NATIONAL INSTITUTE FOR
URBAN SCHOOL
IMPROVEMENT

Topical Summary

PRACTICES FOR ENGLISH-LANGUAGE LEARNERS

An Overview of Instructional Practices for English-Language Learners: Prominent Themes and Future Directions

Russell Gersten and Scott Baker
Eugene Research Institute/University of Oregon

Anyone involved with schools — especially urban schools — knows firsthand how often discussions of bilingual education generate more heat than light. In such a politically charged context, it is often difficult to know where to look for up-to-date and fair summaries of what research is discovering about best practices. We think that the following review by Russell Gersten and Scott Baker brings some needed illumination to this controversial area. Our hope is that educators and administrators working in urban schools will find this synthesis of research to be of immediate relevance and usefulness. To that end, we also asked Dr. Patrick Teicher to introduce this document by sharing his perspective as an administrator in a large urban district that deals with this issue on a daily basis.

IDEAs that Work
Office of Special Education Programs

May 2001

Introduction by Patrick Teicher

As a general educator responsible for a large school district's special programs, bilingual education has presented a special challenge. In my experience, I have found bilingual program leaders to be highly committed and knowledgeable, but suffering greatly from a lack of acceptance by their general education teacher and administrator peers. Most general educators have very little knowledge about bilingual education, and view it with the suspicion and prejudices of the general public. The bilingual teacher is torn between a loyalty to support native-language instruction and culture and a constant pressure from those around them to get their students speaking English as soon as possible. This lack of acceptance and confusion over many years has resulted in extremely low staff morale and high turnover of staff. It also seems to have resulted in bilingual professionals taking political sides on professional methodology rather than having the freedom (and energy) to explore strategies for improvement. It would seem that bilingual education has become a parallel system much as special education was in all but very recent years.

As a supporter of bilingual programs, I have done what I could to embrace and assist the program, but it has been very challenging for all the reasons stated above. Bilingual staff have recently been especially sensitive when criticized about results of "their students" on high-stakes academic performance measures. The new pressure of high-stakes performance measures has "ratcheted" up the pressure on bilingual staff to get their students speaking English faster and earlier, and has frustrated even further staff loyal to native-language instruction and culture. However, this pressure on bilingual staff to get their students speaking English faster and earlier, while frustrating, may have a silver lining. A positive outcome of the high-stakes performance push, ironically, has been the realization that improvement of all student populations is necessary if a school or school district is to improve its academic report card. This compulsory "inclusion" may be a powerful catalyst to bring resources, help, and increased acceptance to bilingual educators and their students. It may also be a driving force to lift expectations for limited English-proficient students.

Efforts to improve the current bilingual program have been thwarted by frustration and confusion within the field. I am thankful to Gersten and Baker for providing us with a thorough review of bilingual education research and practice in the United States. As an administrator, I feel that they have provided me with a better-balanced perspective of bilingual instructional practices. Reading their article has also made me appreciate the wealth of research done recently in the area of specific methodologies for increasing the literacy and skills of limited English-proficient learners. I believe Gersten and Baker have provided valuable insight into how we might begin to provide new hope for bilingual education instruction.

Patrick Teicher, Ph.D., is the Assistant Superintendent for Student Services, Northside Independent School District, San Antonio, Texas.

Practices for English-Language Learners: Framing the Issues

The past several years have witnessed a virtual avalanche of events in the field of bilingual education that portend a significant shift in the way English-language learners are taught in this country. In April 1998, the Secretary of Education, Richard Riley, announced a major shift in federal policy, calling for the goal of English-language proficiency in three years for virtually all English-language learners. In outlining the government's position, Riley asserted that "new immigrants have a passion to learn English and they want the best for their children" (Riley, 1998).

A survey conducted of 420 randomly selected members of the Association of Texas Educators, who represented educators both within and outside the field of bilingual education, found that the majority supported the government's position. They felt English-language learners were spending too much time in native-language instruction (Tanamachi, 1998).

The views expressed by both the Department of Education and the sample of teachers are in stark contrast to the position of several noted scholars in the field, who believe that English-language learners should be taught all academic subjects in their native language for no fewer than five, and preferably seven, years (e.g., Cummins, 1994; Thomas & Collier, 1997). These scholars feel that extensive native-

Practical Implications

Gersten and Baker's review of the research suggests that good bilingual programs do the following:

1. ***Anchor curriculum goals to vocabulary development***
2. ***Develop teachers' awareness and provide them with resources to allow the strategic use of visual aids in their instruction to reinforce learning and retention***
3. ***Use small-group cooperative learning and peer tutoring to enhance learning***
4. ***Develop the skills of bilingual teachers to strategically use students' native language to reinforce academic content learning***
5. ***Use ongoing research as a resource for staff discussion around current and future program practices***

language academic instruction is necessary for students to benefit from eventual instruction in English delivered in mainstream classrooms.

Recent events also indicate that some large schools districts (e.g., New York, Denver) and some states (e.g., California) are seriously rethinking how they educate English-language learners. Invariably, initiatives in these districts and states call for students to enter English-language instruction at a much earlier age. The initiatives also call for a significant reduction in the amount of native-language instruction provided. Lawsuits or threatened litigation in Sacramento, Denver, and Albuquerque have given us a sense of the emotional tenor of the debate.

The *New York Times* recently reported that "in response to years of criticism of the city's bilingual education programs— which now serve 155,000 students speaking 145 languages— New York City plans to dramatically increase the amount of time devoted to English-language development" (Archibold, 1998). This is the most recent event in "New York's long, torturous history (of bilingual education) with the subject, dating from the early 1970s" (p. 2). The *Times* article concludes with a summary of major lawsuits.

Although the specifics vary from case to case, and region to region, increasingly, parents and teachers (most notably Jaime Escalante and Gloria Tuchman) have begun to question the extremely small amounts of time devoted to English-language development in many bilingual education programs in the primary grades and the quality of English-language development instruction. A noted literacy researcher, Rosalinda Barerra, said that:

> … the real challenge for schools today is not the growing number of Latino/a children who speak Spanish (and must learn English), but the school's continuing need to do a far better job of delivering instruction to them in English. This would entail that schools and teachers acknowledge and understand these children as second-language learners and develop quality, content-rich ESL programs for them … It also means that we must teach English reading and writing from a second-language perspective and not treat all Latino/a children as native English readers and writers (Jiménez, Moll, Rodríguez-Brown, & Barrera, 1999, p. 225).

