

## **The Role of Language and Literacy in College- and Career-Ready Standards: Rethinking Policy and Practice in Support of English Language Learners**

### **Summary**

English is embedded throughout all college- and career-ready standards, including the widespread Common Core State Standards as well as the Next Generation Science Standards. To meet these standards, a student must possess and be able to demonstrate an understanding of the English language and any subject matter being considered.

By definition, the rapidly expanding population of English language learners (ELLs)—students who are in the process of acquiring language proficiency—will now be expected to learn new subject matter. For many, this could prove to be an insurmountable challenge. To aid ELLs in successfully reaching new college- and career-ready goals, teachers, principals, and district and state leaders need to re-envision curriculum, instruction, and assessment to help them access grade-level content while building their language proficiency.

States should ensure appropriate alignment between the English language proficiency standards and the new common core and college- and career-ready standards. Most importantly, leadership and vision are needed to act collectively to provide supportive policies, build educator capacity, and develop effective approaches to English learners' language and literacy instruction.

### **Introduction**

All students in the United States need to function fully in the English language to enjoy success in the modern American economy. English language learners (ELLs) should be held to the same rigorous expectations and provided commensurate opportunities for achievement in academic content areas as other students.<sup>1</sup> The challenge is to help ELLs learn and use language and literacy in ways that incorporate deeper learning competencies that include the mastery of academic content, creative and critical thinking, collaboration, communication, and self-reflection. As technology advances and the American economy becomes increasingly knowledge based, students need to graduate from high school with the skills and knowledge that allow them to learn, and then apply what they have learned, in novel and non-routine ways.

To better ensure that all students graduating from high school are prepared to go to college or enter the workforce, forty-six states and the District of Columbia are in the process of implementing the Common

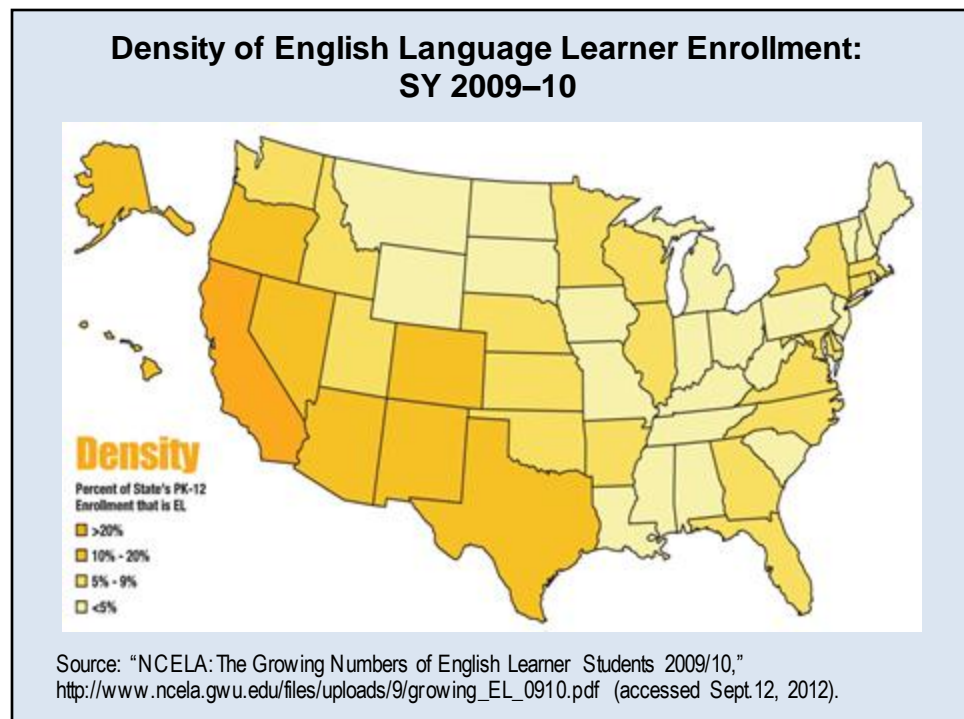
Core State Standards (CCSS), and another three states have adopted their own version of college- and career-ready standards in English language arts (ELA) and mathematics. Furthermore, twenty-six states are also working with Achieve, Inc., the National Research Council (NRC), and other leading professional organizations in developing the Next Generation Science Standards. These rigorous standards, which integrate multiple uses of language and literacy into the fabric of content-area learning, can significantly advance the quality of education and student outcomes. To make good on their promise, however, the goal must be to ensure that the powerful literacies associated with these college- and career-ready standards are accessible to all students.

For ELLs in particular, the academic language competencies embodied in the standards require systemic, district-wide approaches to curriculum design and instructional delivery that intertwine language development and content. The new standards are designed to bridge the gap that has long existed between language acquisition and content proficiency for ELLs. This potential will only be realized if policy leaders and practitioners carefully examine programs and practices and evaluate their impact on ELLs' progress in meeting the standards.

This policy brief describes the implementation of new college- and career-ready standards, with a focus on the implications for ELLs; discusses the challenges of language acquisition; and addresses the importance of connecting language proficiency and rigorous content standards for learners. It highlights a number of initiatives already under way to analyze the language demands embodied in the new standards, and outlines the substantive changes needed at the secondary school level. Finally, the report offers recommendations for state and local policymakers.

## **A Profile of English Language Learners**

Between 1980 and 2009, the number of school-age children who spoke another language in the home more than doubled, from 4.7 million (10 percent) to 11.2 million (21 percent).<sup>2</sup> Sixteen percent each of Hispanics and Asians spoke a non-English language at home and spoke English with difficulty.<sup>3</sup> These



numbers will continue to grow—more than half of all births in the United States are children of color, 26 percent of whom are Hispanic.<sup>4</sup> It is estimated that by 2020 half of all public school students will have non-English-speaking backgrounds.<sup>5</sup>

ELLs are a heterogeneous group consisting of various racial and ethnic groups, economic backgrounds, and ages and grade levels upon entrance into the United States school system. Fifty-seven percent of U.S. middle and high school



ELLs were born in the United States, and 43 percent were foreign born.<sup>6</sup> While almost 300 languages are spoken among students in U.S. public schools, the vast majority speak Spanish.<sup>7</sup> Data compiled for School Year (SY) 2006–08 shows that Spanish is the dominant language for students with limited English proficiency in forty-three states and the District of Columbia; nineteen states reported that 90 percent or more of ELLs were Spanish speakers.<sup>8</sup>

Despite forty years of federal investment in programs for English learners, language-minority students have not fared well in U.S. schools.<sup>9</sup> Many second- and third-generation adolescent learners who are educated exclusively in the United States continue to struggle with the use of language and literacy in secondary-level academic coursework. On the 2011 National Assessment for Educational Progress (NAEP) twelfth-grade reading exam, 77 percent of twelfth-grade English language learners performed below basic in reading compared with 27 percent of their non-ELL peers. Only 3 percent of twelfth-grade ELLs scored at or above the proficient level in reading.<sup>10</sup> The struggle continues for ELLs in other subjects, as evidenced by the 2009 NAEP science assessment, where 88 percent of twelfth-grade ELLs scored below basic; only 1 percent performed at or above the proficient level.<sup>11</sup>

