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School-Age Language and Classroom Success

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OBJECTIVES

By the end of this chapter, the reader will be able to:

1. Describe the foundational skills required for school success.
2. Explain the syntactic/morphologic, semantic, and pragmatic skills development in school-age children.
3. Discuss relevant issues concerning the development of narratives as they apply to school-age children.

INTRODUCTION

The first day of school is a landmark event in the lives of many children and their families. It is a day that they may both long for and dread at the same time. Children will have to navigate a complex web of mathematics and literacy skills that will allow them, one day, to acquire the ability necessary for going to college or pursuing the careers of their choice. Regardless of the chosen post-high school pathway, there are skills children must acquire to survive in a society that values literacy and technological savvy. By the time children reach high school, they must be able to follow directions, skim reading selections, locate specific information within a text, recall information on demand, meet deadlines, take notes during presentations, plan and execute projects, participate in discussions, make logical deductions, and the list goes on (Westby, 2006). They must learn all of these abilities, with changing environments and expectations, while working through a fragmented day of stopping and starting classes.

There is no way around it—school is a language event. Language activities

occur daily during *all* tasks in the classroom and school environment, not only during class periods addressing reading or language arts. School-age children use and further develop all aspects of their oral and written language abilities; listening to teacher instructions, negotiating with peers for play and work materials, articulating answers to questions, reading, and writing. School, therefore, is a particular challenge for children with language and communication impairments associated with auditory deficits. A thorough understanding of what is known about the connections between oral language skills (i.e., listening and talking) and written language skills (i.e., reading and writing) can support the effectiveness of the audiologist serving school-age children. It is critical that we view oral language skills and written language skills in an interactive framework. Children develop spoken language skills initially ahead of written language skills, starting to talk around 1 year of age, but not expected to read or write until 6 years of age. Written language skills quickly become the dominant daily modality, and the spoken language skills of older children and adults are directly shaped by their literacy development; that is, in higher education settings, many work environments, and even some social settings, one's ability to speak in a fairly formal, standardized way is expected.

Challenges of developing oral and written language can be even more difficult for children who do not exhibit typical auditory abilities. Children who are deaf or hard of hearing (d/hh) present with a variety of linguistic abilities, not unlike children with language impairment or children, in general. Students who are deaf are likely to exhibit obvious deficits and clear educational challenges that require significant accommodations from classroom teachers, such as interpreters. Students who are hard of hearing will more likely use spoken English as their primary language and spend more time in the regular classroom. As a result, their educational needs and struggles are more likely to be overlooked (Antia, Jones, Reed, & Kreimeyer, 2009). Although students who are d/hh in this century have a better chance of achieving academic success (Antia et al., 2009), this population of students is continually at risk for academic difficulties.

Preschool skills in math, reading, and attention are some of the predictors for determining how successfully children will manage school (Duncan et al., 2007). In an attempt to help audiologists better serve children who are d/hh, this chapter explains both school and language demands placed on children, regardless of hearing ability. With this information, professionals responsible for helping students who are d/hh will be prepared to support these children as they avoid pitfalls of the language-loaded curriculum.

SKILLS FOR SCHOOL SUCCESS

Before the beginning of the school year, new students will get a list of school supplies for the first day of class, supplies like markers and three-ring binders. In addition to supplies, students are expected to come to school with foundational skills in place for learning. Foundational skills are those skills that facilitate rapid gains in reading, writing, and math. Additionally, there are pragmatic or social demands placed on children that go beyond playing well with others. Children must contend

Foundational skills

with both their peer group and the academic culture. Turn-taking, functioning within small groups, and code switching between academic and peer-group interactions are just a few of the skills students are required to bring to school, or to develop quickly in school with little formal instruction. All of these demands set the background for the acquisition of literacy skills that include both mathematical and reading proficiency. The literacy demands start in preschool and advance throughout students' academic careers.

Preschoolers with typical development are increasing their ability in emergent literacy, particularly in the area of phonological awareness, or knowledge of sounds and segments in words. For example, preschoolers around the age of 3 to 4 years, begin to segment sentences into words, demonstrate an interest in sounds and rhyming games, and identify approximately ten letters of the alphabet (Shaywitz, 2003). As children get closer to school age (i.e., 4 to 5 years), about 50% of the children will be able to segment words into syllables (e.g., banana = ba-na-na), whereas 20% will be able to segment words into sounds (e.g., sat = s-a-t) and identify even more letters of the alphabet (Shaywitz, 2003). Preschoolers who exhibit strong phonological awareness skills have been found to have an easier time sounding out words (i.e., decoding) in first grade than preschoolers who have weak phonological awareness skills (Bradley & Bryant, 1983). Yet, children who are d/hh are at risk for having difficulties with decoding. In fact, Briscoe, Bishop, and Norbury (2001) found that children who are d/hh exhibit poor phonological awareness skills at ages 5 to 10 years. Clearly, preschool children (with normal hearing and hearing loss) should begin their literacy journey early for the best possible academic outcome in reading.

One factor known to influence emergent literacy development is environment. Preschool children can be divided into two groups: children from "high print-high talk environments" and children from "low print-low talk environments" (Kuvshinoff & Creaghead, 1994). Environments that are high print-high talk include a child's home and school, where literate activities are not only valued, but are part of a family's daily activities. These activities can include, but are not limited to, joint reading time with books and magazines, paper and pencils for both joint and independent activities, using e-mail for communication, making lists, and discussing with children the things that are happening around them. In contrast, low print-low talk environments tend to have few literate activities as part of the daily routine, usually because of socioeconomic or cultural factors. As one might predict, children from high print-high talk environments have an advantage when starting kindergarten. Children from homes that are low print-low talk environments have to play catch-up when it comes to the literacy skills necessary to be successful students.

