

Chapter 4



Theoretical Foundations and the Research Base of the California English Language Development Standards



California's 2012 English Language Development Standards (the CA ELD Standards) reflect an extensive review of established and emerging theories, research, and other relevant resources pertaining to the education of K-12 English learners (ELs). This wide body of scholarship and guidance was used to inform the development of the CA ELD Standards. The research base was relied upon to ensure that the CA ELD Standards highlight and amplify the language demands in the California Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (CA CCSS for ELA/Literacy) that are necessary for the development of advanced English and academic success across disciplines. The CA CCSS for ELA/Literacy served as the core foundation for developing the CA ELD Standards, which aim to guide teachers in supporting ELs' English language development while students learn rigorous academic content.

The development of the CA ELD Standards was informed by multiple theories and a large body of research pertaining to the linguistic and academic education of ELs. Sociolinguistic, sociocultural, and sociocognitive theories emphasize how learning is a social activity and how language is both a form of social action and a resource for accomplishing things in the world. Among other things, these theories highlight the importance of recognizing and leveraging students' prior knowledge in order to make connections to and foster new learning, helping them to build conceptual networks, and supporting them to think about their thinking (metacognitive knowledge) and language use (metalinguistic knowledge). Teachers making use of the theories and research studies can help students to consciously apply particular cognitive strategies (e.g., inferring what the text means by examining textual evidence) and linguistic practices (e.g., intentionally selecting specific words or phrases to persuade others). These metacognitive and metalinguistic abilities support students' self-regulation, self-monitoring, intentional learning, and strategic use of language (Christie 2012; Duke et al. 2011; Halliday 1993; Hess et al. 2009;

Palinscar and Brown 1984; Pearson 2011; Schleppegrell 2004). From this perspective, language and interaction play a central role in mediating both linguistic and cognitive development, and learning occurs through social interaction that is carefully structured to intellectually and linguistically challenge learners while also providing appropriate levels of support (Bruner 1983; Cazden 1986; Vygotsky 1978; Walquí and van Lier 2010).

Reviews of the research, individual studies, and teacher practice guides synthesizing the research for classroom application demonstrate the effectiveness of enacting the theories outlined above for teaching ELs (see, for example, Anstrom et al. 2010; August and Shanahan 2006; Francis et al. 2006; Genesee et al. 2006; Short and Fitzsimmons 2007). One of the key findings from the research is that effective instructional experiences for ELs have the following features:

- They are interactive and engaging, meaningful and relevant, and intellectually rich and challenging.
- They are appropriately scaffolded in order to provide strategic support that moves learners toward independence.
- They value and build on home language and culture and other forms of prior knowledge.
- They build both academic English and content knowledge.

Interacting in Meaningful and Intellectually Challenging Ways

The importance of providing opportunities for English learners to interact in meaningful ways around intellectually challenging content has been demonstrated in multiple studies. Meaningful interaction in K-12 settings includes, among other tasks, engaging in collaborative oral discussions with a peer or

a small group of peers about texts or content topics. Not all students come to school knowing how to engage in these interactive processes with other students. However, research in classrooms with ELs has demonstrated that teachers can successfully “apprentice” their students into engaging in more academic ways of interacting with one another, using the language of the specific content in question, acquiring the language of academic discourse, and developing content knowledge (Gibbons 2009; Walquí and van Lier 2010).

Teachers can carefully structure collaborative learning practices that promote small-group discussion among students about, for example, the science and history texts they read. Structured collaborative learning practices foster comprehension of the texts, the acquisition of vocabulary and grammatical structures associated with the texts, and more academic ways of engaging in conversations about the texts (Heller and Greenleaf 2007; Klingner et al. 2004; Kosanovich, Reed, and Miller 2010; Short, Echevarría, and Richards-Tutor 2011; Vaughn et al. 2011).

Teachers can provide structured and strategically supportive opportunities for students to develop more ways of interacting meaningfully. For example, the kinds of discourse skills expected in academic conversations can be fostered when teachers:

- establish routines and expectations for equitable and accountable conversations (e.g., specific roles in a conversation, such as “facilitator”);
- carefully construct questions that promote extended discussions about academic content (e.g., questions that require students to infer or explain something for which they have sufficient background knowledge);
- provide appropriate linguistic support (e.g., a sentence stem, such as “I agree with _____ that _____. However, _____.”).

With strategic scaffolding, students can learn to adopt particular ways of organizing their discourse during group work and “practicing” aspects of academic English that approach the more “literate” ways of communicating that are highly valued in school (Dutro and Kinsella 2010; Gibbons 2009; Merino and Scarcella 2005; Schleppegrell 2010).

