Research Foundation
Grades 4–12

LANGUAGE!®
The Comprehensive Literacy Curriculum

Why We Need Comprehensive Literacy Solutions for Adolescents

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Why We Need Comprehensive Literacy Solutions for Adolescents

Troubling levels of academic underachievement, alarming dropout rates, and unpreparedness among postsecondary students are all problems that can be linked to woefully deficient literacy skills. Data show that the inability to read and write has profound social and economic consequences for individuals and for the nation. While there is clear evidence that young children are making gains in reading and writing, the evidence is just as clear that adolescents are not. The move toward national standards and national assessments, including the National Assessment of Educational Progress (NAEP), signal that students must not only learn to read in the primary grades; they must read to learn during the remainder of their school careers and beyond. A national agenda for improved academic performance requires attention to the literacy needs of all students.

Initially educators and policymakers thought that an intense focus on beginning reading in the primary grades would prevent literacy problems in later grades. However, this "inoculation model" did not work to cure the problems of struggling older readers (Carnegie Council on Advancing Adolescent Literacy, 2010). Even skills like word reading, thought to be addressed through the intensive code-based emphasis of the Reading First initiative, remain an issue for a surprising percentage of adolescent learners (p. 31). Significant numbers of adolescents have reading and writing problems (Williamson, 2006), including 2 to 5 percent of students provided with early reading intervention (Mathes et al., 2005; McMaster, Fuchs, Fuchs, & Compton, 2005). Although eighth grade students at the lowest levels of achievement on the NAEP exhibited one- or two-point increases in performance from 2007 to 2009, gaps persist in the performance of students with disabilities and English language learners (ELLs), with 66 and 75 percent of students, respectively, considered below basic ability in reading (National Center for Education Statistics, 2009). Moreover, the majority of students of all ability levels and backgrounds struggle with writing (Graham & Perin, 2007a).

Why does the inoculation model not work for a significant number of readers? There are several possibilities. One is that reading instruction in the primary grades is too narrowly focused on code-breaking skills, leaving students ill-prepared for the escalating requirements for comprehension in upper elementary grades and beyond. Another possibility is that reading instruction breaks down at the secondary level. Training for secondary teachers emphasizes content more than methodology. Little attention is paid to teaching students how to comprehend text in a particular content area. In addition, teachers of older students have very limited (if any) knowledge of assessment tools with which to identify struggling readers, diagnose specific needs, and monitor instruction.

If secondary teachers' training leaves them unaware of how to address literacy problems, the structure of the high school itself mitigates against identifying who is struggling. Students are in any one class for a short amount of time on a daily basis. Typically, secondary teachers have large teaching loads, making it more challenging to determine the specific learning needs of individual students. Departmentalized schedules, along with content requirements, mask the magnitude and reality of basic literacy needs of struggling students.

Finally, struggling readers in secondary school face a much more complex task than in the elementary years. In the early grades, when students are learning to read and write, they have ample time to practice a single skill or a limited number of skills as the teacher presents them. In secondary school, where students are reading to learn, the content requires them to simultaneously use skills and concepts in an integrated way. Missing skills become like missing puzzle pieces and negatively impact comprehension and communication. For example, difficulty decoding a multi-syllabic word in science can have a ripple effect on vocabulary acquisition and reduce comprehension of text material.

Against the backdrop of these conditions, it is clear that there is a necessity for a comprehensive literacy curriculum designed especially for adolescents. The curriculum should offer explicit, systematic instruction in component skills. A successful program for struggling adolescents must also address motivation and engagement (Torgesen et al., 2007) and provide extensive opportunities for discussion and interaction, particularly if the students are English language learners (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006).

Theoretical Foundation for a Comprehensive Literacy Curriculum

The purpose of a literacy curriculum for older struggling students is to teach them the literacy skills essential to school success. *LANGUAGE!® The Comprehensive Literacy Curriculum* was designed precisely for this purpose. A program's efficacy in accomplishing this goal results from its focus on multiple variables necessary for student learning: essential content, effective teaching practices, data to measure learning and inform instruction, and extensive and strategic professional development (Greene, 1996). Why should *LANGUAGE!* be effective? First, the curriculum's content is derived from research on what struggling readers and writers need to be successful. Second, the program builds into the curriculum effective teaching practices. Third, multiple procedures and assessment tools are integral to the curriculum and provide data that guide instruction, engage students, and determine growth. Finally, for teachers—many of whom were trained to teach literature rather than literacy—the curriculum provides a platform for learning how to teach the building blocks of reading and writing. The interaction of these key variables forms a cohesive and comprehensive program designed to accelerate learning and promote achievement for students who struggle with literacy.

Essential Content

To be comprehensive, a literacy curriculum must incorporate content from all domains of language learning necessary for literacy proficiency: phonology, word analysis for reading and spelling, morphology and vocabulary, syntax and usage, receptive language (listening and reading comprehension), and expressive language (speaking and writing). Results of meta-analyses suggest interventions for adolescents can be effective at addressing deficits in phonemic awareness, word identification, fluency, vocabulary, and comprehension (Scammacca et al., 2007) as well as writing (Graham & Perin, 2007b), spelling (Graham & Hebert, 2010), and morphology (Reed, 2008). The scope and sequence for each domain maps out the progression of content according to the logical hierarchy within that domain. The curriculum design then integrates, or weaves, the content across strands emphasizing their reciprocity. This application of the scope and sequence creates the basis for a cumulative and sequential presentation of content in a logical and incremental manner. It also lays the foundation for instructional techniques, to be discussed later in the section on Effective Teaching Practices. It is the systematic and cumulative approach to the content of the curriculum that makes the lesson and assessment design possible.