With each new teacher and/or advance in grade, classroom expectations change (Kuvshinoff & Creaghead, 1994); however, the focus of the curriculum is fairly consistent. In first through third grades, the primary focus of the classroom is developing literacy and math skills. As the children move through the upper elementary grades, they must use their literacy skills to glean information from subject texts (e.g., history and science), as well as written math problems. All of this skill development is in addition to the continued expectation that the

children read fiction and nonfiction stories, write book reports, summaries, and research papers, answer questions on tests, and demonstrate accurate grammar, spelling, punctuation, and penmanship.

In middle school, all of these demands increase, and students are expected to spend about 50% of the instructional day in independent seat work that requires the ability to set priorities, organize time, and make choices about how to approach assignments (Westby, 2006). These skills call for self-regulation and self-determinism, and those with difficulty managing the linguistic demands of the classroom are at risk for deficits in both areas. Westby (2006) defines self-determinism as "having the confidence in one's abilities to achieve important goals" (p. 373) and self-regulation as "managing the internal states and external behaviors to achieve specific tasks" (p. 373). These skills are needed for the development of higher reasoning skills, which support students in setting priorities, making choices, organizing work, initiating conversations, asking for clarification, and composing comments in a timely manner.

Today's classroom is a language-loaded environment; a critical component of academic success is linguistic ability. Today's classroom is also a busy place, with increasing demands in each advancing grade. Students will have diverse backgrounds and varying abilities, all requiring the classroom teachers' time and energy to be successful. Together, students and teachers have to tackle state-mandated curricular requirements and high-stakes testing. Without the appropriate supports, students with auditory deficits are not only at risk for coming to school without the emergent literacy skills necessary to start learning at an appropriate pace, but they are also at risk for failing to meet teacher- and state-required benchmarks.

LANGUAGE SKILLS AND DEVELOPMENT FOR SCHOOL SUCCESS

Syntax and Morphology

Typically developing children exhibit truly amazing sentence skills by the time they begin school at the age of 5 years. Their utterances will increase from simple, single words around the age of 1 year to multiple words organized in phrases to form sentences of increasing complexity. A sentence is defined as a group of related words that contains an initial noun or noun phrase, the subject, and a verb or verb phrase, the predicate. A phrase is also a group of related words, but phrases do not contain both subjects and predicates. For example, the phrase, "*my teacher*," is the subject in the sentence, "*My teacher* passed out the books on the first day of school." Likewise, "*on the first day of school*" is a prepositional phrase within the predicate of the above sentence. The structure of sentences, consisting of related words in phrases and the ordering of those words and phrases in specific languages like American English, is "syntax." "Morphology" is the language system governing small units of meaning, which include morphemes, words, and suffixes. Together, the rule-based systems of syntax and morphology comprise the grammar of a language.

Decades ago, Brown (1973) described the rapid development of syntax and morphology in children under the age of

5 years. For example, preschoolers inflect noun phrases to communicate possession (e.g., possessive pronouns such as "*your* backpack," or addition of *'s,* as in "Jen*'s* paper) and plurality (i.e., *-s* as in "pencil*s*" and "disk*s*"). They elaborate verb phrases with present progressive *-ing*, a variety of auxiliary verbs (e.g., "*is* studying," "*will* eat," and "*can't* sleep"), past tense forms (e.g., *-ed* suffix as in "color*ed*" or the irregular "*sat*"), and the third person present tense *-s* (e.g., "He write*s*," The teacher help*s*").

Children who are d/hh can exhibit delayed morphological development. Researchers have found that three early grammatical morphemes (i.e., possessive *-s*, past tense *-ed*, and the third person present verb tense *–s*) are the most vulnerable for children who are d/hh (Moeller, Tomblin, Yoshinaga-Itano, McDonald Connor, & Jerger, 2007). Acquisition of these morphemes by children who are d/hh can look inconsistent across an individual's development, and some children will achieve normal expectations for morpheme production.

Before their fifth birthdays, children begin to produce complex sentences characterized by embedded phrases and conjoined clauses (Owens, 2008). Like a simple sentence, clauses consist of a noun phrase plus a verb phrase (see example in Table 3–1). Two embedded phrases that emerge at an early age are prepositional phrases and infinitive phrases. In English, the infinitive form of the verb is the unmarked verb preceded by "*to*" as in "*to go.*" Other embedded phrases are gerund and participle phrases (see examples in Table 3–1), in which words that function as verbs (i.e., playing) are used as a noun or gerund, or as a modifier or participle. Early developing conjoined sentences are created with coordinating conjunctions; that is, words such as "*and,*" "*but,*" and "*or,*" are used to connect two independent clauses to form one utterance. Initially, children use and overuse "*and,*" but increasingly they produce other conjunction words, including subordinating conjunctions (i.e., "because," "if") to conjoin clauses (Owens, 2008). Throughout the school-age years, and as students acquire written language skills, they can use elaborated and embedded phrases, and clauses to express more ideas within clauses. This acquisition of skills supports their ability to communicate more concisely detailed information. However, children who are d/hh often show comprehension and production weaknesses for complex utterances with embedded clauses, although some children who have received intense, oral language training can achieve age-level skills for complex syntactic understanding (Moeller et al., 2007).

