

Linguistic and Cultural Issues in Developing Disciplinary Literacy for Adolescent English Language Learners

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English language learners (ELLs) are the fastest growing segment of the student population. An understanding of the diversity these students bring to contexts of disciplinary learning is critical to determining how best to teach them. At the secondary level, ELLs are required to learn content and build English language proficiency simultaneously. Teachers who work with ELLs should be knowledgeable about (a) linguistic issues and the second language process, (b) cultural issues and cultural-responsive pedagogy, (c) assessment considerations, and (d) instruction that supports language and literacy development in the content areas. The aim of this article is to contribute to basic cultural and linguistic understandings relevant to supporting theoretically sound, culturally sensitive, research-based clinical practices for ELLs. **Key words:** *adolescents, content reading, culture, disciplinary literacy, English language learners, literacy, reading comprehension, vocabulary*

Who we are is inextricably tied to the ways we express ourselves.

Brozo and Simpson (2007, p. 8)

AT THE SECONDARY LEVEL, English language learners (ELLs)¹ face the challenge

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¹English language learners are those students who are in the process of acquiring proficiency in English but not yet considered fully fluent. Other terms for ELLs include *emerging bilinguals* and *limited English proficient*. We prefer the term *emerging bilinguals* because it emphasizes students' potential, but in this article, we use *English language learners* as the more common and widely accepted term.

of learning content while improving their English language proficiency, both in the social and in the academic realms of their schooling (Echevarría, Richards-Tutor, Chinn, & Ratleff, 2011). In addition to English language development and content area learning, ELLs are in the process of acclimating to the linguistic, social, cultural, and political norms of their schooling environment. As Short and Fitzsimmons (2007) noted, ELLs have at least “double the work” to do in comparison with their fluent English-speaking peers.

THE DIVERSITY OF ENGLISH LANGUAGE LEARNERS

The percentage of ELLs in schools across the U.S. is increasing rapidly. In fact, ELLs are the fastest growing group in the nation. Between 1995 and 2005, ELL enrollment in U.S. public schools grew by 56% whereas the entire student population grew by only 2.6% (Batalova, Fix, & Murray, 2007). More than 60% of ELLs are concentrated in six states: Arizona, California, Texas, New York, Florida, and Illinois. Yet, states around the nation are

seeing a growth in ELLs. Between 1995 and 2005, seven states, Alabama, Indiana, Kentucky, Nebraska, North Carolina, South Carolina, and Tennessee, had a 300% increase in ELLs (Payán & Nettles, 2009).

ELLs are a diverse group. They speak 400 different languages, although Spanish is the first language spoken by the vast majority, almost 8 of 10 (Office of English Language Acquisition, 2008). About two thirds of ELLs come from low-income families. Most ELLs were born in the U.S. and often are second- and third-generation U.S. citizens. Even by middle school, more than half of ELLs were born in the U.S. and are continuing to develop their English Language skills (Batalova et al., 2007).

Those ELLs who are immigrants come from countries around the world. Many have little to no knowledge of the English language when they arrive. Recent immigrants may have had little previous schooling and might have spent years in a refugee camp and experienced trauma in their home countries. Many immigrant ELLs have a hard time negotiating their schooling, perform poorly on high-stakes tests, and drop out of school before graduating (Ruiz-de-Velasco & Fix, 2000). On the contrary, the diversity of ELLs is such that recent immigrants might have attended school in their home country and be quite well-educated and ready-to-tackle grade-level material. Some might have already learned some English. Whether or not students already know how to read in their first language affects how easily they can learn to read in English and is an important consideration when determining how best to teach them (Goldenberg, 2008).

Understandably, adolescent ELLs tend to lag behind their fluent English-speaking peers in reading English. Recent National Assessment of Educational Progress (NAEP) data suggest that only a very small percentage of eighth-grade ELLs are proficient in reading (Aud et al., 2011). Seventy-one percent of eighth-grade ELL test takers on the 2005 NAEP scored below “basic” on the reading test (Fry, 2007). Furthermore, schools seem to be making lit-

tle progress in improving reading scores and closing the achievement gap for these students. For example, when comparing 2009 eighth-grade NAEP reading scores with those from 1998, the Grade 8 reading gap between Hispanic and other students did not change significantly in any state (Hemphill, Vanne-man, & Rahman, 2011). Yet, the actual reason for ELLs’ low test scores is unknown. Goldenberg (2008) raised the question, is it “because of lagging content knowledge and skills . . . because of limited English proficiency, or because other factors that interfere with their test performance or some combination?” (p.11).

Although the secondary level has long been assumed to be a context for reading to learn (expecting that students already would have mastered learning to read), many students at the secondary level are struggling readers and require instruction that meets their need to learn to read increasingly complex and dense text with largely unfamiliar content. Text-provided to ELLs may or may not be accessible to them for various reasons (Beers, 2003). Thoughtfully targeted literacy instruction is needed for ELLs in secondary schools (Allison & Harlau, 2010; August & Shanahan, 2006).