Parental choice in the amount of English-language instruction each child receives, how early a child is introduced to substantive English-language instruction, and when a child should exit classrooms that use large amounts of native-language instruction have consistently been raised as issues by advocacy groups. Despite the political and philosophical debate regarding best practice, the reality is that many English-language learners never receive any native-language instruction because it is not feasible.

… the real challenge for schools today is not the growing number of Latino/a children who speak Spanish (and must learn English), but the school's continuing need to do a far better job of delivering instruction to them in English. This would entail that schools and teachers acknowledge and understand these children as second-language learners and develop quality, content-rich ESL programs for them … It also means that we must teach English reading and writing from a second-language perspective and not treat all Latino/a children as native English readers and writers (Jiménez, Moll, Rodríguez-Brown, & Barrera, 1999, p. 225).

The report by the National Academy of Sciences (August & Hakuta, 1997) on the state of education for English-language learners points to some of the effects of little or no native-language instruction in reading development, for example, by noting that, "It is clear that many children first learn to read in a second language without serious negative consequences. These include children who successfully go through early-immersion, two-way, and English as a Second Language (ESL)-based programs in North America" (p. 23). The authors also point out that "the high literacy achievement of Spanish-speaking children in English-medium Success for All schools (Slavin & Yampolsky, 1992) … suggests that even children from low-literacy homes can learn to read in a second language if the risk associated with poor instruction is eliminated" (p. 24).

Full-time instruction in English is the approach routinely used with non-Latino English-language learners. In California, the state with the largest number of English-language learners, a recent Department of Education Census tells us that 31.4 percent of English-language learners are taught solely in English. An additional 21.6 percent receive sheltered instruction plus some native-language support, often through an instructional aide (California Department of Education, 1997). Others receive bilingual education with both a native-language component and an English-language component. The number of approaches and procedures is extensive.

It seems reasonable to expect that after so much attention and so many years of controversy and discussion, research would provide some answers to questions of how to best teach English-language learners. Among the commonly asked questions are:

- What age is best to introduce academic instruction in English to young English-language learners?
- To what extent— if any— does native-language instruction benefit the cognitive and academic growth of English-language learners?
- Which are the best instructional methods for English-language development?

Unfortunately, a realistic appraisal of the empirical database indicates that research findings have stubbornly failed to provide answers to the first two questions. The third question has not received the degree of attention from the research community it should (August & Hakuta, 1997), but the scant research base that does exist provides some initial answers.

In the next section, we address the first two questions. Despite the fact that no clear-cut answers can be provided to each question, we provide information on sensible approaches districts could implement. The final section addresses the third question: instructional approaches for supporting English-language development. Here, we summarize research-based information. Information we gleaned from a series of work groups conducted with educators throughout the United States is also included.

Two Models of Bilingual Education: Which Is More Effective?

A major source of controversy in the field of bilingual education is when to move students from native-language instruction into English-language academic instruction. Many bilingual educators believe that the transition to English-language academic instruction should be delayed until students have a good command of academic English (August & Hakuta, 1997; Goldenberg, 1996; Thomas & Collier, 1998), which requires command of their native language. Often they have argued that for the entire first seven years of schooling, academic instruction should be in a child's native language (Thomas & Collier, 1997).

Wong-Fillmore and Valdez (1986) put part of the underlying rationale that drives this belief in stark terms: "If reading involves ... texts of any complexity beyond that of street signs, it is not possible to read in a language one does not know" (p. 661). They feel that although students who are English-language learners can learn to read words in English relatively easily, they will "have considerably greater difficulty making sense of the materials they read" (p. 661). Proponents have argued that premature transfer of students into all-English academic programs interferes with the development of higher-order thinking (Krashen, 1982; Moll & Díaz, 1986).

A major source of controversy in the field of bilingual education is when to move students from native-language instruction into English-language academic instruction.

A contrasting model of educating English-language learners centers on the idea that the transition to English instruction should be made as early as possible. The argument is essentially that students can acquire English while learning academic content, if English is introduced systematically and gradually. In learning to read, for example, Barrera (1983) wrote that "second-language reading can commence soon after native-language reading begins, or develop virtually alongside it, as long as the learner is making sense of the written language he or she encounters" (p. 170).

Other researchers (e.g., Anderson & Roit, 1998; Chamot & O'Malley, 1996) have argued that young English-language learners can benefit from this type of "sheltered" English-language instruction in subjects such as science and mathematics because they are excellent venues for cognitive growth and English-language development. Both disciplines involve many concrete objects, and virtually all students are learning a new vocabulary and the "language" of the discipline (Lee & Fradd, 1996).

Overview of the Research

The questions of when and how to introduce English-language content instruction are critical to schools and school districts. It seems reasonable to expect that after many years of research some answers would be available to help guide policymakers. Yet, careful review of the large-scale research studies that attempted to address these questions, plus research syntheses of studies and a recent report by the National Academy of Sciences on the research base for bilingual education, lead to the following conclusions:

. . . a consensus has emerged that "focusing evaluations on determining a single best method of language instruction for English-language learners was probably the wrong approach [for the Federal government] to take" . . .

It also may be true that more literacy-dependent academic areas, such as reading and writing, are better initial subject areas for sheltered English approaches. In noting that "language is a primary vehicle for intellectual development," Echevarria (1995) laid out a convincing argument for Instructional Conversations, a potentially rich area of academic instruction in reading and language use for English-language learners. Instructional Conversations involves carefully directed dialogic interactions between teachers and students, and holds the assumption that increased oral language use by students during reading instruction will improve comprehension as well as language proficiency.

1. Virtually all the research on this subject is plagued with methodological problems. Problems appear to be most severe in some of the larger-scale studies intended to "answer" the two major policy questions posed: "When should English be introduce?" and "What is the role of native-language instruction in cognitive growth?"
2. Attempts to analyze, synthesize, and critique the studies invariably are mired in political controversy.
3. The cornerstone of most contemporary models of bilingual education is that content knowledge and skills learned in a student's home language will transfer to English once the student has experienced between five and seven years of native-language instruction; yet there is absolutely no empirical support of this proposition.
4. The only discernible pattern to the findings from the evaluation of research studies is that the model of bilingual education does not have an influence on educational outcomes. This was the major finding of the largest-scale study of models of bilingual education by Ramírez and colleagues (1991) and was replicated in smaller-scale research (Gersten & Woodward, 1995). Advocates of both native-language instruction and those who

are for a rapid immersion in English-language classrooms use the "no difference" finding as support for their position.

