

**THE UNIVERSITY STUDENT WITH LANGUAGE/LITERACY DEFICITS:  
ISSUES AND ACTIONS**

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**Introduction**

The number of students with language/learning disabilities attending institutes of higher education is on the rise (Henderson, 1999). With this upsurge comes the need to address these students' specific learning needs. While federal laws (e.g., Americans with Disabilities Act, Individuals with Disabilities Act) provide suggestions and mandates for meeting these needs, often through accommodations such as note takers, un-timed tests, and so forth, university professors are still faced with the need to help students learn skills that will carry them through once they graduate from college. Thus, for some, there is move toward providing remediation of language/literacy deficits, as well as accommodations, at the university level (Apel & Swank, 1999). This paper briefly reviews the literacy skills and foundational linguistic skills underlying these literacy skills as a basis for understanding where deficits may lie in students with language/literacy deficits. Subsequently, we provide some initial suggestions for what university personnel, especially those in the field of Communication Sciences and Disorders, might do to facilitate the literacy learning in students struggling with these skills.

**Literacy Skills and Foundational Knowledge Bases**

The term literacy has many connotations. For the purposes of this paper, we are using the term to encompass a variety of linguistic skills that are used on a daily basis. These skills include reading, spelling, and writing. Reading skills

include the individual's ability to decode, or sound out, unfamiliar or unknown words, and comprehension, the ability to make meaning from text. Writing skills include knowledge of different genres or templates (e.g., narrative, expository), the literate language form (i.e., the language of text versus the language of conversation), and conventions (e.g., capitalization, punctuation). Note that spelling is not a convention; rather, it is a linguistic skill that is part of and a separate component of written language.

There are several foundational linguistic skills that serve as underpinnings for reading, writing, and spelling. First and foremost, all aspects of spoken language (i.e., phonology, morphology, syntax, semantics, and pragmatics) are employed in written language. While readers, spellers, and writers employ these aspects of spoken language when engaged in literate acts, they often do so in a conscious or explicit manner, unlike when they are engaged in spoken conversations. That is, the language systems utilized are brought to conscious awareness. Some specific areas of language for which individuals must be consciously aware include phonological awareness, orthographic knowledge, morphological awareness, and mental graphemic representations.

Phonological awareness encompasses the ability to explicitly think and talk about the speech sound system. Phonemic awareness, which is one aspect of phonological awareness, involves the knowledge of how words consist of specific phonemes. Phonemic awareness skills shown to be closely associated with reading and spelling include blending of phonemes into words and segmenting of words into phonemes (Scarborough, 2001).

Orthographic knowledge involves the set of skills necessary to translate language from spoken to written form (i.e., the use of spelling strategies). This knowledge base includes early selection of the appropriate letters to represent consonant sounds to an understanding of sophisticated *orthotactic* principles (Masterson & Apel, 2000), which are the positional constraints on the use of

graphemes to represent phonemes (e.g., an appreciation for the principle that /k/ is spelled with a ck only in the medial or final position of words).

Morphological awareness is the ability to be conscious of and manipulate the morphological units of a language (Carlisle, 1995). It includes the ability to identify base words and their inflected or derived forms. For example, an individual is using her morphological awareness when she utilizes her knowledge for the spelling of *allegation* to help in spelling *alleged*. Likewise, morphological awareness is being used when a reader uses the root of a multi-morphemic word to glean its meaning.

Finally, mental graphemic representations (MGRs) are the representation of images or templates for words, morphemes, and syllables stored in long-term memory (Apel & Masterson, 2001). MGRs are developed through adequate exposure to print and phonetic decoding (i.e., sounding words out through a blended process). Inadequate MGRs may result from the use of a partial-cues reading strategy (i.e., selectively sampling parts of the word, usually the beginnings and endings and relying heavily on context to derive a reasonable guess). Inadequate MGRs often lead to inaccurate spellings and incorrect guesses when decoding words (Glenn & Hurley, 1993).

### **Literacy Development in Students with Language/Literacy Deficits**

The reading, writing, and spelling errors of students with language/literacy deficits (LLD) are similar to those of younger students with typical skills (Scarborough, 2001). However, given inappropriate or inadequate instruction/intervention, the skills demonstrated by students with LLD may change (Apel & Masterson, 2001). For example, some students with LLD unfortunately learn incorrect strategies for reading decoding (Apel & Swank, 1999). Thus, over time, their decoding skills and strategies begin to look less like those of younger, developing readers.

Students with LLD also require additional learning time to achieve certain levels of literacy development compared to their typically-developing peers. Additionally, even though development may appear to be slower and not “deviant,” eventual mastery of these literacy skills is not a given, especially in the area of spelling. Most likely, the slow and less-than-mastery level of literacy development is due to deficits in phonological and morphological awareness (Scarborough, 2001).

