Education and Urban Society

http://eus.sagepub.com

English-Language Learners: Key Issues
Richard R. Verdugo and Brittney Flores
Education and Urban Society 2007; 39; 167
DOI: 10.1177/0013124506294852

The online version of this article can be found at: http://eus.sagepub.com/cgi/content/abstract/39/2/167

Published by:

\$SAGE

http://www.sagepublications.com

Additional services and information for Education and Urban Society can be found at:

Email Alerts: http://eus.sagepub.com/cgi/alerts

Subscriptions: http://eus.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations http://eus.sagepub.com/cgi/content/refs/39/2/167

http://online.sagepub.com

English-Language Learners

Key Issues

Richard R. Verdugo National Education Association Brittney Flores San Diego State University

Since its inception, America's system of public education has faced many challenges. One of its more important challenges has been how to teach children from diverse backgrounds and cultures. As a society that prides itself on a democratic ideology, cultural diversity and schooling are not trivial issues. One of the more significant diversity topics has been the presence of Englishlanguage learners (ELL) in American public schools. This article introduces the topic of ELL students and the education and education-related issues surrounding ELL students. For researchers and policy makers deeply steeped in the issues surrounding ELL students, the issues and concerns raised in this article are familiar. However, for the vast majority of other researchers and policy makers, these issues are not familiar and may have important impact on their own research agendas.

Keywords: English-language learners; testing; school programs

Since its inception, public education in America has faced many challenges. One of its more significant challenges has been the education of children from diverse cultures. As a society that is a patchwork of diversity, and one that prides itself on a democratic ideology, diversity and schooling are not trivial matters.

The presence of English-language learners (ELL) in the American public schools has been an important diversity challenge. Because the United States is a country of immigrants, the historical ebb and flow of immigrants to the United States from other countries has challenged American schools to devise various ways in educating immigrant children who were unable to proficiently speak English. Early efforts were not so much focused on teaching language skills as with Americanizing children. Much debate and controversy followed. Debate and controversy continue to this day but has become more sophisticated, focusing on such issues as immersion, educating students in their native language, or educating them through a bilingual framework. It does not appear that these debates will reside soon.

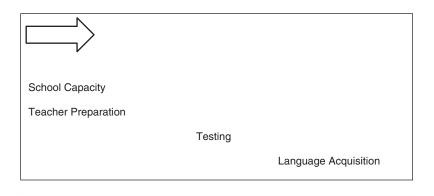
Why do these debates exist in the first place? To be sure, part of the explanation is that researchers simply do not know what works best in teaching language acquisition. However, the larger reason stems from the growth and subsequent political controversy surrounding the ELL population. Data for the year 2001, for example, indicate that 9.7% of the student population is composed of ELL students. Moreover, ELL students are more likely to be at risk of dropping out and of performing poorly in school and on national standardized tests than other students (August & Hakuta, 1997). In the era of No Child Left Behind (NCLB), the challenges for the educational system in providing an appropriate education for ELL students are crucial. Moreover, growing xenophobia in the United States has led many decision makers to focus on policies that stress assimilation, and English language acquisition is part of that strategy.

Although the challenges posed by ELL students are significant, it is less clear what strategies and programs educators can use to improve the educational experiences of this population. Much of this ambiguity is due to the lack of research and information, inappropriate educational policies, and the inability of educators to understand ELL students and their backgrounds. The purpose of this article is to provide a general introduction to the topic of ELL students and their education-related issues. For researchers and policy makers deeply steeped in the issues surrounding ELL students, our article raises little that is new. However, for the vast majority of other researchers and policy makers, these issues are not so familiar and will have important impacts on their own research and policy agendas.

