acquires 3,000 additional words that year; however, depending on the environment, some children acquire 4,000 or more words (PBS, n.d.). If exposed to a language enriched environment, a 6-year-old's vocabulary grows to around 10,000 words (Bloom, 1998), and once a child turns 8, their vocabulary knowledge has doubled to around 20,000 words (Berk, 2008). By the third grade, a child's vocabulary knowledge can grow on the average up to 20 new words a day, simply from independent, daily reading (PBS, n.d.). In fact, hearing and reading words with advanced vocabulary and interacting with these words in various contexts are richer sources of word learning than everyday conversations that rarely contain uncommon words. Vocabulary knowledge also increases in the primary grades in part because of children's improved perspective-taking skills and better understanding of part-whole relationships. In other words, they can understand parts of words and apply that understanding to a new word (e.g., understanding what the word “unlock” means based on their understanding of the prefix “un”) (Copple & Bredekamp, 2009). Finally, by the end of third grade, children should be able to figure out nuances in word meanings, figurative language, and word relationships (Common Core State Standards [for English Language Arts and Literacy], 2010).

4. Begins to present knowledge and ideas. (Kindergarten)

The promotion of oral language skills is particularly enforced in preschool when oral language, rather than reading and writing, is the primary method of learning. Knowledgeable teachers promote oral communication through extended conversations; they follow children's conversation lead, and add responses and comments that enrich the conversation and draw the children out. Offering expansions is also helpful; it enhances the meaning and adds additional linguistic information that assists the young language learner (Copple & Bredekamp, 2009). Preschool children can begin to be able to “report” on topics, such as discussing why they like a favorite toy at show and tell, and providing an opinion about a book. Once in kindergarten, they are better able to speak up in small groups and before the whole class. They can ask and answer questions and further elaborate on their presentations when prompted (Copple & Bredekamp, 2009). Being able to give effective oral presentations is a skill many careers require. As a result, Common Core State Standards [for English Language Arts and Literacy] (2010) emphasize this skill starting in first grade. Specifically, students are expected to describe people, places, things, and events with relevant details, expressing ideas and feelings clearly, and produce complete sentences when appropriate to task and situation. By third grade, they are expected to report on a topic or text, tell a story, or recount an experience with appropriate facts, descriptive details, speaking clearly at an understandable pace. According to Wankoff (2011), once a child reaches the primary grades, poor expressive language skills such as difficulty answering questions or formulating verbal messages or managing conversations could be a warning sign of a difficulty conveying meaning through speech and language.

C. Reading

1. Begins to develop knowledge of letters.

Research studies have confirmed the importance of alphabetic skills (knowledge of letter names and sounds) for the development of reading. Indeed, Denton & West (2002) and West, Denton, & Germino-Hausken, (2000) report that children who are proficient in identifying letters (naming upper- and lowercase letters, recognizing beginning and ending word sounds) at entry into kindergarten show stronger skills at the end of kindergarten and in first grade on measures of

phonological processing and word reading compared to children who are not proficient. The National Institute for Literacy (2008) meta-analysis of the research studies investigating relations between emergent literacy skills in the preschool period and reading skills at school age identified alphabetic skills as strong predictors ($r = .48-.54$) of decoding, comprehension, and spelling. Not only are alphabetic skills strong predictors of reading skills in English speaking samples, but they are also strong predictors of reading in non-English speaking children (Lyytinen et al., 2004; Muter & Diethelm, 2001).

Fortunately, the proportion of young children able to demonstrate cognitive and early literacy skills such as alphabetic knowledge has increased over time. Between 1993 and 2007, the share of preschool children able to recognize all 26 letters of the alphabet increased from 21 to 32 percent (Child Trends DataBank, n.d.). Indeed, from ages 3 to 4, it is expected most preschoolers are able to identify some letters and make some letter-sound matches. At age 5, most kindergartners become able to recognize letters, and by the end of kindergarten, children should be able to name without much effort most letters of the alphabet, regardless of order and whether written in upper- or lowercase (Copple & Bredekamp, 2009). According to a report for the National Center for Educational Statistics (Denton & West, 2002), by the spring of first grade, almost all children can recognize their letters.

2. Demonstrates beginning phonological awareness.

3. Begins to use phonics and word analysis skills to decode. (Kindergarten)

Phonological awareness is the ability to notice sounds of spoken language – speech sounds and rhythms, rhyme and other sound similarities, and at the highest level, phonemes, the smallest units of speech that make a difference in communication (hence the term phonemic awareness). Phonics, which is not the same as phonological or phonemic awareness, is a system of teaching and learning how letters and combinations of letters correspond to sounds of spoken language and is typically introduced in kindergarten or first grade (Copple & Bredekamp, 2009).

