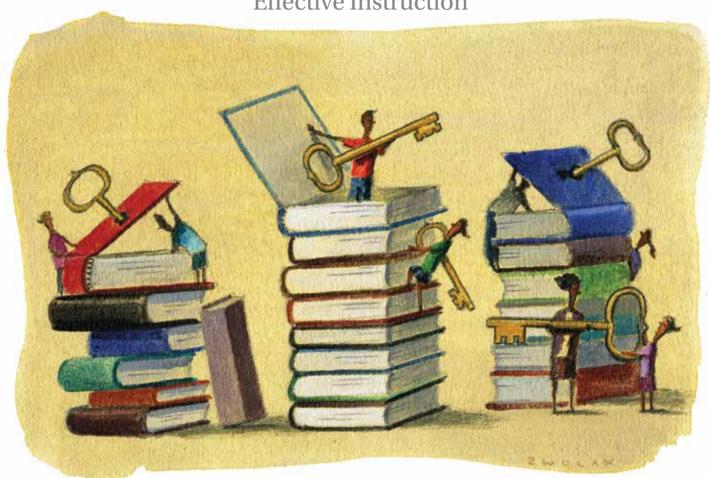
Unlocking the Research on English Learners

What We Know—and Don't Yet Know—about **Effective Instruction**



By Claude Goldenberg

he number of professional publications aimed at improving instruction for English learners has exploded since the early 2000s. Dozens of books, articles, and reports were published in the space of a few years following the appearance of two major research reviews in 2006.1 According to

Claude Goldenberg is a professor of education at Stanford University. Previously, at California State University, Long Beach, he was a professor of teacher education, an associate dean of the College of Education, and the executive director of the Center for Language Minority Education and Research. Early in his career, he taught junior high school in Texas and first grade in a bilingual elementary school in California. He is the recipient of the Albert J. Harris Award from the International Reading Association, among other honors. This article is adapted with permission from Claude Goldenberg, "Research on English Learner Instruction," in Breaking Through: Effective Instruction & Assessment for Reaching English Learners, edited by Margarita Calderón (Solution Tree Press, 2012).

one count, nearly 15 books on the topic of English learners were published in 2010 alone,² most aimed at professional audiences. Since then, the pace has only accelerated, with new and specialized books on assessment, literacy, English language development, and content instruction for English learners (ELs) seeming to appear continuously.

Yet there is surprisingly little research on common practices or recommendations for practice with the more than 5 million ELs in our nation's schools, many of whom come from families in poverty and attend lower-resourced schools. This absence of adequate research applies to all areas, including promoting English language development and instruction in content areas such as math and history. One of the 2006 research reviews noted "a dearth of empirical research on instructional strategies or approaches to teaching content" for ELs.3 A subsequent review of research on content area instruction for ELs echoed the same theme.4 Rather than providing a list of instructional practices specifically validated by research as effective with ELs-which would be a short list—I instead identify three important principles based in the research. These are:

- Generally effective practices are likely to be effective with ELs.
- ELs require additional instructional supports.
- III. The home language can be used to promote academic development.

There is also a fourth principle: ELs need early and ample opportunities to develop proficiency in English (see page 13 for an article devoted to that topic). For each of the three principles listed above, I provide specific examples from research on ELs.

This serious look at the research comes at an opportune time. The new Common Core State Standards (CCSS) for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, which have been adopted by the vast majority

- Clear instructions and supportive guidance as learners engage with new skills;
- Effective modeling of skills, strategies, and procedures;
- Active student engagement and participation;
- Informative feedback to learners;
- Application of new learning and transfer to new situations;
- Practice and periodic review;
- Structured, focused interactions with other students;
- Frequent assessments, with reteaching as needed; and
- Well-established classroom routines and behavior norms.

All published studies with which I am familiar that have demonstrated positive effects on ELs' achievement incorporate at least several of these features into the instructional procedures. For example, one found that structured writing instruction—including teacher instruction, error correction and feedback, and a focus

Effective instruction in general is the foundation of effective instruction for ELs. However, it is probably not sufficient to promote accelerated learning among ELs.



of states and the District of Columbia, are now in the process of being implemented. In calling for students to study and understand complex texts in English language arts and other academic subjects, these new standards place an even greater emphasis on content knowledge and language and literacy skills than the previous standards of many states. Indeed, large numbers of ELs had difficulty meeting states' prior standards. In California, for example, data from the past several years indicate that approximately 40-50 percent of originally classified ELs performed well below criteria established for the previous English language arts standards.5 To meet the demands of the CCSS, ELs clearly need additional help, and teachers need a great deal of support. Meeting the Common Core standards constitutes an enormous challenge we should not underestimate.6

I. Generally Effective Practices Are Likely to Be Effective with ELs

There is a vast literature on effective teaching practices. Educational research over more than a half century has yielded a number of reasonably consistent findings about the features of teaching likely to result in improved student learning. These include:

- Clear goals and objectives;
- Appropriate and challenging material;
- Well-designed instruction and instructional routines;

on building writing skills—had more positive effects on fifth-grade ELs' writing than did a free writing approach with no explicit instruction or error correction. 7 Both groups were allowed to write in either Spanish or English. Another writing study with native Cantonese speakers in Hong Kong reported similar findings explicit teaching of revision strategies helped improve the quality of student writing and helped students learn to write so that readers could understand them.8

Many other studies illustrate the value of well-known elements of effective instruction to promote the learning of ELs, whether in vocabulary instruction,9 early reading interventions,10 English language development,11 or science education.12 In fact, several studies have shown similar effects on both ELs and non-ELs,13 again suggesting that there is considerable overlap between what is effective instruction for ELs and what is effective for students already proficient in English.