Recently, a consensus has emerged that "focusing evaluations on determining a single best method of language instruction for English-language learners was probably the wrong approach [for the Federal government] to take" (August & Hakuta, 1997).

Michael Kirst of Stanford University also provided some valuable insight into the problems within the bilingual education knowledge base. In discussing California, he noted, "from its inception … in the 1970s, bilingual education has been oriented toward inputs, process, and compliance … The assumption was if you have this input, the outputs would take care of themselves. So … (we monitor) … whether you mounted the program, *and not its results*" (Schnaiberg, 1998, p. 16, italics added). Similar problems plague states such as Texas and Massachusetts. This concern with compliance as opposed to learning outcomes is at the heart of many of the current problems.

Several costly attempts have been made to assess whether bilingual education was effective and which model worked best. Many of these attempts have centered around large-scale studies involving extensive data collection in many communities. Invariably, the findings have been inconclusive, in part because all of the studies have been plagued by both methodological and conceptual problems.

… rapid transitions from virtually all-Spanish language instruction to all-English language instruction is frequently disastrous for students.

In addition to these large-scale studies, a series of smaller studies evaluating the effectiveness of various models of bilingual education have been conducted. These have been synthesized in a series of research reviews and meta-analyses (Baker & de Kanter, 1981; Rossell & Baker, 1996; Willig, 1985), which have reached different conclusions. The earlier studies (Baker & de Kanter, 1981; Danoff, 1978) asked the relatively crude question, "Does bilingual education work?" Subsequent studies (Gersten & Woodward, 1995; Ramírez et al., 1991) have focused more on determining which model of bilingual education works best.

Large-Scale Evaluations

A National Research Council panel of the Committee on National Statistics (Meyer & Fienburg, 1992) reviewed the major evaluation studies in bilingual education for technical accuracy. They concentrated on the then recently completed study by Ramírez (1992) and an earlier large-scale evaluation study conducted by Development Associates (Danoff, 1978). Their conclusions were that the goals of the studies were poorly articulated, the research designs were ill-suited to answering the questions raised, and the researchers' attempts to remediate the design flaws by use of intricate statistical models proved unsuccessful. An analysis of the Ramírez study provides a useful example of methodological difficulties of large-scale evaluations.

One could argue that the opportunity to express complex ideas verbally in a second language is critical for successful acquisition of the language.

The Ramírez study was extraordinarily ambitious, perhaps overly so in hindsight. Ramírez attempted to determine the relative effectiveness of three types of programs: structured immersion (where virtually all instruction was in English from the beginning of first grade), early exit bilingual education (approximately one year of native-language instruction), and late exit bilingual education (more than one year of native-language instruction).

A serious methodological limitation of the Ramírez study (Rossell, 1992) is that the models of bilingual education were "confounded" with community. In other words, rather than comparing two models of bilingual education in the same city, an approach used in one city was compared to a different approach used in a different city. In fact, five of the nine sites had only one type of program. Consequently, it is possible that effects were due to factors other than the instructional model (e.g., district choice of curriculum, type of professional development in the district). For these reasons, the National Research Council (Meyer & Fienburg, 1992) concluded no valid inferences could be drawn.

A similar, yet more problematic, flaw in the Ramírez (1992) study was that students in the different models were not tested at the same grade levels. So, for example, it was not possible to contrast how students in different models did at the fourth or fifth grade. It is easy to criticize studies after the fact, and it is true that Ramírez, like many other bilingual education researchers, faced problems that do not confront other researchers. In particular, when language of instruction varies, it is awkward and virtually impossible to assess all students on the same measures. However, his failure to "follow up" on the achievement levels attained by students so that reasonable comparisons could be made led to insoluble problems.

Despite the flaws, the Ramírez (1992) study contributed to the knowledge base on effective instruction for English-language learners in two important ways. First, his results strongly suggested that rapid transitions from virtually all-Spanish language instruction to all-English language instruction is frequently disastrous for students. In the past, these drastic transitions have been a frequent practice with English-language learners. Recently, we have noted the tendency toward more gradual transitions, often accompanied by earlier introduction of some English-language content instruction.

The second contribution by Ramírez stemmed from his observations in classrooms where he noted the paucity of extended discourse and questions requiring higher-order thinking in both native-language and English classrooms. Thus, his observational findings do not support the hypothesis that increased use of native language leads to more sophisticated academic discourse. His observations also indicate a major limitation of current practice: that students rarely have the opportunity to express complex ideas in either their native language or English during class. One could argue that the opportunity to express complex ideas verbally in a second language is critical for successful acquisition of the language. This finding has helped fuel an array of innovative instructional approaches that attempt to alter the nature of classroom discourse during instruction.

The recent report by the National Academy of Sciences (August & Hakuta, 1997) concluded that "for numerous reasons, we see little value in conducting evaluations to determine which type of program is best" (p. 138). The members of the National Academy of Sciences panel concluded that potentially more could be learned from smaller evaluation studies than large-scale evaluation studies because of a greater degree of control.

The El Paso Small-Scale Evaluation

We recently completed our own small-scale evaluation of bilingual education in El Paso, Texas (Gersten, Baker, & Keating, 1998; Gersten, Woodward, & Schneider, 1992). The results of this evaluation have been cited frequently in the literature. The El Paso study began in the late 1980s, when we became familiar with that city's innovative bilingual education program. At that time, it was called bilingual immersion because, unlike other immersion programs in the United States and Canada, students in grades 1 and 2 received approximately 90 minutes of native-language instruction in Spanish that focused primarily on reading and language arts. However, the program was an immersion program because, beginning on the first day of first grade, instruction was predominantly in English, using specially designed instructional techniques such as "sheltered English" or content-area ESL. This model was compared to the district's transitional bilingual education program, in which the majority of academic instruction in the first few years of school was in the students' native language.

The evaluation, conducted jointly with the school district, was longitudinal in nature. It examined achievement patterns up until the seventh grade, long after students had exited the specialized programs. The sample sizes were large, over 100 students per condition, allowing for reasonably valid inferences to be made. Only students who were tested and found to be limited-English proficient participated in the study, making this the first evaluation that compared divergent programs within the same district. This feature allowed for much better control of factors, such as curriculum, teacher training and qualifications, and cost per student, that have an influence on learning.