Two large meta-analyses on phonological awareness and reading skills found there is a substantial association between phonemic awareness skills and word reading skills (Melby-Lervåg, Lyster, & Hulme, 2012; National Institute for Literacy, 2008), and there are now a number of studies showing robust longitudinal correlations between phonemic awareness in prereaders and the rate of growth in reading in the first few years of reading instruction (Lervag, Braten, & Hulme, 2009; Muter, Hulme, Snowling, & Stevenson, 2004; Roth, Speece, & Cooper, 2002). However, for preschoolers, phonological awareness is not automatically acquired. They gain this awareness when preschool teachers purposely support it and provide the degree of assistance needed by each child. Rhyming games, alliteration, songs, finger plays, and clapping out syllables to words are activities that promote phonological awareness. With support, kindergartners deepen their ability to think about the sounds of spoken words (phonemic awareness). Teachers can help them develop an awareness of the smallest meaning units (phonemes) that make up a spoken word (e.g., an /r/ sound changes “ice” to “rice”). This is a crucial step in understanding the alphabetic principle that phonemes are what letters stand for, and toward being able to read (Copple & Bredekamp, 2009). Kindergartners know their letters and have begun to connect some letters with sounds, and by the end of kindergarten, they should be able to recognize some very common words by sight (Copple & Bredekamp, 2009). At age 6, most first graders can identify new words by using letter-sound matches, parts of words, and their understanding of the rest of a story or printed item. They can also identify an increasing number of words by sight and sound out and represent major sounds in a word when trying to spell (NAEYC, 1998). According to the National Center for Education Statistics (2002), by the spring

of first grade, almost all children can recognize their letters, 98 percent of children understand beginning sounds, 94 percent understand ending sounds, and 83 percent recognize very common words by sight. By the end of second grade, most children decode and spell unfamiliar, but decodable words, including combined letters and sounds used in consonant blends, consonant digraphs, and vowel digraphs. Most children are also able to apply the long vowel marking system (when endings such as "-e," "-ing," "-ed" and others mark the vowel as long, like when "tap" becomes "tape" or "taping") when decoding and spelling. They use knowledge of common word families (e.g., "-ite" or "-ate") to sound out unfamiliar words (e.g., given the known word "boat," can decode "coat" and "float"). By the end of third grade, most children should be able to decode and spell multisyllable words by using letter–sound knowledge, including consonant blends and digraphs, short- and long-vowels, and complex vowel patterns. They use knowledge of word families (e.g., "-ould," "-ight") to decode and spell unfamiliar words, and decode and spell multisyllable words by applying basic syllable patterns; knowledge of prefixes (e.g., "un-"), roots (e.g., "friend") and suffixes (e.g., "-ly"); and by analyzing other structural cues. Finally, they demonstrate a growing collection of sight words (words identified quickly and automatically) that include words from content areas such as science and social studies (Common Core State Standards [for English Language Arts and Literacy], 2010; PBS, n.d.).

4. Reads text with fluency at appropriate instructional level. (First Grade)

Fluency, or the ability to read orally with speed, accuracy, and proper expression (National Reading Panel, 2000) is another important component to reading. Reading fluency is considered critical to skilled reading, given (a) its correlational if not causal connection to comprehension (Bourassa, Levy, Dowin, & Casey, 1998; Fuchs, Fuchs, Hosp, & Jenkins, 2001; National Reading Panel, 2000), and (b) evidence that at-risk and typically developing children as early as first grade demonstrate large differences in reading fluency skills (Biemiller, 1977–1978; Deno, Fuchs, Marston, & Shin, 2001). Some researchers now believe that primary grade teachers need to target not only word recognition skills but also fluent word recognition skills (Speece & Ritchey, 2005). In first grade, children are just starting to read aloud with fluency, accuracy, and understanding. In second grade, children continue to build automatic word recognition and their ability to read aloud with greater speed and accuracy. During the year, they read aloud in ways that sound more like natural speech (e.g., speak faster and use more expression), and by the end of third grade, most children read aloud with appropriate speed, expression, and accuracy. Their pacing and speech patterns sound more like spoken language and convey the purpose and meaning of the text. (Common Core State Standards [for English Language Arts and Literacy], 2010; PBS, n.d.).

3. Shows appreciation and some understanding of books.

Children's experiences with books and literature need to begin with appreciation, enjoyment, and engagement. Preschool teachers can enhance this appreciation and interest in books by reading aloud to children expressively and actively engaging children (e.g., asking them to predict what will happen next). Reading aloud books that play with language and rhymes (e.g., Dr. Seuss books) and include consistent language patterns (e.g., *Brown Bear, Brown Bear, What Do You See?*) are greatly enjoyed by children (Copple & Bredekamp, 2009). Engagement is essential in the learning process. Once engaged, the child can be empowered to persist at solving problems, to gain control over skills, and to increase achievement (Mosenthal, 1999). Experts in the field of literacy have consistently demonstrated that interest, motivation, and emotions—in a word, *enjoyment*—influence learning much more than previously thought (Cambourne, 2001). Nodelman & Reimer (2003) noted that children who enjoy and are engaged in reading delight in the words themselves, comprehend the text and pictures, visualize new images and explore new

ideas, identify with characters, experience the lives and thoughts of others vicariously, connect with the book and resonate to its message, and reflect on connections between one's life and the story, among other things (Jalongo, 2004).