In this article, we consider multiple reasons for difficulties and possible pathways for addressing them. We discuss linguistic and cultural issues. We also portray assessment and instructional approaches that can support students’ disciplinary learning.

LINGUISTIC ISSUES

The diverse linguistic proficiencies of ELLs mean that they come to school with widely varying experiences upon which to “build” knowledge. The diversity that ELLs bring to classrooms, in the context of the increasing linguistic demands placed on them in upper-level classrooms, requires attention in developing disciplinary literacy. Oral language proficiency has a high positive correlation with measures of reading comprehension (August & Shanahan, 2006), and “English vocabulary

is a primary determinant of reading comprehension” (August & Hakuta, 1997, p. 5).

As ELLs move out of elementary school and enter into secondary schools, the level of required English proficiency increases as the task of reading becomes more complex. The complexity is created, given the combined length of text, use of content area textbooks as the primary vehicle of instruction, importance of core curriculum, emphasis on expository text with changing structures (such as compare and contrast, cause and effect), syntactically complex sentences, and range of vocabulary used with concepts and ideas not necessarily familiar to students (Carrasquillo, Kucer, & Abrams, 2004).

It is important for teachers to gain some fundamental theoretical understandings of the linguistic diversity ELLs bring to school. Table 1 presents research-based tenets and considerations for making linguistically and culturally appropriate instructional decisions. In this section, we consider how language variation and factors associated with second-language learning can influence practice decisions regarding content area learning among ELL adolescents.

Language variation

ELLs represent a variety of linguistic proficiencies in both their native languages and English. The process of language acquisition is dependent on the cultural and linguistic environments to which students have been exposed. As first-, second-, or third-generation American born, many ELLs come to school with some degree of proficiency in two languages, but their levels of proficiency may vary. As noted previously, recently arrived ELLs may also vary from having high to low levels of proficiency in their native languages, with some to no proficiency in English, depending on their schooling background (Collier, 1987; Cummins, 1989; Valdés & Figueroa, 1994) and other prior experiences. Understanding variation in proficiency requires consideration of concepts of bilingualism and language loss.

Bilingualism

Bilingualism rarely means equal proficiency in both languages. The language proficiency ELLs bring to classrooms is different from that of monolingual speakers of English, yet viable and evolved with communicative styles reflective of values and discourse norms of their home communities (Freeman & Freeman, 2009; Valdés & Figueroa, 1994). To some extent, bilingualism varies on the basis of whether two languages are being learned sequentially or simultaneously.

Sequential bilinguals come from homes where their native language is spoken exclusively. They enter school as monolingual speakers and begin acquiring English through their schooling experiences. *Simultaneous bilinguals* come from homes where two languages are spoken since early in life. They enter school with some proficiency in both languages. It is commonly assumed that sequential bilinguals become conversationally proficient within 2–3 years, but that they need 5–7 years to acquire the academic language needed to compete with their native language-speaking peers in schools (Collier, 1987; Cummins, 1989; McLaughlin, 1984). Many factors influence the rate at which students acquire academic language fluency and the level of fluency they achieve, including but not limited to the quality of instruction they receive.

Escamilla (2009, 2011) observed that instructional frameworks continue to be designed with a *sequential* frame of bilingual development despite the predominance of simultaneous bilinguals in many schools. Assessment and instructional practices designed with a sequential frame are based on the idea that students are already fluent in one or more languages and are adding English (or replacing other languages with English). Such practices do not provide sufficient support in developing both languages, nor do they facilitate students’ abilities to draw from their full linguistic repertoire.

More than half of the ELLs in secondary schools are U.S. born and therefore likely to be

Table 1. Linguistic and Cultural Tenets and Instructional Considerations

Linguistic and cultural tenets	Instructional considerations
<p>ELLs bring diverse linguistic and cultural experiences and literacies in the native language and English (Collier, 1995, 1987; Cummins, 1981, 1989, 1991; Freeman & Freeman, 2009; Goldenberg, 2008; Paradis, Genesee, & Crago, 2011; Valdés & Figueroa, 1994).</p>	<p>Instruction should account for students' differences by first considering the literacy ELLs bring in their native language and in English, the receptive and expressive language ELLs bring in English, and then providing students scaffolds based on their literacy and language proficiencies so that disciplinary literacy can be developed.</p>
<p>Pervasive deficit views exist in regard to ELL proficiency (Escamilla, 2009, 2011; MacSwan, 2000; MacSwan & Rolstad, 2003; MacSwan et al., 2002; Moll & Díaz, 1985; Nieto, 2002)</p>	<p>How quickly and easily ELLs are able to develop literacy in content area classrooms in English is in part dependent on their schooling background. Those students with high literacy backgrounds in their native language draw upon conceptual and linguistic knowledge base that other ELLs may not have developed.</p> <p>ELLs benefit from meaningful connections between students' prior knowledge, life experiences and interests, and the school curriculum to heighten engagement in learning. ELLs benefit from instruction that recognizes, validates, and connects with their rich and varied school experiences, linguistic proficiency, and communicative styles to help them to build disciplinary knowledge.</p>
<p>There is a strong, positive relationship between native and second language proficiency and literacy (Cummins, 1981, 2000; National Reading Panel, 2000; Thomas & Collier, 2002)</p>	<p>Culturally responsive instruction builds on sociocultural views of learning. The language and cultural proficiencies are viewed and used as assets upon which to build disciplinary literacy. Ask: Do students already know this concept in their native language? Do students have English language vocabulary to express their understanding? Is the concept cross-cultural or unique to "U.S. American" culture? What are the different ways ELLs can demonstrate their disciplinary literacy?</p> <p>The native language is a resource that can be used strategically for literacy development.</p> <p>ELLs benefit from instructional scaffolds that affirm their bilingual communicative proficiencies and styles and explicitly work to improve English proficiency within comprehensible and safe learning environments.</p> <p>ELLs benefit from culturally responsive instruction by supportive teachers who know how to make learning relevant, by having high expectations, and building strong, positive relationships with their students.</p>