Two researchers¹⁴ reviewed many of the same studies as the National Literacy Panel on Language-Minority Children and Youth* and concluded that "the programs with the strongest evidence of effectiveness in this review are all programs that have also been found to be effective with students in general" and modified for ELs (see the next section on instructional supports and modifications). These programs include various versions of

^{*}To learn about this panel and read a summary of a subsequent report edited by Diane August and Timothy Shanahan, visit www.cal.org/projects/archive/natlitpanel.html.

Success for All (a school-wide program that involves far more than classroom instruction), Direct Instruction,* and phonics instruction programs. Other programs with at least some evidence of effectiveness include vocabulary instruction programs,¹⁵ a comprehensive language arts program† combining direct teaching and literature study,¹⁶ a program that promotes reading between parents and kindergarten children,¹⁷ a Spanish version of Reading Recovery,¹⁸ an English tutoring program,¹⁹ and programs that incorporate cooperative learning.²⁰

The key message is that what we know about effective instruction in general is the foundation of effective instruction for ELs. However, as we'll see in the next section, although "generic" effective instruction is almost certainly a necessary base, it is probably not sufficient to promote accelerated learning among ELs.

II. ELs Require Additional Instructional Supports

ELs in an English instructional environment will almost certainly need additional supports so that instruction is meaningful and productive. Aside from the pedagogical need, there is also the legal requirement mandated by the Supreme Court's decision in *Lau v. Nichols* (1974) that classroom instruction must be meaningful to students even if their English language proficiency is limited. The need for additional supports is particularly true for instruction aimed at higher-level content and comprehension of academic texts. Because the Common Core standards focus more on academic literacy skills than do prior state standards, teachers will certainly need to bolster ELs' efforts to understand more challenging content in English language arts and all aca-

demic subjects. One of the most important findings of the National Literacy Panel on Language-Minority Children and Youth²¹ was that the effects of reading instruction on ELs' reading comprehension were uneven and often nonexistent even when comprehension skills were taught directly. This is in contrast to studies with English-proficient students, for whom reading instruction helps improve reading comprehension.²²

Why does improving reading comprehension for English learners instructed in English appear so elusive? A likely explanation is that lower levels of English proficiency interfere with comprehension and can blunt the effects of otherwise sound instruction. William Saunders and I conducted a study that suggests this possibility. We randomly assigned a group of ELs either to an instructional conversation group (interactive teacher-led discussions designed to promote better understanding of what students read) or to a control condition, where the teacher used comprehension questions in the teacher's guide. We found that instructional conversations had no overall effect on ELs' story comprehension—students in both groups understood the story about equally. We did find that instructional conversations produced deeper understandings of a complex concept at the heart of a story the students read, but this is different from story comprehension.

However, when we looked at the results for students with different English proficiency levels, we found something striking: for the students with the highest English proficiency, participation in instructional conversations did have an impact on story comprehension—91 percent accuracy versus 73 percent accuracy for students in the comparison group. The middle-level students also did better with instructional conversations, but the results were not statistically significant. The lowest-level English speakers did worse with instructional conversations, although also not to a statistically significant degree. These results suggest that instruction aimed at improving ELs' comprehension is likely to be more effective when ELs have relatively higher English skills, but less effective, *in*effective, or even possibly counterproductive when their English skills are lower.

ELs in an English instructional environment will almost certainly need additional supports so that instruction is meaningful and productive.

One obvious implication is that we need to focus on English language development for ELs, particularly those least proficient in English. (Along with William Saunders and David Marcelletti, I address that topic in a companion article that begins on page 13.) But what can teachers do to help ELs who are developing their English skills as they simultaneously learn advanced academic content and skills in English?

Sheltered Instruction

To meet this challenge, educators and researchers have proposed a set of instructional supports or modifications that are sometimes referred to as *sheltered instruction*.²⁴ The goal of sheltered strategies is to facilitate the learning of grade-level academic content and skills for students being instructed in English but who have limited proficiency in the language. Sheltered instruction can be expected to contribute to English language development, but its real focus is academic content and skills.

Some of the supports and modifications* that have been proposed for instructing ELs include:

- Building on student experiences and familiar content (then adding on material that will broaden and deepen students' knowledge);
- Providing students with necessary background knowledge;
- Using graphic organizers (tables, web diagrams, Venn diagrams)

^{*}To learn about Success for All, see www.successforall.org; for information about Direct Instruction, see www.nifdi.org.

[†]To learn more about this program, Opportunities through Language Arts, go to https://people.stanford.edu/claudeg/video/opportunities-through-language-arts.

^{*}For a comprehensive list of "sheltered" strategies, definitions, and video illustrations, go to https://people.stanford.edu/claudeg/cqell/about.

to organize information and clarify concepts;

- Making instruction and learning tasks extremely clear;
- Using pictures, demonstrations, and real-life objects;
- Providing hands-on, interactive learning activities;
- Providing redundant information (gestures, visual cues);
- Giving additional practice and time for discussion of key concepts;
- Designating language and content objectives for each
- Using sentence frames and models to help students talk about academic content; and
- Providing instruction differentiated by students' English language proficiency.

proficiency levels, there are no published data at all about their effects on ELs' learning.

