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Language Disorders *Are* Learning Disabilities

Challenges on the Divergent and Diverse Paths to Language Learning Disability

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This article takes readers along the pathway of language learning and disorders across childhood and adolescence, highlighting the complex relationship between early (preschool) language disorders and later (school age) learning disabilities. The discussion starts with a review of diagnostic labels widely used in schools and other professional settings. The sometimes confusing interpretations of labels such as specific language impairment and specific learning disabilities are discussed. We outline key relations that exist among language proficiency, language disorders, and school success and emphasize the centrality of language in literacy and academic success within a conceptual framework that addresses both inherent factors (e.g., abilities the language a child "comes with" to school including one's foundational literacy levels) and external factors (e.g., classroom dynamics, textbook language). We argue that mismatches between these factors come together in a manner that is best captured by the term, *language learning disability*. We end with a summary of key points that encourage professionals to reevaluate and challenge the traditional view that children and adolescents with language disorders are a separate and distinct population from those with learning disabilities. **Key words:** *continuum of changing demands*, *diagnostic labels*, *intervention directions*, *learning disabilities*, *language disorders*, *language disorders' outcomes*, *language learning disabilities*, *specific language impairment*, *specific learning disabilities*

IN THIS ARTICLE, we ask readers to consider the complex nature of early language disorders, their overlap and continuity with learning disabilities, and the changing diagnostic labels that may accompany children with language and learning disabilities across time. The following scenario sets the tone.

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A language learning disability (LLD) scenario: A parent of a child who has been receiving services at a speech–language–hearing center for a number of years has been pleased with her child's language development. Tim (a pseudonym) began his intervention journey in this particular clinic at about 2.5 years old as a child with *delayed language*. Tim had difficulties with both language comprehension and expression in all areas of content, form, and use, as well as attention issues, but he also demonstrated many age-appropriate abilities, including motor development and cognitive-communicative skills (e.g., playing appropriately and using nonverbal communication to make his needs known). Thus, Tim received a diagnosis in the clinic as having *specific language impairment* (SLI). When Tim entered school, he was tested by his school-based speech–language pathologist (SLP) and met eligibility requirements for services as a child with a *speech or language impairment* (S-LI). By second grade, Tim was speaking in complete sentences and understanding most everyday language, but

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he was struggling to meet academic standards, including basic skills for reading and writing, comprehending instructional language, and using expressive discourse to express his ideas orally and in writing. At one point, Tim's mother said that because of his academic difficulties and problems with reading and writing, she and Tim's teacher were concerned that he might have a *specific learning disability* (SLD). She asked: "Is it true that Tim has *another problem* on top of his language problem?"

The question asked by Tim's mother in this scenario speaks to the confusion about the relationships between preschool language disorders (often called SLI by clinical professionals and researchers) and eligibility labels associated with school service delivery (i.e., S-LI and SLD). Not only are parents unclear about these relationships but professionals are too. This may be one reason SLPs do not do a better job of preparing parents and students to navigate the sometimes *unclear path taken* among different diagnoses and service delivery models for children who demonstrate language difficulties from their preschool through their school-age years.

The aforementioned scenario harkens to the classic question asked by Bashir, Kuban, Kleinman, and Scavuzzo (1984): "Are we speaking about a group of children, who by virtue of learning context, are called by different names, but who in reality evidence a continuum of deficits in language learning?" (p. 99). This, indeed, was our answer to Tim's mother's question. It was not a new disorder, we told her, but a different manifestation of Tim's ongoing language disorder. The new problems arose as he faced new challenges because the language demands of the academic curriculum grow across grade levels, and this might happen again as Tim continued through school. Tim's two SLPs, one in the clinic and the other in his school, needed to collaborate with each other and with his parents, teachers, and other specialists to co-construct a unified picture of Tim's strengths and needs that could inform treatment plans and help Tim gain new skills to meet curriculum standards within new contexts.

As the title of this article and Tim's case example suggest, children and adolescents facing language challenges may be identified with different diagnostic and service delivery labels at different points across their preschool years through high school and into adulthood. It is our purpose in this article to untangle misconceptions about the parallel and divergent pathways that children with language disorders may take through their developmental years, sometimes shifting diagnoses as they encounter new language and literacy learning challenges.