1. Shows some understanding of concepts of print. (Kindergarten)

5. Uses strategies to construct meaning from different types of text. (First Grade)

Print concepts including print forms, print conventions, and book conventions are skills that provide contextual frameworks for interpreting printed information (Clay, 1993; van Kleeck, 2003). Knowledge of print forms is the understanding that print units can be named and differentiated (e.g., “p” is a letter; 3 is a number; words and letters differ). Understanding of print conventions is the knowledge that print has an organizational scheme (e.g., English print is read from left to right and top to bottom, and we “sweep” to read from one line to the next). Knowledge of book conventions is the understanding of how books are created, how they function, and how they are organized (e.g., the author writes the story, books have titles, books have a front and a back). The distinction between print and pictures is one of the first concepts that children learn about literacy. Children need an orientation to print and meaning in some general sense as a foundation for learning more specifically about alphabet principles related to print and reading (Lomax & McGee, 1987; Mason, 1980). Researchers suggest that the distinction between print and pictures is important because it establishes a separate identity for print and allows children to begin learning about its function and structure (Christie, Enz, & Vukelich, 2003). In a study of young children's concepts about print and reading, Lomax and McGee (1987) found that the ability to discriminate letters and words visually depended on the development of print concepts. Their structural analysis also indicated that print concepts directly influenced grapheme–phoneme correspondence knowledge. These results lend support to the Tunmer, Herriman, and Nesdale (1988) findings that print concept knowledge was significantly related to first grade children's ability to recognize real words and decode pseudowords. In addition, Scarborough (1998) found that, along with a number of other indicators beyond phonological awareness, print-specific knowledge and skills were correlated with later reading achievement. Thus, it can be concluded from these studies that supporting children in their development of print concepts is important for literacy development.

During kindergarten, students become familiar with the table of contents, index, and glossary as a way to help them find different parts of the book. They are also aware of authors and their purpose, and many will indicate who a favorite author is. Kindergartners recognize different types of text (e.g., storybooks, poems). By first grade, students have an even clearer understanding of how the author and illustrator play different roles, can describe an author's style (e.g., Dr. Seuss uses a lot of rhymes and nonsense words) and can tell the difference between books that tell stories and books that give information. In second and third grade, children show interest in a wide range of grade-level texts (e.g., fiction, folktales, fairy tales, poetry, nonfiction or informational texts) and are becoming more aware of their forms, structures, and purposes. They can predict content, events, and outcomes by using text, illustrations, and prior experience. They can also describe and use different words and phrases to provide meaning to a story, poem, or song. Finally, they also learn to use the different parts of the book, such as the table of contents, electronic menus, indexes, icons, subheadings, and chapter headings to locate information (Common Core, 2010; PBS, n.d.).

4. Begins to recount key ideas and details from text.

6. Begins to analyze and integrate knowledge and ideas from text. (Kindergarten)

7. Begins to read for varied purposes. (Kindergarten)

Being able to recall key ideas and details as well as analyze the text is the essence of listening (for prereaders) and reading (for readers) comprehension. There are many variables that effect listening and reading comprehension such as attention, vocabulary knowledge, reading decoding skills, working memory, work retrieval skills, etc. For experienced readers, a common way of conceptualizing the relation between word reading and reading comprehension is that reading comprehension is the product of word reading and listening comprehension (Hoover & Gough, 1990; Hoover & Tunmer, 1993). As such, reading comprehension and word reading abilities share important variance but are separable because of the influence of listening comprehension on reading comprehension, as supported in both phenotypic studies (e.g., de Jong & van der Leij, 2002; Gough, Hoover, & Peterson, 1996) and behavioral genetic studies (e.g., Harlaar et al., 2010; Keenan, Betjemann, Wadsworth, DeFries, & Olson, 2006). Near the beginning of reading instruction, individual differences in reading comprehension and word reading are nearly indistinguishable from each other (Byrne et al., 2007). If a child is unable to read many of the individual words in a text successfully, he or she will be unable to understand the meaning of the text. As word reading skills improve, individual differences in reading comprehension become less influenced by individual differences in word reading ability and more influenced by the child's overall linguistic comprehension abilities (Hoover & Gough, 1990; Rupley, Willson, & Nichols, 1998). Word reading and reading comprehension, therefore, are strongly related in children who are still mastering phonological and basic word reading skills. As children become more proficient word readers, the relation between word reading and reading comprehension declines, and listening comprehension becomes an important source of individual differences in reading ability (Keenan, Betjemann, & Olson, 2008; Vellutino, Tunmer, Jaccard, & Chen, 2007).

Reading comprehension and the ability to recall key ideas and analyze text is dependent on text level complexity. In other words, if the text complexity is too difficult, the student will not be able to comprehend the text. It should be noted that one of the goals of Common Core standards is to increase the current text level complexity that students read in school, particularly in the primary grades. The reason for this is that some believe text level complexity has decreased substantially over the years, and this has led to students graduating from high school ill prepared for college and other careers. However, a review of the existing research done by Hiebert and Messmer (2013) showed that it is middle and high school levels where text levels have decreased over the past 50 years, not the texts of the primary grades. As a result, they stated concerns about this increasing text level complexity, and called for more empirically informed guidelines to govern the text complexity staircase being recommended by Common Core standards. It is because of this research that the Work Sampling System explicitly does not state in the Guidelines that children are to read "grade-appropriate text" since this could mean different things to different educators. Rather, it is the WSS authors' belief that children are to read "developmentally appropriate" text that is commensurate with their current reading abilities.

In preschool, before most children can read on their own, preschool teachers can enhance children's comprehension by reading aloud and expressively and actively engaging children (e.g., asking them to predict what happens next). By kindergarten, children's growing vocabulary knowledge allows them to increase their comprehension skills and remember more details from books, but their comprehension is based still on books read aloud by teachers or parents. Additionally, students are being encouraged to not only understand text, but also analyze it at increasing levels of complexity (Common Core State Standards [for English Language Arts and Literacy] 2010). By first grade, children are expected to be able to read and understand narrative and informational text, understand simple written instructions, and describe in their own words

what new information they have learned from the text. By third grade, they should be able to summarize fiction and nonfiction and identify themes, read longer fiction texts and even chapter books independently, in addition to being able to distinguish between fact and opinion, main idea, and supporting facts (Snow, Burns & Griffin, 1998). In other words, during the primary grades in particular, most children become real readers. Perhaps most important, many children come to thoroughly enjoy reading and seek out reading activities voluntarily and for a variety of purposes (e.g., seeking out a book on basketball to learn more about how to play the sport) (Copple & Bredekamp, 2009).