Background

In determining what we believe were the most important issues surrounding ELL students, we began by focusing our concern on issues occurring within the school. Second, we focused on research that examined how ELL language training leads to English-language proficiency. We then asked two questions: (a) how do students acquire language? and (b) how are schools involved in the process? Both questions led us to focus our review on language acquisition, testing, school capacity, and teacher preparation. A review of these topics, we argue, provides an excellent sense of how well ELL students are educated in U.S. public schools. The fully recursive model we use is organized in the following way in Figure 1:

Figure 1
A Fully Recursive Model of English-Language Learners Issues



School Capacity

School capacity refers to school culture (norms, values, and expectations) and school management (the organization of teaching and learning). School quality and effectiveness has direct, positive effects on student achievement (Verdugo, Greenberg, Henderson, Uribe, & Schneider, 1997), and we can expect the same for ELL students. What are some of these "school factors?" To assist us in our analysis, we have organized the research into two broad topics: school culture and school management. For instance, an important example of normative culture is the views teachers have of students—are they low or high achievers? An example of school management might be the use of tracking in a school. These are broad categories, and many subtopics fall under their aegis, so we limit our discussion to those subtopics found within the ELL literature.

A Supportive School Environment

In supportive school environments teachers, students and parents believe, assume, and expect that students will achieve (see Rutter, Maughan, Mortimer, & Ouston, 1979; Verdugo et al., 1997). A positive school environment creates positive school experiences for ELL students and enhances their academic achievement (Berman, Chambers, et al., 1992; Berman, McLaughlin, et al., 1995; Carter & Chatfield, 1986; Lucas, Henze, & Donato, 1990; Minicucci & Olsen, 1992; Moll, 1988; Tikunoff et al., 1991). Some researchers point

out that ELL students who drop out report they were treated unfairly while they were in school (Buriel, 1983; Laosa, 1977). Effective schools are nurturing, caring environments with high academic expectations.

Three things are emphasized about positive school environments: (a) valuing the linguistic and cultural background of ELL students, (b) having high expectations for achievement, and (c) involving students in the overall school operation. In terms of the normative culture, these three traits also characterize effective schools (Verdugo et al., 1997).

Yet research fails to provide a clear answer as to how schools develop positive environments. Goldenberg and Sullivan (1994) suggest that creating a positive environment is a complex process that begins by identifying school goals and expectations for students and then working toward them in a comprehensive and sustained manner. There is the sense that student achievement leads to positive environments and that sloganeering about building positive school environments, training, or just raising expectations falls short of actually creating positive school environments (Comer, 1984; Goldenberg & Gallimore, 1991). In other words, culture is not enough and appropriate structures and behaviors must also be in place (e.g., policies, methods, and resources).

Finally, building bridges between schools and parents is important for effective schools. Continuing community–school processes are seen as central to school success (Carter & Chatfield, 1986; Moll, 1988). Parents are encouraged to get involved in their children's education, such as parent advisory committees, newsletters, and so forth (Lucas et al., 1990), and actually having an influence in creating a positive school culture.

School Management

As part of school management, we have identified two subtopics: school administration and selected teaching and learning topics. The former refers to school bureaucratic tasks, rules, and regulations. The latter refer to processes that involve the organization and delivery of teaching and learning in a school.

School administration. A number of topics characterize the ELL literature in terms of school administration: leadership, the articulation within and between schools, systematic student assessment, and staff development practices.

Leadership within a school, preferably by the principal, entails providing support and exerting pressure for programs. The research is clear about

what kinds of traits and activities characterize a leader. For example, a leader assumes the planning, coordinating, and administering the program (Tikunoff et al., 1991). It is also important that principals take a central role in monitoring the program, seeing that the program is implemented and is a priority, and providing direction (Carter & Chatfield, 1986; Lucas et al., 1990). Essentially, the principal provides support and exerts pressure (Goldenberg & Sullivan, 1994).

There is an important exception to this body of research about school leadership. The *Success For All* program does not identify leadership as an important factor (Slavin, Madden, Dolan, & Wasik, 1995). Slavin and his colleagues argue that leadership is far less critical than having an effective program.