Graduation rates for ELLs are more difficult to determine because of a lack of available data. For many English learners, family income status seems intertwined with language fluency in creating barriers to academic success. Researchers from the Migration Policy Institute conducted an examination of the trajectories of ELLs in Texas and found that poverty and access to college-ready academic opportunities were the most influential factors determining ELLs' graduation and postsecondary success.<sup>12</sup> In every state, nearly 60 percent of English learners live in families whose income falls below 185 percent of the federal poverty line, compared to 31 percent of adolescent English-proficient students.<sup>13</sup>

Policies at the state level have not fared much better than federal efforts, according to a decade of well-designed studies highlighting the serious shortcomings of state reforms to improve high school performance.<sup>14</sup> A number of studies on the effects of high school exams note alarming disparities in overall pass rates in many states that enroll large numbers of ELLs.<sup>15</sup> The reports chronicle a constellation of factors that call into question their access to equitable learning opportunities that would afford them passage to earning a diploma.<sup>16</sup> Corroborating these findings, the results of the 2009 NAEP High School Transcript Study show that 63 percent of ELLs who graduate from high school received a below standard curriculum, compared to one-quarter of non-ELL graduates.<sup>17</sup>

The lack of progress at both the federal and state levels can be attributed to the fact that educational policies neither leveraged fundamental shifts in the design of curriculum and instruction nor ensured systemic interventions and supports for English learners.

## **Rethinking the Challenge of Language Acquisition**

Beginning in the 1970s, policies and programs designed to address the “deficiencies” of ELLs often had a singular focus on language acquisition through English-only or English as a second language (ESL) programs.<sup>18</sup> Language instruction tended to follow a one-size-fits-all approach that placed a premium on grammar and correctness rather than understanding and communicating ideas. ESL curricula and instruction often ignored the distinctions in how language is used for academic purposes within a given subject as well as critical differences in the needs and aspirations of individual English learners. Acquiring academic English language skills often requires four to seven years, depending on a student's native language, English language proficiency, age/grade of entry, and prior educational experience.<sup>19</sup>



Under Title III of the Elementary and Secondary Education Act, currently known as the No Child Left Behind Act, ELL membership is straightforward—a student is either in or out—and meant to be temporary. Children who score below English proficiency levels determined by each state are entitled to appropriate services and instructional programs and funding to reach predetermined language and academic targets in math and reading. States and districts are held accountable for ELLs’ progress toward English proficiency and their achievement on state assessments of academic content.

Unfortunately, secondary education has served more as a barrier than an opportunity for many English learners. In the face of growing demographic diversity, many secondary schools—particularly in large urban districts serving high concentrations of low-income students and students from diverse cultural and linguistic backgrounds—tend to reduce the cognitive demands in secondary-level courses and provide limited opportunities for students to speak, read, and write about the content they are learning. Too often, developing language proficiency focuses on “content-free” tasks isolated from opportunities to hear and learn language from other students and teachers within subject-area classrooms. Studies have chronicled a steady downward trend overall in the complexity and academic rigor of reading and writing assignments since the 1960s.<sup>20</sup> High school students are rarely asked to complete writing assignments involving analysis and interpretation; a national survey showed that assignments requiring more than a single paragraph occurred less than once a month in half of all high school classes.<sup>21</sup>

Over this same time period, advances in cognitive science reveal a great deal about how learners use prior knowledge, arrange facts and construct meaning, develop patterns of reasoning, and make inferences within a specific discipline.<sup>22</sup> Learning subject matter and work skills involves using language to structure understanding and core knowledge, to connect concepts with other understandings, and to practice multiple literacy skills within meaningful content-rich activities.

## **Understanding Language Within the Disciplines**

The developers of the CCSS understood the critical connections between language, literacy, and content learning. They developed ELA standards for grades six through twelve that combine language capacities within specific disciplines—mathematics, social studies, and science. The standards lay out the expectations for speaking, listening, reading, and writing skills necessary for a literate person in the twenty-first century. The understanding and sophisticated uses of language for academic purposes have wide applicability, not only in the classroom and the workplace but also for encouraging responsible citizenship and shaping a global perspective.<sup>23</sup>

Students must engage with informational texts, use evidence in writing and research, and work collaboratively to present ideas and communicate multiple perspectives. As they proceed through school, students must grasp ever-increasing layers of language complexity and ideas in order to acquire subject-specific content knowledge. To meet these performance expectations, students must use the language and conventions appropriate for a specific academic area. For example, the math standards require students to construct viable arguments and critique the reasoning of others. Arguments in mathematics depend on the precise use of unique expressions that are not a natural extension of ordinary language.<sup>24</sup> The integration of the ELA standards within a given content area raises expectations for students’ use of language to explain concepts and relationships that become progressively more abstract throughout schooling. Consequently, the new standards require a shared responsibility for students’ language development among secondary school teachers, who must use their disciplinary expertise to help students learn the language knowledge and skills of their respective fields.<sup>25</sup>

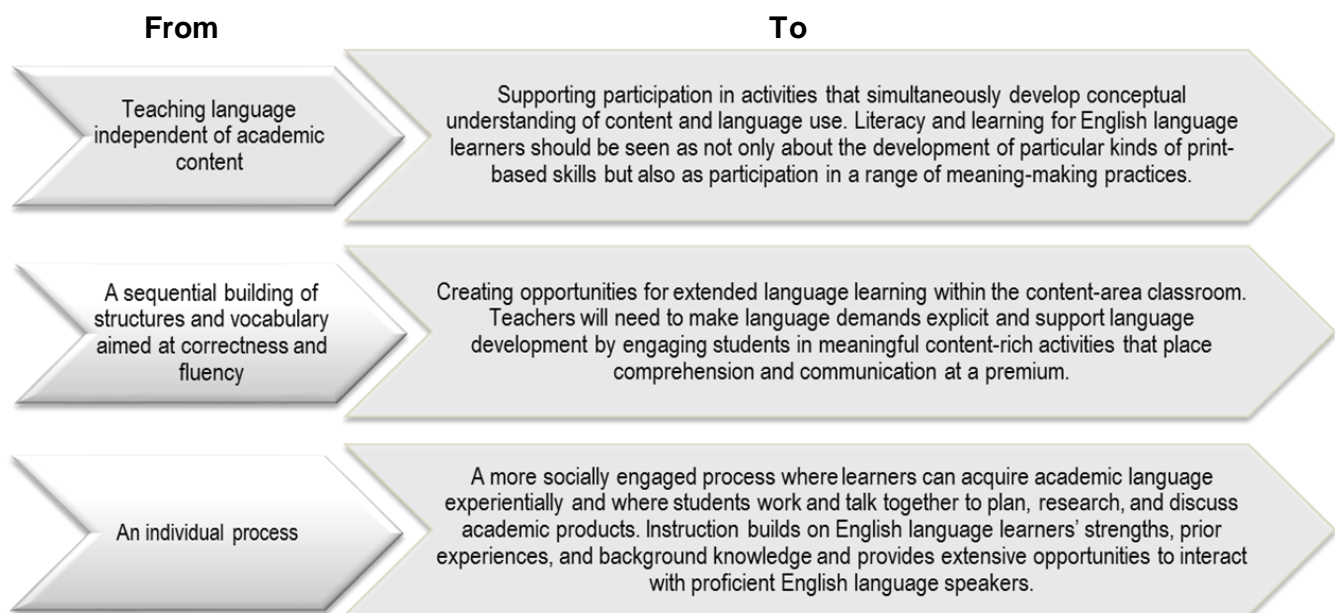


To improve the outcomes for the growing numbers of English language learners, Stanford University, with support from Carnegie Corporation and the Bill and Melinda Gates Foundation, launched a two-year initiative, “Understanding Language: Language, Literacy, and Learning in the Content Areas.”<sup>26</sup> The first step of the initiative was commissioning a set of papers for presentation at a major national conference held at Stanford University in January 2012. These papers provide a comprehensive analysis of the language demands contained in the new standards. Their core message is that standards implementation demands aggressive state and district action to develop system-level strategies to interweave literacy development across the curriculum. A singular focus on language acquisition independent of content learning is insufficient and ineffective. A central goal of the initiative is to draw attention to the critical shifts in instructional practice that are essential to improve ELLs’ language and content learning, as shown in the figure on the following page. Kenji Hakuta, the Lee L. Jacks Professor of Education and cochair of Understanding Language at Stanford University, said,