Even the most popular sheltered model in existence and one that brings together many disparate elements into a useful and coherent instructional model—the Sheltered Instruction Observation Protocol (SIOP)25—has yet to demonstrate more than a very modest effect on student learning. 26 A recent study showed stronger effects than did prior research,27 but unfortunately researchers excluded from the analysis classrooms with lower implementation levels.²⁸ The most recent study²⁹ found modest effects that were not statistically significant. Another professional development model designed to help teachers of ELs accomplish high-level language and content goals with students, Quality Teaching for English Learners, produced no significant



The goal of sheltered strategies is to facilitate the learning of grade-level academic content and skills for students who have limited proficiency in the language.

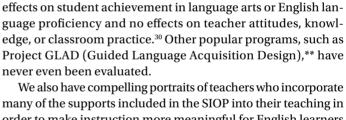
There are also sheltered strategies that involve strategic use of students' home language—for example, cognates and other home language support. These will be discussed in the third section on use of the home language for classroom instruction.

The problem, however, is that there is not much evidence that these strategies actually help English learners overcome the challenges they face in learning advanced academic content and skills, as they will be required to do with the implementation of the CCSS for English language arts. There are virtually no data to suggest that sheltered instruction or any of these modifications and supports help ELs keep up with non-ELs or help close the achievement gap between them. For some of the items on the list,

Educator

such as the use of content and language objectives, sentence frames, and differentiating instruction by English

These three articles on English learners provide a comprehensive update of "Teaching English Language Learners: What the Research Does—and Does Not— Say," by Claude Goldenberg, in the Summer 2008 issue of American Educator, which is available for free at http://go.aft. org/goldenberg.



order to make instruction more meaningful for English learners and to promote academic language skills. One researcher,31 for example, describes high school biology teachers who integrate language and content instruction; use hands-on activities, pictures, and diagrams; build on student background and experiences; and provide opportunities and time for discussion and

language use. But we do not know the extent to which these supports actually compensate for students' lack of proficiency in English, particularly in the sort of English language skills required for academic success.

Some Evidence of Benefits

There is some evidence that these supports and modifications do benefit ELs. For example, studies reviewed by the National Literacy Panel on Language-Minority Children and Youth³² find that building on students' experiences and using

[§]To learn more about Quality Teaching for English Learners, see http://gtel.wested.org.

^{**}To learn more about Project GLAD, see www.projectglad.com.

material with familiar content can facilitate ELs' literacy development and reading comprehension. One ethnographic study found that young English learners' writing development is helped when the teacher incorporates literacy activities and materials from home and the community into classroom activities. ³³ Another set of studies showed that second-language learners' reading comprehension improves when they read material with familiar content. ³⁴

It is generally true that what we know and are already familiar with can influence new learning and the comprehension of what we read.³⁵ Teachers should therefore use materials with some degree of familiarity to students. If students are expected to read material with unfamiliar content, it is important to help them acquire the necessary background knowledge. Building back-

and cultural knowledge into the instruction. Another team⁴¹ built its intervention around the topic of immigration, which presumably had considerable resonance for the ELs, who were themselves immigrants or whose parents were immigrants from Latin America or the Caribbean. This team also used supports in the home language. While both programs showed positive effects on student learning, neither study found any difference in learning outcomes for ELs and non-ELs.

One recent study⁴² represents a new development. The researchers found that "multimedia-enhanced instruction" (videos used as part of lessons) helped make read-aloud vocabulary instruction more effective for ELs in preschool to second grade but had no effect on the learning of non-ELs. Teachers used videos related to the topics in books they read aloud to their students as

We have many promising leads but not a very good understanding of how to help ELs learn high-level academic content and skills.



ground knowledge or building on prior experience and familiar content might be especially important for ELs, since they face the double challenge of learning academic content and skills as they learn the language of instruction. However, like all students, ELs must learn to read and comprehend unfamiliar material—important objectives of the CCSS for English language arts.

There is also a substantial literature on graphic displays and organizers, which facilitate and support learning by clarifying content and making explicit the relationships among concepts. ³⁶ One study ³⁷ found that graphic representations helped improve seventh-grade Canadian ESL (English as a second language) students' comprehension and academic language, but this appears to be the only study of its kind with second-language learners. ³⁸ Another researcher ³⁹ also described the use of graphic organizers to help sixth-grade ELs write a historical argument, although he concluded that students would have benefited from additional explicit instruction in historical writing.

Perhaps these and other instructional supports, which are applicable to learners generally, are especially important or helpful for ELs. That certainly makes intuitive sense, but we have scant evidence either way. In fact, there is some evidence that these supports are equally effective for ELs and non-ELs. One team of researchers⁴⁰ taught students explicitly about the science inquiry method by using pictures to illustrate the process, employing multiple modes of representation (for example, verbal, gestural, graphic, or written), and incorporating students' prior linguistic

part of the science curriculum on habitats (for example, coral reefs or deserts). The ELs who saw the videos as part of the vocabulary instruction learned more of the target words and made greater gains on a general vocabulary measure than those who did not. The videos helped either greatly diminish or eliminate the gap between ELs and non-ELs on the target words. This suggests a potentially very effective strategy that improves ELs' vocabulary learning while not compromising the learning of students already proficient in English.

In short, we have many promising leads but not a very good understanding of how to help ELs learn high-level academic content and skills despite limited English proficiency. What one researcher⁴³ wrote about instruction focusing on language in addition to academic content—"the published research is at an early stage"—is equally true for other supports intended to help ELs achieve at high academic levels.

III. The Home Language Can Be Used to Promote Academic Development

We turn, finally, to the most controversial topic in instructing ELs—the role of the home language. There are two aspects to the issue: teaching academic content and skills, such as reading and mathematics, in the home language, and using the home language as support in an otherwise all-English instructional environment—for example, providing definitions or brief explanations in the home language, but keeping instruction overwhelmingly in English.