A second topic covers communication within and between schools about the program, curriculum, and students' needs. Collaboration between language and content teachers enhances understanding, student achievement, and the smooth transition into mainstream classes (Berman, McLaughlin, et al., 1995; Calderon, Hertz-Lazarowitz, & Slavin, 1996; Minicucci & Olsen, 1992; Saunders, O'Brien, Lennon, & McLean, as cited in Saunders & Goldenberg, 1999; Short, 1997; Slavin & Yampolsky, 1992). Such articulation is not only important within schools but between schools as well.

Effective schools evaluate both programs and students. For example, Carter and Chatfield (1986) found that effective programs evaluate students and student outcomes. Similar findings are reported about student-achievement assessments (Carter & Chatfield, 1986; Goldenberg & Sullivan, 1994; Slavin & Madden, 1987; Slavin & Yampolsky, 1992). Evaluation is effective if it is used formatively rather than summatively.

Staff training that develops skills and raises teachers' expectations is a crucial trait of effective schools. However, training must be linked to students' needs (Lucas et al., 1990) and for specific programs (Slavin & Madden, 1987; Slavin & Yampolsky, 1992). Staff development for all teachers in the school, not just language specialists, has long been a trait of effective schools (Berman, McLaughlin, et al., 1995; Carter & Chatfield, 1986; Lucas et al., 1990; Minicucci & Olsen, 1992). Effective schools avoid the tendency to base instructional practices on teachers' assumptions and stereotypes about ELL students. Rather, effective schools conduct empirical research about the community and use that information as resources in their instruction with students and in their interaction with parents.

Teaching and learning. A number of topics address the linkage between teaching, learning, and ELL students. To begin with, customized learning environments are an issue. In meeting the needs of ELL students, staff

should be involved in the design of the learning environment so that it reflects both the school and community. There is no one right way to educate ELL students, so different approaches should be pursued (Berman, Chambers, et al., 1992; Berman, McLaughlin, et al., 1995; Lucas et al., 1990; Moll, 1988; Samaniego & Eubank, 1991; Tikunoff et al., 1991) and customization is crucial.

The use of student's native language in the instructional process is an important part of the teaching and learning environment. The use of the student's native language is a mechanism for imparting content and understanding (Berman, McLaughlin, et al., 1995; Calderon et al., 1996; Carter & Chatfield, 1986; Goldenberg & Sullivan, 1994; Henderson & Landesman, 1992; Hernandez, 1991; Lucas et al., 1990; Muniz-Swicegood, 1994; Pease-Alvarez, Garcia, & Espinosa, 1991; Roseberry, Warren, & Constant, 1992; Tikunoff, 1983). The use of students' national language is important, because it helps to clarify and elaborate points being made in English (Tikunoff et al., 1991). Reading knowledge gained in one language can be transferred to another, and the use of one's native language clarifies and enhances understanding and focus (Mace-Matluck, Alexander-Kasparik, & Queen, 1998). Moll, Diaz, Estrada, and Lopes (1981) indicate that learning is situation specific and that any generalizations must replicate the context in which the learning occurred. Thus, teaching and learning for ELL students must be tailored to the traits of each group (Tharp, 1982; Wong, Ammon, McLaughlin, & Ammon, 1985).

Some scholars indicate that a balance of basic and more complex skills is a trait of schools that are effective in teaching ELL students (Goldenberg & Gaillimore, 1991; Goldenberg & Sullivan, 1994; Pease-Alvarez et al., 1991). Students need to be challenged, but they must also be successful. A balanced curriculum heightens both possibilities and enhances student achievement.

Explicit skills instruction is important for all students but especially for ELL students (Tikunoff, 1983; Wong et al., 1985). By explicit skills instruction, we mean the clear delineation of both what is being taught and the processes in the instructional context. Research suggests that time devoted to explicit skills instruction is associated with greater student achievement (Carter & Chatfield, 1986; Escamilla, 1994; Goldenberg & Gallimore, 1991; Goldenberg & Sullivan, 1994; Slavin & Yampolsky, 1992). To a large extent, an explicit-skills approach is just good teaching.