We organize our arguments by presenting three theses about the relationships between language impairment and learning disabilities. First, the use of different labels by different professionals in different contexts should not obscure the commonalities among children with language disorders, no matter what they are called. Second, children with a diagnosis of SLI in the preschool years tend to have continued problems with language learning throughout their school years and beyond, although their language disorders, as well as those of children newly identified as having SLD, take on different forms as a consequence of new contexts and learning tasks. Third, language is the embedded curriculum of school, not only in the form of what is called "language arts" but also within all other parts of the curriculum. The implication of this is that intervention choices should be based on students' ongoing language learning and literacy problems within curricular contexts, regardless of their diagnostic labels. We end the article with summary points for consideration and a look toward future research.

DEFINITIONS AND DECISIONS: AN INTRODUCTORY ROADMAP

Our first thesis is that when professionals apply different labels in different contexts, commonalities among language disorders are obscured. Identifying similarities requires merely looking at definitions across sources.

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Under IDEA (2004), language disorders fall under the broad category of *speech or language impairment* (abbreviated S-LI in this article), which is defined as a "communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance" (34 C.F.R. § 300.8(c)(11)). To provide services on the basis of language impairment, school-based SLPs must find a child eligible for services as S-LI. The federal regulations, however, offer no eligibility criteria for diagnosing language impairment and no further definition of language impairment; rather, criteria are established through state and local guidelines, introducing additional sources of variation. Another complexity is that it is impossible to differentiate children receiving services under IDEA who qualify on the basis of speech impairment from those who qualify on the basis of language impairment. Thus, official proportions are difficult to identify.

We note that the federal definition of S-LI does not indicate whether language disorders are specific to oral or written language. Language is language, whether it is spoken or written. This is consistent with the definition of language disorder by the American Speech-Language-Hearing Association (ASHA, 1993), which states:

> A language disorder is impaired comprehension and/or use of spoken, written and/or other symbol systems. The disorder may involve (1) the form of language (phonology, morphology, syntax), (2) the content of language (semantics), and/or (3) the function of language in communication (pragmatics) in any combination.

The *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) uses similar terminology, defining language disorder as:

> Persistent difficulties in the acquisition and use of language across modalities (i.e., spoken, written, sign language, or other) due to deficits in comprehension or production that include the following: (1) reduced vocabulary . . . (2) limited sentence structure . . . (3) impairments in discourse. (315.39 (F80.9))

Definitions of SLI, in contrast, come from the research literature. Leonard (1991) observed that such definitions depend on significant and specific deficits in language, but their identification is based primarily on exclusion. He wrote, "Although these children exhibit significant deficits in language ability, they show no evidence of frank neurological damage, their hearing is within normal limits, and they perform at age level on nonverbal tests of intelligence" (p. 66). Specific language impairment is generally identified first when children struggle to acquire oral language abilities in their preschool years.

Specific learning disability may be identified for the first time when children struggle to acquire written language in their school-age years, but it could be identified earlier. As defined in IDEA (2004), SLD

> means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. (34 C.F.R. § 300.8(c)(10.i))

We note that this definition is not specific to written language difficulties, nor is it confined to any particular point in time. Section 300.308(a)(3) indicates, "For a child of less than school age," the evaluation team for identifying SLI must include "an individual qualified by the SEA [state education agency] to teach a child of his or her age; and (b) at least one person qualified to conduct individual diagnostic examinations of children, such as a school psychologist, speech–language pathologist, or remedial reading teacher."

The "specific" aspect of SLD is also defined by exclusion in the federal regulations, which indicate that "specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage" (34 C.F.R. § 300.8(c)(10.ii)). Under former versions of

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IDEA, discrepancy formulas between IQ and achievement were used as part of the exclusion criterion to identify children with learning disability, but the reauthorization of IDEA (2004) indicated that a state, in adopting criteria for determining whether a child has SLD,

> (1) must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability, as defined in § 300.8(c)(10); (2) must permit the use of a process based on the child's response to scientific, research-based intervention; and (3) may permit the use of other alternative research-based procedures for determining whether a child has a specific learning disability, as defined in § 300.8(c)(10).