Teaching academic skills in the home language is at the core of the great "bilingual education" debate. Proponents of bilingual education have long argued that students should be taught in their home language (although certainly not exclusively) and that doing so strengthens the home language and creates a more solid foundation for acquiring academic skills in English. Opponents of bilingual education argue that instruction in a student's home language is a waste of time, depresses achievement in English, and simply delays an EL's entrance into the academic (and social) mainstream.*

These debates over bilingual education are typically framed in terms of outcomes in English. English outcomes are without a doubt important, but there is an additional reason to consider primary language instruction for English learners, and that is the inherent advantage of knowing and being literate in two lan-

There is no controversy over the positive effects of home language instruction on home language skills. This is important given the possible advantages of bilingualism and biliteracy.

guages. No one should be surprised to learn that all studies of bilingual education have found that teaching children in their primary language promotes achievement in the primary language. This should be seen as a value in and of itself. Of course, if primary language achievement comes at the expense of achievement in English, this might not be a worthwhile tradeoff. As we will see, however, bilingual education tends to produce better outcomes in English; at worst, it produces outcomes in English equivalent to those produced by English immersion. In other words, bilingual education helps students become bilingual something that is valuable for anyone, not just ELs.44 This should not be lost amid the controversy over bilingual education and English immersion.

What the Research Tells Us

Although bilingual education continues to be a politically charged issue, 45 we can draw some conclusions from the research.

Reading Instruction in the Home Language Can Be Beneficial

Numerous experimental studies have been conducted over the past 40 years, and the consensus—although it is by no means unanimous—is that learning to read in their home language helps ELs boost reading skills in English. Learning to read in the home language also maintains home language literacy skills; there is no controversy over this. To date, there have been five meta-analyses conducted since 1985 by researchers from different perspectives. All five reached the same conclusion—namely, that bilingual education produced superior reading outcomes in English compared with English immersion.

A more recent study, and probably the strongest methodologically, reached a different conclusion. Researchers⁴⁶ randomly assigned Spanish-speaking ELs to either transitional bilingual education or English immersion. All students were in the Success for All program. This is very important, since previous studies of bilingual education had not controlled for instruction, curriculum, or other factors that could have compromised the findings. The authors found that in first grade, children in English immer-

> sion did significantly better on English achievement measures than did children in bilingual education. By fourth grade, English immersion students' scores were somewhat higher than that of the bilingual education students, but the differences were not significant. The researchers contend that these results support neither side in the bilingual education controversy. Instead, they argue, quality of instruction and curriculum and the school supports needed to support them are more important determinants of ELs' achievement than language of instruction.

Effects Are Small to Moderate

The effects of home language instruction on English achievement are fairly modest, even if we disregard the findings of the recent study just discussed. The five meta-analyses mentioned in the previous section found

that, on average, teaching reading in the home language could boost children's English literacy scores by approximately 12 to 15 percentile points in comparison with children in the control conditions. This is not a trivial effect, but neither is it as large as many proponents of bilingual education suggest. Of course, if we add in the results of the new study, the average effect would be reduced. But we should keep in mind that there is no controversy over the positive effects of home language instruction on home language skills. This should be seen as an important outcome in itself, given the many possible advantages—intellectual, cultural, and economic—of bilingualism and biliteracy.⁴⁷

Insufficient Data on Length of Time in Primary Language Instruction

The soundest studies methodologically focus on relatively shortterm transitional bilingual education. In transitional programs, children generally receive instruction in the home language from one to three years and then transition to all-English instruction. Among this group of studies, there is no evidence that more or less time spent in bilingual education is related to higher or lower student achievement.48

Another type of bilingual education⁴⁹ is two-way or dual-language.† The goal of two-way bilingual education is bilingualism and biliteracy, in contrast to transitional bilingual education, which uses the home language only to help students transition to

^{*}For an excellent history of the political and ideological debates around bilingual education, see Educating English Learners: Language Diversity in the Classroom, by James Crawford

[†]To learn more about two-way immersion education, see www.cal.org/twi/index.htm.

all-English instruction and then stops instruction in the home language. Two-way programs use the home language for far longer, at least through elementary school and often into middle school and beyond (K–12 two-way programs are rare). Two-way programs were virtually excluded from the five meta-analyses. The reason is that these longer-term studies do not meet the methodological requirements set by the meta-analyses. For example, they do not control for possible differences in the types of students in different programs, who vary considerably in terms of language, literacy, and parents' education levels.⁵⁰ If we don't control for these factors, we are likely to get misleading results.

Our knowledge about the effects of two-way programs is unfortunately very limited. Nonetheless, two-way bilingual education offers a promising model for the education of ELs. It also offers a

students' home language to provide some degree of familiarity when the lesson is taught; following the lesson, there is a review in the home language to solidify and check for understanding); and

 Strategies taught in the home language (reading, writing, and study strategies are taught in the home language but then applied to academic content in English).

Cognates have been used with a number of vocabulary and reading programs. ⁵² No study has ever isolated the specific effects of cognate instruction, but more successful second-language learners do use cognates when trying to understand material in the second language. ⁵³

In one study, teachers previewed difficult vocabulary in Span-

It is an inconvenient truth that we lack the knowledge base to fully prepare teachers to help many of their ELs overcome the achievement gaps they face.

way to promote bilingualism and biliteracy for non-English learners, since two-way programs include English-speaking students as well as students from language-minority backgrounds (for example, Spanish speakers). This is an area in great need of additional research and rigorous evaluation.