Nippold (2007) described school-age children's increasing use of grammatical elements, which occur with less frequency in spoken utterances. One construction, known as "passive voice," is often tested as part of standardized language assessments; however, passive voice is considered to be rare in spoken language. Instead, language spoken by adults to children consists predominately of "active voice" structures, or utterances in which the subject of the sentence is also the agent of the action (e.g., "*you*" in the utterance, "*You* didn't take his boat."). In contrast, passive voice is characterized by the agent of the action in the object position of the sentence (e.g., "*you*" in "His boat was taken by *you.*"), and typically developing children under the age of 9 years may interpret passive voice

Table 3–1. Sentence Complexity: Terms and Utterance Examples from Language Sample Transcripts

Terms	Example Utterance	Source (Child, Age)
Infinitive	"She wants *to pour* some milk."	TD girl, 4;3
Gerund	"I'm finished *playing* with these."	TD girl, 4;4
Participle	"I think it's called a *shooting* range or whatever."	LI boy, 11;2
	"I'm not really sure because my friend's dad found it *abandoned* on the road."	LI boy, 11;9
Complex utterance:	"I was riding it *and* Pawpaw ran over it at Mawmaw's."	TD girl, 4;4
Independent clauses *conjoined with a coordinating conjunction*	"My brother got a scooter *but* it broke."	TD girl, 4;4
	"You got to make a new one *so* the aliens don't get it."	TD boy, 4;3
Complex utterance:	"I'm so funny *because* I laugh all the time."	TD boy, 3;10
An independent clause and dependent clause *conjoined with a subordinating conjunction*	"I know, *because* they are old."	TD girl, 6;10
Complex utterance:	"I'll show you *what the motorcycle's trick is gonna be.*"	TD boy, 3;5
An *embedded dependent clause that serves as the noun or object of the sentence.*	"We can pretend *we have cups.*"	TD girl, 4;3
	"I think *we need these.*"	LI boy, 6;7
Complex utterance:	"There's so many cars *that I can't believe it.*"	TD boy, 3;5
An *embedded dependent clause that serves as a modifier.*	"You just got to do this *when you walk home.*"	TD boy 4;3

TD = typically developing; LI = language-impaired, normal hearing; Ages are years; month.

incorrectly, assuming the subject is the agent. Even with this protracted development for typically developing children, infrequent structures like passive voice are considered indicative of children's higher-level language skills, and children who are d/hh may continue to demonstrate comprehension weaknesses for passive voice well into adolescence (e.g., ages 14 to 17 years; Power & Quigley, 1973). Despite English teachers' increasing urges to avoid using passive constructions in writing, passive voice remains a preferred style in many genres. The following utterance might be associated with technical writing in our professions: "At the start of the investigation, *the story was presented* to the kindergarten children." Readers of this chapter will recognize that this sentence construction is often pre-

ferred to the active voice sentence, "At the start of the investigation, *we presented the story* to the kindergarten children."

Educators of students who are d/hh benefit from considering these rapidly expanding syntactic and morphological skills for children learning English. After all, complex and elaborated utterances emerge relatively early in the spoken and written language of children with typical language skills, and the children's competency with these forms is nothing short of remarkable. Success in school-based Language Arts curricula requires knowledge of phrase, clause, and sentence parts and their varied constructions to convey tense and agreement. Infrequent structures (e.g., passive voice constructions) are indicative of higher level language comprehension and expected of students as their writing style matures. Academic success in the upper elementary grades, and in secondary school, necessitates comprehension, production, and knowledge of these structures in spoken and written language.

Semantic Development

"Semantics," by definition, govern the meaning being conveyed in the linguistic code. Children with typical development are particularly good at learning word meanings. Around the age of 2 years, children should have a vocabulary of about 200 words. As they start first grade, typically developing children have a vocabulary of about 6,000 words, and by the time they finish high school, they are capable of exhibiting a vocabulary of 60,000 words (Pinker, 1994). Throughout our lives, our vocabulary continues to grow as we master new skills with specialized vocabulary. This mass of words to which children have attached meaning is referred to as the "lexicon" (Pence & Justice, 2008). The receptive lexicon is the collection of words we understand, and the expressive lexicon includes the words that we can use (Pence & Justice, 2008).

How do words get stored in a child's receptive or expressive lexicon? Initially, it occurs through a process called "fast mapping." Fast mapping is the ability children possess that allows them to learn a new word with as little as one exposure to the word and its referent. We see evidence of fast mapping from the beginning of children's oral language development. For example, when the first author's daughter was a toddler, she was watching her father empty the contents of his pocket. There was some loose change, scraps of a tissue, and a pair of soft yellow ear plugs. She asked her father, "What's that?" to which he replied, "toilet paper." Little did he know that she was referring to the ear plugs and not the tissue. Until we finally corrected it, she referred to little yellow ear plugs as "toilet paper." Once a word has been fast mapped, it takes repeated exposures before the child can refine that word's meaning.

School-age children have three primary avenues for learning words. The first is vocabulary drill, or direct teaching of vocabulary words in classrooms (Nippold, 2007). Most of us have had firsthand experience with this type of lesson. Unless this type of vocabulary instruction incorporates meaningful application, other than just writing the word in a sentence, it is not very effective in changing students' lexicons (Nelson & Van Meter, 2006).

A second process for learning new words is the use of contextual cues from known words that surround unknown words (Nippold, 2007). Learning new vocabulary from the context of words

is something that students with normal hearing acuity and typical language ability do readily, as it is an effective method for learning new vocabulary words. The ability to use the contextual cues of oral and written language is dependent on students' abilities to process linguistic information. Children who are d/hh can develop vocabulary skills commensurate with peers; however, auditory processing limitations associated with phonological delays may limit vocabulary development, delay strategy use for word learning, and result in below grade-level reading skills (Moeller et al., 2007). Thus, this context-based vocabulary acquisition strategy may not be available for children who are d/hh, unless they receive explicit instruction on its use.