D. Writing

- 1. Represents stories through pictures, dictation and play.**
- 2. Uses scribbles and unconventional shapes to write.**
- 3. Understands purposes for writing. (Preschool-4)**

It is important to allow children the experience of expressing themselves and thinking about themselves as writers. Young children first express themselves pictorially, but eventually begin to “write” letters and letter forms through scribbles and eventually recognizable letters and developmental spellings (NAEYC, 1998). A classic study by Read (1971) found that even without formal spelling instruction, preschoolers use their tacit knowledge of phonological relations to spell words. Invented spelling (or phonic spelling) refers to beginners’ use of the symbols they associate with the sounds they hear in the words they wish to write. For example, a child may initially write “b” or “bk” for the word bike, to be followed by more conventionalized forms later on. Studies suggest that temporary invented spelling contributes significantly to beginning reading (Chomsky, 1979; Clarke 1988; Ouellette, Senechal, & Haley, 2013; Senechal, Ouellette, & Pagan, 2012). One study, for example, found that children benefited from using invented spelling compared to having the teacher provide correct spellings in writing (Clarke 1988). Although children’s invented spellings did not comply with correct spellings, the process encouraged them to think actively about letter–sound relations. As children engage in writing, they are learning to segment the words they wish to spell into constituent sounds. NAEYC’s position statement “*Learning to Read and Write; Developmentally Appropriate Practices for Young Children*” (1998) encourages the practice of invented spelling and providing children regular opportunities to express themselves on paper, without feeling too constrained for correct spelling and proper handwriting. By doing so, this also helps children understand that writing has real purpose. Teachers can help children with their writing by demonstrating the writing process and actively involving children in it. Some teachers help children write down their ideas, keeping in mind the balance between children doing it themselves and asking for help. In the beginning, these products likely emphasize pictures with few attempts at writing letters or words. With encouragement, children begin to label their pictures, tell stories, and attempt to write stories about the pictures they have drawn. These writing activities send the important message that writing is for the purpose of using one’s words to compose a message to communicate with others (NAEYC, 1998).

In introducing children to written language, teachers can show children that print performs a variety of functions. For example, preschoolers benefit from environmental print when it is used in purposeful, functional ways—such as lists, sign-in charts, and labels—and when children increasingly have experiences in seeing print for such purposes, they not only learn the purpose of writing, but they begin to copy these experiences themselves by writing their own lists, stories, etc. (Copple & Bredekamp, 2009). Some teachers use Big Books to help children distinguish many print features, including the fact that print (rather than pictures) carries the meaning of the

story, that the strings of letters between spaces are words and in print correspond to an oral version, and that reading progresses from left to right and top to bottom (NAEYC, 1998). The strategies not only help the writing process, but also the reading process.

2. Uses conventions of writing. (First Grade)

By the end of kindergarten, children's knowledge of conventions of writing grows as they know that space separates printed words, are familiar with punctuation and know they are not letters. They understand the difference between upper- and lowercase letters. During this year, most children establish the habit of returning to the left to begin a new line of print. Many children begin to put space in between words in phrases and sentences they write, and invented spelling (i.e., phoneme based sounding out, and representation of these sounds, without regard for the correct spelling) is the dominant strategy of most children during this year. However, their repertoire of known spellings (sight words) increases (e.g., the, to, for, it, and, was, stop, go, on, up, at, cat, dog) as well as their ability to spell simple words phonetically drawing on knowledge of letter-sound relationships. A few children (usually those who have begun to read) may stop inventing spellings, given that incorrect spellings of common words do not look right to them. They may ask for most spellings rather than attempt to create them (Common Core, 2010; PBS, n.d.).

Once in first grade, most children can print upper- and lowercase letters legibly (using appropriate form, size, and spacing) and provide appropriate, but at times inconsistent spacing between letters, words, and sentences. They develop a deeper understanding throughout the year that a sentence is comprised of an idea, and are able to write complete thoughts using nouns and verbs in sentences. However, many continue to write several ideas without the use of end punctuation. By mid-year, most independently write in simple sentences with appropriate end punctuation and many can correctly capitalize (i.e., dates, proper names). Errors may occur when experimenting with more complex sentences (e.g., combining ideas). At the beginning of the year, some children may represent only consonants, especially initial and final, when spelling. By mid-year, most children can correctly spell words with regular short-vowel patterns (e.g., "cat," "hit"), as well as most common long-vowel words (e.g., "time," "name"). Children also use word recognition strategies (e.g., "sound out" words, feel how sounds are produced in the mouth, and identify word parts) to spell unfamiliar words (Common Core, 2010; PBS, n.d.).

In second grade, students can print all upper- and lowercase letters legibly, and provide appropriate margins and correct spacing between letters in words and words in a sentence. They can write complete sentences using subjects and verbs, as well as capitalization (e.g., proper nouns, months/days of the week, holidays, product names) and punctuation (e.g., comma use in the greetings of letters and to separate items in a list, apostrophes, quotation marks). Most children can distinguish between complete and incomplete sentences in their own writing and in the writing of others. They can use declarative (e.g., "We went to the store.") and interrogative sentences (e.g., "Do you like ice cream too?") with proper end punctuation (Common Core, 2010; PBS, n.d.).