Virtually No Data Exist on Bilingual Education in Other Curriculum Areas

Reading is by far the curriculum area that has received the most attention in studies of bilingual education. A small number have found positive effects in math.⁵¹ We know very little about the effects of bilingual education in other areas of the curriculum.

Instructional Support in the Home Language

Students' home language can play a role even in an all-English instructional program. This is referred to as home (or primary) language support. There is no teaching of content and academic skills in the home language; instead, the home language is used to help facilitate learning content and skills in English. The home language can be used to support learning in an English instructional environment in the following ways:

- Cognates (words with shared meanings that have common etymological roots, such as *geography* and *geografia*);
- Brief explanations in the home language (not direct concurrent translations, which can cause students to "tune out" while English is being spoken);
- · Lesson preview and review (lesson content is previewed in



ish before reading a book in English; the teachers then reviewed the material in Spanish afterward. This produced better comprehension and recall than either reading the book in English or doing a simultaneous Spanish translation while reading.⁵⁴ The program described above that was based on the topic of immigration⁵⁵ made use of a similar technique. Before the class read a written passage, Spanish speakers were given written and audiotaped versions to preview in Spanish.

We also have evidence that reading strategies can be taught in students' home language, then applied in English. One study⁵⁶ found that teaching comprehension strategies in students' primary language improved reading comprehension when students afterward read in English.

t should be clear that despite progress in understanding how to improve teaching and learning for the millions of ELs in our schools, many gaps remain. The challenges posed by the Common Core State Standards make those gaps glaring. Two Berkeley researchers put it squarely:⁵⁷

What will the more demanding complex texts implied by the Common Core State Standards (CCSS) mean for those students who are already having trouble with existing standards? This group includes English learners (ELs), and also the language minority students (LMs) who speak English only, but not the variety that is valued and promoted in the society's schools. What will the CCSS mean for the educators who work with these students? ... [Teachers] are worried. How can they

be expected to help their students handle materials that are more demanding than what already seems difficult enough? This worry is justified.

The researchers then outline an approach to studying complex texts that holds promise for helping ELs meet the Common Core challenge but for which, they acknowledge, there is no real supporting evidence. As we've seen over the course of this article, this is a familiar refrain. And even when there is evidence of effects, they are modest—far too modest to make major inroads on the very large achievement gaps ELs face. It is an inconvenient truth: we lack the knowledge base to fully prepare teachers to help many of their English learner and language-minority students overcome this gap. So what is to be done? Clearly, educators cannot wait until

As Seymour Sarason warned: "Teachers cannot create and sustain the conditions for the productive development of children if those conditions do not exist for teachers."

researchers have adequately solidified our understanding of how to help ELs meet the content and language challenges they face. They'll be waiting a long time. Maybe forever. But if policymakers and the public wish to create a high-stakes environment where teachers and students are expected to do what we do not fully know how to do, at the very least we must provide all possible supports. A good place to begin in thinking about these supports is with famed psychology professor Seymour Sarason's admonition from more than 20 years ago: "Teachers cannot create and sustain the conditions for the productive development of children if those conditions do not exist for teachers."58 What this means in practice is that we must create settings in schools where teachers have the time and space to:

- Systematically study with colleagues the CCSS or whatever standards or learning goals teachers are expected to follow;
- Specify and articulate what these standards and goals mean for curriculum and instruction in their classrooms;
- Implement curriculum, and plan and carry out instruction, based on these understandings;
- Systematically collect student work indicating student progress toward desired outcomes;
- Analyze and evaluate student work with colleagues to help determine what is working and what is not; and
- Repeat the above continuously and systematically, throughout and across school years.

Putting the above in place is no simple matter. It will require

school-wide, concerted, and coherent efforts made possible by leadership, accountability, support, and assistance.* Even with all this in place, there are no guarantees that we can accomplish the very ambitious and worthwhile goals we have set for ourselves and our students. However, without creating these conditions in schools, these goals will remain a pipe dream.

I am cautiously optimistic. The current interest in developing, studying, and evaluating effective practices for ELs promises increased understanding of how to help these students succeed, even thrive, in our schools. But evaluating effective practices will not suffice. Schools must become places, in Sarason's words, for teachers' "productive development." In the end, progress will require creating these conditions in schools, continued research, and thoughtful practice to see what works in classrooms. Practi-

tioners have an extraordinary opportunity to contribute to our knowledge base for educating ELs. We should put aside the ideological debates that have defined this field for too long and work as a profession to seek approaches that will enable all students to succeed in school and beyond. The millions of EL children and youth represent a vast and largely untapped source of social, economic, cultural, and linguistic vitality. Our job is to make sure this vitality is not squandered.