A third mode for learning new vocabulary words is to break words down into base words, suffixes and prefixes (Nippold, 2007). To be facile readers, students must be able to break longer words down, or "chunk" them, into individual syllables or other segments, such as prefixes, suffixes, base words, and root words. The ability to break words into their root or base words and the corresponding suffixes and prefixes is a skill that is important for vocabulary development, decoding unfamiliar words, and reading comprehension, and it is known to build upon children's knowledge of English morphology.

Although word meaning is an important part of semantics, there is much more to meaning than simple or direct understandings of words. Another component of semantics is figurative language. To understand figurative language, not only do students have to comprehend the immediate context of the message being spoken, but they must move beyond the literal interpretation of the sentence to implied comparisons, as in a metaphor, or to deliberate incongruity of what is being said to what is intended, as in irony. There are four commonly used figurative language forms: similes, metaphors, idioms, and irony (Table 3–2). Not only is figurative language needed for social interactions and witty conversational exchanges, it is also central to students' academic success (Milosky, 1994). Children who are too concrete or literal in their language use and comprehension will be considered "slow on the uptake" and miss out on critical peer and academic interactions. Although preschoolers may be able to comprehend some metaphors, children's ability to comprehend and use metaphors

Table 3–2. Types of Figurative Forms Commonly Found in English

Figurative Form	Definition	Example
Simile	A comparison of dissimilar things using "like" or "as"	She was as sweet as honey.
Metaphor	An implied comparison of dissimilar things not using "like" or "as"	Love is a red, red rose.
Idioms	Sayings we use every day	A hitch in your giddy-up.
Irony	Involves the deliberate incongruity between what is stated and what is meant	You failed a test and say, "Well, that was easy."

continues to increase throughout childhood and into adolescence and adulthood (Nippold, 2007). However, children who are d/hh are at risk for having difficulty understanding and using figurative language, in part, because the development of figurative language is a skill that requires exposure and time.

Figurative language forms serve several functions. We commonly use metaphoric language to clarify unknown concepts by comparing them to known concepts or objects. Perhaps you can recall a teacher using an apple to teach the different layers of the earth. The peel is the crust of the earth, the white fruity part is the mantle, and the core of the apple is like the core of the earth. In this manner, metaphors can be used to clarify, illuminate, or explain. Successful comprehension of metaphors relies on the ability to compare dissimilar things. First, students must infer that a comparison is being made, and then students must discern the relevant similar dimensions of the two dissimilar things being compared while ignoring irrelevant similarities (Milosky, 1994). Given that successful metaphor comprehension requires this level of skill, it is no wonder that children who are d/hh are at risk for difficulty with this linguistic device.

Idioms are another figurative form that makes language interesting and rich. They are used to express an attitude, to establish group solidarity, or to be indirect. They can be as apparent as "hold on" for wait a minute or as opaque as "no quarter given" for that person who was given no mercy. The meaning of idioms can be tied to the ethnic or sociocultural group to which someone belongs, or to the dialect one speaks (Milosky, 1994). Certainly comprehension of idioms is necessary to understand informal social conversations, and much humor is conveyed through the use of idioms and metaphors.

Irony is an important linguistic tool used to shape and inform who we are as conversationalists. The only difference between irony and lying is that, for irony, the speaker says the opposite of what he wants the listener to believe. Irony extends across the whole utterance in that the intonation pattern of the statement (i.e., syllable and word stress, pauses, and fluctuation of vocal pitch), as well as the body language used, help the listener understand that the speaker's intent is actually the opposite of the words being spoken. As a student advances toward middle school, irony becomes a common vehicle for both humor and criticism from peers, as well as teachers. To comprehend and use irony, advanced conversational skills on the part of both the listener and the speaker are required. Understanding irony may be difficult for the student who is d/hh not only because of the challenge of this construct from a language standpoint, but also because acoustic cues (e.g., intonation patterns) contained within the message convey meaning that one must hear for the irony to be perceived. Students who are d/hh may not have the hearing sensitivity to perceive these acoustic cues. Semantic ability contributes to later reading comprehension and academic success in the later grades (Rand Corporation, 2002). Once children start school, semantic skill is expected to increase with exposure to classroom and written language. Children who are typically developing start school with semantic abilities that allow them to grow more words and use those words in increasingly creative and figurative ways. Children who are d/hh, however, are at risk for starting school with limited semantic ability. Specifically, these children present

with receptive vocabulary skills within the "normal" range but below their hearing peers (Berent, Kelly, & Porter, 2008; Briscoe, Bishop, & Norbury, 2001).

Pragmatic Development

"Pragmatics," or the social use of language, is important to nearly every school-age child. Like many of the other linguistic skills, this skill is developed through interaction with peers. To fit in, school-age children must learn how to be competent conversationalists. As with other language skills, pragmatics develop with time and experience for children with typical language. In preschool, children's ability to maintain budding conversations often involves repetition of content and is a strategy known as "topic collaboration." During the school years, we see children becoming more advanced conversationalists because they increasingly add new information to the topic. This is a strategy known as "topic incorporation" (James, 1990). As children reach adolescence, they develop even more advanced conversational skills called "topic shading." Topic shading is the ability to move subtly from one topic to another related topic.