In third grade, students can not only print all upper- and lowercase letters legibly, but most also can legibly write in cursive. They use appropriate margins and spacing, and can more consistently use correct capitalization and punctuation for such things as dates, dialog, cities and states, geographic locations, special events and titles of books. They use complete and correct declarative, interrogative, imperative (e.g., "Close the door."), and exclamatory sentences, and demonstrate greater proficiency with grammar, especially plurals, pronouns, verb agreement and

verb tenses. They begin to use resources (e.g., dictionary, thesaurus) to find correct spellings or words with similar meanings (synonyms). Finally, they are better able to recognize the differences between spoken and written language conventions (Common Core, 2010; PBS, n.d.).

3. Understands purposes for writing. (Kindergarten)

5. Begins to gather and use information for research purposes. (Kindergarten)

In kindergarten, children write stories, notes to friends, labels for displayed artwork, observations of science phenomena, and create print props needed for play (e.g., tickets, menus, signs). During this year, most children develop skills in composing simple fictional stories with a setting, characters, events, and a problem to be solved, and also develop skills in composing information that they have obtained from observation, or in composing summaries of information that they have gathered about something (PBS, n.d.). Additionally, the Common Core State Standards (2010) emphasize writing narratives, opinion pieces, informational pieces, and research with an emphasis on using feedback to edit and make the pieces stronger.

In first grade, with support, students write in a variety of forms or genres for different purposes, such as simple notes or letters, journal entries, lists, reports (sentences) to share information about things, and stories or personal narratives to share experiences. First graders are creating their own written texts for others to read—stories, journal entries, notes to friends, etc. They use invented spelling (spelling based on phonics) as necessary, but they are already conscious of getting it right; they want to spell words correctly and can use basic conventional punctuation and capitalization. They produce fairly readable first drafts and do some self-correcting. (Copples & Bredekamp, 2009).

As children progress into the primary grades, they are expected to write convincing arguments about issues that matter, clear and comprehensive informational texts that can do meaningful work in the world, and compelling narratives that foster an understanding of oneself, others, and the world, rather than the “formulaic writing and . . . thinking” rewarded by so many current standards and standards-based assessments (Hillocks, 2002, p. 200). For example, in second grade, students begin to understand and use writing to entertain, tell stories, share information, give directions, and use a variety of forms or genres (e.g., letters, stories, poems, personal narratives, responses to literature). Some children begin to reveal their personal voice (e.g., feelings, personal beliefs) in their texts, use writing to reveal his or her understanding of stories and of informational texts that are read across the curriculum (e.g., science, social studies), and develop an awareness of content and format for different forms of writing. Most children understand the form of writing needed for stories and organize events in a logical sequence (e.g., beginning, middle, and end), and describe the setting, characters, and events more frequently and in greater detail. They begin to write reports that describe and explain topics, objects, events, and experiences (Common Core, 2010; PBS, n.d.).

Third graders can produce a variety of written products including research reports, responses to literature, journal entries, and letters. They can gather and combine information from multiple sources to inform their writing, use more elaborate descriptions and figurative language, and can edit and revise their own work, focusing on spelling and mechanics as well as clarity of meaning (Snow, Burns, & Griffin, 1998). They write to present information, entertain through stories and poems, and communicate their understanding of texts and ideas. Their awareness of audience and increasing vocabulary results in more developed and descriptive writing. Many children reveal their personal voice (e.g., feelings, personal beliefs) in their writing. In third grade, children are more frequently asked to respond in writing to their learning across the curriculum (e.g., gather

together information from a variety of sources to write a report, analyze characters' actions, and interpret themes in stories). They are able to create more sophisticated stories with detailed settings, more fully-developed plot lines (with conflict and resolution), and characters that interact with the events. Some experiment with literary elements (e.g., using "like" or "as" to make comparisons [similes], incorporating figures of speech). Finally, they begin to use information gained from multiple sources (e.g., textbooks, observations, the Internet, and other library resources) to compose reports (Common Core, 2010; PBS, n.d.).

1. Begins to use writing strategies to convey ideas. (Kindergarten)

4. Begins to use feedback to add detail to writing. (Kindergarten)

At times, young children may find it difficult to decide on a topic to write about if asked to write on a subject of their choosing. Brainstorming topics can help children get started. In addition, teachers can ask children questions, such as, "What happened next?" to develop a story or retell an event or "What words could you use to describe the frog?" to show details that support children in writing more developed and descriptive texts. Writing can be more enjoyable and flow smoother when children have an idea about what they want to write before they start. Asking children to talk about their ideas before writing is powerful. For example, adults can help children select a personal experience (e.g., a recent vacation), encourage them to draw a picture about that experience, and then listen as they talk about the illustration. With adult support, children in kindergarten and first grade can use graphic organizers (e.g., brainstorm or web of ideas) to generate and organize ideas before writing. As writing improves and can be read by others, many use strategies to edit (e.g., grammar, capitalization, punctuation) and "publish" or publically share their written work (Common Core, 2010; PBS, n.d.).

In second grade, children continue to improve their organization of writing by grouping related ideas into simple paragraphs, presenting ideas in chronological order, and developing paragraphs with a clear purpose and focus. They use prewriting strategies to plan their written work such as graphic organizers, brainstorming webs, lists, and Venn diagrams, and they use post-writing strategies as well to help them edit and publish final, written work (Common Core, 2010; PBS, n.d.).