This policy was changed because of the lack of evidence that a discrepancy formula is appropriate for identifying learning disabilities (e.g., Christensen, 1992; Fletcher, Lyon, Fuchs, & Barnes, 2007). Similarly, a discrepancy formula should not be used to identify SLI. Addressing the question, "Who shall be called language disordered?" Lahey (1990) emphasized the artificiality of mental and language age numbers and the importance of keeping the bigger picture in mind, including the functionality of the tests used to identify language disorders. She also expressed concerns about assessing language outside of the contexts in which children must live, a notion just as relevant today. In an early presentation, Lahey (1980) described "learning disabilities" as one of those intricate puzzles with hundreds of pieces that was missing the box's cover that provided an intact picture of the puzzle. She went on to reflect on the sometimes circularity of reasoning involved in using labels such as "learning disabled," especially when they play out like this:

> *Question:* Why are these children with normal intelligence having difficulty learning to read?
>
> *Answer:* Because they are "learning disabled."
>
> *Question*: How do you know that?
>
> *Answer:* Because they have normal intelligence and they are having difficulty learning to read? (Lahey, 1980, as cited in Wallach & Butler, 1994, p. 19).

In its frequently quoted definition, the National Joint Committee on Learning Disabilities (NJCLD, 1990) emphasized the heterogeneity of learning disability, as well as the involvement of language across both spoken and written modalities. The essence of the definition is that "learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills" (ASHA, 1998; NJCLD, 1990).

Adding to the confusion are terms introduced both in the research literature and in nonschool clinical settings to describe variations on language and learning disabilities. The term *dyslexia*, for example, appears in the federal definition of SLD, with variations of this term including *specific reading disorder* or *reading disorder*. Important questions about the relationships between SLI and dyslexia have been addressed in the research literature (e.g., Bishop & Snowling, 2004; Catts, Adlof, Hogan, & Elllis Weismer, 2005), which suggests that there are some distinctions between the groups. Individual children and adolescents are complex beings, however, and clinicians must consider the broad range of language issues that may contribute to the language literacy problems any one child or adolescent may face in school.

How can these complex issues be resolved? Even a cursory consideration of these various definitions shows their similarity and, in many aspects, their complete overlap. By definition, a disorder of spoken or written language *is* a learning disability. The converse also is true—that is, a learning disability *is* a language disorder. The one exception is the child who might be identified as having learning disability based only on impairment of the ability to "do mathematical calculations," but even in this case, language may be implicated (Patkin, 2011). Acknowledging this overlap, the term *language learning disability* (LLD) was used by the ASHA Committee on Language Learning Disabilities (1982) in an article describing the role of the SLP in learning disabilities. The

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inaugural issue of *Topics in Language Disorders* (see Butler & Wallach, 1980; Stark & Wallach, 1980) and subsequent issues (e.g., Wallach, 2005) have addressed the complexity of issues surrounding terminology, including use of the term *language learning disability*. Although LLD is not part of any official diagnosis, it applies to children and adolescents who could fit either diagnostic label (SLI or SLD) and to whom different labels might apply across their childhood and adolescence. It has been used in the literature to comprise both SLI and SLD, and we suggest that it might be helpful in avoiding false dichotomies that obscure the language base common to both.

CHANGES IN SLI AND SLD ACROSS TIME AND CONTEXTS: TURNS AND BUMPS IN THE ROAD

Longitudinal research supports the continuing challenges facing children with early language disorders, as well as overlaps between those who begin with SLI, sometimes called language impairment, without the "specific", and those who later are identified with SLD, sometimes called learning disability, without the "specific" (e.g., Bishop, 2003, 2009; McArthur, Hogben, Edwards, Heath, & Mengler, 2000). Stothard, Snowling, Bishop, Chipchase, and Kaplan (1998) found that children with a diagnosis of language impairment at young ages (kindergarten or younger) continued to experience language and academic difficulties as adolescents even if their language difficulties seemed to have resolved early. Tomblin, Zang, Buckwalter, and O'Brien (2003) found that 60% of the children with language disorders they identified at kindergarten in their epidemiological sample continued to show persistent language impairments through fourth grade. Similarly, Young et al. (2002) found that children with a diagnosis of language impairment at the age of 5 years continued to lag behind at the age of 19 years in all domains of academic achievement (spelling, reading comprehension, word identification, word attack, calculation), even after controlling for intelligence.

Making the implicit connection between early language disorders and later academic difficulties more explicit, Young et al. (2002) found that children with a diagnosis of language impairment in the preschool period were more likely to have academic difficulties severe enough to be classified as learning disability than their non–language-impaired peers. They noted that LD was determined if achievement in a particular academic area was below the 25th percentile according to the test norms in their study. Indeed, the chronic and long-term effects of early language disorders suggest that SLI and SLD may be indistinguishable in many children. Not all children who start out with SLI, however, qualify for SLD services in their school-age years. Young et al. posited that many factors can influence this pathway, including the nature of children's early language disorders, the impact and focus of preschool intervention, and home literacy practices, among other factors.