In theory, we expect conversations to be the meeting of two minds as they share thoughts and concepts. Yet, all of us have been in conversations where we had difficulty getting our idea across. With a few queries on the part of the listener, hopefully, we were able to repair the confusion and move on with the story. The art of conversational repair requires finesse from both the speaker and the listener to work through information that is not understood. Preschoolers can try to repair conversational breakdown, but typically they will only respond to one request for clarification (Brinton, Fujiki, Loeb, & Winkler, 1986). As children mature, their abilities to repair conversations increase (Brinton et al., 1986; James, 1990), such that, a 5-year-old child can respond to two requests for clarification. It is not until elementary school age that we expect a child to supply suitable responses to stacked sequences for a minimum of three clarification requests (James, 1990). For an example of a stacked repair sequence from a typically developing 7-year-old, see below.

Example of a stacked repair sequence from a typically developing 7-year-old.

Child's initial utterance:	"I put water in that."
Clarification request 1:	"In what, Sweety?"
Child's repair 1:	"In that thing over there."
Clarification request 2:	"I don't know what you are talking about"
Child's repair 2:	"In that thing on the counter."
Clarification request 3:	"I'm not getting it."
Child's repair 3:	"You know, the thing on the counter you scrub with."

In elementary school, children become better at responding to clarification requests and determining where the breakdown in conversation occurs. Although some children show this skill earlier, children with typical development do not consistently request clarification of a message until they are about 10 years of age (James, 1990). To request clarification, the listener must ask the speaker for additional information to reduce confusion about the message or instruction. This is of particular importance when professionals are working with children who are d/hh, as the children are often encouraged to tell or ask the teacher if they to do not understand.

Asking for help, or requesting a favor from someone, can be a tricky proposition for adults, much less children. Indirect requests, as opposed to direct requests, are a subtle, more polite way of requesting actions. If the door is open, a direct request to a family member might be, "*Shut the door.*" If the person is not as familiar, then a more polite form, an indirect request of, "*Would you shut the door for me?*" is more appropriate. Both direct and indirect requests have the same underlying intention—the door is open and the speaker wants it closed. However, the indirect request is more socially acceptable.

As many parents may attest, preschoolers tend to be direct in their requests for things, often needing prompting to use *polite forms*, like "please" and "thank you." They have a difficult time understanding indirect requests, as well. So if one said to a 4-year-old, "Isn't it a little cool in here?" He may respond by saying "yes" without understanding that you wanted him to close the door. Around the age of 6 years, children respond to many forms of direct requests, but will still not have mastered the use of indirect requests. It is not until around 8 years of age that children are able to use indirect requests because they understand the importance of being polite.

Another important aspect of pragmatic development is presupposition, or knowing what information to present so that a listener can understand a conversation. We have all been on the receiving end of a story that we could not follow. We did not know the "*she*" to whom the speaker was referring, or which "*thing*" was what. Preschool children do not have well developed presuppositional skills and will have difficulty relaying information to others if the context is not known. This difficulty is, in part, due to their lack of skill with language, but it is also based in their incorrect assumption that listeners know what they know. As children move from preschool into elementary school, their abilities with presuppositional skills advance. In general, school-age students with typical development can successfully set the context of a conversation, or explain the overall purpose of the game (Hulit, Howard, & Fahey. 2011). Additionally, they are able to organize information in a way that listeners have a good idea about the sequence of events. School-age children also pay more attention to topic relevance, providing just the right amount, and the right kind, of information needed by listeners. It is only after repeated experiences with conversations across multiple listeners and varied settings that students develop an understanding that the more pertinent, useful, or timely a topic, the more likely the topic will be readily received by listeners (Naremore, Densmore, & Harmon, 1995).

Making accurate assumptions about listeners' knowledge and establishing contexts for interactions are important

skills as students advance in language arts. They will be evaluated on their ability, both written and oral, to use presuppositional skills. Conversational skills and school-age writing assignments require a complex set of language functions, and establishing a joint context for optimizing understanding between the speaker and the listener is critical for success. Additionally, presuppositional ability, in the form of accurate assumptions about teachers and curricular materials, is important for students as they demonstrate critical thinking in content courses. When answering essay questions and explaining how to solve both science and math problems, students must provide the relevant information as clearly as possible.

BEYOND THE BASICS: NARRATIVE LANGUAGE DEVELOPMENT

Expressive language in the form of narratives is a substantial accomplishment associated with school-age language ability. Narrative skills support both production and comprehension of various discourses, including conversational and written language. Narratives come in various shapes and sizes and occur in multiple contexts, including conversation, storytelling, writing fiction and nonfiction, and broadcasting ongoing events, such as a sports competition. Humans across all cultures produce narratives, although there are cross-cultural differences (McCabe & Bliss, 2003). Definitions of narratives often focus on two aspects, a unified meaning or theme and a temporal or causal sequence of ideas (Hughes, McGillivray, & Schmidek, 1997; Liles, 1993; McCabe & Bliss, 2003). When narratives consist of a unified meaning, or the key ideas cluster around a central idea, it is termed "centering." Likewise, "chaining" is the term used when the narrative has events presented in a causal or temporal order. Mature or classic narratives demonstrate both centering and chaining (Applebee, 1978). "Personal narratives" embedded in conversations are the method by which individuals tell their past experiences. Family members and friends retell shared memories through personal narratives. Personal narratives can be termed "accounts," when individuals spontaneously share their experiences (e.g., "You'll never guess what happened to me this weekend . . . "), or "recounts," when individuals are prompted to tell events or describe others' experiences (e.g., "Tell the class about your summer vacation . . . " or "You'll never guess what happened to my sister this weekend . . . "). "Stories" are fictional narratives that describe the goal-directed behaviors of characters.