In third grade, students become even better at using organizers to help them develop their ideas and organize their written thoughts. They become better at knowing how to write for a particular audience, make precise word choices, and create vivid images. They are better able to proofread their work for errors and need less adult supervision and feedback (Common Core, 2010; PBS, n.d.).

References

- Arizona State Board of Education (2005). *Early learning standards*. Tuscon, AZ: Author. Retrieved from <http://www.azed.gov/wp-content/uploads/PDF/EarlyLearningStandards.pdf>
- American Speech and Hearing Association (n.d.). *Building your child's listening, talking, reading, and writing skills: Kindergarten to second grade*. Retrieved from <http://www.asha.org/uploadedFiles/Build-Your-Childs-Skills-Kindergarten-to-Second-Grade.pdf>
- Baldwin, D. (1993). Early referential understanding: Infants' ability to recognize referential acts for what they are. *Developmental Psychology*, 29, 832–843.
- Barnett, W. S. (2007). *New state research on highly effective pre-K*. Presentation on state preschool research at Congressional briefing June 18, 2007. Retrieved from http://works.bepress.com/william_barnett/cv.pdf
- Bennett-Armistead, V. S., Duke, , N. K., & Moses, A. M. (2005). *Literacy and the youngest learner: Best practices for educators of children from birth to 5*. New York, NY: Scholastic Teaching Resources.
- Berk, L. E. (2008). *Infants and children: Prenatal through middle childhood* (6th ed.). Boston, MA: Pearson/Allyn & Bacon.
- Biemiller, A. (1977–1978). Relationships between oral reading rates for letters, words, and simple text in the development of reading achievement. *Reading Research Quarterly*, 13, 223–253.
- Bloom, L. (1998). Language acquisition in its developmental context. In D. Kuhn & R. S. Siegler (Eds.), *Handbook of child psychology, Vol. 2: Cognition, perception, and language* (5th ed., pp. 307–370). New York, NY: John Wiley & Sons.
- Bourassa, D. C., Levy, B. A., Dowin, S., & Casey, A. (1998). Transfer effects across contextual and linguistic boundaries: Evidence from poor readers. *Journal of Experimental Child Psychology*, 71, 45–61.
- Braunger, J., & Lewis, J. P. (2005). *Building a knowledge base in reading* (2nd ed.). Portland, OR: Northwest Regional Laboratory.
- Brigman, G., Lane, D., Switzer, D., Lane, D., & Lawrence, R. (1999). Teaching children school success skills. *The Journal of Educational Research*, 92(6), 323–329.
- Byrne, B., Samuelsson, S., Wadsworth, S., Hulslander, J., Corley, R., DeFries, J. C., Quain, P., Willcutt, E., & Olson, R. K. (2007). Longitudinal twin study of early literacy development: Preschool through Grade 1. *Reading and Writing: An Interdisciplinary Journal*, 20, 77–102.

- Teacher*, 54, 414–417.
- Child Trends DataBank (n.d.). Early school readiness. Retrieved from <http://www.childtrends.org/?indicators=early-school-readiness>
- Chomsky, C. (1979). Approaching reading through invented spelling. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 2, pp. 43–65). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Christie, J., Enz, B., & Vukelich, C. (2003). *Teaching language and literacy: Preschool through the elementary grades* (2nd ed.). Boston, MA: Allyn & Bacon.
- Clarke, L. K. (1988). Invented versus traditional spelling in first graders' writings: Effects on learning to spell and read. *Research in the Teaching of English*, 22, 281–309.
- Clay, M. M. (1993). *Reading recovery: Guidebook for teachers in training*. Portsmouth, NH: Heinemann.
- Common Core State Standards [for English Language Arts and Literacy]. (2010). Retrieved from http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington, DC: National Association for the Education of Young Children.
- de Jong, P. F., & van der Leij, A. (2002). Effects of phonological abilities and linguistic comprehension on the development of reading. *Scientific Studies of Reading*, 6, 51–77.
- Deno, S. L., Fuchs, L. S., Marston, D., & Shin, J. (2001). Using curriculum-based measurement to establish growth standards for students with learning disabilities. *School Psychology Review*, 30, 507–524.
- Denton, K., & West, J. (2002). *Children's reading and mathematics achievement in kindergarten and first grade* (NCES 2002-125). U.S. Department of Education, NCES. Washington, DC: Government Printing Office.
- De Temple, J., Wu, H. F., & Snow, C. E. (1991). Papa pig just left for Pigtown: Children's oral and written picture descriptions under varying instructions. *Discourse Processes*, 14, 469–495.
- Dickinson, D. K., McCabe, A., & Sprague, K. (2003). Teacher rating of oral language and literacy (TROLL): Individualizing early literacy instruction with a standards-based rating tool. *The Reading Teacher*, 56(6), 554–564.
- Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Baltimore, MD: Paul H. Brookes.
- Feldman, K., & Kinsella, K. (2005). *Narrowing the language gap: The case for explicit vocabulary instruction*. Scholastic Professional Paper. New York, NY: Scholastic, Inc. Retrieved from http://teacher.scholastic.com/products/authors/pdfs/Narrowing_the_Gap.pdf

- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading, 5*, 239–256.
- Gough, P., Hoover, W., & Peterson, C. (1996). Some observations on a simple view of reading. In C. Cornoldi & J. Oakhill (Eds.), *Reading comprehension difficulties: Processes and intervention*. Hillsdale, NJ: Erlbaum.
- Grice, H.P. (1975). Logic and Conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics* (Vol. 3 pp. 41–58). New York, NY: Academic Press. Reprinted in H. P. Grice 1989, pp. 22–40.
- Harlaar, N., Cutting, L., Deater-Deckard, K., DeThorne, L. S., Justice, L. M., Schatschneider, C., Thompson, L. A., & Petrill, S. A. (2010). Predicting individual differences in reading comprehension: A twin study. *Annals of Dyslexia, 60*(2), 265–288.
- Hiebert, E. H., & Mesmer, H. A. E. (2013). Upping the ante of text complexity in the Common Core State Standards: Examining its potential impact on young readers. *Educational Researcher, 42*, 44–51. doi:10.3012/0013189X12459802
- Hillocks, G. (2002). *The testing trap: How state writing assessments control learning*. New York, NY: Teachers College Press.
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal, 2*, 127–160.
- Hoover, W., & Tunmer, W. (1993). The components of reading. In G. Thompson, W. Tunmer, & T. Nicholson (Eds.), *Reading acquisition processes*. Clevedon, England: Multilingual Matters.
- Jalongo, M. R. (2004). *Young children and picture books* (2nd ed.). Washington, DC: National Association for the Education of Young Children. Retrieved from <http://www.naeyc.org/store/files/store/TOC/160.pdf>
- Jalongo, M. R. (2006). *Early childhood language arts* (4th ed.). Boston, MA: Allyn & Bacon.
- Jalongo, M. R. (2007). *Learning to listen, listening to learn: Building essential skills in young children*. Washington, DC: National Association for the Education of Young Children.
- Keenan, J. M., Betjemann, R. S., & Olson, R.K. (2008). Reading comprehension tests vary in the skills they assess: Differential dependence on decoding and oral comprehension. *Scientific Studies of Reading, 12*, 281–300.
- Keenan, J. M., Betjemann, R. S., Wadsworth, S. J., DeFries, J. C., & Olson, R. K. (2006). Genetic and environmental influences on reading and listening comprehension. *Journal of Research in Reading, 29*, 75–91.

- Lane, H. B., & Allen, S. A. (2010, February). The vocabulary-rich classroom: Modeling sophisticated word use to promote word consciousness and vocabulary growth. *The Reading Teacher*, 63(5), 362–370.
- Lervåg, A., Bråten, I., & Hulme, C. (2009). The cognitive and linguistic foundations of early reading development: A Norwegian latent variable longitudinal study. *Developmental Psychology*, 45, 764–781.
- Lomax, R. G., & McGee, L. M. (1987). Young children's concepts about print and reading: Toward a model of word reading acquisition. *Reading Research Quarterly*, 22, 237–256.
- Lonigan, C. J. (2005). Development and promotion of early literacy skills: Using data to help children succeed. Retrieved from <http://www.ncl.org/index.php?option=content&task=view&id=506>.
- Lyytinen, H., Aro, M., Eklund, K., Erskine, J., Guttorm, T. K., & Laakso, M. L., ... Torppa, M. (2004). The development of children at familial risk for dyslexia: Birth to early school age. *Annals of Dyslexia*, 54, 184–220.
- Mason, J. M. (1980). When do children begin to read: An exploration of four-year-old children's letter and word reading competencies. *Reading Research Quarterly*, 15, 203–227.
- Melby-Lervåg, M., Lyster, S.A., & Hulme, C. (2012). Phonological skills and their role in learning to read: A meta-analytic review. *Psychological Bulletin*, 138(2), 322–352.
- Minnesota State Department of Education and Department of Human Services. (2005). *Early childhood indicators of progress: Minnesota's early learning standards*. Retrieved from http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=005130&RevisionSelectionMethod=latestReleased&Rendition=primary
- Montgomery, J. W., Windsor, J., & Stark, R. E. (1991). Specific speech and language disorders. In J. E. Obrzut & G. W. Hynd (Eds.), *Neuropsychological foundations of learning disabilities: A handbook of issues, methods, and practice* (pp. 573–601). San Diego, CA: Academic Press.
- Mosenthal, P. B. (1999). Understanding engagement: Historical and political contexts. In J. T. Guthrie & D. E. Alvermann (Eds.), *Engaged reading: Processes, practices, and policy implications* (pp. 1–16). New York, NY: Teachers College Press.
- Muter, V., & Diethelm, K. (2001). The contribution of phonological skills and letter knowledge to early reading development in a multilingual population. *Language Learning*, 51, 187–219.
- Muter, V., Hulme, C., Snowling, M., & Stevenson, J. (2004). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: Evidence from a longitudinal study. *Developmental Psychology*, 40, 665–681.
- Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, 63(1), 59–82.