Endnotes

- 1. Diane August and Timothy Shanahan, eds., Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth (Mahwah, NJ: Erlbaum, 2006); and Fred Genesee, Kathryn Lindholm-Leary, William Saunders, and Donna Christian, Educating English Language Learners: A Synthesis of Research Evidence (New York: Cambridge University Press, 2006)
- 2. Norm Gold, "Educating English Learners: English Learner Brief 10.1" (unpublished bibliography, Norm Gold Associates, September 2010).
- 3. Genesee et al., Educating English Language Learners, 190
- 4. Joy Janzen, "Teaching English Language Learners in the Content Areas," Review of Educational Research 78, no. 4 (2008): 1010-1038
- 5. Laurie Olsen, Reparable Harm: Fulfilling the Unkept Promise of Educational Opportunity for California's Long Term English Learners (Long Beach, CA: Californians Together, 2010); and William M. Saunders and David J. Marcelletti, "The Gap That Can't Go Away: The Catch-22 of Reclassification in Monitoring the Progress of English Learners," Educational Evaluation and Policy Analysis 35, no. 2 (2013): 139-156
- 6. Rhoda Coleman and Claude Goldenberg, "The Common Core Challenge for English Language Learners," Principal Leadership (February 2012): 46–51
- 7. Richard Gómez Jr., Richard Parker, Rafael Lara-Alecio, and Leo Gómez, "Process versus Product Writing with Limited English Proficient Students," Bilingual Research Journal 20, no. 2 (1996): 209-233
- 8. Sima Sengupta, "An Investigation into the Effects of Revision Strategy Instruction on L2 Secondary School Learners," System 28, no. 1 (2000): 97-113.
- 9. For a recent comprehensive review, see Michael F. Graves, Diane August, and Jeannette Mancilla-Martinez, Teaching Vocabulary to English Language Learners (New York: Teachers College Press, 2013).
- 10. Sharon Vaughn, Patricia Mathes, Sylvia Linan-Thompson, Paul Cirino, Coleen Carlson, Sharolyn Pollard-Durodola, Elsa Cardenas-Hagan, and David Francis, "Effectiveness of an English Intervention for First-Grade English Language Learners at Risk for Reading Problems," Elementary School Journal 107, no. 2 (2006): 153-181.
- 11. Fuhui Tong, Rafael Lara-Alecio, Beverly Irby, Patricia Mathes, and Oi-Man Kwok, 'Accelerating Early Academic Oral English Development in Transitional Bilingual and Structured English Immersion Programs," American Educational Research Journal 45, no. 4 (2008): 1011-1044.
- 12. Okhee Lee, Rachael A. Deaktor, Juliet E. Hart, Peggy Cuevas, and Craig Enders, "An Instructional Intervention's Impact on the Science and Literacy Achievement of Culturally and Linguistically Diverse Elementary Students," Journal of Research in Science Teaching 42, no. 8 (2005): 857-887

(Continued on page 38)

*For research on the school and district roles in creating conditions for improving EL achievement, see chapter 6 of Promoting Academic Achievement among English Learners: A Guide to the Research, by Claude Goldenberg and Rhoda Coleman. See also the Talking Teaching Network (www.talkingteaching.org) for a current effort to engage teachers in substantive, systematic work to improve teaching and learning

Unlocking the Research on ELs

(Continued from page 11)

- 13. María S. Carlo, Diane August, Barry McLaughlin, Catherine E. Snow, Cheryl Dressler, David N. Lippman, Teresa J. Lively, and Claire E. White, "Closing the Gap: Addressing the Vocabulary Needs of English-Language Learners in Bilingual and Mainstream Classrooms," *Reading Research Quarterly* 39, no. 2 (2004): 188–215; Lee et al., "An Instructional Intervention's Impact"; and Nonie K. Lesaux, Michael J. Kieffer, S. Elisabeth Faller, and Joan G. Kelley, "The Effectiveness and Ease of Implementation of an Academic Vocabulary Intervention for Linguistically Diverse Students in Urban Middle Schools, Reading Research Quarterly 45, no. 2 (2010): 196-228.
- 14. Alan Cheung and Robert F. Slavin, "Effective Reading Programs for English Language Learners and Other Language Minority Students," Bilingual Research Journal 29, no. 2 (2005): 262
- 15. Graves, August, and Mancilla-Martinez, Teaching Vocabulary to English Language Learners.
- 16. William M. Saunders, "Improving Literacy Achievement for English Learners in Transitional Bilingual Programs," Educational Research and Evaluation 5, no. 4 (1999): 345–381; and William M. Saunders and Claude Goldenberg, *The Effects of a* Comprehensive Language Arts Transition Program on the Literacy Development of English Learners (Santa Cruz: Center for Research on Education, Diversity, and Excellence, University of California, 1999)
- 17. Claude Goldenberg, Evaluation of a Balanced Approach to Literacy Instruction for Spanish-Speaking Kindergartners (paper presented at the annual meeting of the American Educational Research Association, Boston, April 1990).
- 18. Kathy Escamilla, "Descubriendo la Lectura: An Early Intervention Literacy Program in Spanish," Literacy Teaching and Learning 1, no. 1 (1994): 57-70.
- 19. Carolyn A. Denton, Jason L. Anthony, Richard Parker, and Jan E. Hasbrouck, "Effects of Two Tutoring Programs on the English Reading Development of Spanish-English Bilingual Students, Elementary School Journal 104, no. 4 (2004): 289-305.
- 20. Margarita Calderón, Rachel Hertz-Lazarowitz, and Robert E. Slavin, "Effects of Bilingual Cooperative Integrated Reading and Composition on Students Making the Transition from Spanish to English Reading," Elementary School Journal 99, no. 2 (1998):
- 21. August and Shanahan, Developing Literacy in Second-Language Learners
- 22. National Reading Panel, Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction (Washington, DC: National Institute of Child Health and Human Development, 2000)
- 23. William M. Saunders and Claude Goldenberg, "The Effects of an Instructional Conversation on English Language Learners' Concepts of Friendship and Story Comprehension," in Talking Texts: How Speech and Writing Interact in School Learning, ed Rosalind Horowitz (Mahwah, NJ: Erlbaum, 2007), 221–252.
- 24. Jana Echevarria, MaryEllen Vogt, and Deborah J. Short, Making Content Comprehensible for English Learners: The SIOP Model, 3rd ed. (Boston: Allyn and Bacon, 2008).
- 25. Echevarria, Vogt, and Short, Making Content Comprehensible for English Learners
- 26. Jana Echevarria, Deborah Short, and Kristin Powers, "School Reform and Standards-Based Education: A Model for English-Language Learners," Journal of Educational Research 99, no. 4 (2006): 195-210.
- 27. Echevarria, Short, and Powers, "School Reform and Standards-Based Education.
- 28. Ellen McIntyre, Diane Kyle, Cheng-Ting Chen, Marco Muñoz, and Scott Beldon, "Teacher Learning and ELL Reading Achievement in Sheltered Instruction Classrooms: Linking Professional Development to Student Development," Literacy Research and Instruction 49, no. 4 (2010): 334-351.
- 29. Jana Echevarria, Catherine Richards-Tutor, Rebecca Canges, and David Francis, "Using the SIOP Model to Promote the Acquisition of Language and Science Concepts with English Learners," Bilingual Research Journal 34, no. 3 (2011): 334-351.
- 30. Johannes M. Bos, Raquel C. Sanchez, Fannie Tseng, Nada Rayyes, Lorena Ortiz, and Castle Sinicrope, *Evaluation of Quality* Teaching for English Learners (QTEL) Professional Development (Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education, March 2012).
- 31. Yu Ren Dong, "Integrating Language and Content: How Three Biology Teachers Work with Non-English Speaking Students," International Journal of Bilingual Education and Bilingualism 5, no. 1 (2002): 40-57
- 32. August and Shanahan, Developing Literacy in Second-