The Common Core and the Next Generation Science Standards are of special interest to those of us concerned with English language learners because of the emphasis that they place in articulating the content standards in language-rich ways. The ways in which teachers and students are expected to use language to convey understanding of content are strongly highlighted in the standards. This presents both a challenge and an opportunity to advance English language development for English language learners by paying attention to improved instruction in the content areas.<sup>27</sup>

How can teachers help ELLs handle materials that are more demanding than what already seems difficult enough? What will encourage secondary-level teachers to employ different contexts and instructional approaches to deeply engage all students in acquiring language through extended discourse, thinking and rethinking, explaining, and clarifying the ideas specific to a subject area? Clearly, all of these shifts place new demands on teacher capabilities and imply a significant change in how high schools are organized to provide an equitable and inclusive approach to teaching students with diverse language needs.

**Figure 1: Instructional Shifts to Improve ELLs’ Language and Content Learning**



Unfortunately, many secondary schools spent the last decade calibrating their practices to a system that was focused on moving only a few more students each year over a low, fixed bar on state tests. This strategy entrenched ineffective approaches to teaching subject matter. Low-level task assignments and inconsequential teacher-student interactions contributed to adolescents' growing disengagement with school after grade five.<sup>28</sup> A 2006 survey examining why students dropped out of school found that 70 percent said they were disengaged from their classes.<sup>29</sup> Students facing the additional hurdle of not understanding the language of instruction understandably disengage even faster than their non-ELL peers.

The adoption of college- and career-ready standards provides an opportunity to reimagine the core instruction in high school classrooms that has left large numbers of students—not just those identified as ELLs—struggling to achieve grade-level performance. Leadership and vision are needed to provide the conditions and capacity for all educators working within and across schools to develop the deep understanding of content and instructional strategies central to attaining the standards. For example, as noted by the NRC, “Learning science is something that students do, not something that is done to them.”<sup>30</sup>

The NRC's *Framework for K–12 Science Education* identifies eight inquiry-based practices in science and engineering that are accompanied by the language-based performance expectations articulated in the ELA standards.<sup>31</sup> These inquiry-based approaches encourage *doing with understanding* rather than focusing on broad content coverage and recall of discrete facts. Language permeates the inquiry practices and represents a major shift in science instruction toward an explicit focus on conceptual understanding, language use, and scientific practices. The content, performance, and language demands of these new science standards will challenge *all* students and even more so learners with limited English proficiency. Carefully designed curriculum, evidence-based strategies, and language-focused instruction will be essential to making content and language accessible to English learners.

The science framework focuses on a limited set of core ideas to prepare students for broader understanding and deeper levels of investigation. It is designed to actively engage students in scientific and engineering practices and apply crosscutting concepts of the field.<sup>32</sup> The standards call for students to design and use models; develop explanations and solutions; engage in argument for evidence; and obtain, evaluate, and communicate information.<sup>33</sup> In addition, the ELA standards for literacy in science for grades six through twelve emphasize this critical connection between academic uses of language and understanding the key practices and ideas. For example, by grade twelve, students are expected to be able to summarize complex concepts or processes, construct explanations of natural phenomena, and integrate and evaluate multiple sources of information presented in diverse formats and media.<sup>34</sup>

### Framework for K–12 Science Education

The Committee on a Conceptual Framework for New K–12 Science Education Standards of the National Research Council developed *A Framework for K–12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* to articulate a broad set of expectations for students in science built around three major dimensions:

- scientific and engineering practices (e.g., asking questions, developing models);
- crosscutting concepts that unify the study of science and engineering through their common applications across fields (e.g., patterns, cause and effect, structure and function); and
- core ideas in four disciplinary areas: physical sciences; life sciences; earth and space sciences; and engineering, technology, and applications of science.

Source: National Research Council, Committee on a Conceptual Framework for New K–12 Science Education Standards, *A Framework for K–12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* (Washington, DC: National Academies Press, 2012), [http://www7.nationalacademies.org/bose/Frameworks\\_Report\\_Brief.pdf](http://www7.nationalacademies.org/bose/Frameworks_Report_Brief.pdf) (accessed September 12, 2012).



In order to build precise arguments using claims and evidence, students must understand and use a technical vocabulary that is peculiar to each science discipline. (Words such as “force” and “energy,” for example, have science-specific meanings that differ from how they are used in everyday language.) In addition, science texts employ unique structures to convey information more economically and precisely. Readers encounter dense phrasing, complex content packed into shorter sentences, and multiple modes of representations using graphs, charts, tables, maps, and equations. Developing concepts and correct scientific language usage will depend on purposeful activities to call attention to how language is used to communicate in science.<sup>35</sup>

Curriculum developers, content-area teachers, and English language specialists will need to design curricula and instruction with careful attention to making the language of science accessible to ELLs while improving their proficiency in using it.

## **Implications for Curriculum and Instruction for English Language Learners**

Significant improvements in ELLs’ language and content-area learning require a major shift to coursework that promotes discourse-rich, experiential learning, in which the learner has opportunities to interact and reflect on information and ideas through observation and inquiry. Research on learning also shows that embedding explicit instruction of core concepts into meaningful discussions and reading and writing activities aids deeper learning.<sup>36</sup> This is not a trivial exercise. States and districts need to find ways to engage content and English language specialists in creating curriculum, instruction, and formative assessments aligned to the depth and skills of the standards.

What major steps must be taken to make the standards accessible to teachers and English language learners? Educators need systemic structures and processes to collectively

- examine the standards and know the kinds of tasks students must undertake;
- understand the shifts required to support the deeper content, performance, and language demands expected of the students; and
- develop a foundational understanding of content pedagogy that incorporates an understanding of the specific language of the discipline.<sup>37</sup>

The new standards are built on the idea that learning is a developmental progression—that is, there is a progressive sequence in which most students acquire specific core concepts and skills within a subject area.<sup>38</sup> For example, the NRC’s *Framework for K–12 Science Education* outlines a coherent progression of a limited number of core ideas, allowing teachers and students to explore each idea in greater depth over multiple years.<sup>39</sup> Armed with well-defined learning progressions, teachers must first define the tasks students will need to undertake and then evaluate both the content and the language demands that successful task completion requires. To provide consistent support for ELLs, teachers should work with other educators and specialists to determine what content students need to know in order to enter into the task. What language must they understand and be able to use? What formative assessments can help teachers assess and students self-assess their progress toward language and learning goals?<sup>40</sup>



## **Formative Language Assessment Records for English Language Learners (FLARE)**

The FLARE project, a three-year grant funded by Carnegie Corporation of New York, is designed to help secondary-level teachers serve English language learners by developing a valid formative assessment system. The goal is to improve the learning and achievement of ELLs by providing teachers with practical tools for keeping English learners on track for language development and academic success. To this end, the project created language learning progressions: matrices of content-specific, sequential language learning goals, organized across two grade-level clusters (grades six to eight and nine to twelve) and into four content areas—language arts, mathematics, science, and social studies. In addition, the project designed a formative assessment toolbox—samples of formative assessments with scored student work—to support teachers’ development of formative assessments for ELLs.