School success depends on understanding the language of the academic environment. For this reason, *LANGUAGE!* emphasizes academic vocabulary across all domains of the curriculum. These are the words that are encountered more frequently in written language than spoken language and that occur across all content areas (Coxhead, 2000). An emphasis on academic language in *LANGUAGE!* also has to do with the complex tasks facing adolescent learners. Increasingly for these students, tasks require not only negotiating the content-specific vocabulary (e.g., *photosynthesis, quadrilateral*) but also the all-purpose academic language (e.g., *infer, interpret, deny*) that is the glue of concept development and academic discourse. This vocabulary becomes progressively more vital to student success in meeting the requirements of secondary coursework and exams (August, Carlo, Dressler, & Snow, 2005; Stahl & Nagy, 2005). For this reason, the development of the *LANGUAGE!* curriculum paid particular attention to this cross-domain dimension of vocabulary selection and instruction to ensure that students are prepared to handle the language demands of subject areas beyond the *LANGUAGE!* classroom. The emphasis on academic language is a key factor that helps struggling readers progress from the "learn to read" to the "read to learn" stages of reading (Chall, 1983).

The next paragraphs provide an explanation of each content area in terms of the research base supporting the inclusion of the content in the curriculum.

Phonemic awareness and phonics: Reading research indicates that phonemic awareness, the ability to discriminate and manipulate individual sounds in words, is a potent predictor of reading success. Phonemic awareness is vital to the development of phonics, in which letter-symbols are mapped to speech-sounds. While typically developed in the primary grades, poor phonological processing abilities are evident through late adolescence (Catts, Adlof, & Weisner, 2006) and reportedly require extended intervention periods to remediate (Fielding, Kerr, & Rosier, 2007; Fletcher, Lyon, Fuchs, & Barnes, 2007). Although not considered the primary area of difficulty among students of this age group (Curtis, 2004), these foundational skills must be mastered in order for students to be able to take advantage of more advanced word study instruction (Reed & Vaughn, 2010). Since English is 87 percent phonologically predictable (Hanna, Hodges, & Hanna, 1971) and because controlled studies using explicit, systematic phonics instruction with decodable text repeatedly outperform embedded phonics, *LANGUAGE!* includes an emphasis on phonemic awareness and phonics in the content domain (Juel & Minden-Cupp, 2000; Beck, 1998; Juel & Roper-Schneider, 1985).

Word recognition and spelling: The ability to accurately and automatically manipulate the sound-spelling associations of English to read and spell words is foundational to fluent reading with comprehension, as well as fluent writing (composition). Since spelling and word reading depend on the same underlying knowledge, instruction in one skill should have a positive impact on the development of the

other (Ehri, 2000; Snow, Griffin, & Burns, 2005). It is highly important that adolescents learn to analyze words structurally so that they can cope successfully with complex texts and writing assignments (Curtis, 2004; Nagy, Berninger, & Abbott, 2006). Intervention focusing on identifying the constituent parts of words has improved not only students' word attack skills (Bhattacharya & Ehri, 2004; Hasselbring & Goin, 2004) but also their spelling (Tsesmeli & Seymour, 2008). In fact, spelling instruction has been found to support students' word reading, fluency, and writing (Graham & Hebert, 2010). In addition to proficiency with words composed of predictable sound-spelling associations, it is particularly important for older struggling students to become fluent in identifying irregular words, as these words do not follow the regular rules for pronunciation (Shaywitz, 2003). *LANGUAGE!* includes instruction in both categories of words—predictable and irregular—developing word recognition and spelling skills through acquisition of the building blocks of words—sound-spelling associations, syllable patterns, and morphological units.

Vocabulary and morphology: This element in *LANGUAGE!* concentrates on linking meaning to words that students can read and spell. The importance of explicit instruction in developing vocabulary relates to the relationship of vocabulary to reading comprehension. Research has shown that vocabulary is a robust predictor of reading comprehension (Carnegie Council on Advancing Adolescent Literacy, 2010) and therefore requires a significant role in the curriculum. *LANGUAGE!* helps students expand their vocabulary through study of word relationships (e.g., synonyms, antonyms, and analogies) and through repeated readings to develop awareness of multiple meanings as well as degrees of word meaning (e.g., the difference between multiple words meaning small, such as *tiny, miniature,* and *petite*). Students should have multiple exposures to words in different contexts (August, Carlo, Dressler, & Snow, 2005) and should be taught how to use contextual analysis in combination with other word-learning strategies (Baumann, Font, Edwards, & Boland, 2005). Morphology, the study of the meaning of word parts, provides insight into word meaning and has the potential to produce exponential vocabulary growth. Morphemic analysis not only supports word identification, but also vocabulary knowledge (Reed, 2008). Much evidence supports direct instruction in vocabulary and the use of independent word-learning strategies, such as morphemic analysis, for students with reading difficulties (Jitendra, Edwards, Sacks, & Jacobson, 2004) and those who are ELLs (Francis et al., 2006).

Grammar and usage: The function and arrangement of words to create meaning occurs at the sentence level. While the level of communication is typically at the level of text, the unit of building text is the sentence (Scott, 2004). Similar to combining letters to form words that represent meaning, understanding how words are put together to create sentences has an impact on both listening and reading comprehension, as well as on speaking and writing (Graham & Hebert, 2010). This understanding requires knowledge of the form, function, and syntactical arrangement of words—that is, the content of grammar and usage. Comprehending and composing embedded clauses, passive voice, verb tenses, and pronoun referents are among the recurring challenges for students with language weaknesses (Westby, 2004). Sentence length, which is related to the number and type of syntactic elements, is a key variable in text difficulty, or readability (Scott, 2004). If students are more facile with complex grammatical structures, sophisticated text will be easier for them to comprehend (Foorman, 2009). Additionally, syntactic knowledge of written text contributes to the ability to parse text (i.e., read in meaningful phrases), which affects reading fluency and comprehension. The knowledge of syntactic patterns of written language takes the place of the prosodic cues that facilitate listening comprehension. Knowledge of syntax makes sentence parsing more logical, and in turn the text more comprehensible (Scott, 2004). Syntax also plays a role in spelling. The ability to use syntactic awareness can help students make more accurate spelling decisions and avoid over-reliance on phonetic strategies. For example, morphosyntactic awareness helps distinguish between the uses of s on trees in the two phrases *oak trees* and *tree's branches*. It is the grammatical knowledge of the function of trees in each phrase—plural in one; possessive in the other—that yields the correct spelling (Scott, 2004). Facility with a variety of syntactic structures also contributes to writing fluency, which in turn contributes to better developed and more coherent compositions (Graham & Perin, 2007a).

Listening and reading comprehension: In addition to drawing upon the content and skills of the previous four domains, understanding text requires instruction in content, skills, and strategies specific to comprehension. Meta-analysis of reading recommends direct, explicit comprehension instruction focusing on strategies to understand text, teacher modeling of effective strategies for students, and a gradual transfer of responsibility for monitoring one's own comprehension—that is, moving from teacher modeling to student independent use (Biancarosa & Snow, 2004; Alfassi, 2004; Guthrie et al., 2004; Verhoeven & Perfetti, 2008). The meta-analysis also emphasizes providing students with texts covering a wide range of topics at a variety of reading levels. Additionally, students need to be able to negotiate a variety of text structures of increasing complexity and difficulty (Biancarosa & Snow, 2004). Recent research reports suggest comprehension interventions should include graphic organizers, text structure identification, discriminating main ideas from details, summarizing, paraphrasing, questioning strategies, building background knowledge, and self-monitoring (Boardman et al., 2008; Torgesen et al., 2007). For these reasons, *LANGUAGE!* uses multi-leveled text selections based on a readability scale in each unit—each level of text addressing a different instructional purpose. The text selections, which are linked within a unit by a target word (e.g., Unit 1 target word is **bat**; Unit 13 target word is **invention**; Unit 25 target word is **circle**), simultaneously provide repeated exposures to the same vocabulary word while developing the concept of multiple meanings across the text selections. Heavy emphasis on nonfiction

(i.e., 75 percent of text selections in Books A–C) develops background knowledge and subject-specific vocabulary to help compensate for the limited fund of information that characterizes struggling readers. The program emphasizes vocabulary expansion by preteaching high-utility words in text selections and by showing students explicit strategies (i.e., Use the Clues) for using the context and other cues to figure out the meaning of unfamiliar words. Interpreting, answering, and asking questions are integral components of the instructional emphasis in each unit. Comprehension questions based on the signal words from Bloom's Taxonomy (i.e., Answer It) systematically develop the academic language needed to deal with textbook and test questions.

Speaking and writing: Similarly, writing draws upon all other content domains and entails skills and strategies unique to the act of producing written products. Research supports teaching explicit strategies for planning, revising, and editing through the writing process as the key to helping students achieve self-directed writing (Graham & Perin, 2007a). The skills and strategies taught should be coordinated with other dimensions of literacy learning, so it is recommended that students write about the texts they read, learn to combine sentences to vary their length and complexity, and use organizational patterns or text structures as a reciprocal means to improving both their reading and writing (Graham & Hebert, 2010; Monroe & Troia, 2006; Saddler & Graham, 2005). To address these needs, *LANGUAGE!* follows a prompt-to-product process in every unit, which teaches students to interpret the purpose of the writing from the prompt, to select and organize content (usually based on the reading selection for the unit), and to apply correct sentence structure and other mechanical skills of writing. Writer's checklists cue students to apply what they have learned to their writing. The checklists also provide scaffolding toward independent, self-directed writing. Furthermore, the checklists, which are the basis for the writing rubrics used to evaluate student writing, help students keep the multiple components of the complex task in mind. Ongoing teacher conferring, as well as structured peer review using the checklists and rubrics, provide a well-documented means for students to improve writing (Graham & Perin, 2007a; Mastopieri & Scruggs, 1997). The curriculum also focuses on writing answers to questions as another form of written language production essential for success in school. In each unit, interpreting and writing answers to questions based on Bloom's Taxonomy provide abundant opportunity to practice and hone this critical academic skill.

Cross-strand connections: While teaching all domains that contribute to literacy is critically important, it is equally important to emphasize the integration of the content across strands. This is a uniquely deliberate design feature of *LANGUAGE!* In addition to the strand-specific comprehensiveness, the curriculum design also stresses the cross-strand connectedness. For example, to spell words correctly (Step 2), accurate and automatic representation of sounds with letters (Step 1) is essential. Similarly, meaning (Step 3) also plays a role in spelling when words that sound the same (e.g., see and sea or past and passed) are spelled differently. Another example of a cross-strand connection is the understanding of word meaning (Step 3) that comes from the syntactic context of a sentence (Step 4), such as the difference in meaning of bats in these sentences: *"The **bats** live in the cave"* in contrast to *"The player **bats** the ball."* The context is essential to make the distinction between how many bats (noun) versus an action (verb).

The reciprocity of reading (Step 5) and writing (Step 6) is particularly powerful. Recent meta-analysis indicates that writing about text that students read improves the level of comprehension. Findings point to the power of using writing as a means of improving reading and content-specific learning (Graham & Hebert, 2010). *LANGUAGE!* promotes this relationship between reading and writing in a variety of ways. For example, graphic organizers bridge the reading-writing process when students use an organizer to select (e.g., Blueprint for Reading) and record relevant information from a reading selection in preparation for a writing assignment (e.g., Blueprint for Writing) and then use the organizer to compose the written product. The prompt-to-product process used throughout the curriculum also stresses the use of the text selections as an information source for many of the assignments. Answering questions about text in writing is an important goal of the curriculum design through which students improve both reading comprehension and writing skills. The repetition of this process in every unit also contributes to fluent writing performance.

Effective Teaching Practices

The methods of instructional delivery are as critical as the content (Lemov, 2010; Carnegie Council on Advancing Adolescent Literacy, 2010; Marzano, 2007; Darling-Hammond & Bransford, 2005). The instructional techniques used in *LANGUAGE!* are based on learning theory and evidence-based effective teacher practices.

These principles of learning and instruction permeate all steps in the curriculum through both the instructional materials and teaching approaches. They include:

- Explicit instruction
- Instructional match
- Oral language front-loading
- Practice to build automaticity
- Focus on high-frequency content
- Making abstract concepts concrete
- Emphasis on classification
- Use of shared vocabulary
- Focus on self-regulatory behaviors
- Teaching to transfer

Explicit instruction: Explicit instruction—that is, the direct teaching of content, strategies, and skills—is essential for both instructional and learning efficiency. Incremental, systematic, and cumulative presentation of content goes hand-in-hand with explicit instruction. Using the scope and sequence of content in each strand, *LANGUAGE!* gradually unfolds content through activities. For example, through the sentence expansion activity, Masterpiece Sentences, students learn how to write longer and increasingly complex sentences. Initially the emphasis is on the function of the words (e.g., who did it? how? which one?). Once students can generate expanded sentences orally and in writing, they learn to label the function of the word or phrase as a part of speech (e.g., noun, adverb, adjective). Another example of cumulative learning is tapping students' prior knowledge to build new schema or expand knowledge. *LANGUAGE!* emphasizes this practice in the structure of the Teacher Editions, in which lesson design cues teachers to introduce or review constructs before moving to activities. Teachers also routinely activate prior knowledge as part of the introduction of reading selections. Explicit instruction, in which teachers stress function before labels and ensure success through specific examples and explanations that build upon known content and skills, creates a diagnostic teaching environment allowing teachers to accelerate or slow instruction based on content mastery.

Instructional match: Students are more successful when the level of learning is in their instructional range (Vygotsky, 1978). *LANGUAGE!* uses the concept of instructional match in a variety of ways. The placement process is the first step *LANGUAGE!* takes to position students in their instructional range. Students begin the curriculum based on their skill level in reading rather than grade-level placement. The goal of instructional match also influenced the strategic use of readability for the selection of text material in *LANGUAGE!* A readability scale was used for all reading selections in the curriculum in order to match text difficulty to student reading ability (Rosenfield, 1987; Chall, 1983). Incrementally increasing readability levels from unit to unit and book to book, in tandem with the development of content and skills, ensures that students have the requisite skills to read the text. Content Mastery tasks embedded in each unit provide a means to monitor the mastery level of skill acquisition, or the ratio of known to unknown material. The program deliberately makes connections between the content of steps, such as phonics (Step 1) to word reading and spelling (Step 2) or the relationship of word meaning (Step 3) to word function (Step 4) or knowledge of sentence structure (Step 4) on written communication (Step 6). It explicitly links known to unknown and builds from simple to more complex skills and content. Finally, *LANGUAGE!* also utilizes words that students can read and spell in the development of other literacy skills to ensure that acquisition of more complex concepts is not confounded by difficulty with reading the words. For example, in the first unit, after orally discussing the concept of nouns, students practice this concept using only the decodable vocabulary in that unit.

Oral language front-loading: Oral language—speaking and understanding speech—precedes written language developmentally and serves as the language foundation for reading and writing (Biemiller, 2006). *LANGUAGE!* employs oral language front-loading— that is, preteaching and rehearsing language orally before its written language counterpart—because many struggling readers lack the strong oral language base upon which to build reading and writing proficiency. The organization of the instructional steps progresses from sounds (oral) to text (written). In *LANGUAGE!* teachers use oral rehearsal of grammatical structures prior to written work (Step 4) or answering questions (Step 5) to front-load language. Teachers orally front-load reading vocabulary and content through the identification and discussion of text features, prereading comprehension questions before reading the selection, and discussing text content to activate and build prior knowledge as part of the preparation to read. Preteaching key vocabulary and concepts is also the purpose behind the "Speaking and Listening to the English Language" activities that come before the six-step progression in each lesson in Books A through C. These activities are designed for English learners to provide them with the oral language foundation for key concepts prior to Steps 5 and 6.

Practice to build automaticity: Automaticity helps overcome a key obstacle to learning—the limited capacity of working memory. Overcoming the limitations of working memory is essential to move learning to a higher level. Practice that builds to the point of automaticity is critical; sustained practice—that is, ongoing review and use of what has been learned—is also necessary to maintain automatic retrieval of skill and content (Willingham, 2004). *LANGUAGE!* incorporates multiple ways for students to automatize the basic components of literacy. Explicit fluency tasks, which are done under timed conditions, are provided for each unit of instruction. These tasks focus on foundational skills including letter-sound fluency, word fluency, and passage fluency. Students chart their own performances, which gives them ongoing feedback and provides teachers with data to inform instructional emphasis. Through the integration of content—that is, the weaving of content from one step with another—*LANGUAGE!* provides an internal application to reinforce retention and retrieval. The curriculum materials supply abundant opportunities for students to practice important content in a context in which they can be successful. The cumulative and spiraling presentation of content and skills ensures sustained practice and builds in ongoing application. Practice to the level of automaticity is also the focus of instruction for complex procedures. For example, every composition assignment based on the Instructional Text follows a prompt-to-product sequence. Students learn to read the writing prompt, determine the purpose of the composition, gather and organize information and ideas, and write a finished product after editing and revision. The repetition of this sequence develops fluency in performance with this type of complex task. The overarching goal is to develop automaticity with each constituent skill required to accomplish the more complicated tasks.