- Language Learners.
- 33. Charmian Kenner, "Children's Understandings of Text in a Multilingual Nursery," Language and Education 13, no. 1 (1999):
- 34. Salim Abu-Rabia, "Druze Minority Students Learning Hebrew in Israel: The Relationship of Attitudes, Cultural Background, and Interest of Material to Reading Comprehension in a Second Language," Journal of Multilingual and Multicultural Development 17, no. 6 (1996): 415–426; and M. J. Lasisi, Sola Falodun, and A. S. Onyehalu, "The Comprehension of First- and Second-Language Prose," Journal of Research in Reading 11, no. 1 (1988): 26–35.
- 35. Danielle S. McNamara and Walter Kintsch, "Learning from Texts: Effects of Prior Knowledge and Text Coherence Discourse Processes 22, no. 3 (1996): 247–288; and Sigmund Tobias, "Interest, Prior Knowledge, and Learning," Review of Educational Research 64, no. 1 (1994): 37-54.
- 36. John C. Nesbit and Olusola O. Adesope, "Learning with Concept and Knowledge Maps: A Meta-Analysis." Review of Educational Research 76, no. 3 (2006): 413-448.
- 37. Gloria Tang, "The Effect of Graphic Representation of Knowledge Structures on ESL Reading Comprehension," Studies in Second Language Acquisition 14, no. 2 (1992): 177–195
- 38. Xiangying Jiang and William Grabe, "Graphic Organizers in Reading Instruction: Research Findings and Issues," Reading in a Foreign Language 19, no. 1 (2007): 34-55.
- 39. E. Michael Nussbaum, "Scaffolding Argumentation in the Social Studies Classroom," *The Social Studies* 93, no. 2 (2002): 79-83
- 40. Lee et al., "An Instructional Intervention's Impact."
- 41. Carlo et al., "Closing the Gap."
- 42. Rebecca Silverman and Sara Hines, "The Effects of Multimedia-Enhanced Instruction on the Vocabulary of English-Language Learners and Non-English-Language Learners in Pre-Kindergarten through Second Grade," Journal of Educational Psychology 101, no. 2 (2009): 305-314.
- 43. Janzen, "Teaching English Language Learners in the Content Areas," 1015.
- 44. Ellen Bialystok, Bilingualism in Development: Language, Literacy, and Cognition (Cambridge: Cambridge University Press, 2001); and Albert Saiz and Elena Zoido, "Listening to What the World Says: Bilingualism and Earnings in the United States Review of Economics and Statistics 87, no. 3 (2005): 523-538.
- 45. Patricia Gándara and Megan Hopkins, eds., Forbidden Language: English Learners and Restrictive Language Policies (New York: Teachers College Press, 2010).
- 46. Robert E. Slavin, Nancy Madden, Margarita Calderón, Anne Chamberlain, and Megan Hennessy, "Reading and Language Outcomes of a Multiyear Randomized Evaluation of Transitional Bilingual Education," *Educational Evaluation and Policy Analysis* 33, no. 1 (2011): 47-58.
- 47. Bialystok, Bilingualism in Development, and Saiz and Zoido, "Listening to What the World Says.
- 48. Claude Goldenberg and Rhoda Coleman, Promoting Academic Achievement among English Learners: A Guide to the Research (Thousand Oaks, CA: Corwin, 2010).
- 49. Kathryn Lindholm-Leary, Dual Language Education (Clevedon, UK: Multilingual Matters, 2001)
- 50. Leslie Reese, Claude Goldenberg, and William Saunders, "Variations in Reading Achievement among Spanish-Speaking Children in Different Language Programs: Explanations and Confounds," Elementary School Journal 106, no. 4 (2006):
- 51. See Jay P. Greene, "A Meta-Analysis of the Rossell and Baker Review of Bilingual Education Research," Bilingual Research Journal 21, nos. 2–3 (1997): 103–122.
- 52. Carlo et al., "Closing the Gap.
- 53. Cheryl Dressler, Maria S. Carlo, Catherine E. Snow, Diane August, and Claire E. White, "Spanish-Speaking Students' Use of Cognate Knowledge to Infer the Meaning of English Words," Bilingualism: Language and Cognition 14, no. 2 (2011):
- 54. Sharon H. Ulanoff and Sandra L. Pucci, "Learning Words from Books: The Effects of Read-Aloud on Second Language Vocabulary Acquisition," *Bilingual Research Journal* 23, no. 4 (1999): 409-422
- 55. Carlo et al., "Closing the Gap."
- 56. Irene Y. Y. Fung, Ian A. G. Wilkinson, and Dennis W. Moore, "L1-Assisted Reciprocal Teaching to Improve ESL Students Comprehension of English Expository Text," Learning and Instruction 13, no. 1 (2003): 1-31.
- 57. Lily Wong Fillmore and Charles J. Fillmore, "What Does Text Complexity Mean for English Learners and Language Minority Students?" (paper presented at the Understanding Language Conference, Stanford University, January 2012), 1
- 58. Seymour B. Sarason, The Predictable Failure of Educational Reform (San Francisco: Jossey-Bass, 1990), xiv.