Teachers can use the language learning progressions to set and evaluate short-term language goals through a combination of tasks and tools such as rubrics, checklists, and rating scales—guided by the assessment toolbox. FLARE focuses on teachers’ assessment literacy and their ability to create and use ongoing, embedded assessments based on best practices grounded in research. Assessments should

- provide examples of good work;
- highlight gaps in student learning and provide directions for addressing those gaps;
- seamlessly integrate with external standards and summative assessments; and
- incorporate a rigorous professional development program for teachers.

To design and validate the formative system, the project works with three partner districts: Charlotte-Mecklenburg, North Carolina; Chicago, Illinois; and Garden Grove, California.

Sources: World-Class Instructional Design and Assessment, “Measuring Language Development for Student Success,” <http://www.flareassessment.org> (accessed September 12, 2012); Gary Cook, personal communication, August 30, 2012.

The science framework reflects the leading thinking on the nature of science and engineering education needed in the twenty-first century. In emphasizing major inquiry practices such as asking questions and analyzing and interpreting data, science learning calls for students to actively use and apply knowledge and should integrate conceptual understanding and language use with others. The NRC recommends using an integrated science literacy curriculum that combines collaborative, hands-on inquiry activities with reading text, writing notes and reports, and small group discussions.<sup>41</sup>

Teachers will need to be prepared to know the language demands of specific tasks and to apply a range of language-support strategies to call attention to language in the course of using it. Teachers must develop a deep knowledge of the vocabulary and language functions for their content area and then structure multiple opportunities in the classroom for students to use language. Most importantly, language instruction as part of content-area learning should focus on discipline-specific concepts rather than overemphasizing syntax and grammatical form.<sup>42</sup>





## Framework for English Language Proficiency Development Standards

States are deeply involved in implementing college- and career-ready state standards in English language arts (ELA) and mathematics and developing aligned assessments. The ELA and math standards spell out the sophisticated language competencies that students will need to perform in the respective academic subject area. English language learners face a double challenge—they must simultaneously acquire enough of a second language to participate and gain knowledge and skills in an academic setting while learning the knowledge and skills in multiple disciplines through that second language. States must ensure that their English Language Proficiency (ELP) standards support ELLs in meeting these new college- and career-ready expectations. Once the Next Generation Science Standards are completed, states adopting them will also need to incorporate the language demands of the science standards into their ELP standards.

ELP standards, if they are to correspond to a state's college- and career-ready standards, must be examined closely to determine the degree of support they provide ELLs in helping them access grade-level content while building their language proficiency. The Council of Chief State School Officers and the English Language Proficiency/Development (ELPD) Framework Committee led the development of an ELPD framework in collaboration with the Council of Great City Schools, the Understanding Language Project at Stanford University, and World-Class Instructional Design and Assessment, with funding support from Carnegie Corporation of New York.<sup>a</sup> The ELPD framework

- outlines the underlying English language practices and uses found in the Common Core State Standards in ELA and mathematics and the Next Generation Science Standards;
- communicates to ELL stakeholders the language that all ELLs must acquire in order to successfully engage in the standards; and
- sketches out a procedure by which to evaluate the degree of alignment between the ELPD framework and the ELP standards under consideration or adopted by states.

## Assessment Services Supporting English Learners Through Technology Systems

A twenty-nine-state consortium—Assessment Services Supporting English Learners Through Technology Systems (ASSETS)<sup>b</sup>—is developing an online assessment to measure student progress in attaining English language skills based on English language proficiency standards aligned to the Common Core State Standards. Proficiency standards describe the academic language development needed to reach proficiency in the general language of the classroom as well as in the content areas. This effort, funded through September 2015 by the U.S. Department of Education's enhanced-assessment instrument grant, is led by the Wisconsin Department of Public Instruction and the World-Class Instructional Design and Assessment, housed in the Wisconsin Center for Education Research at the University of Wisconsin–Madison. The consortium will create

- technology-based summative, benchmark, screener, and formative assessments;
- a shared definition of English language proficiency;
- professional development related to the administration and use of the assessment; and
- analyses of its design, implementation, and use.

<sup>a</sup> Council of Chief State School Officers and the English Language Proficiency/Development Framework Committee, [Framework for English Language Proficiency/Development Standards](#). <sup>b</sup> See <http://dpi.wi.gov/oea/assets.html>.

Grouping students and structuring tasks should be based on careful evaluation of students' language proficiency and what they already know and do in relation to skill targets and progressions. Teachers employ flexible and fluid grouping structures, both homogeneous and heterogeneous, to advantage students' language proficiency, literacy skills, and prior knowledge.<sup>43</sup> Teachers must break down difficult tasks into manageable segments, facilitate productive discussions, provide meaningful and appropriate feedback, and explicitly model and support student production of language. They should provide instructional support to students in close reading of complex text by using extensive pre-reading activities and conversations to leverage English learners' existing background knowledge. In addition,



students gain access to the concepts, vocabulary, and ideas encoded in complex text through multiple opportunities during and after reading to engage in sense making with their classmates and teachers.<sup>44</sup>

Finally, a range of approaches is needed to build bridges between students' native language knowledge, cultural assets, prior knowledge, and evolving acquisition of English in an academic context.<sup>45</sup> Teachers must be able to scaffold instruction—that is, systematically sequence prompted content, tasks, and teacher and peer support until students can apply new skills and strategies independently.<sup>46</sup> These practices apply across delivery models designed to serve ELLs such as sheltered instruction, dual immersion, transitional bilingual education, ESL, and general education classrooms.<sup>47</sup>

### Key Strategies for Language and Content Learning

Given the growing number of English language learners, all teachers must learn to

- *draw on background knowledge and experiences*—expand on students' home languages, culture, and prior knowledge to make content meaningful and to accelerate language transfer;<sup>a</sup>
- *provide opportunities for extended discourse and collaborative learning with teachers and peers*—encourage students to communicate and reflect about ideas and to engage with others even though developing language will be marked by “non-native” or imperfect features of English;<sup>b</sup>
- *communicate clearly to ELLs academic expectations and model strategies to increase their independence and self-monitoring*—use interventions and instructional routines to hone in on specific precursor competencies and knowledge that students need to progress toward mastery;<sup>c</sup>
- *provide explicit instruction in vocabulary and academic uses of language*—guide students' use of language in context and employ the students' own language, culture, and experiences (e.g., draw attention to cognates—words that have similar spellings and meanings in two languages, such as “assimilate” in English and “asimilar” in Spanish);
- *build strategic competence by teaching students to engage with text in multiple ways*—foster strategic questioning, summarizing, and self-monitoring for understanding, and provide explicit instruction to help students focus on vocabulary, language, and text structures;
- *engage in close reading of shorter amounts of informational text*—model and guide practice in answering text-dependent questions and using evidence to structure an oral or written argument;
- *ensure that writing instruction creates meaningful opportunities to communicate rather than mechanical exercises for text production*—provide substantive modeling and feedback at multiple points throughout the writing process;
- *employ multiple ways to help students access content and perform tasks*—use graphic organizers, visuals, models, drawings, diagrams, tables, equations, pictures, graphs, and charts to increase access to content and understanding of text;<sup>d</sup>
- *use diagnostic and formative assessment to continually assess learning*—monitor students' progress, guide the design of learning opportunities, provide specific feedback about how to improve performance, and encourage students to reflect on their own learning and thinking; and
- *use digital media and principles of universal design of learning (UDL)<sup>e</sup> to reduce learning barriers*—apply learning technologies to increase access to content in a variety of forms and differentiate the ways that students can express what they know. UDL is an educational framework based on cognitive and learning sciences that can guide the development of flexible learning environments and accommodate individual learning differences.