Other studies have shown that children with SLI, such as Tim, who was introduced at the beginning of this article, have a higher risk of having later learning difficulties (e.g., Catts, Bridges, Little, & Tomblin, 2008; Catts, Fey, Zhang, & Tomblin, 1999; Grizzle & Simms, 2009; Scott, 2011). These later learning difficulties may take the form of problems acquiring higher levels of spoken language comprehension and expression (e.g., Nippold, 2007; Scott & Balthazar, 2010; Suddarth, Plante, & Vance, 2012; Ward-Lonergan & Duthie, 2012), as well as with reading and writing (Catts & Kamhi, 2005; Poe, Burchinal, & Roberts, 2004).

Acquiring literacy involves more than simply developing phonological and phonemic awareness, phonics, decoding skills, and reading fluency (Justice, 2006; Justice & Ezell, 2002; Snowling & Hayiou-Thomas, 2006). Catts, Compton, Tomblin, and Bridges (2012) noted that late-emerging poor readers (i.e., students who start to show reading problems around fourth grade but who had adequate reading achievement in early school years)

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may have had unidentified deficits in language and/or other cognitive abilities at younger ages.

A number of studies have shown that phonological difficulties place children at risk of deficient reading decoding, but more comprehensive language impairments contribute to poor reading comprehension (Nation, Clarke, Marshall, & Durand, 2004; Snowling & Hayiou-Thomas, 2006). Comprehensive language impairments also may contribute to difficulty understanding the discipline-specific language of social studies, science, mathematical story problems, and other academic subjects (Ehren, Murza, & Malani, 2012; Faggella-Luby, Sampson Graner, Deshler, & Valentino Drew, 2012). Thus, one of the many challenges facing school-based SLPs and other specialists is to recognize some of the literacy-learning patterns and gaps that occur before children arrive at school, as well as to evaluate the language knowledge, skills, and strategies that underlie literacy learning across the grades (Ehren, 2009, 2013).

Children with SLI may come to the task of learning to read with a broad range of spoken language deficits. Some of these deficits include those related to gaps in language content, form, or use; difficulties with metalinguistic awareness; and problems organizing and analyzing information effectively and efficiently (Catts, Fey, Zhang, & Tomblin, 2001; Catts & Kamhi, 1999; Olivier, Hecker, Klucken, & Westby, 2000). Children with a history of SLI are at risk for reading disabilities because of the interactions among impaired early spoken language skills and the increasing linguistic demands required by the written texts they encounter (e.g., Leland, Ociepka, & Kuonen, 2012; Shanahan & Shanahan, 2012; Snowling, Bishop, & Stothard, 2000).

Ehren, Hatch, and Ukrainetz (2012) noted that literacy in the later elementary years involves more than a "read-to-learn" transition; rather, middle schoolers and adolescents must continue to "learn to read" higher level texts. Although some students with SLI develop adequate decoding and word recognition skills as part of foundational literacy, the majority of students continue to struggle with reading comprehension that interacts with their ongoing spoken language problems (e.g., Catts, 2009; Keenan, 2014; Troia, 2014). School-age students with SLI frequently demonstrate limited and less evolved vocabulary repertoires, difficulties with complex syntactic structures (including comprehension of such structures), and problems producing and understanding connected discourse (Catts & Kamhi, 2005; Ehren, 2009; Ehren et al., 2012; Eisenberg, 2013; Scott & Balthazar, 2010; Scott & Windsor; 2000). These spoken language difficulties follow children throughout their school years and contribute to their difficulties in performing the more advanced linguistic tasks of school, such as reading and writing curricular content, and following and attending to complicated instructional language that may appear in spoken and/or written form (Catts et al., 2012).

Many children with early language disorders fail to "outgrow" these difficulties or catch up with their typically developing peers. The idea of "catching up" is consistent with "illusory recovery," described by Scarborough and Dobrich (1990) as a time period when the students with early language disorders seem to catch up with their typically developing peers. This is a time when they undergo a "spurt" in language learning that includes developing conversational skills and basic syntactic ability (Scarborough, 2001). What follows the spurt, however, is a postspurt plateau. This developmental reality points to the importance of considering underlying deficits that may be masked by early oral language development and the consequence of failure to evaluate a child's language abilities in all modalities, including preliteracy, literacy, and metalinguistic skills. Similar to some children with SLI, children with SLD may not show academic or language-related learning difficulties until linguistic and cognitive demands of the task increase and exceed their limited abilities (Wong, Graham, Hoskyn, & Berman, 2008).