Practicing newly acquired skills is important, and providing opportunities for practice sharpens one's skills. School staff can provide opportunities for students to use or practice their language skills in a variety of school activities. Berman, McLaughlin, et al. (1995) found that effective teachers

provide opportunities for ELL students to produce written reports, oral presentation, and get them to engage in the exchange of ideas. Moll (1988) found that effective teachers allowed ELL students to try, use, and manipulate language. There are many avenues one can take to practice new skills, and effective schools and teachers are able to identify those avenues.

Not all students learn in solitude. Given the "community" orientation from which many ELL students originate, a community or group approach to learning might be useful. And research suggests that collaborative and cooperative learning is a successful teaching and learning strategy (Henderson & Landesman, 1992; Pease-Alvarez et al., 1991; Roseberry et al., 1992). Calderon et al. (1996) found that explicit instruction coupled with cooperative learning, partner reading, and checking improved student learning (also see Saunders et al., 1996). Other factors affecting teaching and learning include small group instruction with open-ended discovery (Cohen, 1994), teacher use of comprehensive strategies, use of students' prior knowledge, and greater student responsibility (Hernandez, 1991; Muniz-Swicegood, 1994). There is another benefit from cooperative learning for ELL students; students with educational difficulties can use one another's resources, skills, and knowledge to improve the groups' learning.

Specially tailored instructional strategies in meeting the needs of students are important. Researchers have noted a number of such strategies: metacognitive skills so that students can plan, think about, and monitor their tasks (Dianda & Flaherty, 1995); self generated questioning strategies (Muniz-Swicegood, 1994); comprehensive strategies, such as question generating, summarizing, and predicting (Hernandez, 1991); and explicit instruction (Chamot, Dale, O'Malley, & Spanos, 1992). Tailored strategies meet the specific needs of ELL students.

Strategies that use routines tend to minimize dependence on language (Edelsky, Draper, & Smith, 1983). Strategies that make English comprehensible to ELL students, such as adjusting the level of English vocabulary, the use of explicit discourse markers (first, next), and providing students with appropriate background knowledge have been successful in improving student achievement (Gersten, 1996; Mace-Matluck et al., 1998; Saunders et al., 1996; Short, 1997; Wong et al., 1985). Not everyone learns at the same pace nor under the same strategies, so customized learning strategies are truly important if learning is the objective.

Building redundancy into tasks so students have the opportunity and extra time to interact with English-speaking peers and providing opportunities for extended dialogue are also important. Saunders et al. (1996) found that working the text was successful (studying the text very carefully,

reading, rereading, discussing, and writing about it). Calderon et al. (1996) found that one successful approach involved providing students with the opportunity for discussion before, during, and after reading the text. For example, educators could build background knowledge and vocabulary, reading, and so forth, before reading the text.

Finally, interacting with English speakers has been very successful (Berman, McLaughlin, et al., 1995; Calderon et al., 1996; Wong et al., 1985). Creating opportunities for extended dialogue has been successful in improving English-language skills (Gersten, 1996; Saunders et al., 1996; Tikunoff et al., 1991).

Teacher Preparation

Preparing teachers for teaching ELL students is considerably more complex than it would first appear. In attempting to clearly describe these complexities, we begin by noting that teacher preparation refers to all teachers who teach ELL students and to those who are bilingual education teachers. Our review focuses on four broad areas: credentials, language, cultural sensitivity and understanding, and race and ethnicity.

Credentials

Research suggests that ELL students more than non-ELL students are taught by less qualified teachers. One indicator of such inequity is differentials in the credentials or certification held by teachers of ELL and non-ELL students. For example, Gandara and Maxwell-Jolly (2000) note that in California, the class-size reduction initiative has created a crisis for many ELL students, because they are being taught by teachers who lack appropriate training. In California, schools where 90% to 100% of the student population is from an ethnic and racial group, about 25% of teachers are not appropriately certified. In Los Angeles, 19% of teachers are not fully certified, whereas the student population is overwhelmingly composed of ethnic and racial minority groups. In the rural, agricultural areas of California, a significant number of ELL students attend school, yet 23% of teachers had emergency permits or waivers.

