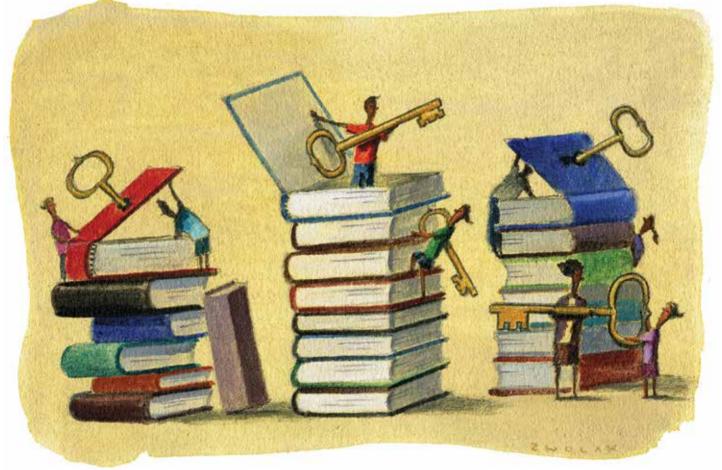
Unlocking the Research on English Learners

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 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

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).

would be a short list—I instead identify three important principles based in the research. These are:

- I. Generally effective practices are likely to be effective with ELs.
- II. 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

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;

- 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



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 academic 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.²³ 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 lesson;
- 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



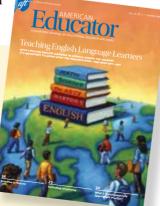
The goal of sheltered strategies is to facilitate the learning of grade-level academic content and skills for students who have limited proficiency in the language.

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,

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.



effects on student achievement in language arts or English language proficiency and no effects on teacher attitudes, knowledge, or classroom practice.³⁰ Other popular programs, such as Project GLAD (Guided Language Acquisition Design),** have never even been evaluated.

We also have compelling portraits of teachers who incorporate many of the supports included in the SIOP into their teaching in 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://qtel.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 backand 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 study³⁷ 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 researcher³⁹ 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

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. 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-



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 *geografía*);
- 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 framed by the CCSS.

Recommended Resources

Colorín

While any teacher with an Internet connection is awash in resources, finding the right resource is still difficult. The following websites, in addition to those cited in the related articles, may help.

1. Instructional Materials

Colorín Colorado: www.colorincolorado.org

Colorín Colorado offers free teacher tip sheets on reading instruction, professional development videos, and tools for effective outreach to Hispanic parents, among other resources, to help English learners in preK– 12th grade.

Word Generation: www.wg.serpmedia.org

Word Generation provides free curricular materials, classroom videos, and other supports to help ELs in middle school learn important academic vocabulary in the core disciplines: language arts, mathematics, science, and social studies.

Understanding Language: http://ell.stanford.edu

Understanding Language has a wide array of papers to keep educators up-to-date on the latest thinking about educating ELs, particularly in a Common Core environment. It also provides free

CEL

teaching resources aligned to the Common Core State Standards in English language arts and mathematics as well as the Next Generation Science Standards. While a handful of these resources are currently available, many more will be added to the site throughout 2013.

And is a device of the second second





2. Research and Evaluation

What Works Clearinghouse: www.ies.ed.gov/ ncee/wwc/topic.aspx?sid=6

Teaching ELA/Literacy to English Language Learners

What Works Clearinghouse, which has particularly high standards for evidence of effectiveness, has devoted a section of its free website to research publications and program evaluations for ELs.

Best Evidence Encyclopedia: www.bestevidence. org/reading/ell/ell_read.htm

Two reviews of reading programs for ELs are available for free on the Best Evidence Encyclopedia website.

3. National and State Statistics

National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs: www.ncela.gwu.edu

This free website provides a variety of demographic information about ELs, as well as reports, webinars, and other resources on EL education.

English Language Development

Guidelines for Instruction

H TO ELA K

By William Saunders, Claude Goldenberg, and David Marcelletti

espite a growing US literature on educating English learners (ELs) and an upsurge in studies of vocabulary interventions,¹ surprisingly little research examines the effects of instruction on ELs' English language development (ELD). Since the Supreme Court's 1974 *Lau v. Nichols* decision affirming that English learners must be guaranteed a "meaningful education," controversy over bilingual versus English-only education has dominated research and policy discussions of ELs. Many of the programs involved in these studies included ELD instruction, but studies sought to measure the effects of the program on academic achievement, primarily reading, rather than estimating the effects of ELD instruction on English language acquisition.

This article synthesizes research that provides guidelines for ELD instruction. Many resources, such as theory, ELD standards, practitioner experience, and published programs, might provide such guidance. We focus on individual studies and research syntheses that point to how educators might provide effective ELD instruction—instruction that focuses specifically on helping English learners develop English language skills and that is delivered in a portion of the school day separate from the academic content that all students need to learn.

Using existing research to identify effective guidelines for ELD instruction is problematic. There is little that focuses specifically on K-12 ELD instruction for ELs in US schools. In the absence of a comprehensive body of research, the field of ELD instruction has been driven mostly by theory. The result is a large body of accepted practices that are not adequately supported by research. Currently, the dominant theoretical perspective of educators is "communicative language teaching." There are two primary tenets of communicative language teaching: (1) The goal of second-

William Saunders and David Marcelletti cofounded and codirect research projects at the Talking Teaching Network, a nonprofit organization. Both former teachers, they have participated in and directed research and development projects for more than 20 years that are focused on school change, English learners, English language arts, and the role of standards and assessments. Saunders is also a research associate at the University of California, Los Angeles. Claude Goldenberg is a professor of education at Stanford University. (To learn more about Goldenberg, turn to the author's note on page 4.) This article is adapted with permission from William Saunders and Claude Goldenberg, "Research to Guide English Language Development Instruction," in Improving Education for English Learners: Research-Based Approaches, edited by David Dolson and Lauri Burnham-Massey (CDE Press, 2010).

language education is to develop learners' communicative competence (more so than formal accuracy), and (2) communication is both a goal and means for developing language.² From this perspective, second-language learning is a social process in which language develops largely as a result of meaningful and motivated interaction with others,³ much as a first language does.⁴ Language *in use* is emphasized more than *knowledge about* language.

Teachers might note that some of the practices they have come to accept as standard or even exemplary might not be represented among the guidelines we report here. This, of course, does not necessarily mean that teachers are engaged in "wrong" practices, but rather that the standard wisdom of the field needs to be examined further through the lens of research. For example, secondlanguage acquisition teachers, theorists, and researchers have

In ELD instruction, language is the primary objective and content is secondary. In sheltered instruction, content is primary and language is secondary. ELD instruction—engaging in social interactions inside and outside of school and in other pursuits requiring English proficiency (e.g., obtaining news, serving as a juror, voting, shopping, banking, and locating and using information)—we would argue that preparation for academic studies taught in English remains the top priority because of its relevance to school and career success. Helping ELs succeed in academic contexts is no doubt the most challenging goal and most likely the greatest need to emerge in recent English learner research.

ELD instruction should not be confused with sheltered instruction (see "Unlocking the Research on English Learners," which begins on page 4 of this issue). The essence of sheltered instruction is this: where use of the primary language is not possible, and thus students are being taught in a language they do not fully



realized that exposure and interaction might help promote fluency and communicative competence, but they are not sufficient for native-like proficiency.⁵ Advanced—ideally, to the point of native-like—English proficiency is imperative for English learners in the United States, indeed for any language-minority student whose future and livelihood will be influenced by his or her competence in the dominant social language. We have therefore seen a renewed focus on form (that is, "correct usage" of vocabulary, grammar, norms of interaction in particular circumstances, etc.) as a critical element of second-language instruction.

We begin with an explanation and discussion of ELD instruction, what it is and is not. We then provide a brief description of the research base for ELD instruction and why it is so small. Subsequently, we report research related to 14 guidelines relevant to ELD instruction. The 14 guidelines are grouped into four categories representing concentric circles of influence, from the most global (the broad basis for school and district ELD policies) to the most specific (how ELD should be taught).

English Language Development Instruction

ELD instruction is designed specifically to advance English learners' knowledge and use of English in increasingly sophisticated ways. In the context of the larger effort to help English learners succeed in school, ELD instruction is designed to help them learn and acquire English to a level of proficiency (e.g., advanced) that maximizes their capacity to engage successfully in academic studies taught in English. Although there might be multiple goals for comprehend, instruction is "sheltered" (or adjusted) in order to help students learn skills and knowledge in the content areas— English language arts, math, science, social studies, physical education, and the arts. In doing so, sheltered instruction ideally also supports ongoing learning of English, particularly academic language. So, while the primary goal of sheltered instruction is academic success in the content areas, the primary goal of ELD instruction is learning English.

The distinctions we are making might appear contrived and artificial, since so much of academic content learning is highly language-dependent. It is particularly hard to know where the dividing line is between English *language arts* (content area) and English *language development*. But although the distinction between ELD and sheltered instruction can get blurred, our assumption is that it is better to keep them distinct and for teachers to be clear in their thinking when they are planning, delivering, and evaluating ELD instruction and when they are planning, delivering, and evaluating sheltered content instruction. As we discuss below, clarity about objectives contributes to effective instruction. In ELD instruction, language is the primary objective and content is secondary. In sheltered instruction, content is primary and language is secondary.

The Research Base for ELD Instruction: Why Is It Small?

This article draws heavily on six research syntheses, including meta-analyses that are especially useful because they pool the

results from multiple studies and can offer more confidence in the findings. We also draw on a few studies relevant to ELD instruction that were published subsequent to these six syntheses and meta-analyses, as well as on other broader syntheses that, while not focused specifically on EL populations, are applicable to ELD instruction (e.g., a review of research on grouping⁶).

The six major syntheses and meta-analyses represent divergent populations and contexts:

• The first⁷ casts a wide net across the entire field of secondlanguage acquisition. It suggests 10 principles of instructed language learning but notes that "research and theory do not afford a uniform account of how instruction can best facilitate language learning" and calls these principles "provisional specifications."⁸

This article draws heavily on six key research syntheses and metaanalyses; it also integrates subsequent studies relevant to ELD instruction and broader research applicable to ELD instruction.

- The second⁹ synthesizes 50 K-12 studies conducted within the United States and mostly involving Spanish-speaking English learners.
- The third¹⁰ addresses US and international studies involving primarily foreign-language contexts at the university level and a variety of primary and second languages.
- The fourth¹¹ analyzes both classroom and laboratory studies involving foreign-language, second-language, and ESL (English as a second language) contexts and populations.
- The fifth¹² focuses on studies of immersion, primarily French immersion programs implemented in Canada.
- The sixth¹³ draws mainly upon US and international studies of foreign language instruction involving primarily college and adult education contexts.