As this account suggests, the path from preschool and early language learning to

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classroom and curricular expectations and requirements is filled with several unexpected turns and detours. Failure to account for the language correlates of reading, writing, and academic success may mean missing the underlying core of students' difficulties.

LANGUAGE AS THE EMBEDDED CURRICULUM OF SCHOOL: ROADMAPS FOR PRACTITIONERS

Halliday (2004) referred to language skills as the embedded curriculum of learning, noting that "language . . . is learning how to mean" (p. 12; also see Olivier et al., 2000). McKeown, Beck, and Blake (2009) addressed the importance of macrostructural knowledge (i.e., the organization of content-area texts) and its impact upon comprehension, especially when a topic is new or unfamiliar to a reader (see Wallach, Charlton, & Bartholomew, 2014, for a summary of this research).

Problems when language abilities do not equal expectations of text

Studies of children with SLD and SLI have demonstrated similar effects of complex texts. Cawthon, Kay, Lockhart, and Beretvas (2012) observed the impact of language upon learning in their study of students with a diagnosis of SLD. They noted that the linguistic complexity of both reading and mathematics testing items interfered with students' ability to demonstrate knowledge. For example, sentences with multiple relative clauses and passive voice structures, along with subject-specific vocabulary, created significant barriers for their students with academic problems. Scott and Balthazar (2010) identified similar challenges in comprehending and producing what they called "the grammar of information" in their sample of children with SLI. This grammar of content-area subjects includes comprehending and using complex syntactic and lexical units that take the form of informationally dense sentences with multiple nouns, verbs, and adjectives; adverbial conjunctions that represent time, place, and condition (among other concepts); and multiclause sentences.

Following these themes, Nippold (2007) discussed the importance of using literate language forms as students move along the continuum from oral and contextualized language to literate and decontextualized language. Typically developing peers with strong foundations in language continue to expand their vocabulary, increase their sophisticated use and understanding of complex sentence structures, begin to enjoy nonliteral meaning of the text, and extend their background information through general instruction and independent reading. In contrast, students with language learning and academic difficulties struggle with school texts (e.g., Nippold & Scott, 2009). Helping students to appreciate the relationships signaled by "between words" connectors (i.e., connecting words within sentences) and "beyond words" connectors (i.e., words that connect ideas across sentence boundaries), to facilitate reading comprehension and production (often in written form), is critical for school success regardless of students' diagnostic labels (Scott & Balthazar, 2010; Venable, 2003). According to Nippold (2007), some of the later linguistic forms that students must comprehend include advanced adverbial conjuncts (e.g., *moreover*, *in contrast*), adverbs of likelihood and magnitude (e.g., *possibly*, *extremely*), technical terms related to curricular content (e.g., *bacteria*, *protein*), metalinguistic and metacognitive verbs (e.g., *imply*, *hypothesis*), words with multiple meanings (e.g., *strike*, *short*), and words with multiple grammatical functions (e.g., *hard*, *sweet*).

The cumulative deficits that students with LLD experience may be explained by a variety of underlying issues; for example, insufficient ability to derive the meaning of new words through phonological and morphological analyses, immature grammatical knowledge and skill, weak background knowledge, and limited metacognitive skill make reading higher level text a daunting one (Catts, 2009; Ehren, 2009; Ehren et al., 2012; Faggella-Luby et al., 2012; Olivier et al., 2000; Shanahan

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& Shanahan, 2012; Wallach, 2008; Wallach, Charlton, & Christie, 2010).

Because the academic curriculum is transmitted through language, understanding content-specific language is critical to learning. Venable (2003) recommended that clinicians take a closer look at readability that may have an impact upon word recognition and reading comprehension. She highlighted some "trouble spots" that many students might encounter when reading complex texts, including unfamiliar vocabulary, especially words with unfamiliar roots and affixes; lengthy and complex sentence structures with multilayered subordination within one sentence; sentences containing ellipsis, found when relative clauses include unexpressed words; pronoun reference and noun substitution; and sentences with figurative language (metaphors, idioms, etc.).