At the university level, students with LLD may exhibit a number of different signs that indicate difficulties with literacy. In the area of reading decoding, students may skip words, substitute words that may share certain letters with the target word, or make attempts to “sound out” words without success. These deficits would be evident when the student is asked to read aloud. Additionally, reading deficits may be present when the student decodes words adequately, but does not appear to comprehend the gist of the text. This comprehension difficulty may be due to struggles with specific text genres (e.g., scientific texts) and/or the accompanying linguistic characteristics associated with literate styles of language (e.g., more formal vocabulary and syntactic structures).

Students with LLD also may demonstrate deficits with writing composition. For example, they may not be aware of or not use the expected template or genre for the writing exercise. For example, they may provide written essays that are narrative in form rather than persuasive or compare/contrast. Their style of language within their written compositions may represent a spoken style of language rather than a literate style of language. Finally, their written output may be very limited, which may be due to difficulties in the writing process, background knowledge, or awareness of their spelling deficits.

The spelling problems of students with LLD may take on a variety of patterns. It may be that their misspellings include words that are missing letters

for sounds that are heard in the word (e.g., “interpet” for interpret). Multisyllabic words with unstressed vowels (e.g., confident) are frequently misspelled due to the perceived ambiguity of which vowel grapheme to use for the unstressed schwa (Masterson & Crede, 1999). Common spelling rules, such as when to double letters, may not be followed. Finally, spelling abilities may appear to be “uneven,” with words correctly spelled “haphazardly” because students are using incomplete MGRs to guide their spelling.

### **Initial Thoughts on Helping University Students with LLD**

In optimal situations, students who are identified with specific language/literacy deficits should be referred to and seen in the university Speech-Language-Hearing Clinic. Ideally, with the growing awareness and guidelines for the speech-language pathologist’s role in developing literacy skills (ASHA, 2000), Communication Sciences and Disorders departments and their clinics will be prepared to provide remedial literacy services. The following section describes some teaching tactics to facilitate students’ literacy skills. In cases where the professor believes s/he should provide some initial instruction, these tactics, which have been shown to help students develop and understand the literacy skills and strategies needed to meet the demands of the university classroom, may be used demonstrated and encouraged in individual cases.

For students struggling with reading decoding, instructors should model and then request the use of phonemic decoding, or sounding out/blending letters across word without a break (Apel & Swank, 1999). It is important not to encourage students to “chunk” parts of words or to look at the first few letters of a word and make a guess. With this latter strategy, the student will be correct only 1 out of 10 times. For reading comprehension, students should be encouraged to activate prior knowledge for the topic of the text to be read and to reflect on what is known, what might be learned, and what was learned after reading the text. Professors also may wish to provide practice and modeling for

paraphrasing information in the text, and examples for converting a literate style of language to a spoken style of language, to aid comprehension.

Strategies for improving spelling skills should focus on heightening the student's awareness of the different linguistic strategies that may be used when spelling unfamiliar words (Masterson & Apel, 2000). For example, instruction can focus on discussing and modeling thinking about the sounds in words and tying that identification of sounds to letters or digraphs (two letters that represent one sound). Students can be shown groups of words that follow a certain spelling convention, contrasted with other words that do not follow that specific convention (e.g., doubled versus non-doubled words) and be asked to hypothesize the rule for the convention. Additionally, attention can be given to root words and their inflected or derived forms (e.g., magic, magically, magician). This can heighten students' awareness of the spelling and meaning relationships between root words and their inflected or derived forms. Finally, students should be cautioned to use the "picture in their head" of words as a check for correct spelling, as opposed for the main means for spelling words.

Finally, for help with writing composition, instruction can focus on the writing process (i.e., planning, writing, and revising), with an emphasis on the recursive nature of this process (Graham, Harris, & Troia, 2000; Wong, 2000). Students should be cautioned on the limitations of relying on technology tools for compensation, because there is little evidence that technology will be a "cure-all" for writing difficulties. Modeling and opportunities to practice writing different genres and forms of literate language also should prove to be helpful to the development of written composition skills.

### **Summary**

More so than in the past, university professors may encounter students with specific literacy deficits. It is tempting to suggest that students with LLD are not as bright or should have "got it" by the time they reach the university (Apel,

1999). However, it is important to remember that deficits in the area of literacy development are not correlated with intelligence nor have the students necessarily been provided appropriate treatment in the past. These students deserve remediation as well as accommodation. There is a great deal to learn about these students. In the meantime, it appears that university professors, especially those in the field of Communication Sciences and Disorders, may need to take the time and effort to determine how to best help these students access and successfully complete the university curriculum.

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