<sup>a</sup> G. Bunch, A. Kibler, and S. Pimentel, “Realizing Opportunities for English Learners in the Common Core English Language Arts and Disciplinary Literacy Standards,” paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA; M. Santos, L. Darling-Hammond, and T. Cheuk, “Teacher Development Appropriate to Support English Language Learners,” paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA. <sup>b</sup> Ibid.; see <http://dpi.wi.gov/oea/assets.html>. <sup>c</sup> Understanding Language, “Key Principles for ELL Instruction,” forthcoming at <http://ell.stanford.edu>. <sup>d</sup> Ibid. <sup>e</sup> See <http://www.cast.org/udl>.



## **Creating a Culture of Learning for English Language Learners**

Advances in cognitive science indicate that learning for teachers and students takes place in a social context—where learners come to understand themselves as part of a community of learners.<sup>48</sup> For ELLs as for all students, high schools must be diligent and intentional in creating a culture conducive to high levels of interaction. Learning environments must value and reward the search for understanding and allow students and teachers the freedom to collaborate and learn from mistakes.<sup>49</sup> Unwritten norms of classroom instruction that call out student errors hinder English learners' willingness to ask questions or solicit help when they do not understand the material or need help in conveying their ideas. The objective is to establish norms of practice that encourage English learners to engage fully in meaningful content-rich activities through inquiry, reflection, and revision in collaboration with their peers and within a culture of respect.

Powerful learning environments provide English learners with rich, authentic tasks that bridge content-area learning with language and literacy development. Teachers teach less, facilitate more peer-to-peer learning, and slow down the pace of instruction to examine core ideas and their application in depth. Teachers plan flexible groupings based on students' primary language, English literacy, and/or science literacy. They connect instruction to students' prior experiences and offer choices to motivate their engagement.

For example, ELLs may have the option to use their language of choice for peer-assisted learning and problem solving in order for the focus to stay on the science content. At the same time, teachers provide a variety of ways for students to learn new concepts and communicate with their peers in order to maximize their opportunities for language repetition, elaboration, and practice.<sup>50</sup> Researchers from City University of New York examined the impact of a successful model of peer instruction on the achievement of secondary ELLs.<sup>51</sup> The Peer Enabled Restructured Classroom (PERC),<sup>52</sup> designed to help underperforming urban students in science and math classes, harnesses collaborative learning strategies incorporated within a peer-teaching model. English learners participating in PERC performed on par with their native English-speaking classmates on the New York Regents exams that are required for high school graduation.

Regarding the Next Generation Science Standards, Okhee Lee, professor of education at Steinhardt School of Culture, Education, and Human Development at New York University, writes, "The teacher must define and facilitate a classroom culture of discourse. This culture should be inclusive, accepting contributions for their meaning and value in the discourse however flawed or informal the language of the speaker. It should support students to maintain a spirit of shared sense-making and discovery while they question others, ask for further explanation, and provide arguments that refute an idea expressed."<sup>53</sup>

In addition, emerging learning technologies should enable teachers to amplify and extend relevant instructional time for ELLs. Digital tools can increase access to content anywhere and anytime, provide multi-modal approaches to learning vocabulary and content, support language acquisition, expand practice opportunities, and deliver timely feedback. The application of the principles of universal design of learning (UDL)—a framework based on cognitive and learning sciences—is an important aspect to the effective use of technology.<sup>54</sup> UDL provides a blueprint for customizing learning and integrating a number of features that can reduce learning barriers for ELLs. These design features allow students to access content in a variety of forms and express what they know through different means.



High-quality digital tools can provide teachers and students with formative analyses of learning and language development based on detailed learning measures and captured within a learning management system. The access to information collected in real time supports ongoing diagnosis and feedback to tailor the nature and pace of instruction. Students can exercise greater control over their own learning by demonstrating their knowledge and skills using a range of multimedia software. This intense focus on the learner, which calls for ongoing monitoring and personalization of learning, can help ensure that English learners receive the academic and developmental supports they need.

## **Organizing High Schools for Professional Learning**

These shifts in practice rely on teachers' deep content expertise and discipline-specific pedagogical practice along with their understanding of language and literacy development. Even though the body of evidence with regard to language acquisition, content learning, and literacy instruction has expanded greatly in recent years, this knowledge base has not had a profound impact on secondary teaching practice.<sup>55</sup> For example, implementation studies show that many high school teachers are ineffective in using a range of proven reading and writing strategies within their content area.<sup>56</sup> Too often they lack an in-depth knowledge of the content frameworks that they are required to teach along with the skills to integrate language development and literacy strategies within their respective subject areas.<sup>57</sup>

Data from multiple sources shows an overall pattern of poorly designed and implemented professional improvement practices even in states where policies on staff development exist. In 2004, more than 60 percent of U.S. teachers responding to the School and Staffing Survey (SASS) reported that they had not even had one day of training in supporting the learning of ELLs during the previous three years.<sup>58</sup> The 2008 SASS data showed further decline in the percentage of teachers receiving more than eight hours of training in teaching ELLs in a three-year period—from 36 percent in 2004 to 20 percent in 2008.<sup>59</sup>

These findings have important implications for policy and underscore the imperative to redesign and strengthen the clinical components of teacher preparation and professional development. The new expectations for student learning require education systems to equip all teachers with what is known about how the standards can be learned, taught, and assessed.<sup>60</sup> Moreover, states bear the primary responsibility for ensuring that teachers and school leaders have the essential knowledge and skills to provide ELLs with effective language and content-area learning. States can use their authority for program approval of preparation programs, initial and advanced licensure, and evaluation systems to make sure that the special needs of ELLs are addressed. In addition, supportive policies could institute the use of performance assessments to require prospective teachers to demonstrate the skills they need to support ELLs and hold all preparation programs accountable for the performance of their graduates in the classroom.

A 2012 analysis by the Center for American Progress reveals that in the majority of states, existing teacher education policies make limited reference to the specific needs of ELLs.<sup>61</sup> The report also notes that in a number of states with large ELL populations, legal action impelled major changes in how teachers are prepared to teach English learners. For example, a class action suit was launched in Florida to redress inequities in the education of ELLs. As a result, the state implemented rigorous requirements for coursework for ESL, general education, and subject-area teachers based on evidence of effective ELL instruction. The report notes that since implementation began in 2003, Florida's ELLs made impressive gains on the ensuing NAEP reading assessments relative to other high-density ELL states.<sup>62</sup>



Furthermore, practicing teachers must engage with their colleagues through discussion and peer observation to design and rigorously assess high-leverage instruction to accelerate language and content learning. Improving the performance of ELLs requires teachers to shift their thinking about what effective teaching practice looks like, why students struggle to succeed, and what is needed to improve language and content learning. The press to improve ELLs' educational attainment affords an enormous opportunity to work toward a shared notion of good teaching, establish points of focus for training and support, and align systems of assessing practice and providing feedback.