In sum, although there is considerable research on secondlanguage instruction broadly defined, we have a relatively small body of research to guide the design and delivery of K-12 ELD instruction specifically. Many studies are relevant to ELD instruction (e.g., language use, peer interaction, rates of proficiency attainment), but few explicitly focus on instruction or, more importantly, the effects of instruction. Even research on secondlanguage instruction broadly defined does not provide a basis for universally accepted principles of instruction.¹⁴ Given the research base, we have chosen to be inclusive. Rather than rule out studies and meta-analyses involving widely different populations and contexts (e.g., college-age and adult learners), we have chosen to review them and interpret them as best we can for their relevance to K-12 ELD instruction.* Furthermore, there are several important questions about ELD instruction for which we have no direct research, not even in different second-language acquisition contexts. For example, should districts prioritize ELD instruction? Should students be grouped by language proficiency levels for ELD instruction? Should teachers use specific language objectives? For these questions, we draw on the larger educational research literature, even though those studies are not based on ELD or second-language instruction or conducted with EL populations.

ELD Guidelines and the Related Research

This section explains 14 ELD guidelines and the research on which they are based. The guidelines are organized into four groups, each group framed around a driving question. The first group—global policy guidelines—answers the questions of *whether* and *to whom* schools should provide explicit ELD instruction. The second group—organizational guidelines—takes up the question of *how* ELD instruction should be organized in schools. The third group—curricular focus guidelines—addresses *what* should be taught during ELD instruction. Finally, the fourth group—instructional guidelines—focuses on the *pedagogical* question of how ELD should be taught.

Group 1: Global policy guidelines: What should state, district, and school policy commit to for ELD instruction?

The available evidence suggests the following major commitments: schools should make ELD part of the

program of instruction for English learners; they should do so for ELs at *all* levels of proficiency; and they should make the presence, consistency, and quality of ELD instruction a strong and sustained priority.

1. Providing ELD instruction is better than not providing it.

Existing research does not provide sufficient basis for determining the most effective methods of ELD instruction with total confidence. However, there is ample evidence that providing ELD instruction, in some form, is more beneficial than not providing it. Contemporary audiences may perhaps find it difficult to conceive, but three decades ago "Does second-language instruction make a difference?"¹⁶ was a viable question. A dominant view (then and for some time after) was the "monitor" hypothesis,¹⁷ which proposed that formal instruction is of limited utility for second-language acquisition; instead, large amounts of exposure to comprehensible input in authentic communicative contexts is critical. This hypothesis posited that although second-language instruction might help learners learn some rules, language forms, and the like, this type of learning is not very useful for *language acquisition*—that is, being able to speak and understand a lan-

^{*}For a complete discussion of the strength of the evidence for each of the 14 guidelines based on population, outcomes, and replication, see "Research to Guide English Language Development Instruction," by William Saunders and Claude Goldenberg.¹⁵ See also the listing of the 14 guidelines appearing on page 23 of this article that includes Saunders and Goldenberg's original classification in terms of strength of evidence for each guideline.

guage in natural conversations and authentic contexts. However, a review published 30 years ago of studies comparing secondlanguage *instruction* with second-language *exposure*¹⁸ concluded that instruction indeed aided second-language learning. This finding was true for young as well as older learners and at beginning, intermediate, and advanced levels. There are certainly benefits to exposure—that is, living, working, and going to school with English speakers (or any target language)—as well as to sheltered instruction that seeks to make academic subjects comprehensible. But ELD instruction clearly has added benefits.

A more recent meta-analysis¹⁹ revisited this question and asked: How effective is second-language instruction overall and

There is ample evidence that providing ELD instruction, in some form, is more beneficial than not providing it.

in comparison with exposure and communication with speakers of a second language? It found that focused second-language instruction (designed to teach specific aspects of the second language) is more effective than conditions that do not provide focused second-language instruction (including exposure only, minimally focused instruction, and minimal exposure). Students who received focused second-language instruction made more than five times the gains of students who did not.²⁰

An important study²¹ found that providing kindergarten and first-grade students with an "English-oracy intervention" resulted in more accelerated ELD growth compared with students in control schools who received typical "ESL instruction." The ELD intervention, which was equally effective with students in either English immersion or bilingual education, comprised (a) daily tutorials with a published ELD program, (b) storytelling and retelling with authentic, culturally relevant literature and leveled questions from easy to difficult, and (c) an academic oral language activity using a "Question of the Day." One important caveat: students who received the experimental treatment also received more ELD instruction than students in the control schools, so it is therefore impossible to rule out the effects of additional time independent of the particular curriculum and instruction used. The study is nonetheless important in demonstrating the value added by ELD instruction even in an English immersion context wherein students receive instruction in English throughout the day.

2. ELD instruction should continue at least until ELs attain advanced English language ability.

This guideline emerges from evidence about the rate at which students achieve advanced levels of proficiency. Students' academic English—both oral language proficiency and literacydevelops over time (five or more years). The evidence regarding literacy development has been reported and debated and theorized about for more than 25 years.²² The evidence regarding oral English development among English learners has received much less direct attention. However, one synthesis of research on oral language²³ provides estimates based on a compilation of a small number of K–12 US studies that contained longitudinal or crosssectional oral language outcomes. Summarizing across the studies (primarily elementary grade levels) and the various measures, it reported the following:

- a. English learners typically require four to six years to achieve what would be considered "early advanced" proficiency (level 4, where level 1 is beginner and level 5 is advanced).
- b. Average oral English proficiency approached native-like proficiency (level 5, advanced) by grade 5 in fewer than half of the available studies.
- c. Progress from beginning to middle levels of proficiency is fairly rapid (from level 1 to 3), but progress from middle to upper levels of proficiency (from level 3 to 5) slows considerably—in other words, there is evidence of a *plateau effect*, where many English learners reach a middle level of English proficiency and make little progress thereafter.
- d. As evident in one study that allowed for comparisons with native English-speaker norms,²⁴ the gap between ELs and native speakers increased across grade levels.

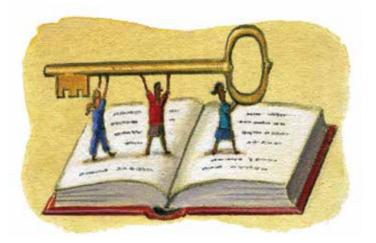
The hypothesis, then, is this: if English learners continue to receive explicit ELD instruction even after they reach middle levels of English proficiency, and as they move into early advanced and advanced levels, they can more rapidly attain native-like levels of oral proficiency and avoid the plateau many experience before becoming advanced speakers of English. Two assumptions underlie this hypothesis. First, the hypothesis assumes that English learners typically do not receive ELD instruction once they get to middle proficiency levels and, even less so, as they move into early advanced and advanced levels. Second, it assumes that the lack of ELD instruction is one reason for the stagnation. Our observations at school sites and a new study²⁵ corroborate these assumptions. With few exceptions, schools tend not to provide an ELD block, pull-out, or coursework once English learners pass the middle proficiency levels.

3. The likelihood of establishing and sustaining an effective ELD instructional program increases when schools and districts make it a priority.

Considerable research suggests that a sustained and coherent focus on academic goals in schools and districts is associated with higher levels of student achievement. However, because of the near absence of experimental research and detailed case studies in this area, it is difficult to draw firm conclusions about cause and effect. Moreover, some researchers have concluded that distal factors such as school and district policies are too removed from students' daily experience to have much impact on their achievement.²⁶ There is nonetheless at least some consensus in the published literature that what gets emphasized in schools and districts can influence what teachers do and students learn. Numerous dimensions of school and district functioning—leadership, common goals and curricula, professional development, ongoing support and supervision, regular assessments that inform instruction—are levers that school and district administrators can use to help shape the academic experiences of students.²⁷

The same holds true for English learners: what school and district leaders emphasize influences what happens in classrooms and what students learn. At least two studies²⁸ found that relatively high-achieving California schools with high concentrations of ELs shared various characteristics that converged on their making academic achievement a priority. At the school level, according to principals, there was a school-wide focus on ELD and stan-dards-based instruction; shared priorities and expectations regarding the education of English learners; and curriculum,

ficiency among Spanish-speaking kindergartners who received ELD instruction during a separate block of time. Compared with kindergartners whose teachers integrated ELD instruction in their larger language arts block, kindergartners from ELD block classrooms made greater gains on end-of-year measures of oral English proficiency and also word identification.* The study included more than 1,200 students from 85 classrooms in 35 schools spread across Southern California and Texas. The positive effects of an ELD block were found in both English immersion and bilingual education programs. Even in the English immersion classrooms, where instruction was delivered almost exclusively in English, English learners provided with a separate ELD instructional block



Researchers found that students who received focused secondlanguage instruction made more than five times the gains of students who did not.

instruction, and resources targeted at them. District administrators cited a shared vision and plan for EL achievement and professional development, resources, and school and classroom organization to support achievement. Smaller intervention studies have reported complementary findings.²⁹

Although far from definitive, available research suggests that one way to promote higher levels of ELD among English learners is to make sure it is a school- and district-wide priority. As is true in other areas of academic achievement, the direction set by school and district leadership, combined with consistent, focused, and effective implementation and follow-up, is likely to influence what is emphasized in classrooms and what students learn.

Group 2: Organizational guidelines: How should ELD instruction be organized in school?

School personnel should strongly consider establishing within the daily schedule, and without compromising access to the core curriculum (English language arts and all other content areas), a block of time dedicated exclusively to ELD instruction. To the greatest extent possible, ELs should be grouped by language proficiency levels for their ELD instruction.

4. A separate, daily block of time should be devoted to ELD instruction.

Two studies offer guidance on whether ELD instruction should be provided during a separate time of the school day, as typically happens with reading, math, and the like. One³⁰ found small (but still statistically significant) positive effects on oral language prooutperformed English learners whose teachers tried to integrate ELD in the language arts block.

What explains this effect? The researchers³¹ found that most of the ELD block time was devoted to oral English language *activities* like sharing personal experiences, identifying and naming colors, and describing picture cards. They conjecture that, although outcomes were significant, the magnitude of the effects may have been small because of the lack of explicit language teaching. In other words, establishing a separate block of time for ELD instruction is probably beneficial—perhaps in part because it helps teachers focus on English language itself and promotes both listening and speaking in English—but the size of the benefit likely depends on what teachers actually do within the ELD block.

Another study addressed both questions: whether a separate ELD block *and* an explicit ELD program are beneficial for English learners' oral language development. The study³² included nine classrooms representing three conditions: (1) classrooms with a separate ELD block taught by teachers delivering an explicit ELD program being evaluated, (2) classrooms with a separate ELD block taught by teachers delivering ELD derived from various components the individual teachers culled from published sources, and (3) classrooms without a separate ELD block taught by teachers who were integrating ELD during their language arts time (where they used a published reading program). Students in all three conditions made significant gains over the year, but the gains were not equivalent. Students in condition 1 (separate ELD

*See guideline 8 for a discussion of teaching literacy during ELD instruction.

block using an explicit ELD program being evaluated) scored significantly higher than did students in conditions 2 (separate ELD block using materials that teachers themselves pulled together) and 3 (ELD integrated with language arts).

One of the studies of California schools mentioned previously³³ lends further support to this guideline insofar as high-achieving schools with high concentrations of English learners tended to emphasize ELD instruction and most utilized a separate daily block of time to deliver ELD instruction.

5. English learners should be carefully grouped by language proficiency for ELD instruction, but they should not be segregated by language proficiency throughout the rest of the day.

Should ELs be grouped with other ELs or kept with English speakers? If grouped with other ELs, should they be with others at simi-

The direction set by school and district leadership, combined with consistent, focused, and effective implementation and follow-up, is likely to influence what is emphasized in classrooms and what students learn.

lar language levels, or should they be in mixed language-level groups? If they are grouped with others at similar language levels, for what purposes and for how much of the school day? We know of no research that answers these questions directly. However, many studies have examined the pros and cons of different types of grouping arrangements in other content areas, primarily reading and mathematics. This research³⁴ suggests the following:

- a. Keeping students of different achievement/ability levels in entirely separate (homogeneous) classes for the entire school day (and throughout the school year) leads to depressed achievement among lower-achieving students with little to no benefit for average and higher-achieving students. A possible exception is extremely high-achieving students (sometimes referred to as "gifted"), whose achievement can be significantly enhanced in homogeneous classes with other extremely highachieving students. We have found no studies that have looked at grouping practices for extremely high-achieving English learners.
- b. Students in mixed (heterogeneous) classrooms can be productively grouped by achievement level for instruction in specific subjects (e.g., math or reading). Groups can be formed with students in the same classroom or students in different classrooms (the latter is sometimes called the "Joplin plan"). In contrast to keeping students in homogeneous classes throughout the day, grouping students by achievement level in certain subjects will result in enhanced achievement at all ability levels

if (1) instruction is tailored to students' instructional levels, and (2) students are frequently assessed and regrouped as needed to maintain an optimal match with their instructional needs (that is, students are taught what they need to know to make continual progress).

To the extent that second-language learning is analogous to learning in other curriculum areas, findings from the abilitygrouping literature serve as a useful starting place to make decisions about how to group ELs. These findings suggest that English learners should not be segregated into classrooms consisting of only ELs, much less into classrooms consisting of all low-achieving ELs. Instead, English learners should be in mixed-ability classrooms and then grouped by English language proficiency specifically for ELD instruction. Moreover, they should be regu-



larly assessed to monitor their progress and to make certain that instruction and group placement are well suited to their languagelearning needs. Presumably, as ELs attain proficiency in English, they can and should receive increasing amounts of instruction with students who are already proficient in English.

Group 3: Curricular focus guidelines: What should be taught during ELD instruction?

The available evidence suggests that ELD instruction should explicitly teach, and engage students in consciously studying, the elements of the English language as applicable to both academic and conversational language, with significant time devoted to speaking and listening, and particular attention to meaning and communication.

6. ELD instruction should explicitly teach forms of English (e.g., vocabulary, syntax, morphology, functions, and conventions). Language forms refer to standard, formal aspects of a language—words, sentence constructions, and generally what is considered to be "correct" or "grammatical" usage, such as subject-verb agreement, possessives, the order of adjectives and the nouns they modify, and so on. The essential body of evidence on teaching language forms explicitly comes from studies³⁵ in primarily college and adult-level foreign-language contexts, where explicit instruction consistently produced stronger results than implicit instruction. Here, explicit instruction means either (a) instructors explain a language element (a rule or a form) to students and then

provide opportunities for them to study or practice the element with many examples, or (b) instructors engage students in tasks containing many examples of a particular form or rule and then direct students' attention to the language element so that students arrive at the rule by themselves or with the teacher's guidance. Explicit instruction included both approaches to studying features of the second language. Instructional treatments were classified as implicit in cases where instructors did not present or explain the language element and did not direct students' attention to the language form. On average, explicit instructional approaches were more than twice as effective as implicit approaches.

As we have noted, most of the evidence for explicitly teaching language forms comes from studies with college and adult students. In addition, the great majority of the studies were of short duration and narrow in scope-teaching a specific feature of language (for example, verb tense, adverb placement, relative pronouns, or wh- questions) and then measuring the extent to which students learned that feature. However, the hypothesis that emerges from this body of evidence is corroborated by other reviews of research. For example, a recent review³⁶ found that exposure to a second language in meaning-based school programs designed to promote second-language learning (e.g., contentbased second-language instruction) successfully develops comprehension, oral fluency, self-confidence, and communicative abilities, but tends not to develop as fully other features of the second language, such as pronunciation and morphology, syntax, and pragmatics. Explicit instructional attention to forms is likely to facilitate students' second-language learning in a way that relying solely on meaning- and communication-oriented instruction alone will not.³⁷ Another review of research³⁸ posits the same hypothesis based on studies from French immersion programs.

The term *explicit* should be interpreted carefully. Explicit instruction is often associated with direct instruction. Indeed, direct instruction is, by definition, explicit (and, on average, effective). However, it is not the only form of explicit instruction. Most models of direct instruction³⁹ typically involve an explanation, demonstration, or presentation of the concept or skill in the early part of the lesson, followed by various forms of practice, feedback, and assessment. As such, direct instruction generally takes a deductive approach to teaching and learning. Explicit instruction can be inductive as well. For example, in the review discussed above with college and adult students, some learners received a certain amount of experience with a language form (e.g., possessives or interrogatives), and then were directed to attend to the form or to focus on deriving the underlying rule or nature of the form.⁴⁰ The key point is that instruction that explicitly focuses students' attention on the targeted language form produces higher levels of second-language learning, at least in the short term that the studies examined, than instruction that does not. Focusing the learners' attention is also a central concept in other researchers' principles of instructed language learning.41

One aspect of language development that has received minimal attention from K-12 researchers is "pragmatics." Pragmatics refers to understanding and using the target language in genuine interactive situations where language formalisms can take a back seat to receiving or getting a message across. For example, there are discourse norms that dictate how and whether one disagrees with a peer or a teacher without generating negative feelings or breaking down the communication. Classroom teaching can help second-language learners understand and use these pragmatic rules and norms,⁴² but instructional studies are again limited to adult second-language learners. There are no instructional studies with which we are familiar that focus on K-12 ELs.⁴³

7. ELD instruction should emphasize academic language as well as conversational language.

Nearly two decades ago, a pair of researchers provided a succinct definition of academic language: "the language that is used by teachers and students for the purposes of acquiring new knowledge and skills ... imparting new information, describing abstract ideas, and developing students' conceptual understanding."⁴⁴ Expanding on this definition, we think *academic language* refers to the specialized vocabulary, grammar, discourse/textual, and

ELs should be carefully grouped by language proficiency for ELD instruction but not segregated by language proficiency during the rest of the day.

functional skills associated with academic instruction and mastery of academic material and tasks. In the simplest terms, *academic language* is the language that is needed in academic situations such as those students encounter during classroom instruction or reading texts.⁴⁵ These would obviously refer to academic texts but also include many newspaper and magazine articles or other nonfiction that the Common Core State Standards call for, which are information-dense and presume certain background knowledge as well as familiarity with key vocabulary and sentence structures.

It is widely believed that successful performance in school requires proficiency in academic language and that a major objective of education for both majority- and minority-language students is teaching the academic language skills they need to master the diverse subjects that make up the curriculum. For example, a group of researchers⁴⁶ found that performance on highly decontextualized tasks, such as providing a formal definition of words, predicted academic performance, whereas performance on highly contextualized tasks, such as face-to-face communication, did not.

Definitions of academic language often contrast it with language used in everyday social situations. The first researcher to propose a distinction between basic communication and academic language,⁴⁷ for example, characterized academic language as decontextualized and cognitively demanding, whereas social language tends to be more contextualized and less cognitively demanding. As a result, academic language tends to draw on more-specialized technical vocabulary, to use more-complex grammatical constructions, and to be more precise in its intended meaning. Others have highlighted the nature of the vocabulary that characterizes academic versus everyday language use: academic language tends to use less-common, more-technical, and highly specialized vocabulary in contrast to that which is used in everyday conversations.⁴⁸

The premise that ELD instruction should focus on both social, interpersonal language and academic language is not controversial. ELs require both kinds of proficiency. That there should be greater emphasis on academic language within ELD instruction, however, is a more recent hypothesis. Although there is, as yet, virtually no research that has examined empirically the effects of

instruction focused specifically on academic language, the hypothesis emerges from at least two interrelated findings. First, studies consistently find that ELs require from five to seven years to achieve native-like proficiency in oral language and literacy.49 Since academic language probably plays an increasingly important role in defining what actually constitutes language proficiency as students go up the grade levels, it is reasonable to hypothesize that a focus on academic language might help students attain advanced language proficiency more quickly. The second finding is that the rate at which students acquire proficiency tends to slow or even plateau as they move to higher levels of proficiency.⁵⁰ Since higher levels of proficiency tend to be characterized by more-academic uses of language, it is reasonable to hypothesize that a greater focus on academic lan-

guage, especially at the middle and upper levels of proficiency, might minimize that plateauing effect.

8. ELD instruction should incorporate reading and writing, but should emphasize listening and speaking.

Along with explicit ELD instruction, programs for ELs should include literacy instruction,⁵¹ sheltered content area instruction as needed,⁵² and primary language support or instruction where possible.⁵³ In such a comprehensive program, it would seem most beneficial to emphasize speaking and listening during ELD instruction. Although speaking and listening are emphasized in other parts of the instructional day, the textual demands of literacy and content area instruction no doubt need to be given priority during those instructional times. It is likely that time allotted for ELD is the one opportunity to make speaking and listening a priority.

The importance of oral English proficiency for ELs is well established in the research literature. With increasing oral English proficiency, English learners are more likely to use English, and more frequent use of English tends to be correlated with subsequent gains in oral English proficiency.⁵⁴ In addition, with increasing oral proficiency in English, ELs are more likely to interact and establish relationships with native English-speaking peers, leading to more opportunities to use English.⁵⁵ With increasing oral English proficiency, ELs also tend to use more complex languagelearning strategies that allow them to monitor language use and interact more effectively with others.⁵⁶ Finally, as oral English proficiency develops, ELs demonstrate a wider range of language skills, including skills associated with more-academic uses of language, specifically higher-level question forms⁵⁷ and the capacity to define words.⁵⁸

Several studies have documented a positive relationship between oral English proficiency and English reading achievement.⁵⁹ Moreover, the relationship between oral English proficiency and English reading achievement is stronger for measures that are associated with more-academic aspects of oral language proficiency. For example, the number of *different* words English learners use during an interview correlates more strongly with reading achievement than the total number of words they use (*r*=.63 and *r*=.40, respectively).⁶⁰ The relationship between oral

Along with explicit ELD instruction, programs for ELs should include literacy instruction, sheltered content area instruction as needed, and primary language support or instruction where possible.

English proficiency and English literacy strengthens across the grades, arguably because both are similarly influenced by schooling and both are indicative of academic success. In one study,⁶¹ correlations between English reading achievement and quality measures of English learners' word definitions increased from r=.16 in grade 2 to r=.50 in grade 5.

Two studies provide evidence suggesting that devoting more instructional time to listening and speaking yields significantly higher levels of oral language proficiency. Among kindergarten ELs, one study⁶² found that more time spent on oral English language instruction leads to stronger oral language outcomes without compromising literacy outcomes. Teachers who produced the strongest outcomes (oral and literacy) devoted approximately 60 percent of their ELD block time to oral language activities (without text) and 40 percent to literacy-related activities (the average daily time allotment for ELD was 37 to 40 minutes). Among first-grade ELs, another study⁶³ found that more time on listening and speaking (approximately 90 percent of the ELD block time) targeted toward language elements produced significantly higher oral English language outcomes than less time on listening and speaking (approximately 50 percent of the ELD block time) that did not target specific language elements.

9. ELD instruction should integrate meaning and communication to support explicit teaching of language.

Meaning, of course, plays a central role in language use. We use language to express and comprehend meaningful communication with others and to help build understanding for ourselves. Meaning also plays a central role in language learning insofar as being able to express and comprehend meaningful communication in the language being learned probably motivates and compels language learning. Although there is little controversy about the role of meaning and communication in language use—and by *communication* we mean both receiving and sending messages—their role in language *instruction* is more complicated. Should authentic, meaningful communication drive instruction? Or, alternatively, should explicit teaching of language forms drive instruction? Research on second-language learning and acquisition has advanced over the last two decades in coming to understand that instructed language learning must involve meaning and communication, but it also must direct students who study a second language simply as one more school subject. The content emphasis of the French immersion studies exemplifies consciously communicating meaning—in this case, the meaning and communication associated with studying academic content. However, the review also highlights another set of findings from French immersion studies: "What emerges from these studies is that immersion students are second language speakers who are relatively fluent and effective communicators, but non-targetlike [that is, not fully proficient] in terms of grammatical structure and non-idiomatic in the lexical choices and pragmatic expression—in comparison to native speakers of the same age."⁶⁶ It concludes that language immersion programs are likely to improve language learning by more strategically and



Communication and meaning should be used to motivate and facilitate second-language learners' acquisition and use of targeted language forms.

students' attention to forms and functions of the language being learned. No doubt, the interplay between meaning-making and conscious attention to language vary for different aspects of language, levels of second-language proficiency, the age of the learner, the learner's first language, and other factors.⁶⁴ Unfortunately, we do not have sufficient empirical evidence to fully understand this dynamic interplay.

We constructed the wording of this guideline based on our review of the literature relative to the focus of this article: *ELD instruction should integrate meaning and communication to support explicit teaching of language*. Communicating meaning and providing explicit teaching are both important. However, we propose that communication and meaning should support explicit teaching of language, not necessarily drive ELD instruction. In other words, communication and meaning should be used to motivate and facilitate second-language learners' acquisition and use of targeted language forms.

A recent review⁶⁵ of primarily second-language immersion studies provides one source of evidence supporting the importance of incorporating meaning and communication in languagelearning contexts. But it also points out the need for better understanding of how to balance meaning and communication with explicit language teaching. Drawing primarily from French immersion studies (K-12, college, and adults), it notes both the successes and limitations of such programs: students instructed through carefully designed programs that immerse students in content study and language study consistently produce levels of second-language proficiency that exceed the levels achieved by systematically teaching and helping students explicitly attend to language forms without compromising the effects of contentbased, meaning-oriented pedagogy.

The study⁶⁷ discussed earlier that compared nine classrooms representing three conditions (which concluded that a separate ELD block with an ELD program was more effective than either a separate ELD block with materials teachers pulled together or ELD integrated with language arts) illustrates this guideline. Meaning and communication can support explicit teaching of language during ELD instruction. All three conditions in the study involved meaning and meaning-making, primarily by focusing on content, concepts, and vocabulary that first-grade students were studying in their English language arts units and reading selections. However, the meaning or meaning-making aspects of the lessons from condition 1 (which produced the strongest outcomes) were utilized to support the learning of specific language forms. The teacher's modeling and explanation of how to use the language form (e.g., "Where did X sail? X sailed to Y."), and the practice students engaged in, were supported by at least three dimensions of the lesson that involved meaning and meaningmaking: First, the lesson was broadly contextualized by the story students had read (about a character that sailed to different parts of the world). Second, the lesson was contextualized by a map of the world and a figurine students held and maneuvered as they constructed their responses (e.g., "Max sailed to Europe."). Third, students eventually took over the role of asking one another the general question (e.g., "Where did Max sail?"), and the respondent could construct his or her own answer, choosing the location on the map (showing where they had Max sail) and uttering the corresponding response. While we do not know empirically the unique effects of each of the three meaning dimensions (story, map/figurine, and interactions), apart from the focus on form (*where* question and response), we hypothesize that these meaning dimensions contributed to language learning and explicit language teaching.

Group 4: Instructional guidelines: How should ELD be taught?

ELD instruction should maximize students' purposeful and ready use of English involving carefully planned interactive activities focused on specific language objectives. ELD instruction should

Activities that *effectively* mix ELs and more-proficient ELs or native English speakers typically involve carefully structured tasks that strongly encourage productive interaction.

also provide students with corrective feedback that is nonthreatening and comprehensible, and encourage students to use strategies that help them progress as language learners.

10. ELD instruction should be planned and delivered with specific language objectives in mind.

The use of instructional objectives is often considered a centerpiece of effective instruction (although not necessarily by everyone⁶⁸). Good objectives function as starting points and rudders to help keep lessons and activities focused and heading toward productive ends.⁶⁹ Instructional objectives enhance learning outcomes "to the degree to which objectives, teaching, and assessment are coordinated with one another."⁷⁰

What we do not know empirically is the degree to which what seems to be generally true for other academic subjects also holds true for ELD instruction. However, we would like to elaborate on a potential connection between the more general research on instructional objectives and the evidence on explicit versus implicit second-language instruction reported earlier.⁷¹ A subset of the studies analyzed in that synthesis included direct contrasts between treatments that specifically focused students' attention on the targeted language form and comparison conditions that involved simple exposure to or experience with the same language form. Such comparisons showed that explicit instruction focusing student attention on the targeted language form can substantially increase the success of such lessons. It is quite possible that formulating clear language objectives would support teachers' efforts to plan and deliver instruction that effectively directs students' attention to the targeted language form. Thus, our hypothesis is that instructional objectives will be as useful for ELD instruction as they are for other types of academic instruction.⁷²

11. Use of English during ELD instruction should be maximized; the primary language should be used strategically.

This guideline does not negate the fact that many studies have shown the advantages of maintenance and development of English learners' home languages, in particular the benefit to English literacy of teaching ELs literacy skills in their primary language (see "Unlocking the Research on English Learners," which begins on page 4 of this issue). We do not know with certainty, however, the impact that use of the primary language during ELD instruc-



tion will have on oral English language acquisition. In general, the evidence suggests that students' language choices tend to align with the dominant language of instruction. For example, one study73 investigated the language choices of Spanish-speaking ELs in bilingual preschool classes. In classes where teachers tended to use more English for instruction, ELs tended to use more English with their peers. In classes where teachers tended to use more Spanish, learners tended to use more Spanish. A follow-up study74 reported language-use data for first-grade Mexican American ELs, half of whom were enrolled in "English" classes, and half of whom were enrolled in Spanish bilingual classes. In the English classes, ELs used English during peer interactions most of the time. English learners in the bilingual classes used Spanish most of the time. Among second-grade English learners in Spanish bilingual programs where at least most instruction was delivered in Spanish, two studies75 found that ELs were more likely to use Spanish during peer interactions. One of these studies⁷⁶ found students using Spanish over English by a ratio of 6 to 1. Finally, among fourthgrade English learners who had participated in Spanish bilingual classrooms through grade 3 and were then placed in an "Englishonly" class, a study77 found a substantial increase from the beginning to the end of the year in students' use of English in their classroom interactions (53 percent to 83 percent).

Based on these studies, we conclude the following: If a practical goal of ELD instruction is increased use of English, that goal will be served best by instruction delivered and tasks carried out primarily in English. However, we can imagine using the primary language in a limited but strategic manner during ELD instruction to ensure that students understand task directions, pay attention to cognates, and master language learning and metacognitive strategies.

12. ELD instruction should include interactive activities among students, but they must be carefully planned and carried out. If interactive activities are to benefit ELs, careful consideration must be given to the following factors:

- The design of the tasks in which students engage;
- The training or preparation of the more-proficient English speakers with whom the ELs interact; and
- The language proficiency of the ELs themselves.⁷⁸

Without attention to these factors, interactive activities tend not to yield language-learning opportunities at all.⁷⁹ For example, in a study of cooperative learning groups comprised of grade 6 ELs and native English speakers, researchers found that paperand-pencil tasks designed to spur interaction actually minimized interaction and language-learning opportunities.⁸⁰ ELs and non-ELs tended to cut short their interactions in order to complete assigned paper-and-pencil tasks in the allotted time: "Just write that down. Who cares? Let's finish up." Other researchers⁸¹ drew a similar conclusion based on their review of EL studies that focused on reading outcomes: interactive activities that *effectively* mix ELs and more-proficient ELs or native English speakers typically involve carefully structured tasks that required or at least strongly encouraged productive interaction.

This guideline regarding interactive activities is supported by

English Language Development Guidelines

Group 1: Global policy guidelines: What should state, district, and school policy commit to for ELD instruction?

- 1. Providing ELD instruction is better than not providing it. (*Relatively strong supporting evidence from EL research*)
- 2. ELD instruction should continue at least until ELs attain advanced English language ability. (*Based on hypoth*eses emerging from recent EL research)
- The likelihood of establishing and sustaining an effective ELD instructional program increases when schools and districts make it a priority. (Applicable to ELD but grounded in non-EL or non-ELD research)

Group 2: Organizational guidelines: How should ELD instruction be organized in school?

- 4. A separate, daily block of time should be devoted to ELD instruction. (*Based* on hypotheses emerging from recent EL research)
- English learners should be carefully grouped by language proficiency for ELD instruction, but they should not be segregated by language proficiency throughout the rest of the day. (Applicable to ELD but grounded in non-EL or non-ELD research)

Group 3: Curricular focus guidelines: What should be taught during ELD instruction?

6. ELD instruction should explicitly teach

forms of English (e.g., vocabulary, syntax, morphology, functions, and conventions). (*Based on hypotheses emerging from recent EL research*)

- 7. ELD instruction should emphasize academic language as well as conversational language. (Based on hypotheses emerging from recent EL research)
- 8. ELD instruction should incorporate reading and writing, but should emphasize listening and speaking. (Based on hypotheses emerging from recent EL research)
- 9. ELD instruction should integrate meaning and communication to support explicit teaching of language. (*Based on hypotheses emerging from recent EL research*)

Group 4: Instructional guidelines: How should ELD be taught?

- 10. ELD instruction should be planned and delivered with specific language objectives in mind. (*Applicable to ELD but grounded in non-EL or non-ELD research*)
- 11. Use of English during ELD instruction should be maximized; the primary language should be used strategically. (Based on hypotheses emerging from recent EL research)
- 12. ELD instruction should include interactive activities among students, but they must be carefully planned and carried out. (*Relatively strong supporting evidence from EL research*)
- 13. ELD instruction should provide



students with corrective feedback on form. (Based on hypotheses emerging from recent EL research)

14. Teachers should attend to communication and language-learning strategies and incorporate them into ELD instruction. (Based on hypotheses emerging from recent EL research)*

-W.S., C.G., and D.M.

*For a more complete discussion of the strength of the evidence for each of the 14 guidelines based on population, outcomes, and replication, see William Saunders and Claude Goldenberg's chapter, "Research to Guide English Language Development Instruction," in *Improving Education for English Learners: Research-Based Approaches*, http://bit.ly/10Kabqd. research on older second-language learners. A meta-analysis⁸² found that treatments with carefully constructed interactive tasks produced a significant and substantial effect on language-learning outcomes. It examined two critical features of interactive tasks: essentialness and output. Essentialness has to do with the extent to which the targeted language form is essential to the task the group is trying to complete: Does successful completion of the task *require*, or is it at least *facilitated by*, correct oral comprehension or production of the meaning of certain target words (e.g., modes of transportation: cars, trucks, trains, etc.) or language constructions (e.g., if-then, before-after)? Learning outcomes were stronger when the language forms or rules were essential for successful completion of a group task. A second analysis with the same studies focused on interactive tasks that required attempts

ELD teachers should not hesitate in providing corrective feedback. The central issue is how to do it so that students understand it as part of language learning rather than a negative evaluation.

to actually produce the language form, for example, tasks that required students to produce oral utterances using the target words, such as modes of transportation, or the target construction, such as an if-then construction. Interactive tasks that required learners to attempt to produce the language form more consistently yielded stronger effects on both immediate and delayed posttests than tasks that did not require learners to produce the language form. Another review⁸³ found similar results based on studies involving students ages 7 to 14: to be effective in supporting language development, interactive tasks need to be designed so that learners must *use* specified language forms in order to communicate successfully.

13. ELD instruction should provide students with corrective feedback on form.

Providing ELs with feedback on form is not a matter of whether to do it but how best to do it. During ELD instruction wherein the primary objective is studying and learning language, corrective feedback can be beneficial. A meta-analysis⁸⁴ that examined the effects of corrective feedback specifically on grammar included studies with a mixture of foreign-language, second-language, and English-as-a-second-language contexts, some of which were conducted in classrooms and some conducted under laboratory conditions. Despite several limitations, all of the studies involved a treatment group that received some form of grammar-focused corrective feedback, a comparison group that did not receive corrective feedback, and a measure of language learning. In all of the studies, the treatment group outperformed the comparison group, and in two-thirds of the studies, the effects were large.

Another review⁸⁵ examined the effects of implicit and explicit forms of corrective feedback: recasts versus prompts. When teachers *recast* a student's utterance, they rearticulate what the student was trying to say with an utterance that includes corrections of one or more errors the student made. For example, if a student says, "My brown cat more big than my white," the teacher would say, "Oh, you mean your brown cat *is bigger* than your white *one*?" In contrast, *prompts* explicitly draw a student's attention to an error and encourage or require the student to attempt to repair (linguistics-speak for "to correct") the utterance. So in the previous example, the teacher would say something like, "Oh, your brown cat is bigger than your white one. Can you say it that way?"



And if the student hesitates, the teacher might help get him or her started (e.g., "My... brown...") and try to have the student formulate as much of the utterance as possible. All of the studies found positive effects for both recasts and prompts but with stronger effects for prompts.

The same review⁸⁶ also provides an analysis of how feedback given through more- and less-explicit forms might function differentially depending on teachers' relative emphasis on form versus meaning. Based on a review of studies that looked at recasts and prompts in French and Japanese immersion classes,87 it concludes that the general classroom orientation influences the potential benefits of either recasts or prompts. In form-focused classrooms where teachers spend some time engaging students in oral drills and repetition of correct forms, the more subtle or implicit recast can serve as meaningful feedback, yielding student repairs, because the students are used to attending to form and repetition of teacher utterances. Recasts are less effective in meaning-oriented classrooms where students are more accustomed to attending to communication and less likely to attend to corrections embedded in teacher utterances. In meaning-oriented classrooms, prompts may be more effective because they explicitly mark the need for the repair of an utterance and therefore purposefully redirect students' attention, at least momentarily, away from meaning to the language itself.

In sum, feedback should not be taken for granted. Where and when implicit feedback, such as recasts, seem to be relevant, ELD teachers will want to help students recognize them and understand their function, most likely as a broader orientation to the instruction block. ELD teachers should provide similar orientation to interactional activities and lessons that involve explicit feedback, so as to alert students to the fact that interactions will be momentarily interrupted to give students feedback intended to help them refine their language use. Most important, the evidence suggests that ELD teachers should not avoid or hesitate in providing corrective feedback. Rather, the central issue is how to do it effectively so that students respond to it, benefit from it, and understand it as a productive part of language learning rather than a negative evaluation of *their* language learning.

14. Teachers should attend to communication and languagelearning strategies and incorporate them into ELD instruction.

Two researchers⁸⁸ found that more-proficient ELs demonstrate a wider repertoire of language-learning strategies than less-proficient English learners. These strategies appear to emerge in the same order-from less to more sophisticated-and are correlated with levels of language proficiency. Second-language learners first use and rely most heavily on fairly simple strategies, such as repetition and memorization. As they learn words and phrases, they will repeat them upon hearing them (e.g., the teacher says "only," and the students repeat "only" to themselves), and they will practice and sometimes produce an entire group of related words they are learning to memorize (e.g., Monday, Tuesday, Wednesday, etc.). As they progress to the middle levels of language development, English learners begin to use more interactive strategies. For example, they are more apt to talk to themselves ("I'll put this here, and this ... "), insert themselves into conversations with verbal attention-getters ("I know..." or "I have one..." or "It was me..."), and elaborate on topics ("My mom and dad took me to..."). Finally, at more advanced levels, ELs use language- and communicationmonitoring strategies in order to maintain and, as needed, repair communication with others, including self-correction ("I need some pencil-a pencil."), appeals for assistance ("How do you say...?"), and requests for clarification ("Decorate? What does decorate mean?").

In addition to the relevance of these findings for designing instructional strategies, in more general terms we view them as important information for ELD teachers. As students develop increasing proficiency, their capacity to use English increases, but so does their strategy use, which seems to undergo significant qualitative changes: from heavy reliance on receptive strategies to increased use of interactive strategies and eventually to more sophisticated, metacognitive communication-monitoring strategies.

Reviewing the literature on language-learning strategies, one researcher wrote:⁸⁹

Taken together, these studies identified the good language learner as one who is a mentally active learner, monitors language comprehension and production, practices communicating in the language, makes use of prior linguistic and general knowledge, uses various memorization techniques, and asks questions for clarification.

One study⁹⁰ found that explicit instruction on how to use strategies effectively, especially metacognitive strategies, might be beneficial for ELs' oral language development. Several other studies have shown positive effects of teaching or prompting listening comprehension strategies to English learners.⁹¹ Teachers may need to use students' primary language (when they can) to teach strategies for students at lower levels of second-language proficiency.⁹²

ur experience in schools suggests that attention to ELD instruction is growing, and that important efforts are underway to develop effective ELD programs for both elementary and secondary school students. Attention to the matter of academic language proficiency is also increasing.⁹³ It is imperative to complement such efforts and interest with careful research and evaluation. Clearly, no one guideline will be sufficient to help ELs gain access to high-level,

ELD program development must be complemented by careful research and evaluation. Strong opinion too often trumps careful weighing of evidence.

mainstream academic curriculum. Instead, we must not only test individual components and guidelines, we must also construct comprehensive ELD programs and test the proposition that they help students acquire high levels of English language proficiency as rapidly as possible, regardless of whether they are in bilingual or English-only programs. From our experience, strong opinion too often trumps careful weighing of evidence in what remains a volatile and politically charged field.

Endnotes

1. Michael F. Graves, Diane August, and Jeannette Mancilla-Martinez, *Teaching Vocabulary to English Language Learners* (New York: Teachers College Press, 2013).

2. Eva Alcón, "Research on Language and Learning: Implications for Language Teaching," International Journal of English Studies 4, no. 1 (2004): 173–196.

3. Michael Long, "Input and Second Language Acquisition Theory," in *Input in Second Language Acquisition*, ed. Susan Gass and Carolyn Madden (Rowley, MA: Newbury House, 1985), 377–393.

4. See Stephen D. Krashen, *Principles and Practice in Second Language Acquisition* (Oxford: Pergamon Press, 1982).

5. See Roy Lyster, Learning and Teaching Languages through Content: A Counterbalanced Approach (Philadelphia: John Benjamins, 2007).

6. Robert E. Slavin, "Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis," *Review of Educational Research* 57, no. 3 (1987): 293–336.

Rod Ellis, "Principles of Instructed Language Learning," *System* 33, no. 2 (2005): 209–224.
 Ellis, "Principles of Instructed Language Learning."

9. 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).

10. Casey M. Keck, Gina Iberri-Shea, Nicole Tracy-Ventura, and Safary Wa-Mbaleka, "Investigating the Empirical Link between Task-Based Interaction and Acquisition: A Meta-Analysis," in *Synthesizing Research on Language Learning and Teaching*, ed. John M. Norris and Lourdes Ortega (Philadelphia: John Benjamins, 2006), 91–131.

(Continued on page 38)

Dual Language Learners

Effective Instruction in Early Childhood



By Claude Goldenberg, Judy Hicks, and Ira Lit

s the number of English learners in K-12 public schools has increased, so too has the population of preschool dual language learners, or DLLs. For preschoolers, the term dual language learners is preferred since young children are still in the midst of acquiring their first language.* More than 4 million DLLs are enrolled in early childhood programs nationally. Thirty percent of the children in Head Start and Early Head Start are DLLs.¹ Although a large majority of preschool-age children in the United States attend some type of early education setting, Latino children and children of immigrants attend at a lower rate than do children of nonimmigrant parents.² This is unfortunate, since children who attend preschool during the year before kindergarten have an advantage in reading and math over their peers who are not enrolled in center-based care.³ Many children who are learning English as a second language while they are gaining early proficiency in their home language are therefore disproportion-ately missing academic benefits that attending preschool provides.⁴

For those DLLs who do attend an early childhood care or education setting, early educators must be informed by what research has to say about creating optimal learning environments. Concern over the achievement of this population of students has led to a large number of recent research reviews and professional publications aimed at improving preschool DLLs' educational opportunities.⁵ In

ILLUSTRATIONS BY PAUL ZWOLAK

Claude Goldenberg is a professor of education at Stanford University. (To learn more about Goldenberg, turn to the author's note on page 4.) Judy Hicks is a doctoral student in curriculum and teacher education at Stanford and a former elementary school teacher. Ira Lit is an associate professor of teaching at Stanford and the director of the Stanford Elementary Teacher Education Program. Previously, he was an elementary school teacher and the executive director for the Teachers for a New Era initiative at Bank Street College of Education. This article is adapted with permission from Claude Goldenberg, Judy Hicks, and Ira Lit, "Teaching Young English Learners," in Handbook of Research-Based Practice in Early Education, edited by D. Ray Reutzel (Guilford Press, 2013).

^{*}For discussions of terms, see the CECER-DLL's website at http://cecerdll.fpg.unc.edu and the NCELA's glossary of terms at www.ncela.gwu.edu/files/rcd/BE021775/ Glossary_of_Terms.pdf.

this article, we survey this growing body of research to help inform educators responsible for creating settings for our young DLLs.

We organize our review of the research by addressing four key topics:

- 1. Employing children's home language in the early childhood curriculum;
- 2. Comparing effective practices for DLLs and English speakers in English-only programs;
- 3. Promoting language development in English and the home language; and
- 4. Involving families in supporting children's language learning.

Spanish interactions with their teachers were more likely to engage in more complex linguistic interactions than children who experienced only English interactions with their teachers. Teachers in classrooms where Spanish was used also tended to rate their students more positively in terms of the students' frustration tolerance, assertiveness, and peer social skills.

Teachers can also use the students' home language in various ways that support children's learning, even when instruction is essentially in English. For example, teachers could supplement a book they are reading aloud with explanations or brief clarifications in the home language or by pointing out a cognate (e.g., "Do you know what a market is? It sounds like *mercado*, right?"), which



At best, instruction in the home language contributes to growth in both English and home language skills; at worst, there's no difference in English achievement but an advantage in home language achievement.

1. Employing children's home language in the early childhood curriculum

The debate over bilingual education has been the most controversial aspect of the education of English learners for more than a half century and continues to be politically charged.⁶ Bilingual education's basic premise is that students should be taught academic skills in their home language as they learn and acquire skills in English. According to this view, instruction in the home language strengthens the home language and creates a more solid foundation for cognitive and academic growth in English; moreover, promoting bilingual competence is valuable in its own right. Opponents of bilingual education argue that instruction in students' home language both delays English learners' entrance into the academic and social mainstream and depresses English achievement; bilingualism might be fine, but the school should focus on rapid and effective English learning. Others have also raised concerns about the resources required to fund bilingual programs and whether the benefits justify the costs.7

Preschool studies tend to find that at best, instruction in the home language contributes to growth in both English and home language skills; at worst, there is no difference in English achievement but an advantage in home language achievement.⁸ In addition to promoting bilingual language and literacy skills, utilization of the home language can also have psychological and social benefits that immersion in a second language cannot offer. One study⁹ found that Spanish-speaking children who experienced can make texts in English more accessible to DLLs and possibly make them aware of linkages across languages.

2. Comparing effective practices for DLLs and English speakers in English-only programs

Studies of effective early childhood curricula have shown cognitive and social benefits for DLLs that may be comparable to or greater than those for native English speakers. Researchers in Nebraska, for example, found that a professional development literacy workshop series (HeadsUp! Reading) for early childhood educators was equally effective in promoting early literacy skills for children from English-speaking and Spanish-speaking homes.10 In Oklahoma, one of the pioneers of universal highquality pre-K education, preschools produce developmental gains across various demographic groups, including Latinos, approximately 70 percent of whom come from predominantly Spanishspeaking homes. Gains for these students (in English) were stronger than for students from English-speaking homes;11 this might be explained by the fact that the Spanish-speaking students began with far lower English levels than the English-speaking students.

Studies also illustrate the value for young DLLs of well-known elements of effective teaching, such as explaining vocabulary words encountered during reading and using them in different contexts.¹² In other words, successful teaching and curricula seem to be successful for most children, suggesting that there is probably considerable overlap between what is effective practice for DLLs and for students already proficient in English.13

Regardless of their level of English development, young DLLs who are working to master the rudiments of English probably need additional supports to help them participate fully in class-room learning activities if the activities are in English. Although preschool DLLs benefit from explanations about the meaning of words (just as English speakers do), one study found that children who began with lower English scores learned fewer words than children with higher English scores.¹⁴ Pictures help DLL preschoolers with low levels of oral English learn story vocabulary (e.g., dentist, mouse, cap), suggesting that *visual representations*, not just *explanations*, provide these children with additional support for learning.¹⁵ Video resources also have proven useful.¹⁶

Attempts to incorporate additional supports such as these into comprehensive programs and curricula have had mixed success. For example, a professional development program that children follow as they begin learning a second language in preschool.¹⁹ First, young children often attempt to use their home language. Then, when they realize their home language is not working in this context, they tend to become silent. DLLs listen and observe, gaining an understanding of the classroom language. Next, they begin to "go public," testing out some new words and phrases. Finally, they begin to produce the new language, using phrases and then sentences.

Children may approach English learning differently, so this developmental sequence is not universal and invariant. But when teachers are aware of the general sequence, they have the opportunity to support DLLs most effectively. For example, it is important to be able to recognize and respond to children's nonverbal requests and protests—a silent child has needs that must be met, and the teacher can couple meeting those needs with introducing new phrases. Additionally, children who are not yet communicating



Preschool educators should use children's home language where possible and build bridges with families to support children's learning.

succeeded in having early childhood educators add scaffolding strategies for DLLs into their core practices found that the improvements in child outcomes were limited to some phonological awareness measures.¹⁷

The key message is that what we know about effective instruction in general is the foundation of effective instruction for English learners of all ages. "Generic" effective instruction, however, is probably not sufficient to promote accelerated learning among ELs, although it is almost certainly a necessary base. While we have some intriguing clues about what else is needed to make programs effective for English learners (as described in the articles on pages 4 and 13 of this issue), there is little certainty about how to incorporate these supports into programs that optimize developmental outcomes for DLLs.

3. Promoting language development in English and the home language

Language development is, of course, a high priority in early childhood programs. English language development is critically important, but so is promoting development of the home language. Developing the home language is important in its own right *and* as a means of promoting other important cognitive and social outcomes.¹⁸

In her volume, One Child, Two Languages, dual language researcher Patton Tabors describes the sequence that most young

verbally can be encouraged to build relationships through shared interests (e.g., working with a partner on a puzzle or dressing dolls) and through humor. Children can also be provided with the space and time both to act as *spectators* and to *rehearse* what they hear and want to repeat. Furthermore, models of pragmatically appropriate phrases—that is, appropriate to the particular situation in which the word or phrase is used—can be very useful for children who are just starting to "go public" with their new language.

As discussed in the article on page 13, explicit English language development instruction is also important. We know surprisingly little, however, about the relative effects, benefits, and disadvantages of different approaches to promoting English language development for DLLs in early childhood settings (or K-12 schools).

In early elementary settings, researchers²⁰ have found that a separate block of English language development instruction during the school day was somewhat more effective than only integrating English language development into other instruction throughout the day, although there certainly should be English language learning opportunities throughout the day as well. There is also evidence in the preschool context for a separate block of language development in the home language: for Spanish-speaking children in an English-immersion preschool, researchers found that a 30-minute block of Spanish-language development led to significant gains in children's oral proficiency in Spanish.²¹ Second-language instruction should provide an appropriate bal-

ance of opportunities for meaningful, authentic communication and for more organized instruction and specific feedback on the proper use of conventional forms.²²

4. Involving families in supporting children's language learning

Families play an important role in helping to make children's preschool experiences successful. DLLs' parents consistently show interest in their children's education and are highly motivated to provide their support.²³ Unfortunately, teachers often underestimate language-minority parents' ability to help their children succeed in school.²⁴ Most parents are responsive to focused and sensitive efforts to help them play an active role in supporting their children's earliest school success. However, researchers have found variability on the impact of home intervention programs on children's academic learning, perhaps due to the range of design and implementation features of various programs.

An important issue that parents and teachers ask about is whether parents of DLLs should use the home language with children exclusively or try to encourage more English use. Research and experience have established that children can learn more than one language, either simultaneously or sequentially, with no adverse effects.²⁵ In fact, in addition to the social and cultural benefits, there are potential cognitive advantages to growing up bilingual.²⁶ Yet many parents—and teachers—assume it is common sense that speaking more English at home will promote higher levels of English proficiency for children. Correlational studies do tend to corroborate these intuitions; use of any language at home is positively associated with children's learning outcomes in that language and negatively associated with outcomes in the other language. But findings are mixed: one study²⁷ found that increased use of English by Spanish-speaking mothers did not accelerate English growth by children-but it did decelerate Spanish vocabulary growth.

Bilingual language development need not be a zero-sum game, and parents should be reassured that use of the home language will not undermine children's English language development. Continuing to speak the native language can also be important for other reasons in addition to the cognitive and linguistic benefits, such as maintaining cultural and family values and communication. In sum, although more research is needed in this area, current research suggests that preschool educators should use children's native language where possible, apply specific strategies for building English language skills, and build bridges with families to support children's learning.

Endnotes

1. Nikki Aikens, Sally Atkins-Burnett, and Eileen Bandel, Approaches to Assessing the Language and Literacy Skills of Young Dual Language Learners: A Review of the Research, Research Brief #10 (Chapel Hill: University of North Carolina, FPG Child Development Institute, Center for Early Care and Education Research—Dual Language Learners, 2012).

2. Kristin Turney and Grace Kao, "Pre-Kindergarten Child Care and Behavioral Outcomes among Children of Immigrants," *Early Childhood Research Quarterly* 24, no. 4 (2009): 432–444.

3. Katherine Magnuson, Claudia Lahaie, and Jane Waldfogel, "Preschool and School Readiness of Children of Immigrants," *Social Science Quarterly* 87, no. 5 (2006): 1241–1262; and Russell W. Rumberger and Loan Tran, *Preschool Participation and the Cognitive and Social Development of Language-Minority Students* (Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing, UCLA, 2006).

4. Lynn A. Karoly and Gabriella C. Gonzalez, "Early Care and Education for Children in Immigrant Families," *Future of Children* 21, no. 1 (2011): 71–101.

5. See, for example, Center for Early Care and Education Research—Dual Language Learners, research briefs #1–#8 (2011), available at http://cecerdll.fpg.unc.edu/document-library; and Linda M. Espinosa,

Getting It Right for Young Children from Diverse Backgrounds: Applying Research to Improve Practice (Upper Saddle River, NJ: Pearson, 2010).

6. See, for example, Patricia Gándara and Megan Hopkins, eds., Forbidden Language: English Learners and Restrictive Language Policies (New York: Teachers College Press, 2010).

7. Oscar Jimenez-Castellanos and Amelia M. Topper, "The Cost of Providing an Adequate Education to English Language Learners: A Review of the Literature," *Review of Educational Research* 82, no. 2 (2012): 179–232; and Thomas B. Parrish, "A Cost Analysis of Alternative Instructional Models for Limited English Proficient Students in California," *Journal of Education Finance* 19, no. 3 (1994): 256–278.

8. W. Steven Barnett, Donald J. Yarosz, Jessica Thomas, Kwanghee Jung, and Dulce Blanco, Two-Way and Monolingual English Immersion in Preschool Education: An Experimental Comparison (New Brunswick, NJ: National Institute for Early Education Research, 2007); Judith K. Bernhard, Jim Cummins, F. Isabel Campoy, Alma Flor Ada, Adam Winsler, and Charles Bleiker, "Identity Texts and Literacy Development among Preschool English Language Learners: Enhancing Learning Opportunities for Children at Risk for Learning Disabilities," *Teachers College Record* 108, no. 11 (2006): 2380–2405; S. Jim Campos, "The Carpinteria Preschool Program: A Long-Term Effects Study," in Meeting the Challenge of Linguistic and Cultural Diversity in Early Childhood Education, ed. Eugene E. Garcia and Barry McLaughlin (New York: Teachers College Press, 1995), 34–48; Lillian K. Durán, Cary J. Roseth, and Patricia Hoffman, "An Experimental Study Comparing English-Only and Transitional Bilingual Education on Spanish-Speaking Preschoolers' Early Literacy Development," *Early Childhood Research Quarterly* 25, no. 2 (2010): 207–217; Jo Ann M. Farver, Christopher J. Lonigan, and Stefanie Eppe, "Effective Early Literacy Skill Development for Young Spanish-Speaking English Language Learners: An Experimental Study of Two Methods," *Child Development* 80, no. 3 (2009): 703–719; and Adam Winsler, Rafael M. Diaz, Linda Espinosa, and James L. Rodriguez, "When Learning Second Language Does Not Mean Losing the First: Bilingual Leavelopment 70, no. 2 (1999): 349–362.

 Florence Chang, Gisele Crawford, Diane Early, Donna Bryant, Carollee Howes, Margaret Burchinal, Oscar Barbarin, Richard Clifford, and Robert Pianta, "Spanish-Speaking Children's Social and Language Development in Pre-Kindergarten Classrooms," *Early Education and Development* 18, no. 2 (2007): 243–269.

10. Barbara Jackson, Robert Larzelere, Lisa St. Clair, Marcia Corr, Carol Fichter, and Harriet Egertson, "The Impact of 'HeadsUp! Reading' on Early Childhood Educators' Literacy Practices and Preschool Children's Literacy Skills," *Early Childhood Research Quarterly* 21, no. 2 (2006): 213–226.

11. William T. Gormley Jr., "The Effects of Oklahoma's Universal Pre-Kindergarten Program on Hispanic Children" (policy brief, Center for Research on Children in the United States, 2008); and William T. Gormley Jr. and Deborah Phillips, "The Effects of Universal Pre-K in Oklahoma: Research Highlights and Policy Implications," *Policy Studies Journal* 33, no. 1 (2005): 65–82.

12. Molly Fuller Collins, "ESL Preschoolers' English Vocabulary Acquisition from Storybook Reading," Reading Research Quarterly 40, no. 4 (2005): 406–408.

13. Diane August and Timothy Shanahan, eds., Developing Reading and Writing in Second-Language Learners: Lessons from the Report of the National Literacy Panel on Language-Minority Children and Youth (New York: Routledge, 2008); and Claude Goldenberg and Rhoda Coleman, Promoting Academic Achievement among English Learners: A Guide to the Research (Thousand Oaks, CA: Corwin, 2010).

14. Collins, "ESL Preschoolers' English Vocabulary Acquisition."

 Theresa Roberts and Harriet Neal, "Relationships among Preschool English Language Learners' Oral Proficiency in English, Instructional Experience and Literacy Development," Contemporary Educational Psychology 29, no. 3 (2004): 283–311.

16. 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.

17. Virginia Buysse, Dina C. Castro, and Ellen Peisner-Feinberg, "Effects of a Professional Development Program on Classroom Practices and Outcomes for Latino Dual Language Learners," *Early Childhood Research Quarterly* 25, no. 2 (2010): 194–206.

18. Fred Genesee, Johanne Paradis, and Martha B. Crago, Dual Language Development and Disorders: A Handbook on Bilingualism and Second Language Learning (Baltimore: Brookes, 2004).

19. Patton O. Tabors, One Child, Two Languages: A Guide for Early Childhood Educators of Children Learning English as a Second Language (Baltimore: Brookes, 2008).

 William M. Saunders, Barbara R. Foorman, and Coleen D. Carlson, "Is a Separate Block of Time for Oral English Language Development in Programs for English Learners Needed?," *The Elementary School Journal* 107, no. 2 (2006): 181–197.

21. M. Adelaida Restrepo, Anny P. Castilla, Paula J. Schwanenflugel, Stacey Neuharth-Pritchett, Claire E. Hamilton, and Alejandra Arboleda, "Effects of Supplemental Spanish Oral Language Program on Sentence Length, Complexity, and Grammaticality in Spanish-Speaking Children Attending English-Only Preschools," *Language, Speech, and Hearing Services in Schools* 41, no. 1 (2010): 3–13.

22. 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), 21–81; and Patsy M. Lightbown and Nina Spada, *How Languages Are Learned*, 3rd ed. (Oxford: Oxford University Press, 2006).

23. Claude Goldenberg and Ronald Gallimore, "Immigrant Latino Parents' Values and Beliefs about Their Children's Education: Continuities and Discontinuities across Cultures and Generations," in Advances in Motivation and Achievement: Culture, Ethnicity, and Motivation, vol. 9, ed. Paul R. Pintrich and Martin L. Maehr (Greenwich, CT: JAI Press, 1995), 183–228; Nancy J. Perry, Sascha Mitchell Kay, and Ashley Brown, "Continuity and Change in Home Literacy Practices of Hispanic Families with Preschool Children," Early Child Development and Care 178, no. 1 (2008): 99–113; and Ana Schaller, Lisa Oglesby Rocha, and David Barshinger, "Maternal Attitudes and Parent Education: How Immigrant Mothers Support Their Child's Education Despite Their Own Low Levels of Education," Early Childhood Education Journal 34, no. 5 (2007): 351–356.

24. Liz Brooker, "'Five on the First of December!': What Can We Learn from Case Studies of Early Childhood Literacy?," *Journal of Early Childhood Literacy* 2, no. 3 (2002): 291–313; and Claude Goldenberg, "Low-Income Hispanic Parents' Contributions to Their First-Grade Children's Word-Recognition Skills," *Anthropology and Education Quarterly* 18, no. 3 (1987): 149–179.

25. Genesee, Paradis, and Crago, Dual Language Development and Disorders.

26. Ellen Bialystok, Bilingualism in Development: Language, Literacy, and Cognition (Cambridge: Cambridge University Press, 2001); and Patricia K. Kuhl, "Early Language Acquisition: Cracking the Speech Code," Nature Reviews Neuroscience 5, no. 11 (2004): 831–843.

27. Carol Scheffner Hammer, Megan Dunn Davison, Frank R. Lawrence, and Adele W. Miccio, "The Effect of Maternal Language on Bilingual Children's Vocabulary and Emergent Literacy Development during Head Start and Kindergarten," *Scientific Studies of Reading* 13, no. 2 (2009): 99–121.

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 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 E. 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.

 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.

 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): 153–165.

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.

 Charmian Kenner, "Children's Understandings of Text in a Multilingual Nursery," *Language and Education* 13, no. 1 (1999): 1–16.

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): 363–385.

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): 243–255.

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), 133–164.

12. Lyster, Learning and Teaching Languages through Content.

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?"

Norris and Ortega, "Effectiveness of L2 Instruction."
 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: Corvin, 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:

Creating Settings to Improve Teaching and Learning (New York: Teachers College Press, 2004); and Dennis McDougall, William Saunders, and Claude Goldenberg, "Inside the Black Box of School Reform: Explaining the How and Why of Change at Getting Results Schools," International Journal of Disability, Development and Education 54, no. 1 (2007): 51_89

30 William M. Saunders, Barbara R. Foorman, and Coleen D. Carlson, "Is a Separate Block of Time for Oral English Language Development in Programs for English Learners Needed?," Elementary School Journal 107 (November 2006): 181-198

31. Saunders, Foorman, and Carlson, "Is a Separate Block of Time?"

32. Gisela Irene O'Brien, "The Instructional Features across Three Different Approaches to Oral English Language Development Instruction" (PhD diss., University of Southern California, August 2007).

33. Parrish et al., Effects of the Implementation of Proposition 227

34. Slavin, "Ability Grouping and Student Achievement in Elementary Schools"; and Robert E. Slavin, ed., School and Classroom Organization (Hillsdale, NJ: Erlbaum, 1989).

35. Norris and Ortega, "Effectiveness of L2 Instruction."

36. Nina Spada and Patsy M. Lightbown, "Form-Focused Instruction: Isolated or Integrated?," TESOL Quarterly 42, no. 2 (2008): 181-207

37. Spada and Lightbown, "Form-Focused Instruction." 38. Lyster, Learning and Teaching Languages through

Content 39. See Robert E. Slavin, Educational Psychology (Boston:

Allyn and Bacon, 2000)

40. Norris and Ortega, "Effectiveness of L2 Instruction."

41. Ellis. "Principles of Instructed Language Learning." See also Lyster, Learning and Teaching Languages through Content; and Hossein Nassaji and Sandra Fotos, "Current Developments in Research on the Teaching of Grammar," Annual Review of Applied Linguistics 24 (2004): 126–145.

42. Gabriele Kasper and Kenneth R. Rose, Pragmatic Development in a Second Language (Malden, MA: Blackwell, 2002)

43. Although, for a rich and detailed account of the development of "interactional competence" among elementary-age Latino ELs, see Guadalupe Valdés, Sarah Capitelli, and Laura Alvarez, Latino Children Learning English: Steps in the Journey (New York: Teachers College, 2011).

44. Anna Uhl Chamot and J. Michael O'Malley, The CALLA Handbook: Implementing the Cognitive Academic Language Learning Approach (Reading, MA: Addison-Wesley, 1994), 40

45. 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).

46. Catherine E. Snow, Herlinda Cancino, Jeanne De Temple, and Sara Schley, "Giving Formal Definitions: A Linguistic or Metalinguistic Skill?," in Language Processing in Bilingual Children, ed. Ellen Bialystok (Cambridge Cambridge University Press, 1991), 90-112.

47. James Cummins, "The Construct of Language Proficiency in Bilingual Education," in Georgetown University Round Table on Languages and Linguistics 1980, ed. James E. Alatis (Washington, DC: Georgetown University Press, 1980), 81-103.

48. See, for example, Robin A. Stevens, Frances A. Butler, and Martha Castellon-Wellington, Academic Language and Content Assessment: Measuring the Progress of English Language Learners (ELLs) (Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing, 2000).

49. Genesee et al., Educating English Language Learners; and Virginia P. Collier, "Age and Rate of Acquisition of Second Language for Academic Purposes," *TESOL Quarterly* 21, no. 4 (1987): 617-641

50. Genesee et al., Educating English Language Learners

51. Diane August and Timothy Shanahan, "Effective English Literacy Instruction for English Learners," in Improving Education for English Learners: Research-Based Approaches, ed. David Dolson and Lauri Burnham-Massey (Sacramento: CDE Press, 2010), 209-250.

52. Jana Echevarria and Deborah Short, "Programs and Practices for Effective Sheltered Content Instruction," in Improving Education for English Learners: Research-Based Approaches, ed. David Dolson and Lauri Burnham-Massey (Sacramento: CDE Press, 2010), 251-322.

53. Kathryn Lindholm-Leary and Fred Genesee, "Alternative Educational Programs for English Learners," in Improving Education for English Learners: Research-Based Approaches, ed. David Dolson and Lauri Burnham-Massey (Sacramento: CDE Press, 2010), 323-382.

54. Ray Chesterfield, Kathleen Barrows Chesterfield, Katherine Hayes-Latimer, and Regino Chavez, "The Influence of Teachers and Peers on Second Language Acquisition in Bilingual Preschool Programs," TESOL Quarterly 17, no. 3 (1983): 401–419; and Muriel Saville-Troike, "What Really Matters in Second Language Learning for Academic Achievement?," TESOL Quarterly 18, no 2 (1984) 199-219

55. Michael Strong, "Social Styles and the Second Language Acquisition of Spanish-Speaking Kindergartners," TESOL Quarterly 17, no. 2 (1983): 241-258; and Michael Strong, "Integrative Motivation: Cause or Result of Successful Second Language Acquisition?," Language Learning 34, no. 3 (1984): 1-13.

56. Ray Chesterfield and Kathleen Barrows Chesterfield, "Natural Order in Children's Use of Second Language Learning Strategies," Applied Linguistics 6, no. 1 (1985): 45-59.

57. Kathryn J. Lindholm, "English Question Use in Spanish-Speaking ESL Children: Changes with English Language Proficiency," Research in the Teaching of English 21, no. 1 (1987): 64–91; and Flora Rodriguez-Brown, "Questioning Patterns and Language Proficiency in Bilingual Students," NABE Journal 13 (1987): 217-233

58. Joanne F. Carlisle, Margaret Beeman, Lyle Hull Davis, and Galila Spharim, "Relationship of Metalinguistic Capabilities and Reading Achievement for Children Who Are Becoming Bilingual," Applied Psycholinguistics 20, no. 4 (1999): 459-478; and Catherine Snow, et al., Second Language Learners' Formal Definitions: An Oral Language Correlate of School Literacy (Los Angeles: University of California, Center for Language Education and Research, 1987).

59. Carlisle et al., "Relationship of Metalinguistic Capabilities and Reading Achievement"; Enedina Garcia-Vázquez Luis A Vázquez Isabel C López and Wendy Ward, "Language Proficiency and Academic Success: Relationships between Proficiency in Two Languages and Achievement among Mexican American Students," Bilingual Research Journal 21, no. 4 (1997): 395–408; Barbara Comoe Goldstein, Kathleen C. Harris, and M. Diane Klein, "Assessment of Oral Storytelling Abilities of Latino Junior High School Students with Learning Handicaps," Journal of Learning Disabilities 26, no. 2 (1993): 138–143; James M. Royer and Maria S. Carlo, "Transfer of Comprehension Skills from Native to Second Language," Journal of Reading 34, no. 6 (1991): 450-455; Saville-Troike, "What Really Matters in Second Language Learning?"; Snow et al., Second Language Learners' Formal Definitions; and Daniel M. Ulibarri, Maria L. Spencer, and Guillermo A. Rivas, "Language Proficiency and Academic Achievement: A Study of Language Proficiency Tests and Their Relationship to School Ratings as Predictors of Academic Achievement," NABE Journal 5 (1981): 47-80.

60. Saville-Troike, "What Really Matters in Second Language Learning?"

61. Snow et al., Second Language Learners' Formal Definitions

62. Saunders, Foorman, and Carlson, "Is a Separate Block of Time?

63. O'Brien, "The Instructional Features across Three Different Approaches.

64. Spada and Lightbown, "Form-Focused Instruction."

65. Lyster, Learning and Teaching Languages through Content.

66. Lyster, Learning and Teaching Languages through Content, 16.

67. O'Brien, "The Instructional Features across Three Different Approaches.

68. For arguments for and against, see Nathaniel Lees Gage and David C. Berliner, Educational Psychology (Chicago: Rand McNally, 1975).

69. Slavin, Educational Psychology

70. Slavin, Educational Psychology, 465.

71. Norris and Ortega, "Effectiveness of L2 Instruction."

72. For corroborating evidence, see also the discussions of O'Brien, "The Instructional Features across Three Different Approaches"; and Saunders, Foorman, and Carlson, "Is a Separate Block of Time?"

73. Chesterfield et al., "The Influence of Teachers and Peers

74. Ray A. Chesterfield and Kathleen Barrows Chesterfield ''Hoja's with the H': Spontaneous Peer Teaching in Bilingual Classrooms," Bilingual Review 12, no. 3 (1985): 198-208.

75. Robert D. Milk, "Language Use in Bilingual Classrooms: Two Case Studies," in *On TESOL '81*, ed. Mary Hines and William Rutherford (Washington, DC: TESOL, 1982), 181–191; and Lilliam Malave, "Contextual Elements in a Bilingual Cooperative Setting: The Experiences of Early Childhood LEP Learners," NABE Journal 13 (1989): 96–122.

76. Malave, "Contextual Elements in a Bilingual Cooperative Setting."

77. Lucinda Pease-Alvarez and Adam Winsler, "Cuando el Maestro No Habla Español: Children's Bilingual Language Practices in the Classroom," TESOL Quarterly 28, no. 3 (1994): 507-535

78. Diane L. August, "Effects of Peer Tutoring on the Second Language Acquisition of Mexican American Children in Elementary School," TESOL Quarterly 21, no. 4 (1987): 717–736; Donna M. Johnson, "Natural Language Learning by Design: A Classroom Experiment in Social Interaction and Second Language Acquisition," TESOL Quarterly 17, no. 1 (1983): 55-68; and Sabrina Peck, "Signs of Learning: Child Nonnative Speakers in Tutoring Sessions with a Child Native Speaker," Language Learning 37, no. 4 (December 1987): 545-571.

79. Ruth L. Cathcart-Strong, "Input Generation by Young Second Language Learners," *TESOL Quarterly* 20, no. 3 (1986): 515–530; and Evelyn Jacob, Lori Rottenberg, Sondra Patrick, and Edyth Wheeler, "Cooperative Learning: Context and Opportunities for Acquiring Academic English," *TESOL* Quarterly 30, no. 2 (1996): 253-280.

80. Jacob et al., "Cooperative Learning," 270.

81. Russell Gersten, Scott K. Baker, Timothy Shanahan, Sylvia Linan-Thompson, Penny Collins, and Robin Scarcella, Effective Literacy and English Language Instruction for English Learners in the Elementary Grades (Washington, DC: National Center for Education Evaluation and Regional Assistance Institute of Educational Sciences, US Department of Education, 2007).

82. Keck et al., "Investigating the Empirical Link."

83. Roy Lyster, "Research on Form-Focused Instruction in Immersion Classrooms: Implications for Theory and Practice," Journal of French Language Studies 14, no. 3 (2004): 321-341.

84. Valezy and Spada, "The Effectiveness of Corrective Feedback

85. Lyster, Learning and Teaching Languages through Content.

86. Lyster, Learning and Teaching Languages through Content

87. Roy Lyster and Hirohide Mori, "Interactional Feedback and Instructional Counterbalance," Studies in Second Language Acquisition 28, no. 2 (2006): 269-300.

88. Chesterfield and Chesterfield, "Natural Order in Children's Use of Second Language Learning Strategies."

89. Anna Uhl Chamot, "Language Learning Strategy Instruction: Current Issues and Research," Annual Review of Applied Linguistics 25 (2005): 115.

90. J. Michael O'Malley, Anna Uhl Chamot, Gloria Stewner-Manazanares, Rocco P. Russo, and Lisa Kupper, "Learning Strategy Applications with Students of English as a Second Language," TESOL Quarterly 19, no. 3 (1985): 557-584.

91. See, for example, Karen A. Carrier, "Improving High School English Language Learners' Second Language Listening through Strategy Instruction," *Bilingual Research Journal* 27, no. 3 (2003): 383–408; Irene Thompson and Joan Rubin, "Can Strategy Instruction Improve Listening Comprehension?," Foreign Language Annals 29, no. 3 (1996): 331–342, cited in Chamot, "Language Learning Strategy Instruction"; and Larry Vandergrift, "'It Was Nice to See That Our Predictions Were Right': Developing Metacognition in L2 Listening Comprehension," Canadian Modern Language Review 58, no. 4 (2002): 555–575.

92. Ernesto Macaro, Learning Strategies in Foreign and Second Language Classrooms (London: Continuum, 2001), cited in Chamot, "Language Learning Strategy Instruction."

93. Tong et al., "Accelerating Early Academic Oral English Development.