We found no difference in academic achievement on standardized tests in either reading, mathematics, or vocabulary at the seventh grade. It is important to reiterate that this was a study of the long-term effects of programs for English-language learners. Studies of short-term effects, though more commonly conducted, are of much less scientific value than knowing the long-term impact of programs on children.

Since we found no achievement differences in the seventh grade, we concluded that early exposure to intensive English-language instruction did not hinder subsequent achievement in any academic area for the group of 109 students who spent the first four years of school in an immersion program. This lack of significant differences— in essence, a "hung jury"— is similar to the findings of Ramírez (1992) in his much larger (though significantly less well-controlled) study of contrasting models of bilingual education.

The El Paso study seems to indicate quite clearly that beginning intensive academic instruction in English in first grade does not hinder, in any way, subsequent academic performance in middle school or high school.

In the El Paso study, we did detect some benefits of the more rapid introduction of English-language academic instruction. Students in the immersion program entered mainstream classrooms much sooner than students in transitional bilingual education. By sixth grade, over 99 percent of the immersion students were in regular classrooms, compared to only 66 percent of the transitional bilingual education students.

Another important finding was that teacher surveys indicated that teachers felt the much more rapid introduction of English was beneficial to their students. For example, 73 percent of the immersion teachers felt their students would succeed in regular classrooms after the specialized program had ended. Only 45 percent of the transitional bilingual teachers felt that their students would succeed in these settings after the program had ended.

We have continued to follow these students' progress in school. Recently, we analyzed the scores of the same set of students in high school, examining how well they performed on the Texas Academic Achievement Scale (TAAS), Texas's statewide examination, which is required for high school graduation. As in the first evaluation, there were no differences between the two samples on state measures of reading, math, or writing. The El Paso study seems to indicate quite clearly that beginning intensive academic instruction in English in first grade does not hinder, in any way, subsequent academic performance in middle school or high school.

Improving the Quality of English-Language Development

Determining the optimal age to begin academic instruction in English may not be answerable. At some point, however, all English-language learners receive academic instruction in English. The initial transition classrooms go by a variety of names, including content-area ESOL, structured immersion, and sheltered content instruction. The common feature of these classrooms is the way teachers' English is designed specifically for students with limited proficiency. No commonly agreed-upon definition yet encompasses this complex concept, but Echevarria and Graves (1998) and Walquis (1998) provide an excellent beginning. Echevarria and Graves describe sheltered instruction as a method that "provides refuge from the linguistic demands of typical mainstream instruction" (p. 54). In sheltered classes, "teachers do not simplify— they amplify, they reiterate, reinstate, exemplify in diverse ways ... They construct support mechanisms (the reiterations, examples, diagrams) that ... enable learners to access sophisticated concepts and relationships" (Walquis, p. 8).

With sheltered instruction, use of English is modulated so that it is comprehensible to the student, and the degree of support is determined by the teacher's knowledge of individual students. In some cases, a student's native language may be used to help the student complete a task, clarify a point, or respond to a question. Almost invariably, a critical component of sheltered teaching approaches is that content instruction is coupled with instruction geared toward building students' knowledge of the English language. In years past, this English-language component has been referred to as English-as-a-Second-Language (ESL) or English for Speakers of Other Languages (ESOL). Increasingly, the term English-language development (ELD) is being used.

Historically, the teaching of ESL has focused extensively on the formal structures of language (e.g., grammar, mechanics). This approach is now routinely criticized because it fails to capitalize on the central communicative function

of language, it does not generate student interest, and it results in very limited generalization (Cummins, 1980; Tharp & Gallimore, 1988).

The 1980s saw the beginning of more "natural" conversational approaches to teaching English. These approaches have also been criticized extensively, on at least two grounds. First, they do not necessarily help students develop competence in the highly abstract, often decontextualized language of academic discourse, which is a central purpose of schooling. In other words, "natural" conversations may have helped with the development of conversational English (which many students seemed to be acquiring through everyday life in the United States anyway), but it rarely helped where help was needed most— with abstract, academic English, critical to understanding science, mathematics, and history.

Another serious shortcoming of the natural-language approach to English-language development was the fact that classrooms are ill-suited for natural conversations between teachers and students. A setting in which one teacher is responsible for organizing and directing activities for 35 children is not one conducive to promoting frequent opportunities for natural conversations. Classrooms are ideally suited for academic conversations. August and Hakuta (1997) note how all contemporary theories "share the important claim that academic language is different from language use in other contexts" (pp. 36–37). Despite widespread understanding of the distinction between these two types of language uses, it is still common for teachers to make the erroneous assumption that possessing command of conversational English means a child can follow abstract discussions of concepts such as antipathy, or gravity, or the causes of World War II.

It was in response to these problems with traditional ESL instruction (focusing on grammar and syntax) and natural conversational approaches to language development that sheltered instruction emerged. The movement began about 10 years ago with the goal of merging English-language learning with content acquisition. Despite some success with this approach, a growing concern seems to be that too often teachers merely "hope that language occurs [during lessons]. There is a risk during content instruction that language development will be neglected" (Gersten & Baker, in press).

Merging English-language Development with Content-Area Learning

The rationale for sheltered approaches is that students can learn English while learning academic content, and that this type of learning will build academic language (Cummins, 1994). However, in numerous professional work group meetings held with practitioners who are experts in teaching English-language learners (Gersten & Baker, in press), the consistent refrain has been:

- Content-area instruction often leads to sacrifices in learning English.
- Few districts have a curriculum program or approach that promotes students' proper use of the English language.

In discussing concerns about instruction for English-language learners, professional work group members frequently noted how Content-Area ESOL almost invariably fails, in the words of one group member, "to provide adequate time for English-language learning" (Gersten & Baker, in press). In other words, participants felt that teachers often emphasize content acquisition over building English-language abilities. As one teacher noted, "It's important to use content as a basis for language development … [however] there is a risk during content instruction of neglecting language development" (California professional work group, October 1996, Gersten & Baker, in press).

This concern has been supported by observational research. Most astounding is the low level of student oral language use in English-language development classes noted by Arreaga-Mayer and Perdomo-Rivera (1996). They observed that students used written or oral language only 21 percent of the time. In other words, students rarely spoke during classes in which the explicit purpose was English-language development.

Similarly, Ramírez (1992) concluded that "consistently, across grade levels within and between the three instructional programs, students are limited in their opportunities to produce language and in their opportunities to produce more complex language" (p. 9). This pattern also supports a major finding in our study of issues confronting teachers in the upper elementary grades (Gersten, 1996a; Gersten, 1996b), and also found in observational research by Reyes (1992). We see inadequate time for English-language development as a major problem with current practice.