### **Marble Hill High School (Bronx, NY)**

Drawing on data from fourteen high schools, a report by the Center for Research on the Context of Teaching at Stanford University provides evidence of the effectiveness of the outcomes of an inquiry-based approach called the Scaffolded Apprenticeship Model (SAM).<sup>a</sup> The study provides a case study of one of these high schools, Marble Hill High School, a small college preparatory school in the Bronx, which served 430 mostly low-income students in grades nine through twelve; 34 percent were ELLs. Over a four-year period, Marble Hill greatly improved their achievement using SAM. This inquiry-based approach integrates leadership development and professional learning in order to shape a culture of collaborative, evidence-based practice focused on accelerating the achievement of struggling learners. The core principles involve creating a "culture of assessment use," whereby teaching staff collectively moved toward using more detailed learning measures to identify the learning gaps of a number of struggling students. Lead teachers helped their colleagues analyze and improve their instructional skills by examining curricula and observing classroom teaching.

The team began its inquiry cycle by analyzing eleventh- and twelfth-grade transcripts to identify thirty-six ELLs in eleventh grade who were under-credited, with interrupted formal education, and/or recently arrived in the United States. The SAM teams led colleagues to transform how they think about academic weaknesses and how they use assessment data to advance the language and content learning of the target students. The SAM teams focused on shaping high-leverage practice to connect content and pedagogy that required focus, knowledge, persistence, and consistency.

The success of the model depended on navigating colleague resistance while facilitating teacher learning. Teams challenged assumptions and surfaced practices that limit student success. By "going small," pinpointing the specific skill gaps of individual students, and observing peer teaching, SAM increased attention to the link between student performance and instruction. Teams reviewed formative data collected every four to six weeks, shared promising practices with colleagues, and engaged students in analyzing their data and setting learning goals.

Only about 35 percent of students entered the school with ELA scores at proficient or above. Among such students in eleventh grade in SY 2008–09, over 80 percent were on track to graduate or attend college—more than double the percentage on track in tenth grade and about 30 percent more than in ninth grade. Marble Hill's eleventh graders who entered the school with weak English language skills far exceeded the performance of similar eleventh graders in nonparticipating SAM comparison schools (more than 80 percent versus 45 percent). The school's high four-year graduation rate—estimated at 95 percent for SY 2007–08—provides strong evidence of the effectiveness of the inquiry-based model.

<sup>a</sup> J. Talbert et al., *Leadership Development and School Reform Through the Scaffolded Apprenticeship Model (SAM)* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2009).



High school leaders who take on the challenge of leading a learner-centered culture must deeply understand the problems of organizational and instructional change. Fundamentally shifting core instructional practice will require

- designing structures for all teachers to share responsibility for ELLs' language development and conceptual understanding;
- ensuring that teachers receive training and support to expand students' engagement in using language as part of content-rich tasks; and
- using formative and benchmark measures to identify students' knowledge and academic language competencies and guide instructional practice.<sup>63</sup>

## **Policy Implications**

During the past two decades of standards-based reform, policymakers anticipated that state standards not only would define what students needed to learn but also would improve how teachers taught. Unfortunately, years of almost-stagnant graduation rates and proficiency levels show that these good intentions have not been realized, particularly at the secondary level. The good news is that emerging research and practice provides rigorous evidence that transforming high school learning environments can significantly improve the outcomes for English learners.

High schools that are purposefully organized around smaller, personalized units of adults and students where teachers have opportunities to collaborate in the design of curriculum and instruction can make a significant difference in the outcomes for students from different linguistic and cultural backgrounds.<sup>64</sup> Reaching the levels of attainment spelled out in the new standards will require concerted strategic action on the part of states and districts.

## **State-Level Recommendations**

### **College and Career Readiness**

1. States should ensure robust implementation of college- and career-ready standards through close alignment of curriculum, assessments, and professional development with these standards. States should also develop and adopt English Language Proficiency (ELP) standards that incorporate the language demands in the college- and career-ready standards.
  - a. States should utilize the Council of Chief State School Officers' *English Language Proficiency Development Framework* as a tool to align or develop ELP standards that draw on the language demands in the Common Core State Standards and the forthcoming Next Generation Science Standards. All state ELP standards should articulate the fundamental language practices that ELLs must learn as they acquire the specific content areas covered by the standards. The ELP standards should aid both ESL and content teachers in diagnosing students' language skills, adjusting instruction accordingly, and closely monitoring ELLs' progress.
  - b. States should adopt a common definition of Limited English Proficiency (LEP) status and set common criteria for identifying these learners and tracking their performance based on assessments of English language development and content knowledge aligned to the standards. Assessment systems based on college- and career-ready standards, including the systems being developed by the Partnership for Assessment of Readiness for College and Careers and the



Smarter Balanced Assessment Consortium as well as state ELP assessments, must validly measure the language demands that accompany the standards.

2. States should support flexible pathways by which ELLs can successfully transition through language development programs and into the regular curriculum. English learners benefit from a range of program options to support language acquisition along with access to a college- and career-ready program of studies. Expectations for ELLs should go beyond the basic outcome of achieving English language proficiency, and should include the opportunity to participate in a rigorous academic curriculum alongside their non-ELL peers in order to reduce their linguistic isolation. Access to college-ready academic opportunities and dual credit programs that let students gain secondary and post-secondary level credits at the same time boost chances of college enrollment.<sup>65</sup>

### **Teacher Effectiveness**

1. States should strengthen teacher preparation—both university based and alternative programs—by including substantial clinical experiences and developing curricula to prepare teachers of ELLs. Program design and credential requirements should specify requirements to ensure that teachers are competent in addressing both the content and academic language needs of ELLs.
2. States should ensure that ELLs have equitable access to effective teaching by enforcing requirements that teachers are fully certified to teach ELLs. States should establish requirements that content-area teachers working with ELLs possess the knowledge and skills to teach their content specialties to English learners.
3. Substantial improvements are needed to ensure better preparation, coaching, and ongoing professional development for all teachers of ELLs. Teacher performance assessments and evaluation systems should assess educators' competencies in using evidence-based practices to support ELLs' language and content learning. District and school leaders should foster a culture of collegial collaboration in the pursuit of high-impact, evidence-based practices consistent with the extensive research on language development, effective instructional strategies, and assessment of ELLs.

### **Use of Data**

1. States should increase the systems that enable schools to access and analyze data relevant to ELLs' performance and progress. In addition to meaningful accountability for language proficiency and content-area achievement, states, districts, and schools should build the capacity of educators to use different forms of data (e.g., formative, diagnostic, early warning indicators) to inform and guide classroom instruction and interventions. Diagnostic and formative assessment practices allow teachers to monitor students' progress and to guide next steps in teaching and learning for language development and academic growth.
2. States, districts, and schools should use longitudinal data systems to track and monitor ELLs' performance and the various outcomes of current and former ELLs. This should include, but not be limited to
  - a. the level of English proficiency with which ELL students begin school;
  - b. the average length of time students are designated as ELLs; and
  - c. the rate of progress states make in improving English proficiency for ELLs over time.



## Support Systems

1. Provide students with the necessary academic and social support, personalization in instruction and support, interventions to address targeted ELLs' needs, extended learning and credit recovery options, and the building of college awareness and links to career pathways.
2. Maximize stakeholder resources by coordinating and networking with other schools, including feeder schools; partnering with higher education, community-based organizations, and industry; and engaging families and communities in the planning, development, and implementation of programs and supports for ELLs.
3. Create a state, or consortium of states, clearinghouse of best policies and practices for ELLs where districts, or partner states, can learn about the successes and lessons learned, where new research can be posted, and where resources can be listed. States and districts can draw from federal resources such as the National Clearinghouse for Language Acquisition and Language Instruction Educational Programs<sup>66</sup> and the What Works Clearinghouse: English Language Learners<sup>67</sup> to identify promising models and strategies, make adaptations and implement interventions, and disseminate information on effective practices.

## Conclusion

Ensuring that English language learners receive an education that prepares them for life after high school must be a priority for communities and states. Meeting this challenge is both urgent and daunting. In the emerging workplace, students must be able to engage with complex texts, communicate effectively, think critically, and apply what they learn to novel settings. The language and literacy competencies to do all of the above effectively are emphasized in the new college- and career-ready standards. Ensuring that English language learners become literate persons in the twenty-first century calls for a shared responsibility among teachers in all disciplines. Equally important, support for English language learners must be a collective enterprise and warrants a major shift in how policymakers, administrators, curriculum developers, teacher educators, and assessment specialists approach language and literacy instruction.

---

***This brief was written by Mariana Haynes, PhD, a senior policy fellow at the Alliance for Excellent Education.***

***Support for this paper was provided by Carnegie Corporation of New York. Opinions expressed are those of the author and do not necessarily reflect the views of Carnegie Corporation of New York.***





## Endnotes

---

- <sup>1</sup> D. August and K. Hakuta, *Educating Language-Minority Children*, Committee on Developing a Research Agenda on the Education of Limited-English-Proficient and Bilingual Students (Washington, DC: National Research Council, 1998).
- <sup>2</sup> U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2011* (NCES 2011–033), Indicator 6, [http://nces.ed.gov/programs/coe/pdf/coe\\_lsm.pdf](http://nces.ed.gov/programs/coe/pdf/coe_lsm.pdf) (accessed June 5, 2012).
- <sup>3</sup> Ibid.
- <sup>4</sup> Pew Research Center, May 17, 2012, <http://www.pewsocialtrends.org/2012/05/17/explaining-why-minority-births-now-outnumber-white-births> (accessed July 17, 2012).
- <sup>5</sup> S. Nieto, *Language, Culture, and Teaching: Critical Perspectives for a New Century* (Mahwah, NJ: Erlbaum, 2002).
- <sup>6</sup> J. Batalova, M. Fix, and J. Murray, *English Language Learner Adolescents: Demographics and Literacy Achievements*, report to the Center for Applied Linguistics (Washington, DC: Migration Policy Institute, 2005).
- <sup>7</sup> National Clearinghouse for English Language Acquisition, “What Languages Do English Learners Speak?,” FS2011–2 (Washington, DC: NCELA, 2011), [http://www.ncela.gwu.edu/files/uploads/NCELA\\_Factsheets/EL\\_Languages\\_2011.pdf](http://www.ncela.gwu.edu/files/uploads/NCELA_Factsheets/EL_Languages_2011.pdf) (accessed September 12, 2012).
- <sup>8</sup> Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students, *Biennial Report to Congress on the Implementation of the Title III State Formula Grant Program, School Years 2006–07 and 2007–08* (Washington, DC: Author, 2012), [http://www.ncela.gwu.edu/files/uploads/3/Biennial\\_Report\\_0608.pdf](http://www.ncela.gwu.edu/files/uploads/3/Biennial_Report_0608.pdf) (accessed August 20, 2012); for SY 2007–08, the most commonly spoken native languages by K–12 LEP students were Spanish, Vietnamese, Hmong, Arabic, and Chinese.
- <sup>9</sup> August and Hakuta, *Educating Language-Minority Children*.
- <sup>10</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation’s Report Card: Reading 2009* (NCES 2010–458) (Washington, DC: Government Printing Office, 2010).
- <sup>11</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation’s Report Card: Science 2009* (NCES 2011–451) (Washington, DC: Institute of Education Sciences, 2011).
- <sup>12</sup> S. Flores, J. Batalova, and M. Fix, *The Educational Trajectories of English Language Learners in Texas* (Washington, DC: Migration Policy Institute, March 2012).
- <sup>13</sup> J. Batalova, M. Fix, and J. Murray, *Measures of Change: The Demography and Literacy of Adolescent English Learners—A Report to Carnegie Corporation of New York* (Washington, DC: Migration Policy Institute, 2007), [http://www.migrationpolicy.org/pubs/Measures\\_of\\_Change.pdf](http://www.migrationpolicy.org/pubs/Measures_of_Change.pdf) (accessed July 6, 2012).
- <sup>14</sup> S. McIntosh, *State High School Tests: Changes in State Policies and the Impact of the College and Career Readiness Movement* (Washington, DC: Center on Education Policy, December 2011); E. Allensworth et al., *College Preparatory Curriculum for All: Consequences of Ninth-Grade Course Taking in Algebra and English on Academic Outcomes in Chicago* (Chicago, IL: Consortium on Chicago School Research at the University of Chicago; Ann Arbor, MI: University of Michigan, December 2008).
- <sup>15</sup> N. Kober et al., *State High School Exit Exams 2006 Annual Report: A Challenging Year* (Washington, DC: Center on Education Policy, August 2006); Y. Zhang, *Conflicts Between State Policy and School Practice: Learning from Arizona’s Experience with High School Exam Policies* (Washington, DC: Center on Education Policy, April 2009).
- <sup>16</sup> Ibid.
- <sup>17</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation’s Report Card: America’s High School Graduates* (NCES 2011–462) (Washington, DC: U.S. Government Printing Office, 2011).
- <sup>18</sup> S. Rak Neugebauer, “Editors’ Reviews,” in *Adolescent Literacy*, ed. J. Ippolito, J. Steele, and J. Samson, *Harvard Educational Review* 78, no. 1 (spring 2008).
- <sup>19</sup> J. Abedi and R. Linquanti, “Issues and Opportunities in Improving the Quality of Large Scale Assessment Systems for English Language Learners,” paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA; K. Hakuta, Y. Butler, and D. Witt, *How Long Does It Take English Learners to Attain Proficiency?*, University of California Linguistic Minority Research Institute Policy Report 2000–1 (Santa Barbara, CA: UC-LMRI, 2000).
- <sup>20</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards for English Language Arts and Literacy in History/Social Studies, and Science, Appendix A: Research Supporting Key Elements of the Standards* (Washington, DC: Author, 2010).