Educators benefit from understanding the structure of both personal narratives and stories in order to support children's development and effective use of narratives in academic settings. The classic structure of personal narratives has been described using "high-point analysis." McCabe and Rollins (1994) indicated that a classic personal narrative includes an event that marks a high point or problem, often with several evaluative utterances, and an event that represents some resolution following the high point. Typically developing children produce classic high-point personal narratives by first grade, or the age of 6 years (see example in Table 3–3). Some personal narratives demonstrate essential elements for a chronological personal narrative, but

Table 3–3. Narrative Types: Examples Collected from Written Samples

Terms	Example	Source (Child, Age)
Personal Narratives:		
Classic High-Point	"One day I was outside rollerblading and my roller blades wouldn't stop. I was going faster and faster. My dad was standing in front of me and I hit the gravel with my knee and it dragged me along the sidewalk. I walked in the house with a straight face not crying a wink. We called my mom and told her. She was really happy that I was okay."	TD girl, age 8
Chronological	"First, I went over to my grandfather's. I rode my motorcycle."	LI boy, age 8
	"Then she talked about narratives. She had a big speech and passed out papers that they could read off of when she talked. Then she read a lot of stories to the class that she was teaching. Then she talked about how you make a story a story."	TD girl, age 8
End-at-High-Point	"My dad wouldn't let me have a friend over. I was very very sad. He just kept saying no. He was very very mad too."	TD girl, age 7
Stories:		
Complete Episode	"I see a grasshopper. He wants to skateboard. He went to the garage. He went to the place where he kept his skateboard. He looked where his skateboard*. He looked everywhere but he knows where it is in his room. He went to his room. He opened the door and surprise. It was his birthday."	TD boy, age 6;9
Pre-episodic	"I see a bee. He is making some honey. I should go inside before lots of bees come out."	TD boy, age 5;11
	"If you had no parents** I would spend my time alone trying to find new friends and a home. I would check every house in town. If I wouldn't find a friend or home I would leave the town. Go somewhere else to work."	TD girl, age 6;7
	"It was amazing. Wow. I saw a sea serpent jump out of the water. It had spikes on it. There it is! It's huge. The teeth are very sharp. There's another one! They're fighting! The other one went away. It got bigger. I can see its shadow on the water. It's jumping out of the water again and again. It jumps very high! When it got bigger, the spikes got sharper. Cool! It's getting bigger. The spikes are getting sharper."	TD boy, age 7

continues

Table 3–3. *continued*

Terms	Example	Source (Child, Age)
Multiple Episodes	"Once there was a gecko named Bobby. He got bored at standing around all day. So he decided to be a space gecko. So he went and applied for the job and then he got the job. So he went and got his suit and got food and water and then he took off into outerspace. Then he went to Pluto and his rocket ran out of fuel. So he was stuck there. Then he saw a town. He got his ray gun and started walking toward the town, and he saw a slimy green thing. It had 100 eyes, 6,000 legs, and 50 arms. 'Ahh,' Bobby yelled as the creature started walking towards him! Then the creature and Bobby started talking. They talked for at least an hour. Then they finally decided that the gecko can live with the creatures. So the creature showed Bobby around. The towns people decided to kill Bobby. So Bobby blew up the town. Boom!!! Then Bobby's creature friend gave Bobby more fuel. Bobby and the creature went back to Gecko world to prove there was life on other planets."	TD boy, age 8

TD = typically developing; LI = language impaired.

*Typically developing children may exhibit developmentally appropriate word and sentence level errors for early written narrative tasks, particularly for journal assignments that do not require proofing for a final draft. Spelling, but not grammar, has been corrected in all of the examples.

**This school journal example was prompted by the story starter, "If you had no parents . . . ," which likely led to the child's ungrammatical pronoun shift in the first sentence.

fall short of the classic high-point structure (McCabe & Rollins, 1994). That is, a chronological narrative includes a minimum of two past-tense event statements produced in a logical or causal sequence that mirrors the actual event sequence. This type of descriptive narrative is demonstrated by individuals of all ages and is often the result of the type of narrative elicitation task. McCabe and Rollins (1994) also labeled children's personal narratives as *end-at-high-point*, when children tell an event, build to the high point, but do not express a resolution or ending (see examples in Table 3–3). This narrative structure is considered typical of preschool-age children.

Similar to the elements of a personal narrative, the primary feature of a story is the "episode." Episodes consist minimally of three key components: a problem set, an attempt by the main character(s) to address the problem, and some description of the consequences or resolution of that problem (Liles, 1993; Roth & Spekman, 1986). Children's stories that do not contain these episodic elements are *pre-episodic*, similar to the chronological

or end-at-high-point personal narratives. The other traditional element of a story is the setting, which precedes the episode. Settings, when explicit, tell the "who," "where," and "when" elements of the story. The episode and setting are critical components of classic story structure, or what is also termed "story grammar." Narratives, particularly fictional stories, are not as simple as what is described here. Instead, much literature, even stories written for young children, consists of multiple episodes. One episode may be embedded within another episode (e.g., Goldilocks attempts to make herself comfortable in the bears' home, while the bears take a walk to let their porridge cool.), or episodes follow one another in a series of adventures (e.g., *If You Give a Mouse a Cookie* by L. Numeroff or the *Harry Potter* series by J. K. Rowling). Children's successful reading comprehension requires tracking details (including initiating events, attempts, resolutions, and character motivations and feelings) across complex, embedded episodic structures.

Even when children produce classic narrative structures (i.e., high points with resolution or complete episodes), narratives can vary in the entertainment value, or the degree to which they evoke emotional responses. Ukrainetz (2006) described this qualitative aspect as "story art." Story art elements include introductions and explanatory elements that create increased interest, not necessarily increased factual detail. Effective stories use evaluative language, often building suspense and emotion around the problem or high point. Repetitions of key ideas or refrain-like utterances, stated moral lessons, and creative openings or endings contribute to story art. Consider any evidence of story art or "sparkle" in the example stories in Table 3–3. Do any of the stories have creative beginnings or endings, evoke emotion, or effectively use repetition?

Development of narrative skill starts in the preschool years and increases throughout the school-age years into adulthood (Nippold, 2007). Kindergarten and early elementary-aged children tell personal narratives, produce scripts, and retell relatively simple stories. Narratives are often prompted and supported by adults who are familiar with the story content, and children may rely on pictures to create a shared context for story retelling (Ukrainetz, 2006). Around the ages of 6 to 7 years, children increasingly include all aspects of a classic story and personal narrative structure. That is, they produce complete episodes in story retelling and produce high points plus resolutions in their personal narratives (Hughes et al., 1997; Liles, 1993). By about third grade, typically developing children can generate their own stories, although picture support or shared context may be needed. Some children may not be successful at retelling stories in their entirety or generating novel stories without picture support until around the seventh grade, or ages 12 to 13 years (Nippold, 2007). From kindergarten through adolescence, children who are typically developing demonstrate narrative development through: (a) increased length and detail, (b) increased number of episodes, including multiple episodes that are linked to one another or embedded one within another, (c) more emotional detail, and (d) greater effort to entertain listeners or add story art (Nippold, 2007).

Although patterns in narrative development have been observed, differences in narrative development are also expected.

Children learn narratives in social contexts. That is, they are socialized to listen to and produce various types of narratives within their families and early preschool and school environments (Westby, 1994). Not all families and cultures create and tell stories in the same ways or for the same reasons (McCabe & Bliss, 2003; Westby, 1994). More specifically, story episode structure, as described above, is predominant in mainstream American culture, but not critical in other storytelling genres. For example, stories in many Asian cultures tend to have themes that focus on the main character's background and emphasis is placed on cultural tradition, not goal-directed behaviors of an individual (Westby, 1994).

Children who are d/hh, similar to children with language impairment, have been shown to produce fewer complete episodes at the ages of 7 to12 years than expected for non-hearing-impaired individuals (Justice, Swanson, & Buehler, 2008; Weiss & Johnson, 1993; Young et al., 1997). Ukrainetz (2006) recommended assessing four aspects of narrative production: "(1) degree of independence, (2) story grammar, (3) cohesion, and (4) story art" (p. 197). Although early elementary-age children are expected to produce narratives independently, their degree of independence is relevant because educators provide varying degrees of support for narrative success and continued development. The story grammar assessment described by Ukrainetz is dominated by evaluating the episode. Story grammar, or episodic analysis, is considered a macrostructure approach; that is, emphasis is placed on the overall text structure. Cohesion, on the other hand, is a narrative element consisting of utterance connections to create a unified text. Cohesion analysis is focused on sentence structures and word selections (particularly conjunctions and pronouns) that assist the listener or reader in creating meaning across utterances. Conjunctions used to link events in narratives include the following meanings: addition ("and," "also"); change of direction ("but," "on the other hand"); temporal ("first," "next"); causal ("because," "then"); emphasis ("most of all"); and illustration ("for example"). Maintaining cohesion through appropriate pronoun use requires that the storyteller unambiguously identify salient individuals, events, or locations prior to using a pronoun. For example, the storyteller cannot appropriately use "he" or "there" without the referents ("king" and "kingdom," for example) clearly indicated in prior utterances. Last, Ukrainetz (2006) stressed that story art factors can distinguish more sophisticated and appealing stories from those judged perfunctory.

Narrative structures, both personal narratives and stories, can be powerful teaching tools. For children who display weaknesses in narrative components, educators can target teaching those aspects of story grammar with resulting improvements in conversational skills, reading comprehension, and written expression. Additionally, narratives can be the context for targeting other skill areas, like morphology and syntax. Specifically, Swanson and colleagues have demonstrated that syntactic weaknesses (i.e., use of coordinating and subordinating conjunctions) for children with language impairment (Swanson, Fey, Mills, & Hood, 2005) and children who have cochlear implants (Justice et al., 2008) can be targeted in narrative intervention, while simultaneously addressing narrative development (e.g., explicit description of the first part of the episode, the problem set).

CONCLUSIONS

Children who talk like books and write like books have a better chance of being academically successful than children who do not. Language is everywhere at school: oral and written directions given by teachers, books on which to write reports, and science and social studies chapters with questions to answer. To successfully advance through school, students must demonstrate ever-maturing skills in oral and written language venues. To understand and express complex concepts, students need to use and understand syntactic structure that is made more complex by phrase and clause embedding. Semantics present a particular challenge for children if they have not learned the strategies for lexicon acquisition. The pragmatic use of language is needed for meaningful peer interaction. All of these components (and more) are needed for the ability to successfully produce narratives that are age-appropriate and interesting.

Students who are d/hh, and who have deficits in their oral language development, are at risk for experiencing reading disabilities and written expression weaknesses that will result in negative academic outcomes. Audiologists who are informed about the linguistic demands of the classroom are in a prime position to advocate for children who are d/hh and unable to meet those demands.

REFERENCES

Antia, S. D., Jones, P. B., Reed, S., & Kreimeyer, K. H. (2009). Academic status and progress of deaf and hard-of-hearing students in general education classrooms. *Journal of Deaf Studies and Deaf Education, 14*, 293–311.

Applebee, A. N. (1978). *The child's concept of story: Ages two to seventeen.* Chicago, IL: University of Chicago Press.

Berent, G., Kelly, R., & Porter, J. (2008). Deaf learners' knowledge of English universal quantifiers. *Language Learning, 58*(2), 401–437.

Bradley, L., & Bryant, P. E. (1983). Categorizing sounds and learning to read—a causal connection. *Nature, 301*(3), 419–420.

Brinton, B., Fujiki, M., Loeb, D. F., & Winkler, E. (1986). Development of conversational repair strategies in response to requests for clarification. *Journal of Speech and Hearing Research, 29*, 75–81.

Briscoe, J., Bishop, D. V. M., & Norbury, C. F. (2001). Phonological processing, language, and literacy: A comparison of mild-to-moderate sensorineural hearing loss and those with specific language impairment. *Journal of Child Psychology and Psychiatry, 42*, 329–340.

Brown, R. (1973). *A first language.* Cambridge, MA: Harvard University Press.

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., . . . Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6), 1428–1446.

Hughes, D., McGillivray, L., & Schmidek, M. (1997). *Guide to narrative language: Procedures for assessment.* Austin, TX: Pro-Ed.

Hulit, L. M., Howard, M. R., & Fahey, K. R. (2011). *Born to talk: An introduction to speech and language development.* Boston, MA: Pearson Education.

James, S. L. (1990). *Normal language acquisition.* Boston, MA: Allyn and Bacon.

Justice, E. C., Swanson, L. A., & Buehler, V. (2008). Use of narrative-based language intervention with children who have cochlear implants. *Topics in Language Disorders, 28*, 149–161.

Kuvshinoff, B. E., & Creaghead, N. A. (1994). Literacy in elementary school: Getting started

on a lifelong journey. In D. N. Ripich & N. A. Creaghead (Eds.), *School discourse problems* (pp. 29–62). San Diego, CA: Singular.

Liles, B. (1993). Narrative discourse in children with language disorders and children with normal language: A critical review of the literature. *Journal of Speech and Hearing Research, 36*, 868–882.

McCabe, A., & Bliss, L. S. (2003). *Patterns of narrative discourse: A multicultural life span approach*. Boston, MA: Pearson Education.

McCabe, A., & Rollins, P. R. (1994). Assessment of preschool narrative skills. *American Journal of Speech-Language Pathology, 3*, 45–56.

Milosky, L. M. (1994). Nonliteral language abilities: Seeing the forest for the trees. In G. P. Wallach & K. G. Butler (Eds.), *Language, learning disabilities in school-age children and adolescents: Some principles and applications* (pp. 275–303). New York, NY: Macmillan.

Moeller, M. P., Tomblin, J. B., Yoshinaga-Itano, C., McDonald Connor, C., & Jerger, S. (2007). Current state of knowledge: Language and literacy of children with hearing impairment. *Ear and Hearing, 28*, 740–753.

Naremore, R., Densmore, A. E., & Harmon, D. R. (1995). *Language intervention with school-age children: Conversation, narrative, and text*. San Diego, CA: Singular.

Nelson, N. W., & Van Meter, A. M. (2006). Find the words: Vocabulary development for young authors. In T. A. Ukrainetz (Ed.), *Contextualized language intervention: Scaffolding preK–12 literacy achievement* (pp. 95–143). Eau Claire, WI: Thinking Publications.

Nippold, M. A. (2007). *Later language de-velopment: School-age children, adolescents, and young adults* (3rd ed.). Austin, TX: Pro-Ed.

Owens, R. E. (2008). *Language development: An introduction* (7th ed.). Boston, MA: Pearson.

Pence, K. L., & Justice, L. M. (2008). *Language development from theory to practice*. Upper Saddle River, NJ: Person Education.

Pinker, S. (1994). *The language instinct: How the mind creates language*. New York, NY: Morrow.

Power, D. J., & Quigley, S. P. (1973). Deaf children's acquisition of the passive voice. *Journal of Speech and Hearing Research, 16*, 5–11.

Rand Corporation. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND. (ERIC Document Reproduction Service No. ED 463559)

Roth, F. P., & Spekman N. J. (1986). Narrative discourse: Spontaneously generated stories of learning-disabled and normally achieving students. *Journal of Speech and Hearing Disorders, 51*, 8–23.

Shaywitz, S. (2003). *Overcoming dyslexia*. New York, NY: Knopf.

Swanson, L. A., Fey, M. E., Mills, C. E., & Hood, L. S. (2005). Use of narrative-based language intervention with children who have specific language impairment. *American Journal of Speech-Language Pathology, 14*, 131–143.

Ukrainetz, T. A. (2006). Teaching narrative structure: Coherence, cohesion, and captivation. In T. A. Ukrainetz (Ed.), *Contextualized language intervention: Scaffolding preK–12 literacy achievement* (pp. 195–246). Eau Claire, WI: Thinking Publications.

Weiss, A. L., & Johnson, C. J. (1993). Relationships between narrative and syntactic competencies in school-aged, hearing-impaired children. *Applied Psycholinguistics, 14*(1), 35–59.

Westby, C. E. (1994). The effects of culture on genre, structure, and style of oral and written texts. In G. P. Wallach & K. G. Butler (Eds.), *Language learning disabilities in school-age children and adolescents* (pp. 180–218). New York, NY: Merrill.

Westby, C. E. (2006). There's more to passing then knowing the answers: Learning to do school. In T. A. Ukrainetz (Ed.), *Contextualized language intervention: Scaffolding*

preK–12 literacy achievement (pp. 319–387). Eau Claire, WI: Thinking Publications.

Young, G. A., James, D. G. H., Brown, K., Giles, F., Hemmings, L., Hollis, J., Keagan, S., & Newton, M. (1997). The narrative skills of primary school children with unilateral hearing impairment. *Clinical Linguistics & Phonetics, 11*, 115–138.