Several reasons for this problem were identified in the professional work groups we conducted. First and foremost was teachers' concern for increased accountability for content learning (as measured by test results), as opposed to the more amorphous goals of English-language acquisition, and a relative de-emphasis in accountability for students' language development needs. Participants in the professional work groups discussed in detail how, based on their observations and experiences in classrooms, the tendency to cover all the content in science, social studies, or mathematics almost invariably precluded allowing adequate time for English-language development, especially more formal academic English.

. . . students used written or oral language only 21 percent of the time. In other words, students rarely spoke during classes in which the explicit purpose was English-language development.

Other comments in the professional work groups focused on the failure to systematically impart to students skills in speaking and writing standard English, even as late as middle school. While many members felt that the policy of never correcting students for grammatical or pronunciation problems during English-language instruction made sense during the

early years of English-language development, there was general consensus that students need feedback on their formal English usage as they progress in school. Furthermore, teachers lack any kind of coherent system for providing it. In one professional work group, it was suggested that in the early phases of language learning, teachers should modulate the feedback they provide to students and be sensitive to the problems inherent in correcting every grammar mistake students make; however, during later stages, one member reflected the feeling in the group by noting the "importance of identifying errors and providing specific feedback."

with cognitive challenge, is an admirable, but perhaps only occasionally realized, goal. On the other hand, providing some time each day when English-language learners have opportunities to work on all aspects of English-language development, and providing academically challenging content instruction (be it in native language or English), are likely to be more easily achievable, especially if teachers take time to make goals clear and precise.

In short, instruction for English-language learners should work to blend oral language engagement with cognitive engagement.

We believe cooperative learning and peer tutoring strategies have the potential to effectively and rapidly increase English-language development, particularly decontextualized language concepts with high degrees of cognitive challenge.

A recent research study by Fashola, Drum, Mayer, and Kang (1996) may provide some direction in this area. Fashola and colleagues noted how errors made by Latino students in English are usually predictable, and how these predictable errors could become the basis of proactive curricula: "Rather than simply marking a predicted error as incorrect, the teacher could explicitly point out that the phonological or orthographic rule in English is different from the one in Spanish" (Fashola et al., p. 840). After reviewing these issues with professional work groups, and reading about problems with Content-Area ESOL in sources as diverse as the *New York Times* and the *Harvard Educational Review* (Reyes, 1992), we concluded that an effective English-language development program should include a component devoted to helping students learn how to use the second language according to established conventions of grammar and syntax.

We encourage researchers and educators to consider language learning and content-area learning as distinct educational goals, rather than assuming that increased use of oral language in school will automatically lead to an increase in academic learning and the development of higher-order thinking skills. Artful and skillful blending of genuine dialogue about literature or science

At about the same time as we conducted the professional work groups with expert practitioners, we conducted a quantitative synthesis of the intervention research on the effectiveness of specific instructional approaches for English-language learners (Gersten & Baker, in press). Through the work groups and quantitative synthesis, we developed some guiding instructional principles for English-language learners that we believe accurately reflect the emerging empirical knowledge base on effective teaching approaches for this population of students.

Principles of Best Practice

We identified five specific instructional variables that, although supported by limited experimental evidence, suggest critical components for instruction: (a) vocabulary as a curricular anchor, (b) visuals to reinforce concepts and vocabulary, (c) cooperative learning and peer tutoring strategies, (d) strategic use of the native language, and (e) modulation of cognitive and language demands. We briefly describe each of these components in this section.

Building and using vocabulary as a curricular anchor. Vocabulary learning should play a major role in successful programs for English-language learners. The number of new vocabulary terms introduced at any one time should be limited. For example, the standard method of presenting up to 20 or more new vocabulary words that students are expected to learn at a given time is not an effective way to help English-language learners develop vocabulary. A better technique is to present lists of seven or fewer words that students would work on over relatively long periods of time. Criteria for selecting words should be considered carefully, so that words are selected that convey key concepts, are of high utility, are relevant to the bulk of the content being learned, and have meaning in the lives of students.

Restricting the number of words students are expected to learn will help them learn word meanings at a deep level of understanding, an important principle of sustained vocabulary growth. The research of Nagy (1988) and Beck

Critical Components of Instruction

We identified five specific instructional variables that, although supported by limited experimental evidence, suggest critical components for instruction:

(a) vocabulary as a curricular anchor,
(b) visuals to reinforce concepts and vocabulary,
(c) cooperative learning and peer tutoring strategies,
(d) strategic use of the native language, and
(e) modulation of cognitive and language demands.

We briefly describe each of these components in this section.

and McKeown (1985) are important resources for helping teachers understand how to teach vocabulary to English-language learners. Many teachers will need help in selecting vocabulary words for instruction, as districts and conventional texts rarely provide the type of guidance needed.

One expert teacher we have worked with previously provided insights into the methods she used to select and teach. She noted how she chose words for the class to analyze in depth that represented complex ideas— adjectives like anxious, generous, and suspicious, and nouns like memory— words that English-language learners are likely to need help with and words that were linked to the story in meaningful and rich ways. Students had to read the story and look for evidence that certain events or descriptions that were connected to vocabulary instruction pertained to a particular character or incident.

Intervention studies have also addressed vocabulary development directly. In a study by Rousseau, Tam, and Ramnarain (1993), teachers used a variety of methods to teach word meanings to students, including visually presenting words, defining them, and using gestures and other visual techniques (e.g., pictures). It is interesting that both of the outcome measures (i.e., accurate reading of all the words in the story and comprehension of the story) showed dramatic improvement over a method in which teachers previewed the entire story with students by reading it to them.

In a study by Saunders, O'Brien, Lennon, and McLean (1998), critical vocabulary words were identified prior to story reading. A range of approaches was used to help students develop a deep understanding of these words. Students were also guided to link critical vocabulary to relevant experiences in their lives.

In both studies, the time-tested practice of introducing new vocabulary prior to reading a new story was used successfully. Echevarria (1998) described how this type of vocabulary instruction can be used with English-language learners:

"One form of vocabulary development includes short, explicit segments of a class time in which the teacher directly teaches key vocabulary. These five-minute segments would consist of the teacher saying the vocabulary word, writing it on the board, asking students to say it and write it, and defining the term with pictures, demonstrations, and examples familiar to students" (p. 220).

Use of visuals to reinforce concepts and vocabulary. The double demands of learning content and a second language are significant, and the difficulty should not be underestimated. Because the spoken word is fleeting, visual aides such as graphic organizers, concept and story maps, and word banks give students a concrete system to process, reflect on, and integrate information.

The effective use of visuals during instruction with English-language learners has ranged from complex semantic visuals (Reyes & Bos, 1998), to visuals based on text structures, such as story maps and compare-contrast "think sheets." Visuals are especially successful in supporting English-language development because they are an excellent way to help students visualize the abstractions of language.

Intervention studies and several observational studies have noted that the effective use of visuals during instruction can lead to increased learning. Rousseau et al. (1993) used visuals for teaching vocabulary (i.e., words written on the board and pictures), and Saunders et al. (1998) incorporated the systematic use of visuals for teaching, reading, and language arts. Visuals also play a large role in Cognitive Academic Language Learning Approach (CALLA), shown to be related to growth in language development.

Implementation of even simple techniques such as writing key words on the board or using a flip chart while discussing them verbally can support meaningful English-language development and comprehension. However, even the simple integration of visuals is drastically underutilized, and it seems that, even when used, methods are typically inconsistent or superficial and do not support students' deep processing and thinking.

Use of cooperative learning and peer tutoring strategies. We believe cooperative learning and peer tutoring strategies have the potential to effectively and rapidly increase English-language development, particularly decontextualized language concepts with high degrees of cognitive challenge. Among the expert teachers we talked to, the need for highly structured cooperative learning groups was often stressed.

Intervention studies have used cooperative learning or peer tutoring strategies as critical pieces of their interventions. Klingner and Vaughn (1996) tested whether cooperative learning or peer tutoring was more effective in promoting comprehension with English-language learners with learning disabilities. Although there was some evidence that peer tutoring was the most effective, both interventions led to improved learning outcomes. In the intervention used by Muñiz-Swicegood (1994), students worked in successively smaller cooperative groups to learn how to generate and answer questions about what they were reading. Students in this intervention did better on measures of reading comprehension than students who were taught using basal reading approaches.

Strategic use of the native language. Strategic use of students' native language can help ensure that the development of higher-order thinking skills receives adequate curriculum focus. A viable way to achieve this objective is for teachers to use levels of English that students are very fluent with, while simultaneously using students' native language to introduce complex concepts.

. . . our conclusion is that it is beneficial to use students' native language, but it should be done in a strategic fashion.

The strategic use of native language is a controversial issue. Many researchers have argued against frequently using dual translations, that is, the extensive use of both the student's native language and a second language during instruction. Authors of relevant observational studies (Gersten & Jiménez, 1994; Lopez-Reyna, 1996; Miniccuci et al., 1995; Tikunoff et al., 1991) have proposed using a student's native language as an instructional approach. Yet, the findings of Ramírez (1992) indicate that neither more nor less higher-order discussion occurred when instruction was in the native language. Thus, our conclusion is that it is beneficial to use students' native language, but it should be done in a strategic fashion.

Modulation of cognitive and language demands. This last instructional strategy carries a different weight of importance, and we view it as the most speculative among those we have proposed. The proposition is that during English language-content instruction, effective teachers intentionally vary cognitive and language demands to achieve specific goals. In short, when cognitive demands are high, language expectations are simplified. In this case, for example, teachers may accept brief or truncated responses in English. In another part of the lesson, cognitive demands are intentionally reduced so that students can more comfortably experiment with extended English-language use.

This proposition was supported in each of the five professional work groups conducted. It also appears consonant with contemporary theories of second-language acquisition (e.g., August & Hakuta, 1997). Empirical support for this proposition is needed, although designing a suitable research study around such a subtle principle will be difficult.

Conclusion

The climate for how best to meet the instructional needs of English-language learners is changing in many parts of the country. In California, it is now law that English-language learners can receive no more than one year of native-language instruction, unless special provisions are made. The U.S. Department of Education has argued that a critical academic goal for English-language learners needs to be their more rapid attainment of proficiency in English.

For many years, research in bilingual education has tried to determine the optimum time to begin English-language instruction for English-language learners. The dominant theory in bilingual education has been that proficiency in a student's native language is needed before full-time instruction in English can be provided. There is virtually no research to support this position, however, as reported by the National Academy of Sciences (August & Hakuta, 1997). The report's condemnation of large-scale evaluation studies, typical of research conducted in bilingual education, has precluded research in other areas that may have better advanced the knowledge on effective instruction for English-language learners. The report recommends an increase in smaller, more tightly controlled studies. The El Paso study, showing that there were no differences between a transitional bilingual education program and an immersion program, is one example of this type of study.

The dominant theory in bilingual education has been that proficiency in a student's native language is needed before full-time instruction in English can be provided. There is virtually no research to support this position, however, as reported by the National Academy of Sciences.

Increasingly, researchers argue that we need to think of components of instruction that lead to improved learning outcomes as opposed to broad instructional labels that, at best, crudely describe complex instructional interventions. August and Hakuta (1997) provide several excellent "lessons learned" from the past 20 years of program evaluation research. In our view, the most relevant is the following:

Programs that are seemingly very different—especially the most successful ones— may have very similar characteristics. These characteristics include the following:

- some native-language instruction
- for most students, a relatively early phasing in of English instruction
- teachers specially trained in instructing English-language learners.

… Historically, programs are described as unitary; a student is either in a program or not. The current debate on the relative efficacy of immersion and bilingual education has been cast in this light … We need to move away from thinking about programs in such broad terms and instead see them as containing multiple components– features that are available to meet the differing needs of particular students … (p. 156).

In our view, there is far from firm support for the first of the three bullets, but, as a set, they appear to be reasonable guidelines. We especially value the sense of looking at components rather than full programs.

The erratic quality of instruction aimed at English-language development is at the root of the growing dissatisfaction with current practice. Inadequate attention has been devoted to curriculum development, pragmatic teacher training and professional development, and applied research. An emerging body of research suggests that the use of approaches such as "sheltered English," whereby the linguistic demands placed on students are aligned with their knowledge of English, can lead to students' learning of complex, age-appropriate content, as well as English-language development. We have proposed that particularly effective teachers carefully modulate their use of English depending on their teaching goals. They decrease cognitive demands when English-language development is the primary goal, and increase cognitive demands when content acquisition is the goal. Of immediate concern in the widespread use of effective sheltered instructional approaches is that inadequate time and energy is devoted to the English language-development component.

We believe some progress has been made in developing an empirical knowledge base on specific and well-defined instructional approaches that are effective for English-language learners. Through our work with expert practitioners, as well as our synthesis of relevant intervention research, we have begun to develop a set of instructional principles that we believe provide a solid beginning. These principles address anchoring curriculum goals to vocabulary development, using visuals to reinforce learning and retention, using small-group instructional strategies such as cooperative groups and peer tutoring, and the strategic use of the students' native language to reinforce content learning.

The mission of the National Institute for Urban School Improvement is to support inclusive urban communities, schools, and families to build their capacity for sustainable, successful urban education. The Institute accomplishes this mission through dialogue, networking, technology, action research, information systems, and alliance and consensus building.

About the Authors



RUSSELL GERSTEN is a professor in the Department of Educational Leadership, Technology, and Administration, and past president, Division for Research, Council for Exceptional Children. He has written over 100 articles on instructional issues, bilingual education, and professional development. He serves on 16 editorial review boards. His recent books include *Promoting learning for culturally and linguistically diverse students* (1998, Wadsworth Publishing, co-edited with R. Jimenez); *Productive instructional practices for English-language learners: Guiding principles and examples from research-based practice* (1999, Council for Exceptional Children, co-written with S. Baker and S.U. Marks); and *Research synthesis in special education* (in press, Lawrence Erlbaum Associates, Inc., co-edited with E. Schiller and S. Vaughn).



SCOTT BAKER is a research associate with Eugene Research Institute. He is currently Principal Investigator (PI) of three research projects funded by the U.S. Department of Education. Baker's research has been published in professional journals such as *School Psychology Review*, *Exceptional Children*, *Learning Disabilities Research and Practice*, *Learning Disabilities Quarterly*, and the *Journal of Learning Disabilities*. Baker has considerable experience working on assessment and instruction issues involving English-language learners. He co-authored a recent book published by the Council for Exceptional Children on effective instructional practices for English-language learners with disabilities. Baker also conducted one of the only empirical studies investigating the use of Curriculum-Based Measurement for English-language learners. Currently, he is conducting a study funded by the state of California on effective instructional approaches in the early primary grades for English-language learners in high-poverty schools.

NATIONAL INSTITUTE FOR URBAN SCHOOL IMPROVEMENT

Center for Program Improvement
University of Colorado at Denver
1380 Lawrence Street, 6th Floor
Denver, CO 80204
Tel: (303) 556-3990
Fax: (303) 556-6142
TTY or TDD: (800) 659-2656

Center for Research Synthesis and Product Development
University of Oregon
1235 University of Oregon
Eugene, OR 97403
Tel: (541) 346-2888
Fax: (541) 346-2471
TTY: (541) 346-2487

Center for Marketing, Networking, and Utilization
Education Development Center, Inc.
55 Chapel Street
Newton, MA 02458
Tel: (617) 969-7100, ext. 2105
Fax: (617) 969-3440
TTY: (617) 964-5448

Email: niusi@edc.org
http://www.edc.org/urban

References

Anderson, V., & Roit, M. (1998). Reading as a gateway to language proficiency for language-minority students in the elementary grades. In R.M. Gersten & R.T. Jiménez (Eds.), *Promoting Learning for Culturally and Linguistically Diverse Students* (pp. 42–54). Belmont, CA: Wadsworth Publishing Company.

Archibold, R.C. (1998, June 21). Crew plans an overhaul of bilingual education. *New York Times*, p. 27.

Arreaga-Mayer, C., & Perdomo-Rivera, C. (1996). Ecobehavioral analysis of instruction for at-risk language-minority students. *Elementary School Journal, 96*, 245–258.

August, D., & Hakuta, K. (1997). *Improving schooling for language-minority children*. Washington, DC: National Academy Press.

Baker, K. A., & de Kanter, A. A. (1981). *Effectiveness of bilingual education: A review of the literature*. Washington, DC: U.S. Department of Education.

Barrera, R. (1983). Bilingual reading in the primary grades: Some questions about questionable views and practices. In T.H. Escobedo (Ed.), *Early childhood bilingual education: A Hispanic perspective* (pp. 164–183). New York: Teachers College Press.

Beck, I. L., & McKeown, M. G. (1985). Teaching vocabulary: Making the instruction fit the goal. *Educational Perspectives, 23*(1), 11–15.

California Department of Education. (1997). *Census report*. Sacramento, CA: California Department of Education.

Chamot, A. U., & O'Malley, J. M. (1996). The Cognitive Academic Language Learning Approach (CALLA): A model for linguistically diverse classrooms. *Elementary School Journal, 96*, 259–274.

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly, 14*(2), 175–187.

Cummins, J. (1994). Primary language instruction and the education of language minority students. In J. Cummins (Ed.), *Schooling and language minority students: A theoretical framework* (2nd ed.). Los Angeles: California State University, National Evaluation, Dissemination and Assessment Center.

Danoff, M. N. (1978). *Evaluation of the impact of ESEA Title VII Spanish-English bilingual education programs* (Technical Report). Washington, DC: American Institutes for Research.

Echevarria, J. (1995). Interactive reading instruction: A comparison of proximal and distal effects of Instructional Conversations. *Exceptional Children, 61*, 536–552.

Echevarria, J. (1998). Preparing text and classroom materials for English-language learners: Curriculum adaptations in secondary school settings. In R. Gersten & R. Jiménez (Eds.), *Promoting learning for culturally and linguistically diverse students: Classroom applications from contemporary research* (pp. 210–229). Pacific Grove, CA: Brooks/Cole Publishing.

Echevarria, J., & Graves, A. (1998). *Sheltered content instruction: Teaching English-language learners with diverse abilities*. Des Moines, IA: Allyn & Bacon.

Fashola, O. S., Drum, P. A., Mayer, R. E., & Kang, S. (1996). A cognitive theory of orthographic transitions: Predictable errors in how Spanish-speaking children spell English words. *American Educational Research Journal, 33*, 825–844.

Gersten, R. (1996a). The double demands of teaching English-language learners. *Educational Leadership, 53*(5), 18–22.

Gersten, R. (1996b). Literacy instruction for language-minority students: The transition years. *Elementary School Journal, 96*(3), 227–244.

Gersten, R., & Baker, S. (in press). The professional knowledge base on instructional interventions that support cognitive growth for language-minority students. In R. Gersten, E. Schiller, & S. Vaughn (Eds.), *Research syntheses in special education: Instruction, social learning, technology, and public policy*. Mahwah, NJ: Lawrence Erlbaum and Associates, Inc.

Gersten, R., Baker, S., & Keating, T. (1998). El Paso programs for English-language learners: A longitudinal follow-up study. *READ Perspectives, 5*(1), 4–28.

Gersten, R., & Jiménez, R. (1994). A delicate balance: Enhancing literacy instruction for students of English as a second language. *The Reading Teacher, 47*(6), 438–449.

Gersten, R., & Woodward, J. (1995). A longitudinal study of transitional and immersion bilingual education programs in one district. *Elementary School Journal, 95*, 223–240.

Gersten, R., Woodward, J., & Schneider, S. (1992). Bilingual immersion: A review and synthesis of research conducted in El Paso, Texas. Washington, DC: READ Institute.

Goldenberg, C. (1996). The education of language-minority students: Where are we, and where do we need to go? *Elementary School Journal, 93*, 353–361.

Jiménez, R. T., Moll, L. C., Rodríguez-Brown, F. V., & Barrera, R. B. (1999). Latina and Latino researchers interact on issues related to literacy learning. *Reading Research Quarterly, 34*(2), 217–230.

Klingner, J. K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a second language. *Elementary School Journal, 96*, 275–293.

Krashen, S. (1982). *Principles and practice in second language acquisition*. New York: Pergamon Press.

Lee, O., & Fradd, S. H. (1996). Interactional patterns of linguistically diverse students and teachers: Insights for promoting science learning. *Linguistics and Education: An International Research Journal, 8*, 269–297.

Lopez-Reyna, N. A. (1996). The importance of meaningful contexts in bilingual special education: Moving to whole language. *Learning Disabilities Research & Practice, 11*(2), 120–131.

Meyer, M. M., & Fienburg, S. E. (1992). *Assessing evaluation studies: The case of bilingual education strategies*. Panel to review evaluation studies of bilingual education, Committee on National Statistics, National Research Council. Washington, DC: National Academy Press.

Miniccuci, C., Berman, P., McLaughlin, B., McLeod, B., Nelson, B., & Woodworth, K. (1995). School reform and student diversity. *Phi Delta Kappan, 77*(1), 77–80.

Moll, L. C., & Díaz, R. (1986). Teaching writing as communication: The use of ethnographic findings in classroom practice. In D. Bloome (Ed.), *Literacy and schooling* (pp. 193–221). Norwood, NJ: Ablex.

Muñiz-Swicegood, M. (1994). The effects of megacognitive reading strategy training on the reading performance and student reading analysis strategies of third grade bilingual students. *Bilingual Research Journal, 18*(1&2), 83–97.

Nagy, W. E. (1988). *Teaching vocabulary to improve reading comprehension*. Neward, DE: International Reading Association.

Ramírez, J. D. (1992). Executive summary: Longitudinal study of structured English immersion strategy, early-exit and late-exit transitional bilingual education programs for language-minority children. *Bilingual Research Journal, 16*(1&2), 1–62.

Ramírez, J. D., Yuen, S. D., Ramey, D. R., & Pasta, D. (1991). *Final Report: Longitudinal study of immersion strategy, early-exit, and late-exit transitional bilingual education programs for language minority children. Volumes 1 and 2*. San Mateo: Aguirre International, Inc.

Reyes, E., & Bos, C. (1998). Interactive semantic mapping and charting: Enhancing content-area learning for language minority students. In R. Gersten & R. Jiménez (Eds.), *Promoting learning for culturally and linguistically diverse students: Classroom applications from contemporary research* (pp. 133–152). Belmont, CA: Wadsworth.

Reyes, M. (1992). Challenging venerable assumptions: Literacy instruction for linguistically different students. *Harvard Educational Review, 62*(4), 427–446.

Riley, R. W. (1998, April 27). *Helping all children learn English*. Washington, DC: U.S. Department of Education, Office of Public Affairs.

Rossell, C. H. (1992). Nothing matters: A critique of the Ramirez, et al. longitudinal study of instructional programs for language-minority children. *Bilingual Research Journal, 16*(1), 1–62.

Rossell, C. H., & Baker, K. (1996). The educational effectiveness of bilingual education. *Research in the Teaching of English, 30*(1), 7–74.

Rousseau, M. K., Tam, B. K. Y., & Ramnarain, R. (1993). Increasing reading proficiency of language-minority students with speech and language impairments. *Education and Treatments of Children, 16*, 254–271.

Saunders, W., O'Brien, G., Lennon, D., & McLean, J. (1998). Making the transition to English literacy successful: Effective strategies for studying literature with transition students. In R. Gersten & R. Jiménez (Eds.), *Promoting learning for culturally and linguistically diverse students: Classroom applications from contemporary research* (pp. 99–132). Belmont, CA: Wadsworth.

Schnaiberg, L. (1998, April 29). What price English? *Education Week*, pp. 1, 16.

Slavin, R., & Yampolsky, R. (1992). *Success for all. Effects on students with limited English proficiency: A three-year evaluation* (Rep. No. 29). Baltimore, MD: The Johns Hopkins University Center for Research on Effective Schooling for Disadvantaged Students.

Tanamachi, C. (1998, July 18). Educators poll: Set bilingual time limit. *Austin American Statesman*.

Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life*. Cambridge, UK: Cambridge University Press.

Thomas, W. P., & Collier, V. P. (1997). *School effectiveness for language minority students*. Unpublished manuscript. Washington, DC: The George Washington University, National Clearinghouse for Bilingual Education.

Thomas, W. P., & Collier, V. P. (1998). Two languages are better than one. *Educational Leadership, 55*(4), 23–26.

Tikunoff, W. J., Ward, B. A., van Broekhuizen, L. D., Romero, M., Castaneda, L. V., Lucas, T., & Katz, A. (1991). *Final report: A descriptive study of significant features of exemplary special alternative instructional programs*. Los Alamitos, CA: The Southwest Regional Educational Laboratory.

Walquis, A. (1998). Legal declaration, California case #C-98-2252 CAL.

Willig, A. C. (1985). A meta-analysis of selected studies on the effectiveness of bilingual education. *Review of Educational Research, 55*, 269–317.

Wong-Fillmore, L., & Valdez, C. (1986). Teaching bilingual learners. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 648–685). New York: MacMillan.