- 
- <sup>21</sup> S. Kihara, S. Graham, and L. Hawken, "Teaching Writing to High School Students: A National Survey," *Journal of Educational Psychology* 101 (2009): 136–60.
- <sup>22</sup> August and Hakuta, *Educating Language-Minority Children*; J. Bransford, A. Brown, and R. Cocking, eds., *How People Learn: Brain, Mind, Experience, and School* (Washington, DC: Committee on Developments in the Science of Learning and Committee on Learning Research and Educational Practice, Commission on Behavioral and Social Sciences and Education, National Academy Press, 2000).
- <sup>23</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards*.
- <sup>24</sup> Council of Chief State School Officers and the English Language Proficiency/Development Framework Committee, *Framework for English Language Proficiency Development Standards Corresponding to the Common Core State Standards and the Next Generation Science Standards* (Washington, DC: CCSSO, in press).
- <sup>25</sup> Understanding Language, "Challenges and Opportunities for Language Learning in the Context of Common Core State Standards and Next Generation Science Standards," [http://ell.stanford.edu/sites/default/files/conference\\_summary\\_4-9-12\\_final.pdf](http://ell.stanford.edu/sites/default/files/conference_summary_4-9-12_final.pdf) (accessed June 10, 2012).
- <sup>26</sup> See <http://ell.stanford.edu/>.
- <sup>27</sup> K. Hakuta, personal communication, July 5, 2012.
- <sup>28</sup> R. Pianta, *Teaching Children Well: New Evidence-Based Approaches to Teacher Professional Development and Training* (Washington, DC: Center for American Progress, November 2007).
- <sup>29</sup> J. Bridgeland, J. DiIulio, and K. Burke Morison, *The Silent Epidemic: Perspectives of High School Dropouts* (Washington, DC: Civic Enterprises, 2006).
- <sup>30</sup> National Committee on Science Education Standards and Assessment and National Research Council, *National Science Education Standards* (Washington, DC: National Academy Press, 1996).
- <sup>31</sup> National Research Council, *A Framework for K–12 Science Education: Practices, Crosscutting Concepts, and Core Ideas, Committee on a Conceptual Framework for New K–12 Science Education Standards* (Washington, DC: National Academies Press, 2012).
- <sup>32</sup> National Research Council, *A Framework for K–12 Science Education*.
- <sup>33</sup> Understanding Language, "Challenges and Opportunities for Language Learning."
- <sup>34</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards*.
- <sup>35</sup> Understanding Language, "Challenges and Opportunities for Language Learning."
- <sup>36</sup> August and Hakuta, *Educating Language-Minority Children*.
- <sup>37</sup> M. Santos, L. Darling-Hammond, and T. Cheuk, "Teacher Development Appropriate to Support English Language Learners," paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA.
- <sup>38</sup> Ibid.
- <sup>39</sup> National Research Council, *A Framework for K–12 Science Education*.
- <sup>40</sup> Santos, Darling-Hammond, and Cheuk, "Teacher Development Appropriate to Support English Language Learners."
- <sup>41</sup> J. Pellegrino and M. Hilton, eds., *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century* (Washington, DC: National Academy of Sciences, 2012).
- <sup>42</sup> Santos, Darling-Hammond, and Cheuk, "Teacher Development Appropriate to Support English Language Learners."
- <sup>43</sup> Understanding Language, "Key Principles for ELL Instruction," forthcoming at <http://ell.stanford.edu>.
- <sup>44</sup> L. Wong Fillmore and C. Fillmore, "What Does Text Complexity Mean for English Learners and Language Minority Students?," paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA.
- <sup>45</sup> Ibid.; Understanding Language, "Challenges and Opportunities for Language Learning."
- <sup>46</sup> S. Dickson, D. Chard, and D. Simmons, "An Integrated Reading/Writing Curriculum: A Focus on Scaffolding," *LD Forum* 18, no. 4 (1993): 12–16; B. Rosenshine and C. Meister, "The Use of Scaffolds for Teaching Higher-Level Cognitive Strategies," *Educational Leadership* 49, no. 7 (1992): 26–33.
- <sup>47</sup> Santos, Darling-Hammond, and Cheuk, "Teacher Development Appropriate to Support English Language Learners."
- <sup>48</sup> Bransford, Brown, and Cocking, *How People Learn*; Understanding Language, "Challenges and Opportunities for Language Learning."
- 



- 
- <sup>49</sup> Ibid.
- <sup>50</sup> Santos, Darling-Hammond, and Cheuk, “Teacher Development Appropriate to Support English Language Learners”; J. Carr, U. Sexton, and R. Lagunoff, *Making Science Accessible to English Learners: A Guidebook for Teachers* (San Francisco, CA: WestED, 2007).
- <sup>51</sup> L. Gerena and L. Keiler, “Effective Intervention with Urban Secondary English Language Learners: How Peer Instructors Support Learning,” *Bilingual Research Journal: The Journal of the National Association for Bilingual Education* 35, no. 1 (2012): 76–97.
- <sup>52</sup> See <http://www.mspinnyc.org/content/perc-brief>.
- <sup>53</sup> O. Lee, H. Quinn, and G. Valdés, “Next Generation Science Standards and English Language Learners,” paper presented at the Understanding Language Conference, January 13–14, 2012, Stanford, CA.
- <sup>54</sup> For more information about Universal Design for Learning see “UDL Guidelines—Version 2.0,” <http://www.udlcenter.org/aboutudl/whatisudl> (accessed July 17, 2012), and “UDL Guidelines,” <http://www.udlcenter.org/aboutudl/udlguidelines> (accessed July 17, 2012).
- <sup>55</sup> A. Schleicher, ed., *Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from Around the World* (Washington, DC: OECD Publishing, 2012).
- <sup>56</sup> D. August and T. Shanahan, eds., *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth* (Mahwah, NJ: Lawrence Erlbaum Associates, 2006).
- <sup>57</sup> A. Pallangyo et al., “A Striving Readers Project: Lessons Learned,” unpublished brief (Danville, KY: Kentucky Content Literacy Consortium, March 2012).
- <sup>58</sup> L. Darling-Hammond et al., *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad* (Washington, DC: National Staff Development Council and the School Redesign Network at Stanford University, 2009).
- <sup>59</sup> R. Wei, L. Darling-Hammond, and F. Adamson, *Professional Development in the United States: Trends and Challenges: Phase II of a Three-Phase Study*, Technical Report (Dallas, TX: National Staff Development Council, July 2010).
- <sup>60</sup> A. Schleicher, ed., *Preparing Teachers and Developing School Leaders for the 21st Century*.
- <sup>61</sup> J. Samson and B. Collins, *Preparing All Teachers to Meet the Needs of English Language Learners: Applying Research to Policy and Practice for Teacher Effectiveness* (Washington, DC: Center for American Progress, April 2012).
- <sup>62</sup> Ibid.
- <sup>63</sup> Understanding Language, “Key Principles for ELL Instruction.”
- <sup>64</sup> H. Bloom, S. Thompson, and R. Unterman, *Transforming the High School Experience: How New York City’s New Small Schools Are Boosting Student Achievement and Graduation Rates* (New York, NY: MDRC, 2010); L. Darling-Hammond, P. Ross, and M. Milliken, “High School Size, Organization, and Content: What Matters for Student Success?,” *Brookings Papers on Education Policy*, no. 9 (2006/2007), 163–203; School Redesign Network, “High Schools for Equity: Policy Supports for Student Learning in Communities of Color” (Stanford, CA: School Redesign Network, 2007).
- <sup>65</sup> Flores, Batalova, and Fix, *The Educational Trajectories of English Language Learners in Texas*.
- <sup>66</sup> See <http://www.ncele.gwu.edu/>.
- <sup>67</sup> See <http://ies.ed.gov/ncee/wwc/topic.aspx?sid=6>.