English Language Development

(Continued from page 25)

- 11. Jane Russell Valezy and Nina Spada, "The Effectiveness of Corrective Feedback for the Acquisition of L2 Grammar: A Meta-Analysis of the Research," in *Synthesizing Research* on Language Learning and Teaching, ed. John M. Norris and Lourdes Ortega (Philadelphia: John Benjamins, 2006),
- 12. Lyster, Learning and Teaching Languages through
- 13. John M. Norris and Lourdes Ortega, "Effectiveness of L2 Instruction: A Research Synthesis and Quantitative Meta-Analysis," Language Learning 50, no. 3 (2000): 417-528
- 14. Ellis, "Principles of Instructed Language Learning."
- 15. William M. Saunders and Claude Goldenberg, "Research to Guide English Language Development Instruction," in Improving Education for English Learners: Research-Based Approaches, ed. David Dolson and Lauri Burnham-Massey (Sacramento: CDE Press, 2010), 21-82
- 16. Michael H. Long, "Does Second Language Instruction Make a Difference? A Review of Research," *TESOL Quarterly* 17. no. 3 (1983): 359-382.
- 17. Krashen, Principles and Practice in Second Language Acquisition.
- 18. Long, "Does Second Language Instruction Make a Difference?
- 19. Norris and Ortega, "Effectiveness of L2 Instruction,"
- 20 Norris and Ortega "Effectiveness of L2 Instruction " 468
- 21. Fuhui Tong, Rafael Lara-Alecio, Beverly Irby, Patricia Mathes, and Oi-Man Kwok, "Accelerating Early Academic Oral English Development in Transitional Bilingual and Structured English Immersion Programs," American Educational Research Journal 45, no. 4 (2008): 1011-1044.
- 22. Virginia P. Collier, "Age and Rate of Acquisition of Second Language for Academic Purposes," TESOL Quarterly 21, no. 4 (1987): 617-641; and Diane August and Timothy Shanahan, eds., Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth (Mahwah, NJ: Lawrence Erlbaum, 2006).
- 23. Genesee et al., Educating English Language Learners.
- 24. Kenji Hakuta, Yuko Goto Butler, and Daria Witt, How Long Does It Take English Learners to Attain Proficiency? (Santa Barbara: University of California Linguistic Minority Research Institute, 2000)
- 25. Peggy Estrada, "English Learner Curricular Streams in Four Middle Schools: Triage in the Trenches" (revised, 2013) (paper presented at the American Educational Research Association, Vancouver, Canada, April 2012)
- 26. Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg, "Toward a Knowledge Base for School Learning, Review of Educational Research 63, no. 3 (1993): 249-294.
- 27. See, for example, Ronald Edmonds, "Effective Schools for the Urban Poor," Educational Leadership 37, no. 1 (1979): 15-27; Michael Fullan, The New Meaning of Educational Change, 4th ed. (New York: Teachers College Press, 2007); Claude Goldenberg and Rhoda Coleman, Promoting Academic Achievement among English Learners: A Guide to the Research (Thousand Oaks, CA: Corwin, 2010); Tom Good and Jere Brophy, "School Effects," in Handbook of Research on Teaching, 3rd ed., ed. Merlin C. Wittrock (New York: Macmillan, 1986), 570-602; and Bruce R. Joyce and Beverly Showers, Power in Staff Development through Research on Training (Alexandria, VA: Association for Supervision and Curriculum Development, 1983).
- 28. Thomas B. Parrish, Amy Merickel, María Pérez, Robert Linquanti, Miguel Socias, Angeline Spain, Cecilia Speroni, Phil Esra, Leslie Brock, and Danielle Delancey, Effects of the Implementation of Proposition 227 on the Education of English Learners, K-12: Findings from a Five-Year Evaluation, final report for AB 56 and AB 1116 (Washington, DC: American Institutes for Research, 2006); and Trish Williams, Mary Perry, Isabel Oregón, Noli Brazil, Kenji Hakuta, Edward Haertel, Michael Kirst, and Jesse Levin, Similar English Learner Students, Different Results: Why Do Some Schools Do Better? A Follow-Up Analysis, Based on a Large-Scale Survey of California Elementary Schools Serving High Proportions of Low-Income and EL Students (Mountain View, CA: EdSource, 2007).
- 29. Claude Goldenberg, Successful School Change: