Portland State University PDX Scholar

Education Faculty Publications and Presentations

Education

9-2012

Enhancing Instruction for English Learners in Response to Intervention Systems: The PLUSS Model

Amanda K. Sanford

Portland State University, asanford@pdx.edu

Julie Esparza Brown
Portland State University, jebrown@pdx.edu

Maranda Turner

Let us know how access to this document benefits you.

 $Follow\ this\ and\ additional\ works\ at:\ http://pdxscholar.library.pdx.edu/edu_fac$

Part of the <u>Bilingual</u>, <u>Multilingual</u>, and <u>Multicultural Education Commons</u>, <u>Educational Assessment</u>, <u>Evaluation</u>, and <u>Research Commons</u>, <u>Educational Methods Commons</u>, and the <u>Elementary Education and Teaching Commons</u>

Citation Details

Sanford, A. K., Brown, J., & Turner, M. (2012). Enhancing Instruction for English Learners in Response to Intervention Systems: The PLUSS Model. Multiple Voices For Ethnically Diverse Exceptional Learners, 13(1), 56-70.

This Article is brought to you for free and open access. It has been accepted for inclusion in Education Faculty Publications and Presentations by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Enhancing Instruction for English Learners in Response to Intervention Systems: The PLUSS Model

AMANDA K. SANFORD

JULIE ESPARZA BROWN

Portland State University

MARANDA TURNER

Gresham-Barlow School District, Gresham, OR

ABSTRACT

This paper proposes a model of effective instruction and intervention for English Learners (ELs) within a Response to Intervention (RTI) framework. First, we review literature on effective instruction for ELs and how RTI can address the needs of these students. Then, we describe the PLUSS model, which integrates research on effective instruction for ELs, tiered models of support, and teacher practices. The model includes the following elements: Pre-teaching critical vocabulary; Language modeling and opportunities to use academic language; Using visuals and graphic organizers; Systematic and explicit instruction; and Strategic use of native language and teaching for transfer. Finally, we provide an example of a PLUSS model lesson for Tier 2 instruction within an RTI framework.

Mrs. Shinn is a fourth-grade teacher in a school implementing Response to Intervention (RTI). She is responsible for core and Tier 2 instruction in her classroom. She has a Tier 2 intervention group of six students, four of whom are English learners; of these, three speak Spanish and one speaks Vietnamese. She uses a program that incorporates effective instructional practices recommended in the literature for native English speakers and English learners (e.g., Gersten et al., 2007), but her students sometimes struggle with the vocabulary and language structures used in the intervention program. She wonders what she can do to make Tier 2 instruction more effective for her English learners.

The National Center for Education Statistics (NCES, 2011) reported that the number of English Learners (ELs) in public schools rose from 4.7 to 11.2 million between 1980 and 2009, representing

an increase of 21 percent. While ELs are a diverse population, representing more than 400 languages, what defines them as a group is their need for specialized and effective language support to fully participate in English-only educational programs (Goldenberg, 2008). Of all ELs, 73 percent are Spanish-speakers (NCES, 2011).

Data on the school achievement of ELs reinforce the importance of assuring that all teachers have the skills necessary to assure that students with limited English proficiency meet high academic standards. In 2010, the National Assessment of Educational Progress (NAEP) reported a gap of 36 points between EL and non-EL students in reading at fourth grade, a 47-point gap in eighth grade, and a staggering 50-point gap in grade 12. As alarming as these statistics may seem, it is hard to interpret NAEP results because ELs were tested in English, a language they are

in the process of learning; moreover, no information was provided about participants' English proficiency or the language(s) in which they were taught. Nevertheless, NAEP data suggest a need to enhance English language development support to close the gap between the achievement of ELs and their monolingual English-speaking peers.

Entrenched patterns of low achievement among ELs may explain, at least in part, increased interest in Response to Intervention (RTI) approaches as a way to address the needs of ELs, and particularly those who are struggling academically. We propose systematic enhancement of instructional and intervention programs that specifically addresses ELs' linguistic, cultural, and experiential needs within an RTI framework. To that end, we (a) describe the unique needs of ELs; (b) discuss how RTI can be used to maximize learning outcomes for ELs; and (c) present the PLUSS model for delivering evidence-based core, strategic, and intensive instruction for these students. Examples of how to implement the PLUSS model in the context of RTI are provided.

Addressing the Unique Needs of English Learners

To be successful in school, students must acquire academic language proficiency, the specialized language of classroom discourse (Francis, Kieffer, Lesaux, Rivera, & Rivera, 2006). This language register differs in structure and vocabulary from social language in that it encompasses the language of teachers and classrooms, textbooks and tests (Dutro & Moran, 2003). Students with academic language proficiency demonstrate mastery of the language structures (i.e., language forms) needed to understand and work with academic content and skills (i.e., language functions). For example, a student asked to explain cause and effect (the function), needs to use words such as "because," "since," or "as a result of " (the language form). ELs are not likely to acquire academic language by just hearing classroom discussions (Graff & Birkenstein, 2010); they need explicit instruction in and multiple opportunities to use academic language (Dutro & Kinsella, 2010).

Home Language as a Resource for Learning

Schools are mandated by the Equal Educational Opportunities Act (1974) to help students overcome language barriers that prevent them from equal participation in instructional programs. For ELs, bilingual education and English as a second language programs are provided to assure they acquire the native language and/or English as a second language skills needed to access the curriculum. Cummins (2000) and Thomas and Collier (2002) make the case that students who receive native language instruction have a greater likelihood of academic success. Cummins further cautions that because the native language is the foundation for English acquisition, it should not be abandoned before it is fully developed.

Unfortunately, some school districts are unable to offer bilingual education programs because they serve a large number of different language groups and/or because of the shortage of certified bilingual educators. Even in such instances, the native language can be used to scaffold English instruction for ELs. For example, educators can pre-teach concepts in the native language or, in the course of delivering lessons in English, use the native language to clarify vocabulary or concepts that are difficult for ELs to understand (Egbert & Ernst-Slavit, 2010; Klingner, Hoover & Baca, 2008). Parents must understand that they contribute significantly to the acquisition of English as a second language by building their children's native language competence.

SECOND LANGUAGE ACQUISITION

All ELs do not acquire English as a second language in the same way; moreover, there is great variability in the English proficiency levels they achieve. As noted by Bialystok and Hakuta (1994), "second languages develop under an extremely heterogeneous set of conditions, far more diverse than the conditions under which children learn their native language" (p. 2). For example, second language proficiency is impacted by such factors as (a) first language development, (b) the nature and quality of exposure to the native language and

to standard English, (c) educational background (Spada & Lightbown, 1999), (d) family literacy in the first and second (or third) languages (Golberg, Paradis, & Crago, 2008; Swain, Lapkin, Rowen, & Hart, 1990), and (e) whether the students' first language is valued (Cenoz, 2003). Understanding these influences can help teachers adjust instruction to ensure that it is appropriate to students' English proficiency and to their background characteristics and experiences.

In addition to understanding the process of second language acquisition, educators should also be familiar with the stages of acquisition that characterize their students' English proficiency. Commonly used models (Herrera, Perez & Escamilla, 2010) describe language proficiency along a five-level continuum. Students progress through these stages at varying rates, depending on the factors delineated above. In general, Level 1 is the Starting or Preproduction level, where a child is attending to non-native sounds and words and developing comprehension skills, but may not yet produce language. At Level 2, Emerging or Early Production, children learn vocabulary at a quick pace and begin communicating in short phrases; their receptive language is typically stronger than their expressive language. During Level 3, Developing or Speech Emergence, ELs communicate fairly effectively, even though they make grammatical errors, and can answer "how" and "why" questions. At Level 4, Expanding or Intermediate Fluency, students can understand and use academic language. They engage in extended discourse, but need continued language support to become fully English proficient. Students who achieve Level 5, Bridging or Fully English Proficient, have language abilities similar to their English-only, same-age peers; however, teachers may still need to scaffold English academic language to assure student success. This is the case, for instance, when students are not familiar with the academic language specific to a content or subject area. Teachers must continuously monitor their students' second language trajectory. To do so, and to design and deliver instruction or interventions consistent with students' current language proficiency levels, they need easy access to their students' English Language Development (ELD) program records.

Effective English Instruction for ELs

Teachers should routinely use instructional strategies that have been shown to be effective in helping ELs develop high levels of English proficiency. These strategies support English for social purposes and are used to assure that ELs acquire academic English language skills across content areas.

Using visuals to support acquisition of language and content. Effective instruction for ELs incorporates the use of visuals, realia, and graphic organizers (Hoover, Klingner, Baca, & Patton, 2008). For example, visual supports such as gestures, facial expressions, modeling, highlighting, manipulatives, pictures, and charts (Hart, 2009) help make language comprehensible to students. Graphic or advanced organizers also promote English language learning (Evans, 2003; Hegarty, 2004; Lin & Chan, 2007; Mayer, 2003; Mohammadi, Moenikia, & Zahed-Babelan, 2010) and improve comprehension (Kim, Vaughn, Wanzek, & Wei, 2004; Schoen & Schoen, 2003) because they integrate content and language use, thereby supporting cognitive skill development and strategic thinking.

Systematic and explicit instruction. Unlike native English-speakers, ELs often have gaps in English language and literacy because of a "double cognitive load" (Goldenberg, 2008): They are faced with learning new concepts in English while they are still learning English. To handle this challenge, students need explicit and systematic instruction in phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing (e.g. Fien et al., 2011; Gersten et al., 2007; Goldenberg, 2008; Shanahan & Beck, 2006). When provided explicit instruction in phonemic awareness and decoding, ELs have been shown to attain these skills at the same rate as their English-only peers (Chiappe, Siegel, & Wade-Woolley, 2002).

Explicit instruction should stress both the content and language skills necessary for academic success (Quiroga, Lemos-Britton, Mostafapour, Abbott & Berninger, 2002; Echevarria & Vogt, 2011; Linan-Thompson, Vaughn, Hickman-Davis, & Kouzekanani, 2003). Teachers can use all four domains of English (listening, reading, writing,

and speaking) to teach specific vocabulary and concepts in context (Vaughn, Bos, & Schumm, 2007). For example, they can introduce words in meaningful contexts and reinforce them through multiple exposures, providing students opportunities to use the words in a variety of ways, both oral and written, to help them achieve a deep understanding of these words (Stahl & Fairbanks, 1986). ELs should then be provided many opportunities to practice newly acquired academic language and vocabulary across content areas and across settings (Gibbons, 2009; Harper & De Jong, 2004; Swain, 1995).

Cross-linguistic transfer. ELs have a linguistic reservoir that is the sum of what they know in their two languages (Kohnert, 2008). To fully benefit from this collective resource, they must learn to apply knowledge and skills they have acquired in their native language to the tasks of learning to speak, read, and write in English (Pransky, 2008). To that end, teachers can explicitly teach students the similarities and differences across alphabets to facilitate transfer of native language (L1) skills to English (L2). Spanish speakers have the advantage of positive cross-linguistic transfer because Spanish and English share an alphabet and many sounds (August & Shanahan, 2006; Durgunoglu, 2002; Goldenberg, 2008). Teachers can capitalize on these similarities by explicitly teaching the use of cognates, words that have the same or similar spelling, pronunciation, and meaning, as a bridge between the two languages. For students with a good foundation in L1, cognates are an excellent way to accelerate vocabulary development and comprehension in L2. Teachers must also be mindful of negative transfer, and explicitly teach differences in vowel sounds and false cognates, which are spelled the same, but do not have the same meaning (e.g., carpeta means file folder, not carpet).

IMPLEMENTING RTI TO MEET THE NEEDS OF ELS

Response to Intervention (RTI) approaches that focus on prevention of academic problems and early intervention services for struggling learners show promise for improving academic outcomes of both ELs and their monolingual English-speaking peers. RTI models that focus on preventing,

and responding to, reading difficulties through research-based practices (Fien et al., 2011) are particularly important, as this is the most common reason for referring ELs to remedial and special education programs (McCardle, Mele-McCarthy, Cutting, Leos, & D'Emilio, 2005). According to the National Center on Response to Intervention (NCRTI, 2010),

Rigorous implementation of RTI includes a combination of high quality, culturally and linguistically responsive instruction; assessment; and evidence-based intervention... Comprehensive RTI implementation will contribute to more meaningful identification of learning and behavioral problems, improve instructional quality, provide all students with the best opportunities to succeed in school, and assist with the identification of learning disabilities and other disabilities. (p. 1)

Assuring that RTI is culturally and linguistically responsive is crucial because ELs have been underserved in the current educational system, as demonstrated by the large achievement gap in NAEP performance.

In RTI models, instruction is delivered in a multi-tiered (typically three or four tiers) instructional support system where the intensity of instruction provided matches students' needs. In a three-tier model, Tier 1, or primary prevention, is conceptualized as core, evidence based, and effective instruction for all students. Tier 2, or secondary support, is conceptualized as early intervening services that meet the needs of students who demonstrate risk of academic failure, and Tier 3, or tertiary support, is designed to be intensive intervention for students who have the greatest needs. Students requiring Tier 3 supports for sustained periods of time may be at risk of special education identification (NASDSE, 2005). A critical component across RTI tiers is that instruction provided to ELs should be evidence-based and designed specifically to meet the cultural and linguistic needs of these students.

ELs are frequently referred to and placed in special education programs because of reading failure that is not due to a disability but, rather, can be explained by factors such as language differences, limited English proficiency, and/or inadequate

instruction (Shifrer, Muller, & Callahan, 2011). Multi-tiered models hold potential for improving academic outcomes for ELs because (a) the models are predicated on the use of a research-based curriculum that is appropriate for all subgroups in the classroom; (b) students are identified for intervention support based on data about academic performance rather than teacher nominations that may be confounded by a lack of understanding of ELs or by teacher bias; (c) students receive intervention in a more timely manner, based on need rather than a "wait to fail" criterion that requires that students fail first and then receive services, or one that requires that they receive a disability diagnosis as a condition of receiving additional support; and (d) there is an emphasis on evidence-based instruction and interventions that are more likely to be effective with diverse learners, including ELs (NASDSE, 2005). While ELs do benefit from the type of explicit and systematic instruction that is beneficial for their monolingual English speaking peers (Fien et al., 2011), recognizing the unique needs of ELs is critical to assuring that they receive appropriate instructional support (Linan-Thompson, Vaughn, Prater, & Cirino, 2006). The following description of the PLUSS model includes evidence-based practices for teaching ELs within an RTI framework.

RESEARCH-BASED INSTRUCTION AND INTERVENTION FOR ELS: THE PLUSS FRAMEWORK

PLUSS is a conceptual framework that is based on a synthesis of the research on what supports successful learning for ELs (See Table 1 for definitions and research support for each component). It is designed to be a tool for instructional planning and lesson delivery that bridges research to practice, so that teachers can easily apply the research on what works for ELs to their instructional planning. We developed the PLUSS framework as a response to the difficulties educators experience in identifying and implementing research-based instruction and intervention for ELs in the context of a RTI framework. It is not an intervention, nor does it substitute for any of the RTI tiers. Rather, its components are integrated into the planning

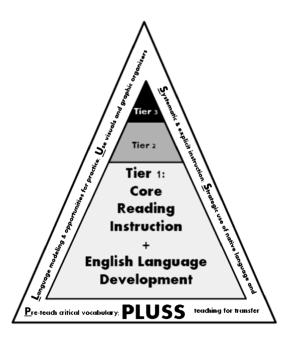


Figure 1.
The Relationship of the PLUSS Model to the RTI Framework.

and delivery of core instruction and Tier 2 and Tier 3 intervention (See Figure 1 for a model of the PLUSS framework). This assures that, across all tiers, lessons take into account the linguistic, cultural and experiential backgrounds of ELs. The components of PLUSS are Pre-teaching critical vocabulary, Language modeling and opportunities for using academic language, Using visuals and graphic organizers, Systematic and explicit instruction, and Strategic use of native language and teaching for transfer (See Table 1). These components address ELs' unique instructional needs at all tiers of instructional support.

PLUSS is similar to, but different from, other models of instruction designed for ELs (e.g., Sheltered Instruction Observation Protocol [SIOP] from Echevarria, Vogt, & Short, 2008; and Specially Designed Academic Instruction in English [SDAIE] from Cline & Necochea, 2003). Such models were designed as *adaptations* to core instruction in English (Echevarria & Vogt, 2011; Cline & Necochea, 2003). SDAIE, for example, is designed as a transitional instructional approach for ELs *after* they have reached an intermediate

Table 1

PLUSS Framework for Research-Based Instruction for ELLs

PLUSS Framework	Definition	Evidence
Pre-teach critical vocabulary	Identify and explicitly teach vocabulary that is high utility, unknown, and critical to understanding a passage or unit of instruction	Calderón (2007); Carlos et al., (2004); Echevarria, Vogt & Short (2008); Linan- Thompson & Vaughn (2007)
Language modeling and opportunities for practicing	Teacher models appropriate use of academic language, then provides structured opportunities for students to practice using the language in meaningful contexts	Dutro & Moran (2003); Echevarria, Vogt & Short (2008); Gibbons (2009); Linan-Thompson & Vaughn (2007); Scarcella (2003)
Use visuals and graphic organizers	Strategically use pictures, graphic organizers, gestures, realia and other visual prompts to help make critical language, concepts, and strategies more comprehensible to learners	Brechtal (2001); Echevarria & Graves (1998); Haager & Klingner (2005); Linan-Thompson & Vaughn (2007); O'Malley & Chamot (1990)
Systematic and explicit instruction	Explain, model, provided guided practice with feedback, and opportunities for independent practice in content, strategies, and concepts	Calderón (2007); Flagella- Luby & Deshler (2008); Gibbons (2009); Haager & Klingner (2005); Klingner & Vaughn (2000); Watkins & Slocum (2004);
Strategic use of native language & teaching for transfer	Identify concepts and content students already know in their native language and culture to explicitly explain, define, and help them understand new language and concepts in English	Carlisle, Beeman, Davis & Spharim (1999); Durgunoglu, et al. (1993); Genesee, Geva, Dressler, & Kamil (2006); Odlin (1989); Schecter & Bayley (2002)

level of English proficiency. SDAIE encourages the use of many of the instructional components incorporated into the PLUSS model; PLUSS, however, is intended to support ELs at all levels of English proficiency in acquiring oral language proficiency and literacy skills in English. Moreover, models such as SDAIE and SIOP were not designed to meet the needs of students who pose the most significant academic risks and who

require secondary or tertiary levels of support within a RTI framework. Although it is critically important to implement models like SDAIE and SIOP in core instruction to make instruction accessible to ELs, a large number of ELs continue to need support beyond core instruction. Thus, PLUSS is unique in that it is designed to be used across all RTI tiers and, in particular, to support students who require secondary and tertiary interventions.

Further, PLUSS deliberately provides continuity and consistency of support for learners with differing needs because the principles and structures are applied in a similar manner across tiers. In our experience, school personnel sometimes view English Language Development (ELD; also referred to as English as a Second Language instruction), supplemental reading instruction, or special education services as separate and mutually exclusive. Teachers sometimes assert that a student should receive only one of these supports (e.g., a student should receive special education or ELD, but not both). Denial of services mandated by law is a violation of students' civil rights; students have legal entitlement to both (a) appropriate instruction matched to their linguistic needs (Equal Educational Opportunity Act, 1974), and (b) appropriate instruction matched to their academic needs, especially in the case of students requiring special education services (Equal Educational Opportunity Act, 1974; IDEA 2004). Eliminating ELD supports when a student qualifies for special education services is not only inappropriate, but it is a violation of their legal right to a free and appropriate education (Equal Educational Opportunity Act, 1974; IDEA 2004). PLUSS is designed as an overlay across all tiers of instruction; it does not replace any program.

Finally, the components of the PLUSS framework may be easier to remember and use than some of the other models of EL support. To use the SIOP model, teachers must participate in intensive professional development and learn the model's 30 features in order to implement it well (Echevarria, Vogt, & Short, 2008). The PLUSS components, on the other hand, are easy to learn and can be implemented by teachers across all tiers of instruction. The model's acronym also makes it easier for teachers to remember the critical elements of effective instruction for ELs.

In summary, the PLUSS model (a) is designed to meet the needs of ELs across RTI tiers, (b) is implemented along a continuum of supports consistent with the RTI framework, and (c) is more likely to be implemented by teachers, based on its ease of use. The following section provides a description and explanation of each of the components of the PLUSS framework. Table 2 provides examples of how to implement the components of

PLUSS in the classroom at all tiers of instructional support.

PRE-TEACH CRITICAL VOCABULARY

Pre-teaching critical vocabulary involves (a) identifying vocabulary critical to learning lesson content and (b) explicitly teaching this vocabulary, in advance, to increase ELs' access to the academic content. Calderón et al. (2005) categorize words into four tiers (not to be confused with RTI tiers): Tier 1 words are those that require minimal instruction and include cognates and false cognates. Cognates are words that sound similar in English and Spanish, and have similar meanings, like botón and button; false cognates sound similar but have different meanings, like rope and ropa (clothes, in Spanish). Tier 1words can be taught quickly. Tier 2, or high-utility words, are necessary to comprehend academic content, and must be explicitly and intensively taught in context. This would be the case, for example, for words that have multiple meanings, such as bank (e.g., river bank, bank of words, bank where money is kept) or table (e.g., table of contents, Periodic Table of Elements, table in a classroom). Tier 3 words are high frequency, high utility words commonly found in texts. Students frequently understand the concept, but need to learn a more sophisticated label (e.g., famished means "really hungry"). Tier 3 words also include cognates that students may have difficulty recognizing (e.g., tend/attender or maintain/mantener). Tier 4 consists of low frequency words or words from technical content areas (e.g., isotope, tundra, or photosynthesis). Calderón and colleagues (2005) emphasize that it is especially important to teach Tier 2 and Tier 3 words and to have EL students compare, analyze, and use these words so they learn them well. For example, students may compare words along a continuum to determine the degree of sadness conveyed by the following words: devastated, depressed, melancholy, blue, and glum. They also may analyze a word to determine its prefixes, suffixes and root words, and determine its relationship to other words with the same prefix (e.g., reteach means teach again, review means to view again). Teachers can engage students in deeper processing of words by helping

Table 2

Examples of PLUSS Framework Applied in the Classroom

PLUSS Framework	Select 3-5 high utility vocabulary words crucial to understanding text (not necessarily content specific words) and explicitly teach student friendly definitions, model using the words, and provide students with repeated opportunities to use the words over time (Beck, McKeown, Kucan, 2002; Honig, Diamond, & Gutlohn, 2008).	
Pre-teach critical vocabulary		
<u>L</u> anguage modeling and opportunities for practicing	Provide language frames and sentence starters to structure language interaction. For example, after having defined the word, ask students to use the word, "preoccupied," in a sentence: "Think of a time when you were preoccupied." (pause to give time to think). "Turn to your partners and share, starting your sentence with, 'I was preoccupied when', what will you start your sentence with?" (have students repeat the sentence starter before turning to their neighbor and sharing).	
<u>U</u> se visuals and graphic organizers	Consistently use a Venn diagram to teach the concept compare and contrast or use realia and pictures to support the teaching of concepts (Echevarría, Vogt, & Short, 2008).	
Systematic and explicit instruction	Teach strategies like summarization, monitoring and clarifying, and decoding strategies through providing direct explanation, modeling, guided practice with feedback, and opportunities for application (Honig, Diamond, & Gutlohn, 2008).	
Strategic use of native language & teaching for transfer	Use native language to teach cognates (e.g. teach that preoccupied means the same thing as <i>preocupado</i> in Spanish) or explain/clarify a concept in the native language before or while teaching it in English.	

them see shades of word meanings and how they communicate different degrees of emotion or meaning, hence increasing students' practice, use, and understanding of the words.

Once vocabulary words are selected, they should be explicitly taught using strategies that provide multiple opportunities for students to practice and use them. Teachers should give student-friendly explanations, present examples and non-examples, and have students use the word in multiple structured and unstructured contexts (e.g., Archer & Hughes, 2011; Beck, McKeown & Kucan, 2002; Honig, Diamond & Gutlohn, 2008). Tier 2 and 3 interventions are enhanced by ensuring that the vocabulary used is explicitly taught, even when vocabulary

development is not the central focus of the intervention.

<u>L</u>ANGUAGE MODELING AND OPPORTUNITIES FOR PRACTICE

This step involves the teacher modeling academic language, and then providing multiple opportunities for students to practice using academic language in meaningful contexts. Teachers can put these recommendations into practice by explicitly teaching academic vocabulary and language structures, posting the words on a "word wall" in the classroom, using sentence starters or sentence frames that require students to use new words and structures, asking students to engage in conversations

about lesson content using targeted academic language, and providing systems for recognizing the use of academic language in writing and speaking (e.g., Archer & Hughes, 2011). They can also design tasks and activities that require students to use academic language; for example, sentence starters or sentence frames that utilize Tier 2 and 3 vocabulary and conversations about lesson content. These strategies are readily implemented during whole group, Tier 1 instruction, and in increasingly intensive Tier 2 and Tier 3 interventions typically provided in small groups. The smaller number of students in Tier 2 and 3 groups increases the opportunities students have to interact and use academic language. Small group structures also make it easier for teachers to monitor and provide feedback regarding language use for students with more intensive instructional needs.

Use Visuals and Graphic Organizers

Using visuals, such use of realia, photographs, pictures, drawings, and gestures can make content more comprehensible to students. Scaffolds such as these can be effective means to demonstrate vocabulary meanings and to prime students' background knowledge so they can show what they know (Archer & Hughes, 2011; Roberts & Neal, 2004). Graphic organizers (e.g., word maps, Venn diagrams, and charts) help ELs organize information and clarify relationships (Hoover et al., 2008). Table 2 provides examples of the use of visuals and graphic organizers. Visuals and graphic organizers used in Tier 1 should be judiciously reviewed in a comprehensive and well planned manner (Carnine, Silbert, Kame'enui & Tarver, 2010), to ensure students have adequate opportunities to practice skills. In some cases, visuals may need to be changed or supplemented to help students who are having difficulty understanding Tier 1 content (e.g., adding pictures or demonstrating a concept by acting it out).

Systematic and Explicit Instruction

Systematic instruction is defined as instruction that is carefully sequenced and provides sufficient practice to master content and judicious review to retain learning over time (Carnine et al., 2010). Teachers who provide systematic, explicit instruction provide clear, comprehensive, and careful explanations, actively demonstrate how to implement skills and strategies, and provide guided practice and then opportunities for independent practice as students master the content being taught (Archer & Hughes, 2011; Honig et al., 2008). In all cases, teachers should examine Tier 2 and Tier 3 instruction to ensure that as student needs increase, the explicitness of instruction also increases to ensure student understanding of content and concepts.

Strategic Use of Native Language and Teaching for Transfer

Using a child's native language strategically can be as simple as providing a single synonym in the student's native language for an English word, or as complex as previewing an entire lesson in the native language before teaching the lesson in English. Teaching for transfer involves identifying what students already know in their native language, and teaching them which skills are the same, or similar, and which skills are different in English. For example, if students can read in Spanish, teachers can teach for transfer by telling students that many consonant sounds are the same in English and Spanish (e.g., /n/, /m/, /t/, /s/) or similar (e.g., /v/, /b/). Teachers can also help students recognize sounds that are different across the two languages (e.g., many vowel sounds, and the sounds for the letters: j, h, and r). Similarly, students can be taught that strategies they are taught in the native language (e.g., summarizing as a comprehension strategy) also apply to reading text in English. Pre-teaching concepts or key vocabulary words in the native language is an excellent scaffold for ELs across tiers. Students can be taught that recognizing common prefixes and suffixes can help them decode multisyllabic English words and that many of these generalize to Spanish.

In summary implementation of the PLUSS model helps assure that ELs access curriculum and instruction delivered in English and that they develop the academic language needed to achieve high educational standards. A unique feature of the model is that its components are intended to be integrated

across RTI tiers. Instruction aimed at enhancing vocabulary, content, and academic language skills is coordinated across tiers to increase exposure to content and opportunities to practice new skills. Scaffolds, such as visuals, native language support, and increasingly explicit strategies characterize instruction across tiers, but the specific scaffolds are selected according to students' language proficiency and needs (e.g., different scaffolds than were used in Tier 1 may need to be added for students receiving Tier 2 and/or Tier 3 interventions). Incorporating the PLUSS model into RTI frameworks furthers the goal of providing evidence-based instruction to meet the unique needs of ELs and assures that content instruction accommodates their language skills and background experiences.

THE PLUSS MODEL IN MRS. SHINN'S CLASSROOM

To determine how best to meet the needs of the ELs in her class, Mrs. Shinn met with her grade-level

Content Objective:

team, which included Mr. Johnson, the English Language Development (ELD) specialist. She learned about the PLUSS Model (see Figure 2 for a sample lesson plan using the PLUSS format). Language proficiency measures showed that her students' English proficiency ranged from Level 2 (Early Production) to Level 3 (Speech Emergence), which meant that they needed additional language supports in order for their Tier 2 intervention program to be successful. Mrs. Shinn decided to enhance Tier 2 instruction by preteaching key vocabulary and language structures. Mr. Johnson helped Mrs. Shinn follow the PLUSS model by starting with the end in mind, so the first focus was to consider the overall instructional plan, identifying the lesson content (Figure 2, step 1) and language objectives (Figure 2, step 2), and determining how to explicitly and systematically teach the reading strategies students needed (Figure 2, step 3). Next, they identified which key vocabulary to pre-teach (Figure 2, step 4). They thought about how to create opportunities for

Language Objective: 5 7 Strategies: L - Language modeling & opportunities for practice U - Use visuals and graphic organizers S - Strategic use of Native language and teaching for transfer 4 P Pre-teach critical vocabulary 3 S Systematic & explicit instruction

Figure 2.
Lesson Plan Using the PLUSS Format.

students to practice the academic language and vocabulary related to the lesson (Figure 2, step 5). Mrs. Shinn decided to use visuals and graphic organizers to help students understand the concepts in the story they were going to read (Figure 2, step 6). Finally, she planned for the strategic use of students' native language to make the content comprehensible (Figure 2, step 7).

In their work together on pre-teaching, Mr. Johnson asked Mrs. Shinn to think about how she could teach both a content objective and a language objective. To help her determine the content objective, he asked her what she wanted students to be able to do. Mrs. Shinn wanted students to learn how to apply the VCe rule (i.e., the vowel is long and the e is silent in syllables that include a vowel + one consonant + e, as in "rebate" or "compete"). In terms of a language objective,

Mrs. Shinn indicated that students needed to know the meanings of words that were important to understanding the story they would be reading (e.g., tape, mope, fine, same, and late). Together, Mrs. Shinn and Mr. Johnson wrote content and language objectives for the students. The sample lesson plan and lesson objectives are presented in Figure 3.

Systematic and explicit instruction. Mr. Johnson and Mrs. Shinn analyzed the lesson to see if the scripted language in the teacher's manual was explicit enough for all the learners. Performance data showed that students could decode accurately, but did not understand some words and had trouble with comprehension questions. The teachers noted that the intervention lesson incorporated explicit explanations, modeling, and guided and independent practice. The lesson design seemed adequate

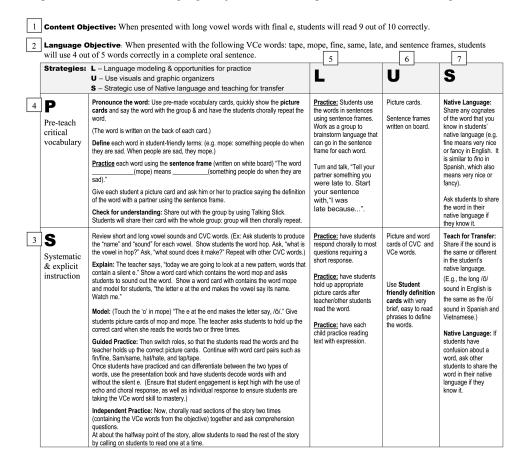


Figure 3.
Sample Lesson Plan Using the PLUSS Format.

for decoding, but needed to be strengthened in the areas of oral language and vocabulary. Given this, Mr. Johnson asked Mrs. Shinn to identify the key vocabulary she would need to teach to make sure students understood the story they were to read in the intervention lesson (i.e., that the story was comprehensible to her students).

Pre-teach critical vocabulary. Mrs. Shinn and Mr. Johnson read the assigned story and made a list of words that might be difficult for ELs. The list included words that were relevant both in terms of decoding strategies and meaning making (i.e., mope, fine, same, tape, and late). These were also high utility words that students could use in other contexts. Mrs. Shinn and Mr. Johnson decided to pre-teach these words and to provide additional support to facilitate students' understanding of the lesson.

Language modeling and opportunities for practice. To build her students' academic language, Mr. Johnson helped Mrs. Shinn identify opportunities to reinforce key vocabulary and for students to practice using academic language. They decided to use sentence frames like, "the word_____ means ," to help students define words. They also thought of sentence frames that would help students use words correctly, for example, "_ and _____ are the same because_____ Mrs. Shinn and Mr. Johnson discussed strategies for promoting the use of academic language, such as having students write a sentence on a notecard using the target vocabulary. Working in pairs, students would share a sentence from a notecard with their partner. They would then trade cards, find new partners, and share new sentences. Activities such as these would assure that students had multiple

Use visuals and graphic organizers. Mr. Johnson and Mrs. Shinn found pictures that represented target vocabulary. They planned to post these pictures next to the corresponding word in a pocket chart. As students took turn reading from the story, Mrs. Shinn would touch the word in the pocket chart when they came to it in text.

opportunities to practice the vocabulary and aca-

demic language targeted in lessons.

Strategic use of native language and teaching for transfer. Although Mrs. Shinn did not speak Spanish or Vietnamese, Mr. Johnson suggested that she could

still use strategies to access what students knew in their native language to help them better understand the lesson in English. First, Mrs. Shinn asked students to give examples, in Spanish and Vietnamese, corresponding to the English words she was teaching. She also pointed out words in which the English vowels had similar pronunciation as Spanish or Vietnamese vowels. To provide additional scaffolding, Mr. Johnson and Mrs. Shinn asked the Spanish-speaking instructional assistant to share any knowledge she might have regarding targeted vocabulary words and to help students identify cognates.

With Mr. Johnson's support, Mrs. Shinn felt much better about her ability to develop lessons and teach language and reading in a way that met the needs of ELs. Moreover, the ELs in her class were more engaged, and experienced greater success after she pre-taught key vocabulary and academic language associated with assigned stories. Mrs. Shinn noted that, in the past, when she asked students to work in pairs, only two or three ELs would talk with their partners; when she provided sentence frames, all ELs participated. Daily independent work and end of unit lesson checks indicated that the students' ability to answer comprehension questions and their reading fluency had improved.

SUMMARY

The PLUSS model is designed to address the language development needs of ELs across RTI tiers. The model components are Pre-teaching critical vocabulary, Language modeling and opportunities for using academic language, Using visuals and graphic organizers, Systematic and explicit instruction, and Strategic use of native language and teaching for transfer. The model incorporates research-based instructional strategies that work for ELs, is designed to supplement and enhance all tiers of instructional supports, and can be used seamlessly across a continuum of student needs (i.e., PLUSS can be integrated across all instructional supports and can be matched to student needs since it is not considered a separate program). The PLUSS acronym serves as an easy reminder to teachers of the elements of effective instruction for ELs. We hope that teachers' increased awareness of the language-related needs of ELs, coupled with ease of implementation of the PLUSS strategies, will motivate more teachers to accommodate the need of ELs across RTI tiers, thereby increasing the likelihood of success for these students. Every child has a right to access the core curriculum through effective instruction, and to support when they experience academic difficulties. Safeguarding these rights will help them achieve the high academic standards critical to becoming a contributing citizen.

REFERENCES

- Archer, A. L., & Hughes, C. L. (2011). *Explicit instruction: Effective and efficient teaching*. New York: Guilford.
- August , D., & Shanahan, T. (Eds.) (2006). Developing literacy in second language learners: Report of the National Literacy Panel on language minority children and youth. Mahwah, NJ: Erlbaum.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction. New York: Guilford.
- Bialystok, E., & Hakuta, K. (1994). In other words: The psychology and science of second language acquisition. New York: Basic Books.
- Brechtal, M. (2001). Bringing it all together: Language and literacy in the multilingual classroom. Carlsbad, CA: Dominie.
- Calderón, M. (2007). Teaching reading to English language learners: Grades 6 – 12. Thousand Oaks, CA: Corwin.
- Calderón, M., August, D., Slavin, R., Duran, D., Madden, N., & Cheung, C. K. A. (2005). Bringing words to life in classrooms with English Language Learners. In A. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 117-140). Mahwah: NJ: Erlbaum.
- Carlisle, J. F., Beeman, M., Davis, L. J., & Spharim, G. (1999). Relationship of metalinguistic capabilities and reading achievement for children who are becoming bilingual. *Applied Psycholinguistics*, 20, 459-478.
- Carlos, M. S., August, D., McLaughlin, B., Snow, C. D., Dressler, C., Lippman, D. N.,... White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly*, 39(2), 188-215.
- Carnine, D., Silbert, J., Kame'enui, E., & Tarver, S. G. (2010) Direct Instruction Reading (5th ed.). Upper Saddle River, NJ: Pearson.
- Cenoz, J. (2003). The additive effect of bilingualism on third language acquisition: A review. *International Journal of Bilingualism*, 7, 71-87.

- Chiappe, P., Siegel, L. S., & Wade-Woolley, L. (2002). Linguistic diversity and the development of reading skills: A longitudinal study. *Scientific Studies of Reading*, 6, 369-400.
- Cline, Z., & Necochea, J. (2003). Specially designed academic instruction in English (SDAIE): More than just good instruction. *Multicultural Perspectives*, 5(1), 18-24.
- Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. Clevedon, England: Multilingual Matters.
- Dutro, S., & Kinsella, K. (2010). English Language Development: Issues and implementation at grades six through twelve. In California Department of Education (Eds.) *Improving education for English learners: Research-based approaches* (pp. 151-208). Sacramento, CA: California Department of Education Press.
- Dutro, S., & Moran, C. (2003). Rethinking English language instruction: An architectural approach. In
 G. García (Ed.), English learners: Reaching the highest level of English literacy (pp. 227-258). Newark, DE: International Reading Association.
- Echevarria, J., & Graves, A. (1998). Curriculum adaptations. In J. Echevarria & A. Graves, *Sheltered content instruction: Teaching English-language learners with diverse abilities* (pp. 121-149). Boston: Allyn and Bacon.
- Echevarria, J., Vogt, M., & Short, D. J. (2008). *Making content comprehensible for English language learners: The SIOP model.* Boston: Pearson.
- Echevarria, J., & Vogt, M. (2011). Response to intervention (RTI) and English learners: Making it happen. Boston: Pearson.
- Egbert, J. L., & Ernst-Slavit, G. (2010). Access to academics: Planning instruction for K-12 classrooms with ELLs. Boston: Pearson.
- Equal Educational Opportunities Act, 20 U.S.C. § 1703 (1974).
- Evans, S. (2003). Graphic organizers for Japanese readers of expository texts. *English Language Research Bulletin*, 18, 1-17.
- Fien, H., Smith, J. L. M., Baker, S. K., Chaparro, E., Baker, D. L., & Preciado, J. A. (2011). Including English learners in a multitiered approach to early reading instruction and intervention. Assessment for Effective Intervention. 36, 143-157.
- Flagella-Luby, M. N., & Deshler, D. D. (2008). Reading comprehension in adolescents with LD: What we know; what we need to learn. *Learning Disabilities Research & Practice*, 23(2), 70-78.
- Francis, D. J., Kieffer, M., Lesaux, N., Rivera, H., & Rivera, M. (2006). *Practical guidelines for the*

- education of English language learners: Researchbased recommendations for instruction and academic interventions. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Genesee, F., Geva, E., Dressler, C., & Kamil, M.L.(2006). Synthesis: Cross-linguistic relationships. In D. August and T. Shanahan (Eds.), Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth (pp. 153-174). Mahwah, NJ: Erlbaum.
- Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). Effective literacy and language instruction for English learners in the elementary grades, An IES practice guide. Washington, DC: Institute for Educational Sciences, Department of Education.
- Gibbons, P. (2009). English learners, academic literacy, and thinking: Learning in the challenge zone. Portsmouth, NH: Heinemann.
- Golberg, H., Paradis, J., & Crago, M. (2008). Lexical acquisition over time in minority first language children learning English as a second language. *Applied Psycholinguistics*, 29, 41-65.
- Graff, G., & Birkenstein, C. (2010). They say, I say: The moves that matter in academic writing. New York: Norton.
- Goldenberg, C. (2008). Teaching English language learners: What the research does and does not say. *American Educator*, *32*(2), 8-42.
- Haager, D., & Klingner, J. K. (2005). Differentiating instruction in inclusive classrooms: The special educator's guide. Boston: Pearson.
- Hart, J.E., (2009). Strategies for culturally and linguistically diverse students with special needs. *Preventing School Failure*, 53(3), 197-206.
- Hegarty, M. (2004). Dynamic visualization and learning: Getting to difficult questions. *Learning and Instruction*, 14, 343-351.
- Harper, C., & De Jong, E. (2004). Misconceptions about teaching English language learners. *Journal of Adolescent & Adult Literacy*, 48(2) 152-162.
- Herrera, S.G., Perez, D.R., & Escamilla, K. (2010). Teaching Reading to English language learners: Differentiated Literacies. Boston: Allyn & Bacon.
- Honig, B., Diamond, L. & Gutlohn, L. (2008). Teaching Reading Sourcebook (2nd ed.). Novato, CA: Arena Press.
- Hoover, J. J., Klingner, J. K., Baca, L. M., & Patton, J. M. (2008). Methods for teaching culturally and linguistically diverse exceptional learners. Upper Saddle River, NJ: Pearson.
- Individuals with Disabilities Educational Improvement Act, 20 U.S.C. §1400 et. seq. (2004).

- Kim, A., Vaughn, S., Wanzek, J, & Wei, S. (2004). Graphic organizers and their effects on the reading comprehension of students with LD. *Journal of Learning Disabilities*, 37(2), 105-118.
- Klingner, J. K., Hoover, J. J., & Baca, L. M. (Eds.), (2008). Why do English language learners struggle with reading? Distinguishing language acquisition from learning disabilities. Thousand Oaks, CA: Corwin Press.
- Klingner, J. K., & Vaughn, S. (2000). The helping behaviors of fifth-graders while using collaborative strategic reading (CSR) during ESL content classes. TESOL Quarterly, 34, 69-98.
- Kohnert, K. (2008). *Language disorders in bilingual children and adults*. San Diego, CA: Plural Publishers.
- Lin, H., & Chan, T. (2007). Reading authentic EFL text using visualization and advance organizers in a multimedia learning environment. *Language and Learn*ing Technology, 1(3), 83-106.
- Linan-Thompson, S., & Vaughn, S. (2007). Research-based methods of reading instruction for English language learners: Grades K-4. Alexandria, VA: Association for Supervision and Curriculum Development.
- Linan-Thompson, S., Vaughn, S., Prater, K., & Cirino, P. (2006). The response to intervention of English language learners at risk for reading problems. *Journal* of Learning Disabilities, 39, 390-398.
- Linan-Thompson, S., Vaughn, S., Hickman-Davis, P., & Kouzekanani, K. (2003). Effectiveness of supplemental reading instruction for English language learners with reading difficulties. *Elementary School Journal*, 103, 221-238.
- Mayer, R. (2003). *Learning and instruction*. Upper Saddle River, NJ: Pearson.
- McCardle, P., Mele-McCarthy, J., Cutting, L., Leos, K., & D'Emilio, T. (2005). Learning disabilities in English language learners: Identifying the issues. *Learning Disabilities Research and Practice*, 20(1), 1-5.
- Mohammadi, M., Moenikia, M., & Zahed-Babelan, A. (2010). The role of advance organizer on English language learning as a second language. *Procedia Social and Behavioral Sciences*, 2(2), 4667-4671.
- National Association of State Directors of Special Education[NASDSE] (2005). *Response to Intervention: Policy Considerations and Implementation.* Alexandria, VA: Author.
- National Center for Education Statistics. (2011). The condition of education 2011 (NCES 2011-033). Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=96
- National Center on Response to Intervention. (March 2010). *Essential Components of RTI A closer look at Response to Intervention*. Washington, DC: U.S.

- Department of Education, Office of Special Education Programs, National Center on Response to Intervention.
- National Center on Response to Intervention. (n.d.). What is RTI? Retrieved from http://www.rti4success.org/
- Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language learning*. Cambridge, England: Cambridge University Press.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge, England: Cambridge University Press.
- Pransky, K. (2008). Beneath the surface: The hidden realities of teaching culturally and linguistically diverse young learners K-6. Portsmouth, NH: Heinemann.
- Quiroga, T., Lemos-Britton, Z., Mostafapour, E., Abbott, R. D., & Berninger, V. W. (2002). Phonological awareness and beginning reading in Spanish-speaking ESL first graders: Research into practice. *Journal of School Psychology*, 40, 85-111.
- Roberts, T., & Neal, H. (2004). Relationships among preschool English language learners' oral proficiency in English, instructional experience, and literacy development. *Contemporary Educational Psychol*ogy, 29, 283-311.
- Scarcella, R. (2003). *Academic English: A conceptual framework*. Santa Barbara, CA: University of California Linguistic Minority Institute.
- Schecter, S. R., & Bayley, R. (2002). Language as cultural practice: Mexicanos en el Norte. Mahwah, NJ: Erlbaum.
- Schoen, S. F., & Schoen, A. A. (2003). Action research in the classroom: Assisting a linguistically different learner with special needs. *Teaching Exceptional Children*, 35(1), 16-21.
- Shanahan, T., & Beck, I. L. (2006). Effective literacy teaching for English-language learners. In Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth. (pp. 415-488). Mahwah, NJ: Erlbaum.
- Shifrer, D., Muller, C., & Callahan, R. (2011). Disproportionality and learning disabilities: Parsing apart race, socioeconomic status, and language. *Journal of Learning Disabilities*, 44(3), 246-257.
- Stahl, S. A., & Fairbanks, M. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of Educational Research*, 56, 72-110.

- Spada, N. & Lightbown, P.M. (1999). Instruction, first language influence and developmental readiness in second language acquisition. *The Modern Language Journal*, 83, 1-22.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.). *Principles and practice in the study of language* (pp.125-144). Oxford: Oxford University Press.
- Swain, M., Lapkin, S., Rowen, N., & Hart, D. (1990). The role of mother tongue literacy in third language learning. *Language*, *Culture*, and *Curriculum*, 3, 65-81.
- U. S. Department of Education (2010). National assessment of educational progress in reading and mathematics, 2010. Washington, DC: Author.
- Vaughn, S., Bos, C. S., & Schumm, J. S. (2007). Teaching exceptional, diverse, and at-risk students in the general education classroom. Boston: Allyn & Bacon
- Watkins, C., & Slocum, T. (2004). The components of Direct Instruction. In N. E. Marchand- Martella, T. A. Slocum, & R. C. Martella (Eds.), *Introduction* to Direct Instruction (pp. 28-65). Boston: Allyn & Bacon.

ABOUT THE AUTHORS

AMANDA K. SANFORD is an Assistant Professor in the Department of Special Education at Portland State University.

JULIE ESPARZA BROWN is an Assistant Professor in the Department of Special Education at Portland State University.

MARANDA TURNER is a Sheltered Instruction Teacher on Special Assignment with the Gresham-Barlow School District, Gresham, OR.

Correspondence concerning this article should be addressed to: Amanda K. Sanford, Department of Special Education, Portland State University; Graduate School of Education, Suite 204; 615 SW Harrison St., Portland, OR 97201. Phone: 503-725-4638; E-mail: asanford@pdx.edu

Copyright of Multiple Voices for Ethnically Diverse Exceptional Learners is the property of Division for Culturally & Linguistically Diverse Exceptional Learners and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.