- National Association for the Education of Young Children. (1998). *Learning to read and write: Developmentally appropriate practices for young children: A joint position statement of the International Reading Association and the National Association for the Education of Young Children*. 53(4), 30–46. Retrieved from <http://www.naeyc.org/files/naeyc/file/positions/PSREAD98.PDF>
- National Institute for Literacy. (2008). *Developing early literacy: Report of the National Early Literacy Panel, A scientific synthesis of early literacy development and implications for intervention*. Retrieved from <https://www.nichd.nih.gov/publications/pubs/documents/NELPReport09.pdf>
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: Government Printing Office. Retrieved from <http://www.nichd.nih.gov/publications/pubs/nrp/pages/smallbook.aspx>
- Nelson, K. (2007). *Young minds in social worlds: Experience, meaning, and memory*. Cambridge, MA: Harvard University Press.
- Ninio, A., & Snow, C. (1999). The development of pragmatics: Learning to use language appropriately. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of child language acquisition* (pp. 347–383). San Diego, CA: Academic Press.
- Nodelman, P., & Reimer, M. (2003). *The pleasures of children's literature* (3rd ed.). Boston, MA: Allyn & Bacon.
- O'Neill, D. (1996). Two-year-old children's sensitivity to a parent's knowledge state when making requests. *Child Development*, 67, 659–677.
- Ouellette, G., Sénéchal, M., & Haley, A. (2013). Guiding children's invented spellings: A gateway into literacy learning. *Journal of Experimental Education*, 81(2), 261–279.
- Pearson, P. D., Hiebert, E. H., & Kamil, M. L. (2007). Vocabulary assessment: What we know and what we need to learn. *Reading Research Quarterly*, 42(2), 282–296.
- Potocki, A., Ecalle, J. & Magnan, A. (2013). Narrative comprehension skills in 5-year-old children: Correlational analysis and comprehender profiles. *Journal of Educational Research*, 106(1), 14–26.
- Public Broadcasting System. (n.d.). *Child development/PBS parents: Child development tracker*. Retrieved from www.pbs.org/parents/child-development/
- Read, C. (1971). Pre-school children's knowledge of English phonology. *Harvard Educational Review*, 41, 1–34.
- Ricard, R. J., & Snow, C. E. (1990). Language use in and out of context. *Journal of Applied Developmental Psychology*, 11(3), 251–266.
- Roth, F. P., Speece, D. L., & Cooper, D. H. (2002). A longitudinal analysis of the connection between oral language and early reading. *Journal of Educational Research*, 95(5), 259–272.

- Rupley, W. H., Willson, V. L., & Nichols, W. D. (1998). Exploration of the developmental components contributing to elementary children's reading comprehension. *Scientific Studies of Reading, 2*(2), 143–158.
- Scarborough, H. S. (1998). Early identification of children at risk for reading disabilities: Phonological awareness and some other promising predictors. In B. K. Shapiro, P. J. Accardo, & A. J. Capute (Eds.), *Specific reading disability: A view of the spectrum* (pp. 75–119). Timonium, MD: York Press.
- Sénéchal, M., Ouellette, G., Pagan, S., & Lever, R. (2012). The role of invented spelling on learning to read in low-phoneme awareness kindergartners: A randomized-control-trial study. *Reading and Writing: An Interdisciplinary Journal, 25*(4), 917–934.
- Siegal, M. (1999). Language and thought: The fundamental significance of conversational awareness for cognitive development. *Developmental Science, 2*(1), 1–14.
- Smith, C. B. (2003). *Skills students use when speaking and listening*. Retrieved from ERIC database. (ED480895)
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academies Press.
- Snow, C. E., Pan, B. A., Imbens-Bailey, A., & Herman, J. (1996). Learning how to say what one means: A longitudinal study of children's speech act use. *Social Development, 5*(1), 56–84.
- Speece, D. L., & Ritchey, K. D. (2005). A longitudinal study of the development of oral reading fluency in young children at risk for reading failure. *Journal of Learning Disabilities, 38*(5), 387–399.
- Tabors, P. O., & Snow, C. E. (2001). Young bilingual children and early literacy development. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 159–178). New York, NY: Guilford Press.
- Thal, D. J., & Flores, M. (2001). Development of sentence interpretation strategies by typically developing and late-talking toddlers. *Journal of Child Language, 28*(1), 173–193.
- Tompkins, G. E. (2005). *Literacy for the 21st century: A balanced approach* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Tunmer, W. E., Herriman, M. L., & Nesdale, A. R. (1988). Metalinguistic abilities and beginning reading. *Reading Research Quarterly, 23*, 134–158.
- U.S. Preventive Services Task Force. (2006). *Screening for speech and language delay in preschool children*. Retrieved from <http://www.uspreventiveservicestaskforce.org/uspstf/uspschdv.htm>

- Vellutino, F. R., Tunmer, W. E., Jaccard, J. J., & Chen, R. (2007). Components of reading ability: Multivariate evidence for a convergent skills model of reading development. *Scientific Studies of Reading, 11*(1), 3–32.
- van Kleeck, A. (2003). Research on book sharing: Another critical look. In A. van Kleeck, S. Stahl, & E. Bauer (Eds.), *On reading books to children: Parents and teachers* (pp. 271–319). Mahwah, NJ: Lawrence Erlbaum.
- Wankoff, L. (2011). Warning signs in the development of speech, language, and communication: When to refer to a speech-language pathologist. *Journal of Child and Adolescent Psychiatric Nursing, 24*(3), 175–184.
- Werner, R. S., Cassidy, K. W., & Juliano, M. (2006). The role of social-cognitive abilities in preschoolers' aggressive behaviour. *British Journal of Developmental Psychology, 24*(4), 775–799.
- West, J., Denton, K., & Germino-Hausken, E. (2000). *America's kindergartners* (NCES 2000-070). U.S. Department of Education, NCES. Washington, DC: Government Printing Office.
- Wolvin, A. D., & Coakley, C. G. (2000). Listening education in the 21st century. *International Journal of Listening, 14*, 143–152.