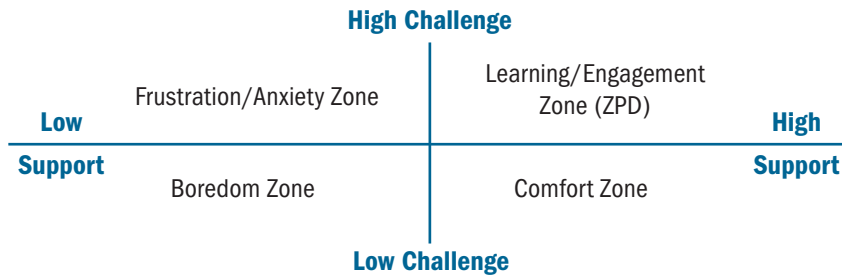
Scaffolding

Teachers play a central role in providing *temporary* supportive frameworks, adjusted to students’ particular developmental needs, in order to improve access to meaning and ongoing linguistic and cognitive development. The metaphorical term *scaffolding* (Bruner 1983; Cazden 1986; Celce-Murcia 2001; Mariani 1997) refers to ways in which these temporary supportive frameworks can be applied. The term draws from Vygotsky’s (1978) notion of the “zone of proximal development (ZPD)”: the instructional space that exists between what the learner can do independently and that which is too difficult for the learner to do without strategic support, or scaffolding. Scaffolding is temporary help that is future-oriented. In other words, scaffolding supports students in how to do something today that they will be able to do independently in the future.

As Hammond (2006, 271) has emphasized, scaffolding “does not just spontaneously occur” but is, rather, intentionally designed for a learner’s particular needs and then systematically and strategically carried out. The level of scaffolding that a student needs depends on a variety of factors, including the nature of the task and the learner’s background knowledge of relevant content, as well as the learner’s proficiency with the language required to engage in and complete the task. Scaffolding does not change the intellectual challenge of the task, but merely allows learners to build the knowledge and skills for independent performance of the task at some future point.

Scaffolding practices are selected in accordance with the standards-based goals of the lesson, the identified needs of the learner, and the anticipated challenge of the task. Gibbons (2009) has offered a way of conceptualizing the dual goal of engaging ELs in intellectually challenging instructional activities while also providing them with the appropriate level of support:

Figure 4.1 Optimizing Scaffolding for English Learners Engaged in Academic Tasks (Gibbons 2009, adapted from Mariani 1997)



The CA ELD Standards establish three overall levels of scaffolding that teachers can provide to ELs during instruction: *substantial*, *moderate*, and *light*. ELs at the emerging level of English language proficiency will generally require more substantial support to develop capacity for many academic tasks than will students at the bridging level. **This does not mean that these students will always require substantial, moderate, or light scaffolding for every task.** EL students at every level of English proficiency will engage in some academic tasks that require *light* or *no* scaffolding because they have already mastered the requisite skills for the given tasks, and students will engage in some academic tasks that require *moderate* or *substantial* scaffolding because they have not yet acquired the cognitive or linguistic skills required by the task. For example, when a challenging academic task requires students to extend their thinking and stretch their language, students at expanding and bridging levels of English proficiency may also require *substantial* support. Teachers need to provide the level of scaffolding appropriate to specific tasks and learners' cognitive and linguistic needs, and students will need more or less support depending on these and other variables.

Examples of planned *scaffolding*¹ that teachers prepare in advance, during lesson and curriculum planning, in order to support ELs' access to academic

1. There are many ways to categorize scaffolding. The terms used here are adapted from Hammond and Gibbons (2005), who refer to "designed-in" and "interactional" scaffolding. *Designed-in (or planned) scaffolding* refers to the support teachers consciously plan in advance. *Interactional scaffolding* refers to the indirect support teachers provide spontaneously through dialogue during instruction or other interaction.

content and linguistic development include, but are not limited to, the following:

- Taking into account what students already know, including their primary language and culture, and relating it to what they are to learn
- Selecting and sequencing tasks, such as modeling and explaining, and providing guided practice, in a logical order
- Frequently checking for understanding during instruction, as well as gauging progress at appropriate intervals throughout the year
- Choosing texts carefully for specific purposes (e.g., motivational, linguistic, content)
- Providing a variety of collaborative groups
- Constructing good questions that promote critical thinking and extended discourse
- Using a range of information systems, such as graphic organizers, diagrams, photographs, videos, or other multimedia, to enhance access to content
- Providing students with language models, such as sentence frames/starters, academic vocabulary walls, language frame charts, exemplary writing samples, or teacher language modeling (e.g., using academic vocabulary or phrasing)

This planned scaffolding allows teachers to provide *just-in-time* scaffolding during instruction, which flexibly attends to ELs' needs as they interact with content and language. Examples of this type of scaffolding include:

- prompting a student to elaborate on a response to extend his or her language use and thinking;
- paraphrasing a student's response and including target academic language as a model and, at the same time, accepting the student's response using everyday or "flawed" language;
- adjusting instruction on the spot based on frequent checking for understanding;
- linking what a student is saying to prior knowledge or to learning that will come (previewing).

For ELs, instruction and/or strategic support in the student's primary language can also serve as a powerful scaffold to English literacy (August and Shanahan

2006; CDE 2010; Genesee et al. 2006; Goldenberg 2008). The research evidence indicates that EL students in programs where biliteracy is the goal and bilingual instruction is used demonstrate stronger literacy performance in English, with the added metalinguistic and metacognitive benefits of bilingualism.

Developing Academic English

For K–12 settings, *academic English* broadly refers to the language used in school to help students develop content knowledge and the language students are expected to use to convey their understanding of this knowledge.

Interpreting, discussing, analyzing, evaluating, and writing academic texts are complex literacy processes that involve the integration of multiple linguistic and cognitive skills, including word-level processing, such as decoding and spelling. Furthermore, these advanced English literacy tasks especially involve higher-order cognitive and linguistic processes, including applying prior knowledge, making inferences, recognizing the grammatical structures and linguistic features of texts, resolving ambiguities (e.g., semantic or syntactic), and selecting appropriate language resources for specific purposes, not to mention stamina and motivation.

