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Innovations in Language and Literacy Instruction

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Innovations in Language and Literacy Instruction Michael L. Kamil

The title of this chapter intentionally uses the word "instruction" rather than learning. An explanation of this usage is in order. Learning is an intervening variable between instruction and some outcome measure. That simply means that what we label learning is not directly observable—it must be inferred by showing that some measure improves (or not) as a result of some instruction. Outcome measures are many and varied. They can be simple measures answering questions about text or responding to oral language in a variety of appropriate ways. If learning has occurred, the performance after instruction will be better than it was prior to instruction. Learning is not under the direct control of either a learner or a teacher. What is under the teacher's control is instruction. Instruction can take many different forms. A traditional form is for a teacher to deliver a curriculum. Other forms include instruction without a traditional teacher delivered either by textbooks, computers, or even trial and error. A learner can, for example, choose to spend more time repeating or practicing material in order to improve outcomes. Learning to speak a language, for example, involves just such a format. What can be manipulated (or innovated) are the external conditions, not the internal learning. This chapter will deal with the innovations in these external conditions.

Over the last two decades or so, the greatest innovations in language instruction have been the results of three efforts to improve general instruction: the use of standards to guide instruction, the application of research to determine effective instruction, and the consistent use of assessment for accountability in achievement. All three of these innovations can be classed as mature, which means they have been used, vetted, and improved, but are still not universal. These innovations shape the form of the material in this chapter.

While there are many nascent innovations, most of them have little or no research to demonstrate the effectiveness of their applications. Standards are a relatively recent development but have a relatively high adoption rate because of federal and state educational policy. The refinement in the use of standards has been the adoption of the Common Core State Standards (CCSS) by most of the states. The major innovation involved in CCSS is that it provides a common framework for instruction so that students receive consistent instruction across schools, districts, and even states, with few exceptions. The other innovation is that CCSS calls for increased rigor and complexity compared to other standards.

Accompanying the development of CCSS has been the development of assessments that are consistent with those standards—a necessity given that the CCSS

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incorporate a large increase in the rigor as well as an extended range of analysis of language. The development of the CCSS was based on the best available research and drew on the best of the available standards at the time, reflecting the second innovation already noted. The new assessments are currently under development.

However, the use of assessments has been adopted by a portion of the educational practice community. The innovation is that teaching is guided by a series of assessments to measure progress and determine what is needed either to prevent or correct difficulties in learning.

Research has always been promoted as a path to higher student achievement by the education research community, but it took an act of Congress to move this emphasis into widely adopted educational practice. The federal initiative that established the National Reading Panel (NRP; National Institute of Child Health and Human Development [NICHHD], 2000) was an instantiation of the attempt to improve practice by applying relevant research. The research syntheses conducted by the NRP became policy, particularly for the Reading First Program under the No Child Left Behind Act of 2001, and have been implicated in the improvement in reading achievement since their implementation. The use of research findings is an innovation because educational materials were (and often still are) adopted without consideration for their effectiveness.

There are many nascent innovations that have been and are being offered as improvements in instruction. They are not the focus here because many of them have little or no evidence for their effectiveness. As these newer innovations are implemented and tested, they may well take their place among the more reliable and mature innovations that are the focus of this chapter.

In what follows, I will address the language areas in so far as there is research to support recommendations. The areas to be considered are reading, writing,

speaking, and listening. This chapter will also consider some recommendations for early childhood education and some recommendations for second-language learners. For each of these areas, I will review some of the relevant research and recommendations for policy and implementation. Because the body of research is so extensive, reliance is placed on meta-analyses and other reviews of the research.

Reading and Language Instruction in Early Childhood Education

A major component of early childhood education is language instruction because literacy instruction is based in oral language. In what follows, I focus on the elements of early education that are related to later literacy learning. The National Early Literacy Panel (2008) conducted extensive meta-analyses of research on the variables in early language that produced improved outcomes in literacy in later grades, including the following:

- a. alphabet knowledge
- b. phonemic awareness
- c. concepts about print (knowledge of print conventions, e.g., left-right, front-back, and concepts like title page, author, etc.)
- d. oral language
- e. print awareness (combines elements of alphabet knowledge, concepts about print, and protodecoding, i.e., beginning or early decoding)
- f. writing or writing one's name
- g. rapid automatic naming (RAN) of letters and digits
- h. RAN of objects and colors
- i. phonological short-term memory
- j. visual perception

Research on some of these variables has produced evidence supporting the efficacy of incorporating them into instruction to improve later literacy. For example, there is ample evidence that teaching students phonemic awareness skills leads to improved reading. On the other hand, it is not clear that phonological memory can be taught in an effective way to produce better literacy outcomes. Alphabet knowledge, concepts about print, oral language, print awareness, and writing would seem to be clear and appropriate targets of instruction. While the other variables are indicators of later achievement and might suggest the need for some instruction, the exact form of the appropriate instruction is not clear.

Shared book reading and dialogic book reading (Lonigan & Whitehurst, 1998) in early childhood have also been shown to have a positive effect on oral language and later reading achievement. In these methods, which are related but somewhat different, an adult reads a book with children, asking questions, modeling responses, and asking for predictions as the story continues. A summary of these results is available from the What Works Clearinghouse (2007).

Hart & Risley (1999) have shown deficits in the vocabulary of students of lower socioeconomic status. Because vocabulary is such a critical facet of literacy development, any sort of intervention to address this deficit must begin before children enter formal schooling. Any intervention seeking to augment a child's lexical abilities should be part of a comprehensive effort, such as that developed by Dickinson and his colleagues (Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003), in which vocabulary, phonological sensitivity, and print knowledge are combined.

Given the large variability in early childhood programs, there is a great deal of difficulty in guaranteeing that students receive the appropriate sorts of instruction. This problem is further exacerbated by the patchwork of credentialing for early childhood educators. Nevertheless, in their edited volume, Neuman and Kamil (2010) present evidence demonstrating that effective practices in professional development can endow early childhood educators with the skills to provide solid foundations for their students.

Recommendations

The research findings described in the preceding paragraphs should be used to guide instruction. In addition, ways to help ensure that instructional practices are implemented effectively are needed. The following are offered as a partial list of ways to assist state education agencies (SEAs) and local education agencies (LEAs) in implementation:

- a. SEAs: Require that credential or certificate programs include current research-based practices to prepare early childhood educators to deliver high-quality instruction that will prepare students for later success in school.
- b. LEAs and their schools: Ensure that a comprehensive program of instruction connects early childhood instruction to instruction in elementary grades and ultimately through high school.
- c. LEAs: Provide continual professional development for inservice teachers.

Reading in the Elementary Grades

The National Reading Panel (NICHHD, 2000) was established to determine what instructional regimens should be implemented with a high probability of succeeding in raising reading achievement. While the technical charge was to examine research from elementary grades through high school, the most intensive uses of the National Reading Panel (NRP) were by teachers in elementary grades. The greater uses are likely a function of the greater prevalence of reading instruction in elementary grades. The NRP recommended practices in five areas:

Phonemic awareness: the ability of students to focus on or manipulate the sounds (phonemes) of the language. The NRP found that phonemic awareness (PA) instruction was effective for students in kindergarten and first grade but was far less effective for students in higher grades. Moreover, if PA was taught

for too many hours, its effect was mitigated. One interesting finding was that PA instruction was more effective for small groups than for individuals or for whole classes.

Phonics: the ability to translate print into oral language. The NRP reported that phonics instruction was effective for students up to second grade but had diminishing returns (in terms of improvement in reading achievement) from second to sixth grade.

Fluency: the ability to read with speed, accuracy, and appropriate expression. The NRP found that fluency was the indicator of appropriate progress in reading in the early grades. A lack of fluency is the indication that students need some intervention in order to make progress in learning to read.

Vocabulary: the ability to understand the meanings of individual words. The NRP found that explicit vocabulary instruction increased vocabulary and comprehension.

Comprehension strategies: procedures that guide students as they read and write. The NRP identified eight types of comprehension strategy instruction that were effective:

- a. comprehension monitoring
- b. cooperative learning
- c. curriculum integration
- d. graphic organizers
- e. question answering
- f. question generation
- g. story structure (maps)
- h. summarization

Of these, the most effective were question generation and summarization, even though all had substantial support in the research literature.

In addition to the five areas of instruction, the NRP detailed the effectiveness of professional development in improving student reading achievement. The report also summarized the research on applications of technology in reading instruction. Although there was less of a body of research to analyze for technology applications compared to studies of the efficacy of professional development, the NRP did show that technology could be used effectively in instruction to raise student achievement.

The Institute of Education Sciences has produced a number of documents describing instructional practices for a range of topics from reading to mathematics to school reform. For each of these "practice guides," five instructional recommendations are presented, along with the research evidence and an assessment of the amount of support for the recommendation. For elementary grades, a practice guide was developed for improving reading comprehension in kindergarten through Grade 3 (Shanahan et al., 2010). The five recommendations were rated according to the amount of evidence substantiating them:

- a. Teach students how to use reading comprehension strategies. (strong)
- b. Teach students to identify and use the text's organizational structure to comprehend, learn, and remember content. (moderate)
- c. Establish an engaging and motivating context in which to teach reading comprehension. (moderate)
- d. Guide students through focused, high-quality discussion on the meaning of text. (minimal)
- e. Select texts purposefully to support comprehension development. (minimal)

Some of these recommendations clearly reiterate items in the NRP list, but recommendations "c" and "d" are new. Given the overall agreement of both lists, it is clear that the research findings provide some obvious guidance for instruction. (Note: The rating of "minimal" suggests that there are few studies, but the data from those studies do support the recommendation.)

Recommendations

The preceding summaries of recommendations for instruction in the elementary grades provide a great many detailed suggestions for instructional practice. As with early childhood education, there is a need to consider some factors in implementing those practices.

- a. Although not specified in the brief review of research described above, it is important for SEAs to have both a diagnostic (progress monitoring) program and the resources to address student difficulties as they arise. After identification of reading difficulties (or potential difficulties), it is important to follow up on the diagnosis of difficulties with sufficient instruction to correct them. The resources for such remedial or supplemental instruction are often insufficient.
- b. LEAs: Shift the focus of instruction as students progress through the grades; that is, ensure that students receive a strong but not exclusive foundation in decoding skills in early grades, shifting to higher level comprehension skills.
- c. LEAs: Provide a coherent program of professional development (and coaching). If done correctly, such a program will enable teachers to continually update their skill sets and so deliver the most effective instruction possible.

Reading Instruction in Middle and High School

As early as 1944, Artley expressed a concern about the adequacy of reading instruction in the content areas with his oft-quoted phrase, "Every teacher a teacher of reading." While that may be going too far, the recent development of standards (Common Core State Standards, 2012) suggests a current and critical need for reading instruction in the content areas, particularly in science, social studies, and history. The findings of the NRP, as well as other research, suggest

that the focus of reading instruction for improving adolescent literacy is different from that required for earlier grades. In particular, the structures and discourse of individual content areas require specialized instruction for each area. For example, through about Grade 3, vocabulary expansion is mostly from oral language, whereas the new words learned beyond Grade 3 derive mainly from text (Sticht & James, 1984). CCSS addresses these concerns by including standards for science, history, social studies, and technical material beginning at the elementary levels.

Obviously, reading instruction should build on the work done by teachers in earlier grades, but with an eye to the work that will have to be done in subsequent grades. Another IES practice guide concerned with improving adolescent literacy (Kamil et al., 2008) addresses some of the needs of students in Grades 4–12 by making the following recommendations:

- a. Provide explicit vocabulary instruction. (strong)
- b. Provide direct and explicit comprehension strategy instruction. (strong)
- c. Make available intensive and individualized interventions for struggling readers, interventions that can be provided by trained specialists. (strong)
- d. Provide opportunities for extended discussion of text meaning and interpretation. (moderate)
- e. Increase student motivation and engagement in literacy learning. (moderate)

This practice guide acknowledges that students in Grade 4 have different needs from students in Grade 12. However, an examination of all of the recommendations across the range of middle and high school settings does show some general commonalities: an emphasis on vocabulary and comprehension and on improving students' motivation and engagement. In addition, it seems clear that provisions should be made for struggling readers by providing targeted tutoring that will address the reasons for their difficulties.

Recommendations

- a. SEAs and LEAs: Provide extra instructional time, targeted to need, for struggling readers. This additional time will involve assessments and appropriate instructional regimens based on those assessments.
- b. LEAs: Provide professional development for teachers in middle and high school to assist them in delivering high-quality instruction. Extend professional support to all content area teachers and not limited to English language arts teachers.
- c. LEAs and schools: Provide content area teachers with the tools to detect and to address difficulties in learning that are related to their specific disciplines.

Writing Across the Grades

A practice guide that addresses the issues of writing in elementary schools provides four recommendations (Graham et al., 2012):

- a. Teach students to use the writing process for a variety of purposes. (strong)
- b. Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing. (moderate)
- c. Provide daily time for students to write. (minimal)
- d. Create an engaged community of writers. (minimal)

In a meta-analysis of writing research about improving writing for students in Grades 4–12, Graham and Perin (2007) offered another set of recommendations. Their research and the resulting 11 recommendations focused strictly on improving writing, without consideration for other literacy skills. Notable in their report are effect sizes differentiating highly effective practices from less effective ones:

- a. writing strategies (effect size = .82)
- b. summarization (effect size = .82)
- c. collaborative writing (effect size = .75)
- d. specific product goals (effect size = .75)
- e. word processing (effect size = .55)
- f. sentence combining (effect size = .50)
- g. prewriting (effect size = .32)
- h. inquiry activities (effect size = .32)
- i. process writing approach (effect size = .32)
- j. study of models (effect size = .25)
- k. writing for content learning (effect size = .23)

Of these, writing strategies, summarization, collaborative writing, and having specific product goals have such substantial effects that they should be unquestioned parts of the curriculum. Studying models and writing for content learning provide relatively less improvement and should be implemented only with lower priority. While some of these effect sizes are relatively small, they may be worth the effort given the general difficulty of improving writing ability for adolescents.

Another set of recommendations about writing focuses on the improvements in reading that occur when writing is added to the curriculum (Graham & Hebert, 2010). As with both the other sets of recommendations above, some of these are highly effective and others less so. This set of recommendations focuses on students in Grades 1–12 and are grouped in three categories:

- A. Have students write about the text they read. (effect size = 0.40)
 - 1. Have students respond to a text. (effect size = 0.77)
 - 2. Have students write summaries of a text. (effect size = 0.52)
 - 3. Have students write notes about a text. (effect size = 0.47)

- 4. Have students answer or create and answer questions about a text in writing. (effect size = 0.27)
- B. Teach the process of writing, text structures, and paragraph or sentence construction skills. (effect size = 0.18)
- C. Increase how much students write. (effect size = 0.30)

There is substantial overlap in the recommendations on writing instruction from the three sources. It is also the case that the expected improvement varies by the context and the purposes for including writing in the curriculum. Perhaps the most interesting recommendation is that simply increasing the amount that students write will improve their reading by close to one third of a standard deviation. This is a more than reasonable return for a simple intervention.

Recommendations

- a. SEAs: Stipulate in teacher credentialing requirements that preparation for writing instruction is a fundamental part of teacher preparation.
- b. LEAs: Ensure that writing is integrated into the literacy curriculum and taught in combination with reading and other literacy skills.
- c. LEAs: Direct teachers to conduct writing instruction in contexts that are as authentic as possible so that students will not view writing as divorced from real life.

Listening and Speaking

In spite of the recent developments in technology—audio books and podcasts—and their place in learning and literacy, mainstream literacy research has not focused on listening and speaking as targets of literacy instruction. This knowledge deficit is rendered more puzzling by the evidence of an emphasis in early grades instruction on both listening and speaking and the transition to reading as documented by Sticht and his colleagues (Sticht et al., 1974; Sticht & James, 1984). Although there is little guidance specifically about improving instruction in listening and speaking, the Common Core State Standards have set specific standards for what students should learn in these areas.

Recommendations

- a. LEAs: Add both listening and speaking to the curriculum across all grades, not just the elementary grades.
- b. LEAs: Promote the teaching of listening and speaking in the context of reading and writing and also as independent skills.

Second-Language Learning

No one is a stranger to the fraught relationship of Americans to languages other than English. Our Founders relied on the English language as a unifier and as a way of insuring that ties with the lands of immigrants would be severed. Even our great early linguists, such as Noah Webster, supported the belief that

suppressing languages other than English would serve the betterment of English specifically and the American educational system in general. In fact, until World War II, the only obvious role given to languages other than English was for the "reading purpose," for the study of foreign literatures.

This status changed dramatically during World War II, as the military in particular confronted the grave dilemma of having Americans totally unprepared to participate with others (friends or foes) on the world stage in a language other than English. The response was the rapid development of an audio-lingual pedagogy in which students were immersed in foreign language study for 10-12 hours per day. Although adult students in a pressure-filled environment demonstrated success, the pedagogy was not sustainable in a school setting. The 1950s and 1960s saw language learning as a stimulus–response endeavor, where individual words and phrases in one language are paired with those in another. This produces, at best, an impoverished learning. Many adults to this day claim to be able to ask some questions in the second language but then have no understanding of an answer when it deviates from the learned pairing. This resulted in the general societal belief that Americans are somehow genetically incapable of

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learning a language other than English and perpetuated a philosophy that others must be compelled to learn and use English at the expense of all other languages. A full discussion of this history is found in Bernhardt (1999).

The 1970s witnessed massive immigration of individuals fleeing

repression rather than only seeking opportunity. Schooling at all levels had to respond to massive numbers of individuals needing useful and usable English quickly, not merely for the "reading purpose." Linguistics probed the nature of the useful and usable and focused on the nature of *functional* language—in other words, on the nature of what individuals could *accomplish* with language, rather than just what they *knew* about language. The concept of *doing*, known technically as *proficiency*, is probably the most influential concept to have been infused into the language landscape in the past 30 years. This concept of language proficiency attaches to significant and renewed insights into the language learning brought forth by the research process, specifically in two areas: oral proficiency development in a second language (Doughty & Long, 2004), and second-language reading (Bernhardt, 2011).

Oral Proficiency

Research in oral proficiency development has led to the recommendation that, at the school level, children should be encouraged to speak English and also to the admonition that instructors must understand that oral language is merely

a surface manifestation of student learning. Research in oral proficiency development also implies that, at the district level, mechanisms should be in place to permit learners to use and access their strongest language (which may be their home language) in their classrooms and in tutorials as well as in high-stakes content assessments.

Research in second-language oral proficiency indicates that linguistic forms develop over time as a response to the efficacy and frequency of particular forms within a language environment. As an example, the present progressive in English, formed with the -ing (I am going to school) is a form learned early in English regardless of native language background. Present progressive is the most frequently occurring form of the present tense in English. The verbal inflection -(e)s for the third-person singular is learned late in English language acquisition and oftentimes never: *My mother goes to the market every day* is often rendered as *My mother go to the market every day even among highly fluent and competent speakers. While incorrect in standard English, this latter utterance is fully comprehensible, never interfering with communication. Yet learners are often penalized early and frequently for not developing a command of all the standard forms of English. Such corrections reinforce teachers' beliefs that students cannot learn a second language until they have a complete command of all forms and learners' beliefs that they will never succeed in that task. Research indicates that English language learners need minimally 6 years in an Englishspeaking environment to have an oral command somewhat equivalent to nativespeaking peers. Said differently, instruction relying exclusively on oral language performance tends to put learners into a very threatening position. Signals are sent that the oral performance should be grammatically flawless and that the performance should be spontaneous when neither is possible with second-language learners. Second-language learners and users often need more time than native speakers to articulate an utterance, often reporting that by the time they have formulated a response an instructor has moved on. To reduce the pressure on speech performance, teachers should employ several alternate strategies in the classroom, such as telling students in advance what questions will be posed, permitting them to work in groups to formulate answers, and having language learners "try out" their answers with peers before speaking publically. At the district level, mechanisms should be in place to allow students additional tutorial time for practicing speech. Tutorial time is often at the level of grammatical form. What learners actually need is time to practice and articulate oral speech: Retelling events, explaining processes, and describing are language functions that learners need to practice and to be given feedback on. Teachers should also be given professional development opportunities to learn new languages. Taking a language course at a local college or university will bring enlightenment regarding the learning processes and frustrations of language learners in

classrooms more concretely than any additional summer workshop ever could (Teemant, Bernhardt, Rodrîguez-Muñoz, & Aiello, 2000).

Recommendations

- a. SEAs and LEAs: Ensure that policies encourage the use of native language in the acquisition of second languages.
- b. SEAs and LEAs: Include all communicative forms in second-language instruction—reading, writing, and listening, in addition to speaking.
- c. LEAs: Provide professional development in current research-based practices for teaching second languages.

Second-Language Literacy

In addition to recommendations from studies of oral proficiency, SEAs and LEAs can improve instruction for English language learners by attending to research in second-language literacy.

At the classroom level, students should be encouraged to use their native language literacy as a critical tool in their English language learning. At the district level, libraries should be equipped with materials such as encyclopedias, handbooks, and digital material that articulate in a language familiar to students the expository content material they are learning in English.

Reading in a second language entails, according to research across a number of age groups and languages, three variables: first-language literacy, second-language knowledge, and background knowledge and affect.

Generally, the more able readers are in their first-language reading, the greater the contribution (upwards of 20%) to second-language reading (Bernhardt & Kamil, 1995). This understanding of the importance of first-language literacy is recent. When Rossell and Baker (1996) reviewed the research on bilingual education, they concluded that it was not beneficial for students. However, Greene (1997) did a meta-analysis of the studies in the Rossell and Baker research review and found that methodologically sound studies yielded a different conclusion. Greene concluded that at least the use of some native language in learning English produced moderate effects. These data are supportive of the conclusion of Bernhardt and Kamil. The understanding of the contribution of first-language reading is one of the main reasons that learners in school should be encouraged to use some of what they know in their native language when using their second language. It will improve learning outcomes, and they will be more able to focus on the content of reading material. In fact, much of the technical vocabulary related to content material is Latinate, and, consequently, many learners who come to school speaking Spanish already have a sense of this particular technical vocabulary. Of course, when reading material is exclusively narrative fiction, any vocabulary advantage for non-native learners is mitigated; the vocabulary is not necessarily Latinate, and the content often has little or no factual basis.

The second variable entailed in second-language reading is grammatical knowledge of the second language. Ironically, this knowledge accounts for no more than 30% of the process of second-language reading (Greene, 1997). If teachers force students to focus on language form while ignoring content, they do little to actually help learners to read and understand.

The third element is the importance of background knowledge and affect. Research has revealed the importance of background knowledge and affect—around 50% of the second-language reading process (Greene, 1997). All readers have some content knowledge that engages them and interests them. For some, that content knowledge might be about animals or trains; for others, fashion and games. That content knowledge is generally housed for the particular reader in a language other than English. It is not that knowledge does not exist; it is that it might not be visible to a teacher in English.

The important conclusion of this research is not that the three elements listed above are distinct from each other. Rather, it is that they are interdependent, and they compensate for each other. In other words, if a learner has knowl-

edge of a process in his or her first language, the learner can use that knowledge to compensate for a lack of knowledge in grammar and syntax in the new, second language. In like manner, an acute understanding of

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language forms can help a reader through the signaling system of a text, helping to point out redundancies and references that assist a reader in comprehending new vocabulary. And, of course, motivation and the desire to learn can help a struggling learner of English strive to understand more about animals or how to play a game more effectively.

The recommendations listed here are interdependent. Students should learn to talk about and write about what they read. They should be encouraged to elaborate and to extend their utterances so that they practice upper registers of speech. What learners read, whether in their first or second language, provides the content and the motivation to write and speak. If schools or districts have staffs that fail to see or to utilize this interdependence, their students will continue to have difficulty in middle and high school and will fail to learn to use all the resources they possess and therefore fail to take on the challenges of college-level material.

Gersten et al. (2007) produced a U.S. Department of Education practice guide with recommendations for teaching English language learners in elementary school. Those recommendations, with the assessments of the strength of the evidence of their effectiveness, are:

- a. Conduct formative assessments with English learners using English language measures of phonological processing, letter knowledge, and word and text reading. (strong)
- b. Provide focused, intensive small-group interventions for English learners determined to be at risk for reading problems. (strong)
- c. Provide high-quality vocabulary instruction throughout the day. Teach essential content words in depth. In addition, use instructional time to address the meanings of common words, phrases, and expressions not yet learned. (strong)
- d. Ensure that English learners participate for 90 minutes per week in instructional activities that pair students at different levels of proficiency in English. (strong)
- e. Ensure that the development of formal or academic English is a key instructional goal for English learners, beginning in the primary grades. (low)

In addition to these explicit recommendations, the authors also strongly urge an appropriate use of native languages in instruction for English language learners. Generally, the explicit recommendations (a) through (e) overlap substantially with those for teaching language skills to native speakers of English, but that should not obscure the real differences in learning English as a second language from native English learners.

In a synthesis of research on adolescents learning English, Short and Fitzsimmons (2007) formulated both general policy recommendations (e.g., refining definitions of English language learners) and instructional recommendations. For the purposes of this discussion, I focus on the instructional recommendations:

- a. Integrate all four language skills into instruction.
- b. Teach components and processes of reading and writing.
- c. Teach reading comprehension strategies.
- d. Focus on vocabulary development.
- e. Build and activate background knowledge.
- f. Teach language through content and themes.
- g. Use native language strategically.
- h. Pair technology with existing interventions.
- i. Motivate English language learners through choice.

This list clearly overlaps both the set of native English learner recommendations and the other English language learner recommendations presented above. A substantial amount of transfer between languages (Dressler & Kamil, 2006; Genesee, Geva, Dressler, & Kamil, 2008) accounts for the similarities of the recommendations. In spite of the similarities, a caution in assessing the recommendations is in order. While the body of research in first-language literacy is extensive, the volume of research in second-language literacy is far smaller.

Consequently, there may be many issues for which there is little or no guidance for instruction of English language learners.

Many of the recommendations cited above also, obviously, are reflected in the Common Core State Standards (CCSS)—particularly those recommendations that emphasize all four literacy domains. However, CCSS are not explicitly about second-language learners, and some types of accommodations need to be made to instruction for them. To address the differences between standards for native speakers and standards for English language learners, the WIDA (World-Class Instructional Design and Assessment) Consortium developed its own set of expectations for learners (WIDA, 2012). These standards were designed to highlight the ways in which second-language learners can be taught to the same standards as the CCSS.

Recommendations

- a. SEA policies: Allow the use of native language in the instruction of English language learners to make such instruction more effective.
- SEAs and LEAs: Ensure that teachers receive appropriate preparation in teaching English language learners both in preservice and inservice settings.
- c. SEAs and LEAs: Use assessments that take into account the native language abilities of students for both formative and summative purposes.

Summary

Many recommendations included in this discussion of language and literacy overlap. Care must be taken to understand how each of the recommendations may be instantiated differently across different grade levels. Thus, for example, vocabulary instruction in early grades should be focused primarily on oral language, whereas instruction for older students should focus on print vocabulary. Similar examples could be generated for almost all of the recommendations. Clearly, the needs and experiences of elementary students are different from those of middle and high school students.

Very little has been included about the assessments that attend these instructional recommendations because assessments are now being developed for CCSS. Although there are assessments for the WIDA standards, they might have to be revised when the CCSS assessments are finalized. Until "the dust settles," teachers, administrators, and policymakers need to be tuned in to new developments. The guidance given in the various recommendations above should be followed insofar as possible until "official" guidance is available.

This chapter has provided a broad range of recommendations. Any such review will eventually become outdated. Thus, there is no substitute for keeping up with the research literature. New findings may alter old recommendations, and new findings may uncover areas not in the scope of current recommendations. A good source for research-based information on instructional programs is

the What Works Clearinghouse (http://ies.ed.gov/ncee/wwc/) which publishes reports on research that evaluates such materials.

Professional learning groups should focus not only on current practices, but also on ways to read, digest, and implement new research-based practices. The improvement in achievement of the last decades in reading and mathematics can largely be attributed to the use of such practices, assessments to monitor student progress, and data-based decision making to focus instruction on student needs. Keeping up with research will allow for continual improvement in educational practice.

As noted in the opening paragraphs of this chapter, there are many innovations that have been developed that are not the focus of the chapter. Some of these are certainly worth watching—those involving technology are among the most promising, but those are also among the developments that have not been extensively tested. For example, whether widespread use of smartphones, tablets, Ultrabooks, or other computers will improve learning is still to be determined. There is a need to teach students about the uses of technology regardless of its ultimate effects on achievement simply because the world that students will enter is increasingly filled with technology. Similar concerns about multimedia texts, electronic textbooks, and other digital media have to be raised. Educational policymakers and practitioners will have to be more vigilant about developers and will have to keep current on a wider range of issues.

Finally, there will never be a substitute for principled evaluations of any innovations (or conventional materials) that are adopted. This is a corollary to the application of research to practices but is a special case. If adopted materials do not provide appropriate improvements in learning for students they *must* be changed or discarded. The only way to do this is to have local evaluations of programs to determine whether innovations promoted by popularity are truly effective in local contexts. Such a procedure is entirely consistent with the innovation of using research-based practices. If consistently implemented, it will improve practice and force producers of materials to raise the currency and quality of their products.

References

Artley, S. (1944.) A study of certain relationships existing between general reading comprehension and reading comprehension in a specific subject matter area. *Journal of Educational Research*, *37*, 464–473.

Bernhardt, E. B. (1999). Socio-historical perspectives on language teaching in modern America. In H. Byrnes (Ed.), *Perspectives on research and scholarship in second language learning* (pp. 39–57). New York, NY: Modern Language Association.

Bernhardt, E. B. (2011). *Understanding advanced second-language reading*. New York, NY: Routledge.

Bernhardt, E., & Kamil, M. L. (1995). Interpreting relationships between L1 and L2 reading: Consolidating the linguistic threshold and the linguistic interdependence hypotheses. *Applied Linguistics*, 16, 15–34.

- Common Core State Standards Initiative. (2012). *Common Core State Standards*. Retrieved from http://www.corestandards.org/about-the-standards
- Dickinson, D. K., McCabe, A., Anastasopoulos, L., Peisner-Feinberg, E. S., & Poe, M. D. (2003). The comprehensive language approach to early literacy: The interrelationships among vocabulary, phonological sensitivity, and print knowledge among preschool-aged children. *Journal of Educational Psychology*, 95(3), 465–481.
- Doughty, C., & Long, M. (Eds.). (2004). *The handbook of second language acquisition*. Malden, MA: Blackwell.
- Dressler, C., & Kamil, M. L. (2006). First- and second-language literacy. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth* (pp. 197–238). Mahwah, NJ: Erlbaum.
- Genesee, F., Geva, E., Dressler, C., & Kamil, M. L. (2008). Cross-linguistic relationships in second-language learners. In D. August & T. 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* (pp. 153–183). New York, NY: Routledge.
- Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). Effective literacy and English language instruction for English learners in the elementary grades: A practice guide (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides
- Graham, S., & Hebert, M. A. (2010). Writing to read: Evidence for how writing can improve reading. A Carnegie Corporation Time to Act Report. Washington, DC: Alliance for Excellent Education.
- Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/practice_guides/writing_pg_062612.pdf
- Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools* (A report to the Carnegie Corporation of New York). Washington, DC: Alliance for Excellent Education.
- Greene, J. (1997). A meta-analysis of the Rossell and Baker review of bilingual education research. *Bilingual Research Journal*, *21*(2), 103–122.
- Hart, B., & Risley, T. R. (1999). *The social world of children learning to talk*. Baltimore, MD: P. H. Brookes.
- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A practice guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences.
- Lonigan, C. J., & Whitehurst, G. J. (1998). Relative efficacy of parent and teacher involvement in a shared-reading intervention for preschool children from low-income backgrounds. *Early Childhood Research Quarterly*, 13(2), 263–290.
- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel: A scientific synthesis of early literacy development and implications for intervention*. Washington, DC: National Institute for Literacy. Retrieved from http://lincs.ed.gov/publications/pdf/NELPReport09.pdf

- National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. Washington, DC: Author.
- Neuman, S. B., & Kamil, M. L. (Eds.). (2010). *Preparing teachers for the early childhood classroom: Proven models and key principles.* Baltimore, MD: P. H. Brookes.
- Rossell, C. H., & Baker, K. (1996). The educational effectiveness of bilingual education. *Research in the Teaching of English*, 30(1), 7–74.
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from whatworks.ed.gov/publications/practiceguides
- Short, D., & Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners* (A report to Carnegie Corporation of New York). Washington, DC: Alliance for Excellent Education. Retrieved from http://www.all4ed.org/files/DoubleWork.pdf
- Sticht, T., Beck, L., Hauke, R., Kleiman, G., & James, J. (1974). *Auding and reading: A developmental model*. Alexandria, VA: Human Resources Research Organization.
- Sticht, T. G., & James, J. H. (1984). Listening and reading. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (Vol. I, pp. 293–317). White Plains, NY: Longman.
- Teemant, A., Bernhardt, E., Rodrîguez-Muñoz, M., & Aiello, M. (2000). The insights of dialogue: Teacher collaboration benefits second language learners. *The Middle School Journal*, *32*(2), 30–38.
- What Works Clearinghouse. (2007). *Dialogic reading*. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/intervention_reports/WWC_Dialogic_Reading_020807.pdf
- Weir, R. H. (1962). *Language in the crib*. The Hague: Mouton.
- WIDA. (2012). The English language development standards, kindergarten–Grade 12. Madison, WI: Board of Regents of the University of Wisconsin System. Retrieved from http://www.wida.us/standards/eld.aspx