Focus on high-frequency content: To accelerate learning, *LANGUAGE!* concentrates on teaching essential high-frequency and high-utility content in each step. Students learn the most frequently occurring concepts and constructs before exposure to less-utilized constructs. For example, in the area of phonology, *LANGUAGE!* begins with the short sound for vowels, which is the vowel sound in the most frequently occurring syllable type, the closed syllable (e.g., cat, sunset, fantastic). LANGUAGE! emphasizes high-frequency words in English because they comprise a high percentage of the words English speakers read and write. For instance, the top 100 words on the high-frequency word list make up 50 percent of all written English (Fry, Kress, & Fountoukidis, 2002). In the area of morphology, inflectional endings, which overlap significantly with grammar, are featured in the first two books. Then, the 12 most common prefixes are taught in the next book before lower-incidence prefixes. Vocabulary focus in the reading selections is also based on utility using Beck's tier system (Beck, McKeown, & Kucan, 2002). The words highlighted for instructional emphasis in the Instructional and Challenge Text selections fit the criteria for Beck's Tier 2, which are high-frequency words for mature language users. These are words that can be used across reading selections and subject matter, thereby contributing to the expansion of language ability (Beck, McKeown, & Kucan, 2002). *LANGUAGE!* uses nonfiction subject matter for 75 percent of the reading selections in the first half of the curriculum to provide extensive practice interacting with the text structure of informational text, the type of text students encounter in content-area subjects.

Making abstract concepts concrete: The terminology and concepts in a language arts/reading curriculum are often abstract, making it difficult for students to comprehend them and for teachers to know whether students understand them. *LANGUAGE!* uses multiple multi-sensory techniques—including tangible objects, visuals, graphics, color coding, and kinesthetic techniques—to help make the abstract concepts concrete. In an activity to segment words into their component sounds (phonemes), teachers model the segmentation using tiles and have students replicate the process. Using letter cards to build words makes concrete the relationship between the constituent sounds in a word and the symbols that represent them. A visual vocabulary supports the introduction of targeted vocabulary in preparation for reading the Instructional Text selections. When teaching students the components of a word's definition, teachers use a graphic organizer to represent the parts of the definition—the category and attributes for the word. The Handbook section of the Student Text provides illustrations to help convey abstract concepts. The program employs graphic organizers, such as the Blueprint for Writing, to use as concrete models for the organization of information in preparation for writing. In most cases, these techniques and tools help students see the relationship of parts to a whole. Color coding makes the structure of a paragraph concrete by making each component of a paragraph—topic sentence, supporting details, elaborations, and conclusion—a different color. The program provides a color-coding system for sentence diagramming if additional scaffolding is needed to understand sentence structure. Students learn to "scoop" groups of words to identify meaningful phrases while reading using a pencil mark. The pencil marks serve to encourage greater fluency when reading. While helpful for all struggling students, these techniques are particularly advantageous for English language learners (Short & Fitzsimmons, 2007; Echevarria, Vogt, & Short, 2004).

Emphasis on classification: *LANGUAGE!* capitalizes on the cognitive stage of older learners through the extensive use of activities involving classification or sorting. The work of Piaget suggests that students in upper elementary grades and higher move toward a more abstract worldview (James, 1975). Even so, many struggling learners have not intuited the grouping of similar or connected ideas, which forms the basis for higher-order skills such as understanding or writing paragraphs. In *LANGUAGE!* students sort content by sounds, spelling patterns, semantic groups, and word function (i.e., parts of speech). By doing so, they show the extent to which they understand the concept underlying the sort. Moreover, when students can find common characteristics among content or ideas and label them, this facilitates storage and retrieval, critical elements in the thinking process (James, 1975). Classification activities have the added benefit of revealing students' level of understanding, making it possible to adjust instruction.

Use of shared vocabulary: *LANGUAGE!* makes use of the power of a shared vocabulary for efficiency with students and among educators. For example, the activities are named (e.g., Move It and Mark It, Define It, Divide It, and Answer It) to create a quick, efficient, and specific way to communicate what students are to do. In a similar way, the use of common activity and process names allows educators using the curriculum to talk about what they are doing with a clearly defined and shared terminology (Lemov, 2010). The added benefit is consistency of language from teacher to teacher from one school year to the next. This consistency and predictability allow more time to focus on doing the instructional tasks rather than explaining them, which in turn contributes to more extensive practice with the content and skills. *LANGUAGE!* also stresses the use of the academic terminology specific to literacy—such as syllables, clauses, and literary terms— so that students acquire the language of the subject matter. This, too, increases efficiency and precision in both the instructional and assessment processes.

Focus on self-regulatory behaviors: One of the goals of *LANGUAGE!* is to develop independent performance, not only within the curriculum but beyond. For this reason, there is an emphasis on the development of self-regulatory behaviors, or meta-cognitive strategies, that create the tools for successful independent application of content and skills. LANGUAGE! uses cueing questions extensively, first modeled by the teacher and then utilized by students, to focus on critical elements of what they are learning. Questions are used in each step and are specific to the content of that domain. For example, "How many vowels?" to determine the number of syllables in a word; "Who did it?" to determine the subject of a sentence; "What are all of the sentences about in this paragraph?" to identify the main idea of a paragraph; "What is the question asking?" to focus on the signal word beginning a question; "What is the prompt asking?" to guide students to concentrate on the purpose of their writing. These questions are introduced gradually and practiced repeatedly to become an integral part of the metacognitive system on which students draw. Activities are also designed to practice procedures repeatedly until automatic. Double It is an example of this kind of activity. A graphic organizer maps out a specific sequence of steps to determine whether to double the final consonant of a word before adding an ending (e.g., *sit – sitting* versus *end – ending*). The Double It graphic organizer exposes students to word patterns following this spelling rule in isolation; with enough repetition, the correct spellings will find their way into students' spontaneous writing. Student-developed mnemonics provide additional support for students to retrieve and apply skills (Suid, 1981). For example, a mnemonic to remember the letters to double at the end of most single-syllable words (i.e., **f**, l, **s**, and **z** as in pu**ff**, be**ll**, mi**ss**, and bu**zz**) might be "**L**azy **Z**ebras **S**mell **F**unky." *LANGUAGE!* also uses checklists as a concrete reminder of what students are supposed to do (e.g., the Lesson Checklist at the beginning of each unit in the Interactive Text) or to guide work (e.g., Writer's Checklists used for editing). Checklists provide a classification system to organize the retrieval of content and skills that students should apply. The checklists free up working memory in order to apply the skills rather than struggle to retrieve those details.

Teaching to transfer: Teaching to transfer is another goal of the curriculum reflected in both the instructional approaches and the organization of the content. Instruction is presented in the Teacher Editions based on the gradual release model. Activities are written to follow the progression from teacher explanation and modeling to guided practice with students to independent practice. This approach creates a diagnostic teaching environment, which makes it possible for teachers to accelerate or slow down instruction based on how well students perform at each level of scaffolding. Activities are designed to transfer responsibility from the teacher to the students. As students' skills increase, they work more independently. A system of icons cues teachers for the level of scaffolding in the teaching guides. The organization and integration of content also contributes to transfer and application of skills. Content or skills learned in one step are applied in subsequent steps. Additionally, once something is learned, it is expected that students will use it after that. For example, once students learn how to spell the phonetically irregular word said in Unit 2, they are expected to spell said correctly in all contexts after that. The ultimate goal is for students to apply strategies and skills learned in the *LANGUAGE!* classroom in grade-level English/language arts courses, as well as in non-English/language arts subjects. This requires students to use meta-cognitive strategies independently and includes professional development for subject-area teachers focused on fostering a scaffolded environment in their classrooms.

Responding to Data

The *LANGUAGE!* assessment system—beginning with accurate placement into the curriculum followed by baseline, ongoing, and summative assessments—provides the data to inform instruction, the feedback to motivate students, and the information to determine growth. Ongoing monitoring of and responding to data is an integral component of the design of *LANGUAGE!* and is an essential ingredient to an effective implementation of the curriculum. The assessment tools integrated into the curriculum, along with the complete data management system (VPORT®), ensure that instruction is strategically planned and continually adapted to students' specific needs. This is considered particularly important to the success of intervention for ELLs (Gersten et al., 2007) and students whose literacy performance is significantly behind their peers ([e.g., below the 35th percentile on standardized measures of reading]; Madelaine & Wheldall, 2005; Stecker, Fuchs, & Fuchs, 2005).

Data to inform instruction: Data from the assessment tools make it possible for teachers to adjust instruction, which includes pacing and identifying the need for reteaching. Data also signals when to use the built-in differentiation tools in the curriculum. The entry point for each student is determined through the use of the Placement Test. Content Mastery tasks in each unit ensure that teachers have current information about the extent to which students are acquiring the content and skills in the curriculum. Performance targets (e.g., 80% or 60%) signal the need to reinforce or reteach. Data collection on the fluency tasks involves students directly. Benchmark writing samples link feedback on writing performance with meta-cognitive strategies through the use of teacher-led conferencing, writing checklists, and rubrics. Summative assessments provide teachers with a view of each student's overall mastery of curriculum content using the End-of-Book Content Mastery tasks, as well as perspective on growth from the Progress Indicators, which are different forms of the same assessment tools used for baseline assessment and are not based explicitly on the *LANGUAGE!* curriculum.

Feedback to motivate students: Students trapped in a cycle of failure are rarely motivated by their performance on tests. In contrast, in *LANGUAGE!* the frequent ongoing assessments and fluency checks provide feedback on small increments of learning. For example, students chart their fluency rates frequently in order to observe the changes in what they know and how well they are doing. Since these assessments are closely tied to instruction, students often report experiencing academic success for the first time in school.

Information to measure growth: The Progress Indicators, which are different forms of the tests used for establishing baseline performance, allow teachers to monitor and calculate growth. These measures make it possible to determine the rate of learning.

Extensive and Strategic Professional Development

Professional development has a positive effect on instruction when it occurs over a considerable amount of time, focuses on specific content and/or instructional strategies, works with school- or grade-level cohorts to develop collective participation, strives for coherence by delivering the same content and message, and includes active learning (Snow-Renner and Lauer, 2005). Professional development offerings need to be built in to the regular school schedule to provide consistency and predictability for ongoing opportunities to learn new research, to exchange ideas on instructional practices, and to seek support when questions arise (Biancarosa & Snow, 2004).

Following an initial launch training for *LANGUAGE!* district personnel are provided monthly cohort meetings; campus leadership are provided quarterly benchmark meetings; and interventionists receive in-class coaching, consultative support, and online mentoring through VPORT. Enhancing the knowledge, skills, and self-efficacy of those charged with implementing an initiative is believed to be the critical link to improving students' academic achievement (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). In fact, teachers provided with high-quality materials and equally high-quality professional development have improved outcomes for ELLs (August, Branum-Martin, Cardenas-Hagan, & Francis, 2009; Vaughn et al., 2009). Furthermore, Wayne and colleagues (2008) found in a review of research that professional development delivered by the program developers to a small number of teachers successfully increased student achievement. Professional development models that include online consultative support have shown promise in increasing the quality of classroom interactions associated with effective instruction (Pianta, Mashburn, Downer, Hamre, & Justice, 2008).