The CA ELD Standards position English as a meaning-making resource with different language choices available based on discipline, topic, audience, task, and purpose. This notion of English as a meaning-making resource expands the notion of *academic language* from simplistic definitions (e.g., academic vocabulary or syntax) to a broader concept that encompasses discourse practices, text structures, grammatical structures, and vocabulary, and views them as inseparable from meaning (Bailey and Huang 2011; Wong Fillmore and Fillmore 2012; Snow and Uccelli 2009). Academic English shares characteristics across disciplines—it is densely packed with meaning, authoritatively presented, and highly structured—but is also highly dependent upon disciplinary content (Christie and Derewianka 2008; Moje 2010; Quinn, Lee, and Valdes 2012; Schleppegrell 2004). The CA CCSS for ELA/Literacy emphasize the need for all students to be able to comprehend and produce complex texts in a variety of disciplines so that they are college- and career-ready. Research suggests that teachers can foster, and even accelerate, the development of academic English for EL students through multilayered and multicomponent approaches that focus on the way English works in different contexts.

The Importance of Vocabulary

Over the past several decades, research has repeatedly identified vocabulary knowledge as a critical and powerful factor underlying language and literacy proficiency, including disciplinary literacy (e.g., Graves 1986; Chall, Jacobs, and Baldwin 1990; Beck and McKeown 1991; Hart and Risley 1995; Blachowicz and Fisher 2004; Baumann, Kame'enui, and Ash 2003; Bowers and Kirby 2010; Carlisle 2010; McCutchen and Logan 2011). Comprehensive and multifaceted approaches to vocabulary instruction include a combination of several critical components: rich and varied language experiences (e.g., wide reading, teacher read-alouds), teaching individual academic words (both general academic and domain-specific), teaching word-learning strategies (including cognate awareness and morphology), and fostering word consciousness and language play (Graves 2000, 2006, 2009). The CA CCSS for ELA/Literacy draw particular attention to domain-specific and general academic vocabulary knowledge and usage due to the prevalence of these types of vocabulary in academic contexts. Research conducted over the past decade, in particular, has demonstrated the positive effects of focusing on domain-specific and general academic vocabulary with K–12 EL students (August et al. 2005; Calderón et al. 2005; Carlo et al. 2004; Collins 2005; Kieffer and Lesaux 2008, 2010; Silverman 2007; Snow, Lawrence, and White, 2009; Spycher 2009; Townsend and Collins 2009).

The Importance of Grammatical and Discourse-Level Understandings

Although academic vocabulary is a critical aspect of academic English, it is only one part. The CA ELD Standards were further informed by genre- and meaning-based theories of language, which view language as a social process and a meaning-making system and seek to understand how language choices construe meaning in oral and written texts. These theories have identified how networks of interrelated language resources—including grammatical, lexical, and discourse features—interact to form registers that vary depending upon context and situation (Halliday and Matthiessen 2004). Advanced English proficiency hinges on the mastery of a set of academic registers used in academic settings and texts that “construe multiple and complex meanings at all levels and in all subjects of schooling” (Schleppegrell 2009, 1).

Register refers to the ways in which grammatical and lexical resources are combined to meet the expectations of the context (i.e., the content area, topic, audience, and mode in which the message is conveyed). In this sense, “register variation” (Schleppegrell 2012) depends on what is happening (the content), who the communicators are and their relationship to one another (e.g., peer-to-peer, expert-to-peer), and how the message is conveyed (e.g., written, spoken, multimodal texts). Informal (“spoken-like”) registers might include chatting with a friend about a movie or texting a relative. Formal (“written-like”) registers might include writing an essay for history class, participating in a debate about a scientific topic, or making a formal presentation about a work of literature. The characteristics of these academic registers, which are critical for school success, include specialized and technical vocabulary, sentences and clauses that are densely packed with meaning and combined in purposeful ways, and whole texts that are highly structured and cohesive in ways that depend upon the disciplinary area and social purpose (Christie and Derewianka 2008; Halliday and Matthiessen 2004; O’Dowd 2010; Schleppegrell 2004).

Language is the medium through which teaching and learning take place in schools, the medium through which we transform and develop our thinking about concepts; and in this way, language and content are inextricably linked (Halliday 1993). For this and other reasons, language has been referred to as the “hidden curriculum” of schooling and accounts for why school success can be seen as largely a language matter (Christie 1999). EL students often find it challenging to move from everyday or informal registers of English to formal academic registers. Understanding and gaining proficiency with academic registers and the language resources that build them opens up possibilities for expressing ideas and understanding the world. From this perspective, teachers who understand the lexical, grammatical, and discourse features of academic English and how to make these features explicit to their students in purposeful ways that build both linguistic and content knowledge are in a better position to help their students fulfill their linguistic and academic potential.

Teaching about the grammatical patterns found in particular disciplines has been shown to help ELs’ reading comprehension and writing proficiency. The main pedagogical aims of this research are to help students become more conscious of how language is used to construct meaning in different contexts

and to provide students with a wider range of linguistic resources. Knowing how to make appropriate language choices will enable students to comprehend and construct meaning in oral and written texts. Accordingly, the instructional interventions studied in the applied research in this area have focused on identifying the language features of the academic texts that students read and are expected to write in school (e.g., narratives, explanations, arguments) and on developing students’ awareness of and proficiency in using the language features of these academic registers (e.g., how ideas are condensed in science texts through nominalization, how arguments are constructed by connecting clauses in particular ways, or how agency is hidden in history texts by using the passive voice) so that they can better comprehend and create academic texts (Brisk 2012; Gebhard et al. 2010; Fang and Schleppegrell 2010; Gibbons 2008; Hammond 2006; Rose and Acevedo 2006; Schleppegrell and de Oliveira 2006).

Research on genre- and meaning-based approaches to literacy education with EL students in the United States and other countries has demonstrated the effectiveness of teaching EL students about how language works to achieve different purposes in a variety of contexts and disciplines (Achugar, Schleppegrell, and Oteíza 2007; Aguirre-Muñoz et al. 2008; Gebhard and Martin 2010; Schleppegrell, Achugar, and Oteíza 2004; Spycher 2007). This research has stressed the importance of positioning ELs as competent and capable of achieving academic literacies, providing them with an intellectually challenging curriculum with appropriate levels of support, apprenticing them into successful use of academic language, and making the features of academic language transparent in order to build proficiency with and critical awareness of the features of academic language (Christie 2012; Derewianka 2011; Gibbons 2009; Halliday 1993; Hyland 2004; Schleppegrell 2004).

The extensive body of theories and research drawn upon to inform and guide the development of the CA ELD Standards demonstrates that effective instruction for ELs focuses on critical principles for developing language and cognition in academic contexts. These principles emphasize meaningful interaction; the development of metalinguistic awareness in contexts that are intellectually rich and challenging, focused on content, strategically scaffolded, and respectful of the cultural and linguistic knowledge students bring to school; and the use of such knowledge as a resource.

Other Relevant Guidance Documents Consulted

Additional state, national, and international documents designed to inform and guide policy and practice for the education of ELs were consulted. These documents include the following:

- *Understanding Language: Language, Literacy, and Learning in the Content Areas*—Commissioned Papers on Language and Literacy Issues in the Common Core State Standards and Next Generation Science Standards (Stanford University)
- *The Framework for English Language Proficiency Development Standards Corresponding to the Common Core State Standards and the Next Generation Science Standards* (Council of Chief State School Officers 2012)
- *Improving Education for English Learners: Research-Based Approaches* (CDE 2010)
- *The Common European Framework of Reference for Languages: Learning, Teaching, Assessment* (Council of Europe, Language Policy Unit, n.d.)
- *Standards for Foreign Language Learning in the 21st Century* (National Standards in Foreign Language Education Project 2006)
- *The Framework for High-Quality English Language Proficiency Standards and Assessments* (Assessment and Accountability Comprehensive Center 2009)
- ELD/English Language Proficiency (ELP) standards from multiple states
- The Australian National Curriculum

Conclusion

The theoretical bases and body of research and resources that were consulted for the development of the California ELD Standards were complemented by the writing team’s knowledge working in schools across California with both EL students (as teachers) and teachers of EL students (as professional developers, research partners, and consultants in various capacities). At every stage of the development and review process, this practical knowledge about what goes on in classrooms, paired with extensive knowledge of the theories and research pertaining to the education of EL students contributed to the development of a rigorous and balanced set of ELD standards.

References

- Acevedo, C., and D. Rose. 2007. “Reading (and Writing) to Learn in the Middle Years of Schooling.” *Primary English Teaching Association* 157:1–8.
- Achugar, M., M. Schleppegrell, and T. Oteíza. 2007. “Engaging Teachers in Language Analysis: A Functional Linguistic Approach to Reflective Literacy.” *English Teaching: Practice and Technique* 6 (2): 8–24.
- Aguirre-Muñoz, Z., J. E. Park, A. Amabisca, and C. K. Boscardin. 2008. “Developing Teacher Capacity for Serving ELLs’ Writing Instructional Needs: A Case for Systemic Functional Linguistics.” *Bilingual Research Journal* 31 (1): 295–322.
- Anstrom, K., P. DiCerbo, F. Butler, A. Katz, J. Millet, and C. Rivera. 2010. *A Review of the Literature on Academic English: Implications for K–12 English Language Learners*. Arlington, VA: The George Washington University Center for Equity and Excellence in Education.
- Assessment and Accountability Comprehensive Center. 2009. *Framework for High-Quality English Language Proficiency Standards and Assessments*. San Francisco, CA: WestEd.
- August, D., M. Carlo, C. Dressler, and C. Snow. 2005. “The Critical Role of Vocabulary Development for English Language Learners.” *Learning Disabilities Research and Practice* 20 (1): 50–57.
- August, D., and T. Shanahan, eds. 2006. *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah, NJ: Lawrence Erlbaum Associates and the Center for Applied Linguistics.
- Bailey, A. L., and B. H. Huang. 2011. “Do Current English Language Development/Proficiency Standards Reflect the English Needed for Success in School?” *Language Testing* 28: 343–65.
- Baumann, J. F., E. J. Kame’enui, and G. E. Ash. 2003. “Research on Vocabulary Instruction: Voltaire Redux.” In *Handbook of Research on Teaching the English Language Arts*, 2nd ed., edited by J. Flood, D. Lapp, J. R. Squire, and J. M. Jensen, 752–85. Mahwah, NJ: Erlbaum.

- Beck, I. L., and M. G. McKeown. 1991. "Conditions of Vocabulary Acquisition." In *Handbook of Reading Research, Vol. II*, edited by R. Barr, M. Kamil, P. Mosenthal, and P. D. Pearson, 789–814. White Plains, NY: Longman.
- Biemiller, A. 2003. "Oral Comprehension Sets the Ceiling on Reading Comprehension." *American Educator* 27 (1).
- Blachowicz, C., and P. Fisher. 2004. "Vocabulary Lessons." *Educational Leadership* 61 (6): 66–69.
- Bowers, P. N., and J. R. Kirby. 2010. "Effects of Morphological Instruction on Vocabulary Acquisition." *Reading and Writing: An Interdisciplinary Journal* 23 (5): 515–37.
- Bravo, M. A., E. H. Hiebert, and P. D. Pearson. 2005. "Tapping the Linguistic Resources of Spanish/English Bilinguals: The Role of Cognates in Science." In *Vocabulary Acquisition: Implications for Reading Comprehension*, edited by R. K. Wagner, A. E. Muse, and K. R. Tannenbaum, 140–56. New York: Guilford Press.
- Brisk, M. E. 2012. "Young Bilingual Writers' Control of Grammatical Person in Different Genres." *Elementary School Journal* 112 (3): 445–68.
- Brown, A. L. 1980. "Metacognitive Development and Reading." In *Theoretical Issues in Reading Comprehension*, edited by R. S. Spiro, B. B. Bruce, and W. L. Brewer. Hillsdale, NJ: Erlbaum.
- Brown, A. L., and J. C. Campione. 1996. "Psychological Theory and the Design of Innovative Learning Environments: On Procedures, Principles, and Systems." In *Innovations in Learning*, edited by L. Schauble and R. Glaser, 289–325. Mahwah, NJ: Erlbaum.
- Bruner, J. S. 1983. *Child's Talk: Learning to Use Language*. New York: Norton.
- Calderón, M., D. August, R. Slavin, D. Duran, N. Madden, and A. Cheung. 2005. "Bring Words to Life in Classrooms with English-Language Learners." In *Teaching and Learning Vocabulary: Bringing Research to Practice*, edited by E. H. Hiebert and M. L. Kamil. Mahwah, NJ: Erlbaum.
- California Department of Education (CDE). 2010. *Improving Education for English Learners: Research-Based Approaches*. Sacramento: California Department of Education.
- Carlisle, J. F. 2010. "Effects of Instruction in Morphological Awareness on Literacy Achievement: An Integrative Review." *Reading Research Quarterly* 45:464–87.
- Carlo, M. S., D. August, B. McLaughlin, C. E. Snow, C. Dressler, D. Lippman, T. Lively, and C. White. 2004. "Closing the Gap: Addressing the Vocabulary Needs of English Language Learners in Bilingual and Mainstream Classrooms." *Reading Research Quarterly* 39 (2): 188–215.
- Cazden, C. B. 1986. "Classroom Discourse." In *Handbook of Research on Teaching*, 3rd ed., edited by M. C. Wittrock. New York: Macmillan.
- Celce-Murcia, M., ed. 2001. *Teaching English as a Second or Foreign Language*. 3rd ed. Boston: Heinle Thomson.
- Chall, J. S., V. A. Jacobs, and L. E. Baldwin. 1990. *The Reading Crisis: Why Poor Children Fall Behind*. Cambridge, MA: Harvard University Press.
- Christie, F., ed. 1999. *Pedagogy and the Shaping of Consciousness: Linguistic and Social Processes*. London, UK: Cassell Academic.
- . 2005. *Language Education in the Primary Years*. Sydney, Australia: UNSW Press.
- . 2012. *Language Education Throughout the School Years: A Functional Perspective*. West Sussex, UK: Wiley-Blackwell.
- Christie, F., and B. Derewianka. 2008. *School Discourse: Learning to Write Across the Years of Schooling*. London, UK: Continuum.
- Collins, M. F. 2005. "ESL Preschoolers' English Vocabulary Acquisition from Storybook Reading." *Reading Research Quarterly* 40 (4): 406–8.
- Council of Chief State School Officers. 2012. *Framework for English Language Proficiency Development Standards Corresponding to the Common Core State Standards and the Next Generation Science Standards*. Washington, DC: CCSSO.
- Council of Europe, Language Policy Unit. n.d. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge, UK: Cambridge University Press.

- Culican, S. J. 2007. "Troubling Teacher Talk: The Challenge of Changing Classroom Discourse Patterns." *The Australian Educational Researcher* 34 (2): 7-28.
- de Oliveira, L. C., and K. N. Dodds. 2010. "Beyond General Strategies for English Language Learners: Language Dissection in Science." *Electronic Journal of Literacy Through Science* 9. http://ejlts.ucdavis.edu/sites/ejlts.ucdavis.edu/files/articles/EJLTS%20liveria_Dodds%20Final.pdf (accessed October 14, 2013).
- Derewianka, B. 2011. *A New Grammar Companion for Teachers*. Sydney, Australia: Primary English Teaching Association.
- Dixon, L. Q., J. Zhao, J. Shin, S. Wu, J. Su, R. Burgess-Brigham, M. U. Gezer, and C. Snow. 2012. "Four Perspectives: What We Know About Second Language Acquisition: A Synthesis from Four Perspectives." *Review of Educational Research* 82 (1): 5-60.
- Duke, N. K., P. D. Pearson, S. L. Strachan, and A. K. Billman. 2011. "Essential Elements of Fostering and Teaching Reading Comprehension." In *What Research Has to Say About Reading Instruction*, 4th ed., edited by S. J. Samuels and A. Farstrup, 51-93. Newark, DE: International Reading Association.
- Dutro, S., and K. Kinsella. 2010. "English Language Development: Issues and Implementation at Grades Six Through Twelve." In *Improving Education for English Learners: Research-Based Approaches*. Sacramento: California Department of Education.
- Fang, Z., and M. Schleppegrell. 2010. "Disciplinary Literacies Across Content Areas: Supporting Secondary Reading Through Functional Language Analysis." *Journal of Adolescent and Adult Literacy* 53 (7): 587-97.
- Francis, D., M. Rivera, N. Lesaux, M. Kieffer, and H. Rivera. 2006. *Practical Guidelines for the Education of English Language Learners: Research-Based Recommendations for Instruction and Academic Interventions*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Gebhard, M., and J. Martin. 2010. "Grammar and Literacy Learning." In *Handbook of Research on Teaching the English Language Arts*, edited by D. Fisher and D. Lapp. Mahwah, NJ: Erlbaum/Taylor and Francis.
- Gebhard, M., J. Willett, J. Jimenez, and A. Piedra. 2010. "Systemic Functional Linguistics, Teachers' Professional Development, and ELLs' Academic Literacy Practices." In *Preparing All Teachers to Teach English Language Learners*, edited by T. Lucas, 91-110. Mahwah, NJ: Erlbaum.
- Genesee, F., K. Lindholm-Leary, W. M. Saunders, and D. Christian. 2006. *Educating English Language Learners: A Synthesis of Research Evidence*. New York: Cambridge University Press.
- Gersten, R., S. K. Baker, T. Shanahan, S. Linan-Thompson, P. Collins, and R. Scarcella. 2007. *Effective Literacy and English Language Instruction for English Learners in the Elementary Grades: A Practice Guide* (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Gibbons, P. 2006. *Bridging Discourses in the ESL Classroom: Students, Teachers and Researchers*. London, UK: Continuum.
- _____. 2008. "'It Was Taught Good and I Learned a Lot': Intellectual Practices and ESL Learners in the Middle Years." *Australian Journal of Language and Literacy* 31 (2): 155-73.
- _____. 2009. *English Learners, Academic Literacy, and Thinking: Learning in the Challenge Zone*. Portsmouth, NH: Heinemann.
- Goldenberg, C. 2008. "Teaching English Language Learners: What the Research Does—and Does Not—Say." *American Educator* 32 (2): 8-23, 42-44.
- Graves, M. F. 1986. "Vocabulary Learning and Instruction." In *Review of Research in Education*. Vol. 13, 49-90. Washington, DC: American Educational Research Association.
- _____. 2000. "A Vocabulary Program to Complement and Bolster a Middle-Grade Comprehension Program." In *Reading for Meaning: Fostering Comprehension in the Middle Grades*, edited by B. M. Taylor, M. F. Graves, and P. Van Den Brock. New York: Teachers College Press.
- _____. 2006. *The Vocabulary Book: Learning and Instruction*. New York: Teachers College Press.
- _____. 2009. *Teaching Individual Words: One Size Does Not Fit All*. New York: Teachers College Press and International Reading Association.

- Graves, M. F., D. August, and J. Mancilla-Martinez. Forthcoming. *Teaching Vocabulary to English Language Learners*. New York: Teachers College Press, International Reading Association, Center for Applied Linguistics, and Teachers of English to Speakers of Other Languages.
- Halliday, M. A. K. 1993. "Toward a Language-Based Theory of Education." *Linguistics and Education* 5 (2): 93–116.
- Halliday, M. A. K., and J. R. Martin. 1993. *Writing Science: Literacy and Discursive Power*. London, UK: Falmer Press.
- Halliday, M. A. K., and C. M. I. M. Matthiessen. 1999. *Construing Experience Through Meaning: A Language-based Approach to Cognition*. London, UK: Cassell.
- _____. 2004. *An Introduction to Functional Grammar*. 3rd ed. London, UK: Arnold.
- Hammond, J. 2006. "High Challenge, High Support: Integrating Language and Content Instruction for Diverse Learners in an English Literature Classroom." *Journal of English for Academic Purposes* 5 (4): 269–83.
- _____. 2008. "Intellectual Challenge and ESL Students: Implications of Quality Teaching Initiatives." *Australian Journal of Language and Literacy* 31 (2): 128–54.
- Hammond, J., and P. Gibbons. 2005. "Putting Scaffolding to Work: The Contribution of Scaffolding in Articulating ESL Education." *Prospect Special Issue* 20 (1): 6–30.
- Hart, B., and T. R. Risley. 1995. *Meaningful Differences in the Everyday Experiences of Young American Children*. Baltimore, MD: Brookes.
- Heath, S. B. 1986. "What No Bedtime Story Means: Narrative Skills at Home and in School." In *Language Socialization Across Cultures*, edited by B. Schieffelin and E. Ochs, 97–124. Cambridge, UK: Cambridge University Press.
- Heller, R., and C. L. Greenleaf. 2007. *Literacy Instruction in the Content Areas: Getting to the Core of Middle and High School Improvement*. Washington, DC: Alliance for Excellent Education.
- Hess, K. K., D. Carlock, B. Jones, and J. R. Walkup. 2009. "What Exactly Do 'Fewer, Clearer, and Higher Standards' Really Look Like in the Classroom? Using a Cognitive Rigor Matrix to Analyze Curriculum, Plan Lessons, and Implement Assessments." Presentation at Council of Chief State School Officers, Detroit, MI, June 2009. http://www.nciea.org/publications/cognitiverigorpaper_KH12.pdf (accessed October 15, 2013).
- Hinkel, E., ed. 2005. *Handbook of Research in Second Language Teaching and Learning*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hyland, K. 2004. *Genre and Second Language Writing*. Ann Arbor, MI: University of Michigan Press.
- Kieffer, M., and N. Lesaux. 2008. "The Role of Derivational Morphology in the Reading Comprehension of Spanish-Speaking English Language Learners." *Reading and Writing: An Interdisciplinary Journal* 21 (8): 783–804.
- _____. 2010. "Morphing into Adolescents: Active Word Learning for English-Language Learners and Their Classmates in Middle School." *Journal of Adolescent and Adult Literacy* 54 (1): 47–56.
- Klingner, J. K., S. Vaughn, M. E. Arguelles, M. T. Hughes, and S. A. Leftwich. 2004. "Collaborative Strategic Reading: "Real-World" Lessons from Classroom Teachers." *Remedial and Special Education* 25 (53): 291–302.
- Klingner, J. K., S. Vaughn, and J. S. Schumm. 1998. "Collaborative Strategic Reading During Social Studies in Heterogeneous Fourth-Grade Classrooms." *The Elementary School Journal* 99 (1): 1–22.
- Kosanovich, M. L., D. K. Reed, and D. H. Miller. 2010. *Bringing Literacy Strategies into Content Instruction: Professional Learning for Secondary Level Teachers*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Lesaux, N. K., M. J. Kieffer, S. E. Faller, and J. G. Kelley. 2010. "The Effectiveness and Ease of Implementation of an Academic Vocabulary Intervention for Linguistically Diverse Students in Urban Middle Schools." *Reading Research Quarterly* 45 (2): 196–228.
- Mariani, L. 1997. "Teacher Support and Teacher Challenge in Promoting Learner Autonomy." *Perspectives* XXIII (2).

- McCutchen, D., and B. Logan. 2011. "Inside Incidental Word Learning: Children's Strategic Use of Morphological Information to Infer Word Meanings." *Reading Research Quarterly* 46 (4): 334–49.
- Merino, B., and R. Scarcella. 2005. "Teaching Science to English Language Learners." *UCLMRI (University of California Linguistic Minority Research Institute) Newsletter* 14 (4).
- Moje, E. B. 2010. "Comprehending in the Content Areas: The Challenges of Comprehension, Grades 7–12, and What to Do About Them." In *A Comprehensive Look at Reading Comprehension, K–12*, edited by K. Ganske and D. Fisher, 46–72. New York: Guilford.
- Nagy, W., and D. Townsend. 2012. "Words as Tools: Learning Academic Vocabulary as Language Acquisition." *Reading Research Quarterly* 47 (1): 91–108.
- National Standards in Foreign Language Education Project. 2006. *Standards for Foreign Language Learning in the 21st Century*. 3rd ed. Lawrence, KS: Allen Press, Inc.
- O'Dowd, R. 2010. "Online Foreign Language Interaction: Moving from the Periphery to the Core of Foreign Language Education." *Language Teaching* 44 (3): 368–80.
- Painter, C. 1999. "Preparing for School: Developing a Semantic Style for Educational Knowledge." In *Pedagogy and the Shaping of Consciousness: Linguistic and Social Processes*, edited by F. Christie. London, UK: Continuum.
- Palincsar, A. S., and A. L. Brown. 1984. "Reciprocal Teaching of Comprehension-Fostering and Comprehension-Monitoring Activities." *Cognition and Instruction* 1 (2): 117–75.
- Pearson, P. D. 2011. "Toward the Next Generation of Comprehension Instruction: A Coda." In *Comprehension Going Forward*, edited by H. Daniels, 243–53. Portsmouth, NH: Heinemann.
- Quinn, H., O. Lee, and G. Valdes. 2012. "Language Demands and Opportunities in Relation to Next Generation Science Standards for English Language Learners: What Teachers Need to Know." Stanford, CA: Stanford University School of Education. <http://ell.stanford.edu/sites/default/files/pdf/academic-papers/03-Quinn%20Lee%20Valdes%20Language%20and%20Opportunities%20in%20Science%20FINAL.pdf> (accessed October 14, 2013).
- Reppen, R. 1994. "A Genre-Based Approach to Content Writing Instruction." *TESOL Journal* 4 (2): 32–35.
- Roessingh, H., and S. Elgie. 2009. "Early Language and Literacy Development Among Young English Language Learners: Preliminary Insights from a Longitudinal Study." *TESL Canada Journal* 26 (2): 24–45.
- Rose, D., and C. Acevedo. 2006. "Closing the Gap and Accelerating Learning in the Middle Years of Schooling." *Literacy Learning: The Middle Years* 14 (2): 32–45.
- Sato, E., R. Lagunoff, and P. Worth. 2008. *Language for Achievement: A Framework for Academic English Language*. San Francisco: WestEd.
- Sato, E., R. Lagunoff, and P. Yeagley. Forthcoming. *Academic Language and the Common Core State Standards: Implications for State and District Implementation and Supporting the Achievement of English Language Learners*. San Francisco: WestEd.
- Scarcella, R. 2003. *Academic English: A Conceptual Framework*. The University of California Linguistic Minority Research Institute Technical Report 2003-1. http://lmri.ucsb.edu/resdiss/2/pdf_files/scarcella_finalreport.pdf (accessed August 28, 2003).
- Schieffelin, B. B., and E. Ochs. 1986. "Language Socialization." *Annual Review of Anthropology* 15:163–91.
- Schleppegrell, M. J. 2004. *The Language of Schooling: A Functional Linguistics Perspective*. Mahwah, NJ: Lawrence Erlbaum Associates.
- _____. 2009. "Language in Academic Subject Areas and Classroom Instruction: What Is Academic Language and How Can We Teach It?" Paper prepared for the Workshop on the Role of Language in School Learning: Implications for Closing the Achievement Gap, October 15–16, Hewlett Foundation, Menlo Park, CA.

- _____. 2010. "Functional Grammar in the Classroom." In *Symposium 2009. Genrer och funktionellt språk i teori och praktik*, edited by M. Olofsson, 79–95. Stockholm, Sweden: Stockholm University Publishing.
- _____. 2012. "Academic Language in Teaching and Learning: Introduction to the Special Issue." *The Elementary School Journal* 112 (3): 409–18.
- Schleppegrell, M. J., M. Achugar, and T. Oteíza. 2004. "The Grammar of History: Enhancing Content-Based Instruction Through a Functional Focus on Language." *TESOL Quarterly* 38 (1): 67–93.
- Schleppegrell, M. J., and L. D. de Oliveira. 2006. "An Integrated Language and Content Approach for History Teachers." *Journal of English for Academic Purposes* 5:254–68.
- Shanahan, T., and C. Shanahan. 2008. "Teaching Disciplinary Literacy to Adolescents: Rethinking Content-Area Literacy." *Harvard Educational Review* 78 (1): 40–59.
- Short, D., J. Echevarría, and C. Richards-Tutor. 2011. "Research on Academic Literacy Development in Sheltered Classrooms." *Language Teaching Research* 15 (3): 363–80.
- Short, D., and S. Fitzsimmons. 2007. *Double the Work: Challenges and Solutions to Acquiring Language and Academic Literacy for Adolescent English Language Learners*. Washington, DC: Alliance for Excellent Education.
- Silverman, R. D. 2007. "Vocabulary Development of English-Language and English-Only Learners in Kindergarten." *Elementary School Journal* 107 (4): 365–83.
- Snow, C. E., J. Lawrence, and C. White. 2009. "Generating Knowledge of Academic Language Among Urban Middle School Students." *Journal of Research on Educational Effectiveness* 2 (4): 325–44.
- Snow, C. E., and P. Uccelli. 2009. "The Challenge of Academic Language." In *The Cambridge Handbook of Literacy*, edited by D. R. Olson and N. Torrance, 112–33. New York: Cambridge University Press.
- Spycher, P. 2007. "Academic Writing of Adolescent English Learners: Learning to Use 'Although'." *Journal of Second Language Writing* 16 (4): 238–54.
- _____. 2009. "Learning Academic Language Through Science in Two Linguistically Diverse Kindergarten Classes." *The Elementary School Journal* 109 (4): 359–79.
- Townsend, D., and P. Collins. 2009. "Academic Vocabulary and Middle School English Learners: An Intervention Study." *Reading and Writing* 22 (9): 993–1019.
- Tyler, A. 2010. "Usage-Based Approaches to Language and Their Applications to Second Language Learning." *Annual Review of Applied Linguistics* 30:270–91.
- Vaughn, S., J. K. Klingner, E. A. Swanson, A. G. Boardman, G. Roberts, S. S. Mohammed, and S. J. Stillman-Spisak. 2011. "Efficacy of Collaborative Strategic Reading with Middle School Students." *American Educational Research Journal* 48 (4): 938–64.
- Veel, R. 1999. "Language, Knowledge and Authority in School Mathematics." In *Pedagogy and the Shaping of Consciousness: Linguistic and Social Processes*, edited by F. Christie. London, UK: Continuum.
- Veel, R., and C. Coffin. 1996. "Learning to Think Like an Historian: The Language of Secondary School History." In *Literacy in Society*, edited by R. Hasan and G. Williams, 191–231. Harlow, Essex, UK: Addison Wesley Longman.
- Vygotsky, L. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, UK: Cambridge University Press.
- Walquí, A., and L. van Lier. 2010. *Scaffolding the Academic Success of Adolescent English Language Learners: A Pedagogy of Promise*. San Francisco: WestEd.
- Wells, G. 1999. *Dialogic Inquiry: Towards a Sociocultural Practice and Theory of Education*. New York: Cambridge University Press.
- Wong Fillmore, L., and C. J. Fillmore. 2012. "What Does Text Complexity Mean for English Learners and Language Minority Students?" Stanford, CA: Stanford University School of Education. http://ell.stanford.edu/sites/default/files/pdf/academic-papers/06-LWF%20CJF%20Text%20Complexity%20FINAL_0.pdf (accessed August 27, 2013).