Note. ELLs = English language learners.

simultaneous bilinguals. Although it may seem counterintuitive, they also are more likely to be “long-term English learners” (Freeman & Freeman, 2009, p. 3), which refers to students who have been classified as ELLs for 7 years or more. For example, Menken and Kleyn (2009) examined New York City Department of Education data and found that one third of all ELLs in grades 6 through 12 were classified as long-term ELLs. In an examination of 40 school districts in California, researchers found that more than 59% of ELLs in secondary schools had been in U.S. schools for 6 years or more (Education Week, 2010). Data suggest that “many students educated exclusively in U.S. schools still cannot speak English well” (Batalova et al., 2007, p. 13). Long-term ELLs are not developing the academic literacy they need to succeed. It appears that they are not receiving adequate instruction designed to support their emerging bilingualism.

Simultaneous bilingual students are often thought of as children with low levels of language in their first and second language and may be ascribed labels such as *semilingual* or *non-non* to convey that they are only partially or nonproficient in both of their languages (MacSwan, 2004, p. 1). Escamilla (2009, 2011) argued for a paradigm shift to conceptualize best ways to assist the “new normal” simultaneous ELL population of children born in the United States but still working on their English language skills. Escamilla suggested the terms *bilingual learners* and *emergent bilinguals* to counteract the “language as a problem” prevailing sociopolitical mindset. It is important to counteract this prevailing negative view—ELLs come from culturally *different* backgrounds and not culturally or linguistically deficient backgrounds.

Language loss

The majority of ELLs receive all English instruction (Goldenberg, 2008). Zehler et al. (2003) found that, in 2002, 59.6% of ELLs were receiving all-English instruction and that the percentage of ELLs receiving services “all in English” had increased substantially from

1992 to 2002. Yet, ELLs’ level of proficiency in each language is dependent on their exposure to each language and associated knowledge gained in different domains for different functions at home and in their communities. The extent to which ELLs have had the opportunity to develop their native language as well as English as a second language in primary school grades adds to the range of linguistic proficiency and literacy skills students bring to the upper grades (Carrasquillo et al., 2004).

Research by Wong Fillmore (1991, 2000) and Cummins (1989) has shown that proficiency in the native language is lost when it ceases to be developed, particularly in the primary grades, when children enter formal schooling. This loss occurs in “subtractive” instructional environments, where English is the primary medium of instruction at school and minimal time is devoted to the development of the native language or native language literacy. This loss may extend into the home, because parents want their children to learn English. English language learners may initially retain their ability to understand their native language, but over time, they lose their ability to speak it.

Consequently, the communication between parents and their children is also placed at risk. Conversations are diminished that can only be conducted by parents in the native language to support their children in their linguistic, cognitive, and social development (August & Hakuta, 1997; Escamilla & Escamilla, 2003; Valdés & Figueroa, 1994; Wong Fillmore, 1991).

In working with families of ELLs, professionals can encourage parents and primary caregivers to use the native language at home to nurture and maintain strong connections with their children and adolescents. Oral language proficiency developed at home that utilizes the parents’ primary language provides ELLs the opportunity to grow socially, cognitively, and linguistically. Bilingualism is viewed best as an asset that ELLs can draw upon at home and in their communities.

Pervasive deficit view of ELLs

Without a full understanding of the nature of bilingualism within the sociopolitical context of this country, the pervasive deficit view of ELLs' linguistic proficiency will continue to prevail. Holding this view would lead one to expect that the language proficiency ELLs bring to school is low and even to categorize ELLs as "nonspeakers" in their native language and English (MacSwan, Rolstad, & Glass, 2002). MacSwan (2004) pointed out the flaws in this deficit-oriented, unuseful characterization. Applying "monolingual" speaker "norms" to ELL language proficiency does not provide a proper point of reference for determining "anomalies" in ELL language acquisition. MacSwan and Rolstad (2003) cited a case in point in the Los Angeles Unified School District where as many as 6,800 children were classified as non-nons, which characterized them as limited in both English and their native language. Such a category implies low and lacking, affecting teachers' expectations of students and ascribing a self-fulfilling prophecy for ELL academic failure. The implications of the deficit view are worrisome. "If teachers believe that some children have a low language ability in both languages, then this belief may have a strong negative effect on their expectations for these children and the curricular content and teaching practices students receive" (MacSwan, 2000, p. 6).

MacSwan and Rolstad (2003) emphasized that all students come to school with language and communicative norms governed primarily by their communities and their unique individual characteristics. Although ELLs' skills may differ from monolingual norms, their native and English language is fully viable and evolved.

Relationship between native and second languages

In-depth reviews of research completed by the National Literacy Panel (NLP) (August & Shanahan, 2006) and the Center for Research on Education, Diversity, and Excellence (Genesee, Lindholm-Leary, Saunders, & Chris-

tian, 2006) led to several conclusions that can help educators make informed, research-based decisions. Goldenberg (2008) identified major findings supported by both systematic reviews as including the following: (a) literacy development in the native language promotes reading achievement in a second language, (b) "good instruction and curriculum in general" applies to ELLs, and (c) good instruction and curriculum "need to be modified" to address ELLs' "language limitations" (p. 14).

In designing disciplinary literacy instruction for ELL adolescents, strategic use of the native language supports ELLs' development of concepts. Studies show a consistent positive relationship between linguistic proficiency in a first and second language and between literacy development in a first and second language. Knowledge and skills learned in the native language transfer across languages and support acquisition of a second language (August & Shanahan, 2006; Collier, 1995; Cummins, 1981, 2000; Escamilla, 1987; Freeman & Freeman, 2009; Genesee et al., 2006; Goldenberg, 2008; Rodriguez, 1988; Thomas & Collier, 2002). English language learners benefit from instruction that points out what does and does not transfer from a native language and English (Cummins, 1981, 2000; Goldenberg, 2008; Herrera, Perez, & Escamilla, 2010).

CULTURAL ISSUES

Language is a manifestation of culture (Readence, Bean, & Baldwin, 2004). Culture is complex. It is dynamic, not static. Culture "consists of standards for deciding what is, standards for deciding what can be, standards for deciding how one feels about it, and standards for deciding how to go about doing it" (Goodenough, 1981, p. 62). Culture is "subtle and invisible . . . a collection of values, beliefs, and standards which influence how students think, feel, and behave in various social settings including classrooms" (Readence et al., 2004, p. 31; Au, 2000).

The cultural diversity ELLs bring to school is inextricably tied to their linguistic

development, and, as such, it needs to be considered in designing effective instruction. The natural language variation brought to the classroom by ELLs in both the native language and English reflect cultural diversity among them and between ELLs and monolingual speakers of English. Alvermann (2002) pointed out that the difficulties adolescent ELLs experience are often spread over a vast array of sociocultural, motivational, and linguistic factors that vary with the specific population being studied. Diverse linguistic proficiencies come with diverse cultural experiences upon which to “build” disciplinary knowledge.

Diverse cultural experiences and literacies

“Effective instruction is culturally appropriate” (Teachers of English to Speakers of Other Languages [TESOL], 2008, p. 6). It builds on the skills, knowledge, and experiences students acquire before coming to school and while they are in school, and it extends and broadens their skills and experiences in developmentally meaningful ways throughout their school years. Culturally responsive instruction focuses on helping students access and connect with their prior knowledge, tap into their interests, and use all of this to connect concepts they are learning in school to their everyday lives (Klingner & Soltero-González, 2009).

Cultural differences versus cultural deficits

Instruction for ELLs should be individualized or personalized to account for important personal and cultural differences among students (Echevarría & Graves, 2010; TESOL, 2008). English language learners come from *different* cultural backgrounds compared with students from the majority language and culture in U.S. schools (NCTE, 2008). Unfortunately, these differences are sometimes viewed from a deficit perspective, just as language differences are, and they are offered as an explanation for the academic difficulties faced by ELLs. The term “cultural

difference” is sometimes used as a euphemism for “cultural *deficit*” (TESOL, 2008). Even those educators who say they value ELLs’ differences may consider them to be unprepared for mainstream schooling and put the responsibility for changing to match the school’s curricula on students. This perspective does little to help teachers view ELLs’ background knowledge and out-of-school resources that could have a positive impact on their schooling (TESOL, 2008). In contrast, culturally responsive instruction values students’ linguistic and cultural resources and views these as assets to build upon rather than deficits to be overcome through schooling (Nieto, 2002).

A great deal of research over the years has demonstrated the rich and diverse socio-cultural characteristics of different communities (e.g., Heath, 1986; Schieffelin & Eisenberg, 1984; Valdés, 2001). Pease-Alvarez and Vasquez (1994) pointed out ways ELLs are enriched by “the home culture, the dominant group culture in which they live, and the multiculturalism that inevitably results from contact and interaction between minority and majority groups in a pluralistic society” (TESOL, 2008, p. 7). English language learners have rich funds of knowledge available to them in their families and communities; but teachers must be prepared to notice them (González, Moll, & Amanti, 2005). There are many ways for teachers to learn more about their students and tap into these funds of knowledge, for example, through dialogue journals with students, parent-teacher interviews, and home visits (TESOL, 2008).

Culturally responsive teaching

Culturally responsive education aims to help students and families bridge borders between home and school cultures (Gay, 2000). Culturally responsive teachers facilitate achievement by making learning relevant for students—They are adept at using students’ experiences and interests as the basis for curricular connections (Ladson-Billings, 1994). They build positive, supportive relationships with their students. They empower students and validate and affirm the individual worth

of each student, while holding high expectations. They seem to have an uncanny ability to challenge their students, while supporting them (Nieto, 1999; Villegas & Lucas, 2002).

Culturally responsive teaching is similar to multicultural education because it values multiple cultures and languages and advocates their integration into school instruction and content. It examines the construction of knowledge and integrates multiple perspectives and critical thinking into the curriculum. It reduces prejudice, promotes equity, and supports an empowering school culture (Banks, 2003). Culturally responsive education is also different from multicultural education, however, because it is meant to be responsive to specific students rather than providing a generalized account of various cultures. Culturally responsive perspectives and multicultural education complement one another.

CLASSROOM ASSESSMENT CONSIDERATIONS

Teachers face multiple challenges when assessing ELLs' learning. Perhaps, their greatest obstacle is distinguishing between language acquisition and content knowledge. A second challenge is that in content classes at the secondary level, teachers must be able to assess ELLs' mastery of the specific academic language necessary for understanding that content (e.g., in science or mathematics). Third, teachers must be able to apply their knowledge of bilingual processes and biliteracy development to identify if and when their ELLs are transferring native language skills, knowledge, and strategies to English (TESOL, 2008).

Consider first the challenges teachers face when assessing ELLs with regard to distinguishing between students' language proficiency and their content learning (Echevarría & Graves, 2010; Solano-Flores & Trumbull, 2003). Because all content assessments essentially become language proficiency assessments when used with ELLs, it is difficult to determine what students actually know and can do. If ELLs do poorly on a content exam-

ination, teachers must question whether the reason was that they did not understand the language used on the test, or that they could not convey what they understood in English, or that they simply lacked the relevant knowledge needed to do well.

Testing is confounded by other aspects of adolescent ELLs' diversity than their language proficiency, such as their prior schooling experiences, cultural background, socioeconomic status, and whether they are literate in their native language. Tests often refer to cultural experiences or historical information familiar to mainstream middle-class students raised in the U.S. but unfamiliar to many adolescent ELLs. Examples include assessment questions about walkathons or camping. This is problematic because then the test is not measuring what it purports to measure—students' disciplinary knowledge. Also, as Solano-Flores and Li (2008) have described, many test items are written with unnecessarily ambiguous language that can be hard for ELLs to decipher.

Inadequate content assessment procedures consistently underestimate ELLs' progress in content learning. Underestimating students' achievements can result in their recycling through material they have already learned and/or being tracked inappropriately into lower level classes (Abedi & Gándara, 2006). One reason students give for dropping out of school is that they are bored and do not feel challenged. Also, without effective assessments, it can be difficult to determine which ELLs might have language or learning disabilities (Miramontes, 1987).

Teachers need to be able to determine whether their adolescent ELLs are acquiring the specialized language skills and vocabulary associated with their content areas, such as in mathematics and science. To do so requires using a variety of assessment techniques that can unveil students' understanding of specialized vocabulary, as well as of their knowledge and skills in the content area. No one test alone can provide sufficient information. Adequate assessments are essential for determining the individual strengths and areas of

need for each ELL, for making placement decisions, and for personalizing instruction (Short & Fitzsimmons, 2007).

Two promising lines of research indicate ways to improve content area assessment: test accommodations and universal design. Possible test accommodations include using dictionaries and glossaries during testing that can help students understand test items and improve test performance (Kieffer, Lesaux, Rivera, & Francis, 2009; Kopriva, Emick, Hipolito-Delgado, & Cameron, 2007). Other accommodations include unlimited time and simplifying the language of the test items (e.g., adjusting verb tense, sentence structure, vocabulary) to improve readability. Whatever the accommodations, students should not be presented with them for the first time during a testing situation. Rather, they should be provided with opportunities to become familiar with any accommodations ahead of time.

Universal design experts recommend changing test items so that they are more accessible for all students. So, rather than changing the wording of test items as an accommodation specifically for ELLs, the linguistic complexity of test items would be modified for all students (Rivera & Stansfield, 2004; Thompson & Thurlow, 2002).

Teachers can use a variety of assessments to gauge their students' linguistic skills and content knowledge. We briefly describe several of these assessments in Table 2. In addition, teachers should encourage students to draw from native language resources to express their understanding, when possible. English language learners can sometimes explain their understandings more adequately in their first language than in English even when instruction has been in English (Moll & Díaz, 1985). Also, alternative formats for responding to questions, such as labeling a diagram rather than writing essay responses, can help.

INSTRUCTION THAT SUPPORTS LANGUAGE AND LITERACY DEVELOPMENT IN THE CONTENT AREAS

In the final section of this article, we highlight three types of instruction found to en-

hance the language and literacy development and content learning of adolescent ELLs—sheltered English, vocabulary instruction, and reading comprehension strategies. For each, we provide a brief overview of theoretical principles and key research in the area. We also present features of effective instruction.

Sheltered English instruction

Sheltered English is teaching English *through* the content areas in ways that support ELLs' disciplinary learning. ELLs are taught grade-appropriate, cognitively demanding core content. Sheltered English is characterized by an abundance of supplementary materials, clear and meaningful lessons, and concrete examples. Various instructional practices are used to help make content comprehensible for ELLs (Echevarría & Graves, 2010; Echevarría, Vogt, & Short, 2010).

Sheltered English is intended for ELLs at intermediate and advanced levels of language proficiency. Instruction is organized around grade-appropriate, theme-based content and provides "access to the core curriculum." A key principle of sheltered English is that instead of "watering down" the curriculum, teachers make it more comprehensible for students. They adjust the cognitive load, but not the cognitive level or grade appropriateness, of content. Similarly, teachers using sheltered English increase (rather than decrease) the percentage of inferential and higher order thinking questions asked (Genesee et al., 2006). An important principle to keep in mind is that ELLs are every bit as intelligent and capable of higher order thinking as their fluent English-speaking peers (Moll & González, 1997). Teachers cover less material but in more depth. To decide what to focus on, teachers carefully evaluate the curriculum and determine which aspects are most important.

In addition to content goals, teachers establish language objectives appropriate for students' levels of English language proficiency in relation to the language demands of the lesson. Language and content learning are integrated. Teachers present content from multicultural perspectives, looking for ways to help

Table 2. Assessment practices other than paper-and-pencil tests

Assessment practice	Purpose	Cultural responsiveness
Analytic teaching	Analyze behaviors during specific tasks to determine strengths and needs	Assessment focuses on specific knowledge and behaviors
Cross-cultural interview(s)	Determine how behaviors reflect cultural and linguistic background	Adds to understanding of cultural and linguistic variables
Language sample	Analyze linguistic skills, vocabulary, strengths, needs	Provides a more natural representation of linguistic skills than language proficiency tests—can be used to assess discipline-specific language
Observations	Determine academic and socioemotional behaviors in instructional environment Determine context and match between instruction and student needs	Provides information about appropriateness of instruction, classroom climate, and opportunities to learn
Work sample analysis	Identify patterns, strengths, and areas of need in student work	More authentic representation of skills than standardized tests
Task analysis	Break tasks into subtasks to determine what students know and can do and where support is needed	More authentic and individualized approach to determining strengths and needs
Curriculum-based measurement	Measure student progress in a systematic way on a measure closely aligned to the curriculum to determine whether progress is adequate and how student compares with others in the same setting	Helps to determine student progress with curriculum as well as how student is doing compared with “true peers”
Performance-based assessment	Evaluate work products or performance to determine strengths and needs	Allows students to demonstrate learning in potentially more culturally and linguistically responsive and authentic ways
Portfolio assessment	Evaluate work samples to determine progress over time, strengths, and needs	Authentic way to evaluate student progress

Note. From *Differentiating Learning Differences From Disabilities: Meeting Diverse Needs Through Multi-tiered Response to Intervention*, by J. J. Hoover, 2009, Upper Saddle River, NJ: Pearson. Copyright 2009 by Pearson. Adapted with permission.

students make connections with their prior learning and outside-of-school experiences.

Sheltered English is based on the principle of comprehensible input—that for learning to occur, students must understand the instruction. There are multiple ways to make instruction more comprehensible. Teachers use pictures, real objects, diagrams, video clips, movements, and clear vocabulary (Echevarría et al., 2010; Goldenberg, 2008).

To use sheltered English, teachers begin by providing an advance organizer. They state the objectives of the lesson and explain its purpose with multiple modality supports (e.g., using the chalkboard, whiteboard, flipchart, overhead, and PowerPoint slides). They make connections with prior learning (e.g., asking students what they already know and linking students' personal experiences with the topic). They build relevant background knowledge, perhaps showing a brief video clip.

As lessons progress, teachers using such approaches provide opportunities for students to interact with others in pairs or small groups to exchange ideas and talk about content. Cooperative learning is an effective technique with ELLs (August & Shanahan, 2006; Kagan, 1986). Ideally, ELLs should be paired or grouped with bilingual peers as well as native English speakers during cooperative learning tasks. Heterogeneous groupings provide ELLs with low-risk opportunities to use academic language, engage in higher level thinking, receive support from bilingual peers who can explain concepts in ELLs' native language, and hear fluent English modeled. Cooperative learning can increase academic performance, motivation, engagement, time on task, self-esteem, and positive social behaviors. Table 3 summarizes ways to accommodate ELLs during content lessons.

Teachers using sheltered English support students' efforts at communication in multiple ways. They increase "wait time" before calling on students to answer questions in order to allow sufficient time for them to think and frame their responses. As an alternative,

they might have students jot down their ideas or share with a neighbor before responding in front of the class. They allow students *more* time to speak, and they focus on the content of students' responses rather than any speech or linguistic errors they might make. They recognize that students will make language mistakes as they are learning and that this is natural. They respond to the accuracy of the content in a student's response rather than grammar.

Vocabulary instruction

ELLs benefit from rich, intensive, explicit vocabulary instruction (Carlo et al., 2004; Gersten & Baker, 2000; Goldenberg, 2008; Lesaux, Kieffer, Faller, & Kelley, 2010; Vaughn et al., 2009). Recent research has focused on building ELLs' knowledge of academic vocabulary.

For instance, Vaughn et al. (2009) were able to improve ELLs' vocabulary knowledge and content learning in seventh-grade social studies classes. They provided students with multicomponent social studies instruction that included explicit vocabulary instruction, graphic organizers, and videos to build concepts and promote discussion. Students spent some time during each lesson working collaboratively with peers.

In another vocabulary-based intervention, this time with sixth-grade ELLs (Lesaux et al., 2010), teachers taught vocabulary by reading a short and engaging text with selected academic vocabulary words. Teachers provided students with multiple exposures to the target words and a variety of vocabulary activities that varied across lessons. In addition, lessons incorporated discussions with pairs of students and the whole class. English language learners' vocabulary knowledge and comprehension improved significantly as a result of these lessons.

Although conducted with fifth graders, rather than secondary students, two different studies showed the value in teaching morphology (i.e., word analysis and word parts) to ELLs as a way to improve their vocabulary. Carlo et al. (2004) introduced an

Table 3. Some accommodations for English language learners in content classes

Assignments	Lesson presentation
Provide extra time to complete tasks	Display and orally review content and language objectives
Clarify complex directions, providing picture support, if needed	Pair students to check work (with L1 peer if needed)
Provide visual supports	Write key points and directions on board in clear, neat writing
Tape-record reading assignment for homework or review	Provide peer tutoring (with L1 peer for clarification)
Divide assignments into shorter segments	Use wide variety of visuals and supplemental materials
Reduce complexity of homework assignments	Provide peer note-taker (L1, if needed)
Provide structured outline in L1 when needed	Make sure directions are understood (model and check frequently for understanding)
Give frequent shorter quizzes; avoid long tests	Break longer presentations into shorter segments
Allow use of L1 for expressing knowledge	

Note. L1 refers to a student's native language. From *Response to Intervention (RTI) and English Learners*, by J. Echevarría and M. Vogt, 2011, Boston: Allyn & Bacon. Copyright 2011 by Pearson Education. Adapted with permission.

instructional procedure that included direct instruction in the meanings of words and word-learning strategies. Students learned morphological analysis and how to reflect on cross-linguistic aspects of word meaning, including cognates (i.e., words that look and sound similar across languages) and affixes. In a related study, Kieffer and Lesaux (2008) found that fifth-grade ELLs with greater morphological awareness showed higher levels of vocabulary knowledge and reading comprehension.

Teachers can reinforce ELLs' vocabulary learning in a variety of ways. Examples include the following:

- Introducing new words early in a lesson by highlighting them or listing them for visual reinforcement (e.g., posted word bank, vocabulary lists)
- Linking new information with prior knowledge, building on students' background knowledge, experiences, and interests
- Teaching students how to figure out the meanings of new words using context clues and word analysis
- Using a variety of pictures, charts, videos, diagrams, demonstrations, illustrations,

maps, multimedia, photos, and realia to illustrate new concepts

- Developing semantic webs, semantic feature analyses, concept maps, and word maps
- Providing opportunities to use new words while applying processing skills and higher level thinking (e.g., problem solving, predicting, organizing, synthesizing, evaluating)
- Setting up frequent opportunities to practice new vocabulary in a variety of contexts

Reading comprehension strategies

A number of researchers have shown that adolescent ELLs benefit from comprehension strategy instruction (e.g., August & Shanahan, 2006; Garcia & Godina, 2004; Riches & Genesee, 2006). Comprehension strategies should not be taught in isolation but rather in the context of helping students learn new content and engage in meaningful ways with text. Comprehension strategies are intended to help students improve metacognitive and cognitive skills. Here, we highlight the work of Jiménez (1997) and Klingner and Vaughn (1996).

Jiménez (1997) studied the effectiveness of cognitive strategy instruction designed to improve the reading comprehension of five middle-school Latina/o ELLs with reading difficulties. He taught students how to derive meaning from unknown words, integrate prior knowledge with textual information, and formulate questions. Students were provided with multiple opportunities to interact with culturally familiar text, accompanied by think-aloud activities used to model strategy usage. They were encouraged to draw information from their two languages: Spanish and English. Students learned to apply the strategies successfully and transferred this knowledge to other contexts, developed metacognitive awareness of reading, and demonstrated positive attitudes toward becoming better readers. A particularly encouraging finding, and unique aspect of this study, was that students increased their motivation for reading.

Using a modified version of Reciprocal Teaching (Palincsar & Brown, 1984), Klingner and Vaughn (1996) taught reading comprehension strategies to seventh- and eighth-grade Spanish-speaking ELLs with learning disabilities in their social studies classes. They added a brainstorming strategy to help students access their prior knowledge about the topic of the passage they would be reading to the existing Reciprocal Teaching comprehension strategies of prediction, clarification, summarization, and questioning. They also added cooperative learning and peer-tutoring components to their intervention. Students' reading comprehension improved significantly. Students with initial decoding skills above third-grade level but low comprehension ability showed the greatest gains, yet even those students with low decoding skills improved. Also, students with high oral language proficiency in both languages showed more improvement than students with low oral language skills.

Building on their success with this first study, Klingner, Vaughn, Argüelles, Hughes, and Ahwee (2004), Klingner, Vaughn, and Schumm (1998), and Vaughn et al. (2011)

continued to investigate reading comprehension strategies. They developed and evaluated Collaborative Strategic Reading (CSR), which is a research-based intervention that has been successfully implemented and studied in culturally and linguistically diverse, inclusive classrooms from fourth grade through middle school. Klingner, Vaughn, and colleagues are currently investigating the implementation of CSR in middle schools with ELLs in Texas and Colorado. Students who learn CSR regularly outgain comparison students in reading comprehension at statistically significant levels.

CSR includes strategies for summarizing information, asking and answering questions, peer discussion, and monitoring comprehension and taking steps to improve understanding. It was designed to support disciplinary learning in content classes. The structure of CSR is divided into before, during, and after reading activities (Klingner, Vaughn, Boardman, & Swanson, in press).

Before reading, the teacher and students *preview* the text together to activate background knowledge, make predictions, and state the purpose of the reading. During this phase, the teacher guides students to brainstorm by examining the title, headings, pictures, and the like, connecting their prior knowledge about the topic and their own experiences to the text. Teachers help build background knowledge as needed and also introduce key vocabulary terms and proper nouns. Teachers may use realia, pictures, short video clips, or demonstrations to make connections explicit for students. Students also make predictions about what they might learn and set the purpose for reading.

During reading, students monitor their understanding and identify confusing words or concepts by using a strategy called *click* and *clunk*. When the text makes sense it clicks; when it does not, it clunks. Once the students have finished reading a section, they apply fix-up strategies to figure out the unknown words and concepts. These include the following steps:

1. Reread the sentence, with the clunk in it looking for context clues.
2. Re-read the sentence, with the clunk and the sentences before or after it looking for clues.
3. Break the word apart and look for a prefix, suffix, or root word.
4. Look for a cognate that makes sense.

After students repair their clunks, they figure out the main idea of the section of text they have just read using the Get the Gist strategy. Students are encouraged to discuss the quality of each other's gists, providing evidence from the text to support their ideas.

After reading, students then use the Wrap Up strategy by generating questions about the passage they read and reviewing the most important ideas in a reading. They are encouraged to use three types of questions: (a) those that seek information directly in one place in the text; (b) those that require synthesizing information from different places in the text; and (c) and those that require more critical thinking beyond the text and background knowledge. Finally, students write down one or two of the most important ideas from the passage.

Students initially learn the CSR strategies from their teacher during whole-class instruction. Once they know how to apply the strategies, they use them while working with their peers in cooperative learning groups. Each student performs an expert role: leader,

clunk expert, gist expert, or question expert. Cue cards prompt students as they take the lead in their designated roles. The goal is for the strategies to guide students in engaging in meaningful discussions about the content they are learning. While group discussions and shared ideas are important aspects of CSR group work, individual accountability is also essential. For each strategy, students first think about and record individual responses in CSR learning logs. This process provides wait time so that all students are prepared to share their ideas with one another. Group discussions also provide comprehensible input, which is particularly important for ELLs when gleaning meaning from content. The learning logs also become an important source of information for teacher feedback.

CONCLUSION

In closing, growing evidence suggests that ELLs benefit from teachers who understand and know how to meet their linguistic and cultural needs and provide them with meaningful access to core content. Instructional methods found to be effective for ELLs help them build their oral language skills while teaching content, build oral and written vocabulary knowledge, and teach them the reading comprehension strategies that can help them to be more active, engaged learners and better comprehenders.

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