A Larger Framework

Certain conditions are vital to successful curriculum implementation. It is necessary to provide sufficient time, to identify appropriate groupings, to utilize data toward targeted levels of student performance, and to examine the professional development needs of educators to sustain delivery of the curriculum with fidelity. The framework inherent in a multi-tier system of supports (MTSS) provides for logistical needs such as scheduling extended time for literacy, grouping, and data-driven decision making. Implementation of a comprehensive and coordinated literacy program is best viewed as a team responsibility rather than the sole responsibility of literacy teachers and coaches. Districts can achieve a more robust implementation if administrators pave the way for literacy teachers to support a larger network of educators, including content-area teachers. Included in this effort is the coordinated use of data from student performance to guide instruction, as well as the identification of areas for ongoing professional development and infrastructural adjustments (Biancarosa & Snow, 2004; Heller & Greenleaf, 2007). While not an explicit component of the curriculum, the larger framework facilitates the implementation of *LANGUAGE!*

Summary

In summary, the theoretical foundation for a comprehensive literacy curriculum for struggling students forms the foundation for *LANGUAGE!* The goal of such a comprehensive curriculum is improved performance in the reading, writing, listening, and speaking skills of upper elementary, middle, and high school students more than two years below grade level as a result of improved teacher efficacy, delivery of scientifically based reading instruction, and school systems for literacy support.

PART II:

Description of *LANGUAGE!* The Comprehensive Literacy Curriculum

LANGUAGE! The Comprehensive Literacy Curriculum translates the essential content for struggling literacy students and best teaching practices into an integrated instructional system. This system provides the base from which to improve student performance and teacher effectiveness. The essential content of the curriculum—inextricably tied to effective instructional practices and principles of learning—advances student skill acquisition, content knowledge, and application of learning. Concurrently, through the act of teaching the curriculum, teachers increase their effectiveness by gaining content knowledge, instructional techniques, and ways to use data. Data from student performance inform the ongoing instructional process, including differentiation and pacing, and identify areas in which teachers may need support through professional development. In this way, the curriculum is simultaneously the vehicle for student learning and professional growth for teachers. As an instructional system, *LANGUAGE!* is uniquely well-suited to work in an MTSS, which is designed to provide appropriate instructional support to students along with the necessary support to teachers.

Curriculum Structure

The curriculum is designed as a multi-component intervention delivered in 90 minutes of daily instruction to students scoring below the 35th percentile on national norm-referenced reading tests. The objective in the design of *LANGUAGE!* is to teach the essential content of reading and writing as expediently as possible to accelerate learning. To that end, each of the six areas of content forms the basis for an instructional step in *LANGUAGE!* Lessons follow a six-step format—one step for each content domain—that develops concepts by linking and building cumulatively from one skill to another across each lesson, unit, and book. Moreover, in the first three book levels of the curriculum, an additional activity—"Speaking and Listening to the English Language"—precedes the first step to front-load academic language for subsequent activities in the lesson. Together, "Speaking and Listening to the English Language" and the six-step sequence establish the structure for the curriculum's instructional design.

Speaking and Listening to the English Language: These oral language activities build background in the critical language skills necessary to master subsequent content in each lesson. The activities develop academic vocabulary, reinforce grammar concepts, and provide abundant opportunities to practice speaking English. These activities front-load academic language and embody teaching strategies effective in making abstract concepts concrete. The goal is to have teachers devote sufficient instructional time to oral language development, the basis for success with written language.

Step 1—*Phonemic Awareness and Phonics:* In this step, students learn phoneme and syllable awareness, morpheme awareness, sound-spelling correspondences, syllable types, and multiple spellings for the same sound. Practice to the point of automaticity with these building blocks for words is key in this step.

Step 2—*Word Recognition and Spelling:* The sound-letter correspondences learned in Step 1 are the basis for developing accurate and fluent reading and spelling of words in Step 2. Students build words to read and spell using known correspondences. Encoding and automatic recognition of phonetically regular words are the goals of this step. Additionally, students gradually master high-frequency

words that are not phonetically based. Strategies to learn syllable types and syllable division help students decode multi-syllable words. Spelling rules are taught in this step and applied in all written work.

Step 3—Vocabulary and Morphology: Step 3 focuses on learning the meanings associated with the words students can read and spell. This includes learning the target word for each unit, as well as other unit words based on the phonology of the unit. Students acquire a deep understanding of words by exploring multiple meanings, word associations (i.e., antonyms, synonyms), and figurative meanings. Instruction in this step is tied closely with Step 4, Grammar and Usage, to stress the impact of sentence context on the meanings of words. Latin roots, prefixes and suffixes, and Greek combining forms provide a vehicle to accelerate vocabulary development. Through these morphological units, students can access the meanings of more than 60 percent of English words.

Step 4—Grammar and Usage: In Step 4, students learn the impact of syntax, the arrangement of words in sentences, on meaning. Context is essential to determine both word function and meaning. Grammatical structures are the basis for sentence development; sentences are the building blocks of text and meaning. Initially, students build sentences from unit vocabulary that they can read and spell. Through sentence combining and other strategies, students learn to generate expanded and more complex sentences. Facility with sentence development contributes to comprehension when reading and clarity when writing. Step 4 incorporates the mechanics, such as capitalization and punctuation, that also influence meaning.

Step 5—Listening and Reading Comprehension: Skills learned in Steps 1 through 4 are applied in Step 5 as students read a range of informational and literary text selections. Depending on the type of text (i.e., Decodable, Instructional, or Challenge), students develop fluency, gain understanding of text structures, build background knowledge, and learn vocabulary using context-based strategies. Through the use of context-based vocabulary strategies, question interpretation at all levels of Bloom's Taxonomy, and utilization of text structures, students move toward the goal of improved reading comprehension. Additionally, Challenge Text selections emphasize critical thinking and listening skills.

Step 6—Speaking and Writing: Step 6 focuses on expressive communication—speaking and writing. Students write sentences, paragraphs, and compositions. Prompts for writing require interpretation and draw upon content from the reading selections or from personal experiences. Each unit features the program's prompt-to-product process to help students develop writing fluency and become proficient in many genres, including essays and research reports. Generating oral and written responses to questions based on Bloom's Taxonomy also expands expressive language skills.

Instructional Components

The instructional components of *LANGUAGE!* support teachers and students in the learning process. The curriculum consists of six levels, Books A–F, each with six units of instruction with 10 lessons per unit. The main *LANGUAGE!* curriculum components—including Teacher Editions, Student Texts, Interactive Texts, and assessment and technology tools—translate the theoretical foundation into practice.

Teacher Edition: Teacher Editions orchestrate the curriculum by mapping out and coordinating what to teach, how to teach it, and when to assess learning. Teachers are guided every step of the way through content maps, lesson planners, and step-by-step daily lessons for each unit. The Teacher Edition furnishes the teacher with the content knowledge necessary to give students accurate explanations of concepts and content in clear, understandable language. Recurring activities are introduced to the teacher in a "why do, how to" format to ensure understanding of the purpose of each activity. Through a series of icons, the Teacher Editions also provide guidance for the level of scaffolding appropriate for the students and the lesson: teacher modeling, guided practice, or monitoring independent student work. The appendices make reference material—such as thumbnail versions of the Student Text, a glossary of terms, and contrastive analyses of students' first language with English—readily available to teachers.

Student Text: The Student Text consists of two major components: the handbook and readability-leveled reading selections. The handbook furnishes students with a cumulative resource of major concepts and skills taught in each unit. Teachers use the terminology, examples, and visual supports in the handbook during instruction; students use this section independently as a reference. Text selections for each unit, linked by a target word, supply three levels of reading selections, each designed for specific instructional purposes. Decodable Text, composed of decodable words based on the phonology scope and sequence of the curriculum, offers students reading material with which to practice application of decoding skills and build fluency. At the easiest readability level, students should be able to read these selections independently. Instructional Text, written in the mid-range of readability difficulty, provides reading material to explicitly teach text structures, develop vocabulary, and build content knowledge. This text level also serves as the basis for writing answers to text-related comprehension questions and compositions. Challenge Text selections, the most difficult in terms of readability in each unit, continue to develop vocabulary and background knowledge, as well as to provide exposure to various literary genres and comprehension questions

that tap higher-order thinking skills. When read aloud to students, the Challenge Text selections develop listening skills. Across the board, the text selections in *LANGUAGE!* emphasize informational text to mirror the type of reading required widely in content-area subjects and on high-stakes tests.

Interactive Text: The Interactive Text provides scaffolded activities to apply and reinforce skills in each lesson. Activities, to be completed interactively under teacher direction, are designed for a high level of student success. The Interactive Text is best used after direct instruction in a concept or skill as a place where students can apply their learning. The Interactive Text also contains reference materials, fluency drills, and charts to document performance on fluency activities. A checklist at the beginning of each unit serves as an agenda for the unit lesson, allowing teachers and students to monitor progress through the requirements of the unit.

Assessment tools: The *LANGUAGE!* assessment system begins with accurate placement into the curriculum, followed by baseline, ongoing, and summative assessments to inform the instructional process. Together, these assessment tools drive instruction. Data from a group-administered placement test identify students' entry point, based on skill level, into the curriculum: Book A, C, or E. Before instruction begins in Book A, C, or E, baseline tests, which are not *LANGUAGE!* based, give teachers an indication of students' skills from which to measure growth. Tied to the curriculum objectives, Content Mastery tests provide ongoing information regarding the level of student learning. Data from ongoing assessments inform teachers' decisions, including the need to reinforce, re-teach, or adjust pacing. Performance data also drive differentiation decisions. End-of-Book Content Mastery tests provide teachers with a view of each student's overall mastery of curriculum content. Analysis of these results guides decisions regarding movement to the next book level. Progress Indicators produce grade equivalencies that help pinpoint growth when compared with baseline performance. These tests are designed to provide valid and reliable measures of speed and accuracy of word reading, reading comprehension, spelling, and writing.

Technology tools: *LANGUAGE!* supplies technology tools for teachers and students. Those designed for teachers help them develop materials to meet specific student instructional needs. Other interactive technology tools allow students to practice skills and content. Together these tools are a valuable resource to teachers in order to differentiate instruction.

Elements of an Effective Implementation

An effective implementation requires a systemic commitment to address the essential variables—learning outcomes, logistical arrangements, and professional development—that promote the intensity, duration, and quality of instruction needed for a comprehensive intervention system to thrive. Effective implementation of LANGUAGE! requires that:

- Personnel at all levels of a district agree that all students have the right to maximize their literacy learning. Such an agreement necessitates that sufficient time, rather than an arbitrary number of years, is dedicated to this goal.
- Adjustments must be made to provide a workable schedule and appropriate grouping to maximize instructional time.
- Teacher training and support ensure that teachers know the program's content and instructional practices—their purpose and relevance. Enhancing the knowledge and skills of those charged with implementing an initiative contributes to improving students' academic achievement (Yoon et al., 2007).
- District personnel must be committed to the use of data to inform instruction and educational decision making. Beginning with the use of placement information, data are the key to maximizing the power of instructional match. This is particularly important to the success of interventions for English learners (Gersten et al., 2007) and students whose literacy performance is significantly behind their peers (Madelaine & Wheldall, 2005; Stecker et al., 2005).
- Teachers stress a high level of student participation and engagement in the activities of each lesson.

Conclusion

Addressing the needs of struggling adolescent readers is a complex problem that requires a comprehensive solution. *LANGUAGE!* offers all the variables necessary to accelerate the achievement of older readers and writers who lack literacy skills: content essential to literacy acquisition, effective teaching practices, data to measure progress and inform instruction, and extensive and strategic professional development. With an effective implementation of this comprehensive curriculum, the national agenda for improved academic performance for all students can be a reality.

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