Fang and colleagues (Fang, 2006, 2008, 2012; Fang, Schleppegrell, & Moore, 2014) also suggested clinicians review the "embedded curriculum" that may impose grammatical challenges for students across content areas of language arts, science, history, and mathematics. Patkin (2011) examined the interplay of language and mathematics and supported the importance of helping students with academic problems understand double-meaning words detached from everyday use (e.g., *power*, *base*, *table*). Many researchers and practitioners advocate creating a balance between the teaching of domain-specific literacy strategies (e.g., how to read science vs. how to read history) and more foundational or generalized literacy skills (Ehren et al., 2012; Faggella-Luby et al., 2012; Wallach et al., 2014). As noted by Ehren et al. (2012), there is a difference between learning literacy *in* a discipline and learning literacy *of* the discipline. These are challenges for all students, but even more for children with SLI and SLD.

Clearly, the spoken-to-written and written-to-spoken relationship along the path to school success is an ever-changing one. Many of the early language problems of children with SLI are apparent as reading and writing difficulties in the early grades; they evolve to higher levels of both spoken and written difficulties as students with LLD advance through the grades (Scarborough, 2005, 2009). Many of the ongoing changes in language disorders across time are also reflected in problems with writing.

Problems with written expression

Writing is especially challenging for many students with LLD because of linguistic skills involved in the process and the necessary integration of content, form, and use of language (Hall-Mills & Apel, 2012; Suddarth et al., 2012). In addition, writing involves metacognitive and cognitive processes such as executive function/self-regulation (Singer & Bashir, 1999, 2004, 2012; Westby, 2014; Wong, 1997). Because it takes years for typically developing students to master writing skills, a longer learning process may be expected and necessary to improve the writing skills of students with LLD. A variety of writing tasks, including the writing of narrative, expository, persuasive, argumentative, and descriptive essays, are required in middle and high school; thus, it is important for us to understand the changing demands across the continuum of academic writing requirements (Nippold, 2007; Paul & Norbury, 2012; Scott, 2011; Wong, 1997).

Writing is viewed as an aspect of language competence that is reflected in academic performance (Perfetti & McCutchen, 1987). It is the primary way that students demonstrate knowledge in school (Graham & Harris, 2004) and improve their reading skills (Graham & Herbert, 2010). Writing also helps students gain employment and communicate widely (Dockrell, 2014). It is one of the most complex aspects of language and a significant factor in academic success and the acquisition of knowledge in school-age years (Singer & Bashir, 2012). Science, for example, is a discipline that is particularly informed by precise writing (Fang, 2012).

Making explicit the connection between LLD and writing problems, Dockrell (2014) commented,

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> Difficulties in the production of written text have been reported both for students with continuing language difficulties and those with . . . [seemingly] . . . resolved language problems, leading to the hypothesis that *written language can be conceptualized as a window into residual language problems.* (p. 511; emphasis added; also see Bishop & Clarkson, 2003; Fey, Catts, Proctor-Williams, Tomblin, & Zhang, 2004; Lewis, O'Donnell, Freebairn, & Taylor, 1998)

As suggested earlier, linguistic and learning difficulties often resurface because writing requires the integration of multiple linguistic and cognitive processes (Bashir & Singer, 2006; Graham, Harris, & Larsen, 2001). Looking back to early language experiences, preschoolers with language disorders often lack the level of experiences with writing that children with typical language abilities have, and they continue to lag behind in the "self-talk" and planning that is needed to be an effective writer of one's language (e.g., Singer & Bashir, 2012; Snowling & Hayiou-Thomas, 2006).

While examining narrative and expository text across spoken and written systems, Scott and Windsor (2000) found that children with SLI performed more poorly in writing, especially in expository discourse, than their peers. Other researchers have shown that school-age children with language disorders have greater macro-level difficulty writing and organizing narrative and expository texts and greater micro-level difficulty forming complex sentences (Mackie, Dockrell, & Lindsay, 2013; Puranik, Lombardino, & Altmann, 2007). Children and adolescents with LLD need explicit instruction and scaffolds to use executive functions (e.g., "Plan what you want to write with self-talk, use your graphic organizer, and re-read what's written") to facilitate their writing of connected text (Singer & Bashir, 2012).

Koutsoftas and Gray (2012) also found that students with SLI produced poorer lexical diversity and sentence complexity, productivity, and spelling accuracy in both narrative and expository writing than their typically developing peers. Similarly, Hall-Mills and Apel (2012) found that low levels of syntactic complexity and higher level grammatical errors were indicated to a greater extent in expository text than in narrative writings. Looking further down the continuum, however, they found that limited or less sophisticated text structure knowledge persisted in both genres in adolescents with SLI. More errors in spelling, punctuation, lexical choices, subject–verb agreement, and use of advanced sentence structures are aspects of micro-level issues reported in the writings of students with ongoing language disorders. Suddarth et al. (2012) further evaluated writing in adults with a history of SLI. Their study revealed that significantly more errors (e.g., a combination of spelling, word-choice, verb tense, punctuation, and other errors) were produced in the written narratives of adults with a history of SLI than that in the written narratives of adults with typical language development.

Dockrell (2014) provided school-based and other professionals with cautionary advice that speaks to the themes of this article. She noted that there are significant overlaps among various diagnostic categories used to describe children and adolescents with writing difficulties (also see Dockrell, Lindsay, & Connelly, 2009). In addition, Dockrell (2014) observed that labels provide "insufficient information to guide intervention" (p. 513). She added that difficulties in capturing differences, for example, between those children identified as having SLI and those identified as having learning disability may involve "arbitrary cutoffs used to identify learning disabilities" and heterogeneity within and between groups (p. 513). Not surprisingly, students identified as having learning disability experience many difficulties that are similar to those reported in students with SLI. These include more spelling and punctuation errors, shorter compositions, poor word selections, and difficulties with coherence and organization of text as a whole (Graham et al., 2001; Li & Hamel, 2003; Monroe & Troia, 2006).

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To be a proficient writer, students must plan, translate, and review their work—skills that are interactive with the writer's knowledge of the topic, audience, and writing plans (Flower & Hayes, 1984; Graham et al., 2001; Singer & Bashir, 2012). Students with SLI and learning disability frequently use a retrieve-and-write approach (i.e., write down relevant information they want to say about the topic) with a lack of planning and revising skills (Monroe & Troia, 2006; Singer & Bashir, 2012; Wong, 1997). All of these findings point to many similarities and few if any differences among the heterogeneous group of children with LLD, whether they are first identified with a label of SLI or SLD.

CONCLUSION

We summarize the following three key points related to the theses that we have developed within this article. These can serve as guides to decision making and communicating with parents and others about the needs of children with SLI and SLD.

First, children's diagnostic labels may change from language disorders to learning disabilities when they come to school and experience academic difficulties, but their linguistic needs continue and are a common feature of both SLI and SLD. The majority of children newly identified as having SLD have existing language/literacy needs that may have been unidentified previously and that should be addressed. Identifying the language correlates of academic tasks is critical (regardless of students' diagnostic labels) and may help clinicians to create more relevant and functional interventions that are curriculum-based and literacy-focused.

Second, early language disorders are chronic and tend to follow children through time, manifesting themselves differently based upon an individual's inherent abilities, language-learning contexts, and learning tasks (Bashir & Scavuzzo, 1992). Speech–language pathologists must be aware of the language underpinnings of school tasks (Ehren, 2009, 2013) and the nature and timing of "illusionary recoveries."

Third, definitions of literacy have broadened to include many types of literacy, such as foundational literacy (e.g., basic decoding and comprehension), content-area literacy (e.g., predicting, inferencing, managing expository text), and discipline-specific literacy (e.g., paying attention to the different language requirements of subjects). These different layers of literacy represent the linguistic demands all children face in curricular learning. Intervention goals and targeted language learning strategies should change accordingly to guide effective and relevant intervention.

In conclusion, we propose that the majority of learning disabilities are language disorders that have changed over time. SLD is not a "new" and distinct condition that arrives when children enter school, as we told Tim's mother in the scenario that opened this discussion. In addition, we offer the following questions: Does the term *learning disability* adequately capture the ongoing verbal-linguistic needs of our students? Do current assessment and intervention approaches reflect the ongoing language-based learning difficulties of our students who have academic challenges? Are there better ways for professionals across disciplines and service delivery sites to collaborate to address the needs of these children and adolescents with LLD, regardless of their individual labels? These are questions, among others, that readers are asked to consider. We hope that they will stimulate renewed efforts on the part of researchers to investigate relationships of language and learning disorders and renewed efforts on the part of clinicians to support better communication with parents, students, and other professionals with shared caseloads and concerns.

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