Language

A majority of teachers, both regular and bilingual education teachers, are native English speakers. This is especially the case in California (Gandara & Maxwell-Jolly, 2000). Some researchers view this as a problem.

There are at least two educational difficulties with teachers whose first language is English and who teach ELL students. First, there are issues with communication. Teachers of ELL students may have difficulty in communicating with ELL students about their schoolwork and the tasks needed for them to successfully complete their work. The importance of this issue can be seen by the fact that research shows that teacher preparation and skills exert positive effects on student learning outcomes (Hanushek, 1986) and also that teachers who are able to communicate clearly with their students have positive effects on their students' educational achievement (Center for Research on Education, Diversity, and Excellence, 1999; Gandara, Maxwell-Jolly, & Driscoll, 2005; Garcia, 1996; Milk, Mercado, & Sapiens, 1992; Zeichner, 1996).

Finally, there is a somewhat controversial issue about teacher quality. Some research has pointed out that quality teachers for ELL students should be proficient in at least two languages (Rumberger, 2000). Teachers who are themselves bilingual are better able to communicate with both students and their parents.

Culture and Race and Ethnicity

Knowing and understanding a student's culture and background are important factors in the teaching and learning process. Teachers are primarily middle-class adults, and a majority of ELL students are from poor communities (Zeichner, 1996). In California, 61% of the student population is from minority backgrounds, whereas only 21% of teachers are minority (Center for the Future of Teaching and Learning, 1999).

The race and ethnicity of teachers who teach minority students varies by the race and ethnicity of students. Thus, the same race student-to-teacher ratio in California for African Americans is 2 and nearly 4 for Latinos (Center for the Future of Teaching and Learning, 1999). Research indicates that students whose teachers are of the same background as themselves do better academically (Gandara & Maxwell-Jolly, 2000; Haberman, 1996). In fact, Haberman (1996) is very explicit in noting that teachers of color have positive influences on the personal development and academic performance of minority students. The organization of teaching and learning is also affected by the race and ethnicity of teachers. Research by the Tomas Rivera Center (1993) points out that Latino teachers are less likely than non-Latino teachers to place Latino students in remedial courses and more likely to place them in gifted and talented programs. Why is this the case?

One possible explanation is that nonminority teachers either fail or do not care about understanding the issues faced by minority students (Delpit, 1995). Moll et al. (1981), for example, found that nonminority teachers fail to see and use the vast funds of knowledge and experiences ELL students bring to school. In fact, nonminority teachers tend to hold low academic expectations for minority and ELL students, which then have powerful effects on their academic performance (Romo & Falbo, 1996). Students are very sensitive to the subtle messages given to them by adults in school (Weinstein, 1989).

Testing Issues Surrounding ELL Students

Testing is a second topic of concern. Although the body of research is fairly extensive, in recent years it has been dominated by the NCLB legislation. As a result, we divide our review and analysis into two subtopics: NCLB and general testing issues that pertain to ELL students.

NCLB: Title III

The passage of President Bush's NCLB (2001) legislation has direct implications for the education of ELL students. For the purposes of this article, we have identified five areas: goals, accountability, funding, professional development, flexibility, and science.²

Goals. NCLB stresses the acquisition of the English language and students' academic performance, but it does not seem to be concerned with developing the native language skills of ELL students. Instead, the emphasis is to quickly move ELL students to a state of English language proficiency. Although there is some merit to such a goal at first glance, it is also one with many pitfalls, because there is much debate about how to achieve such a goal.

There are at least four problems with an emphasis on moving students quickly out of English acquisition programs.³ To begin with, it is a problem, because skill in one language is linked to skills in another language. In other words, developing native language skills increases the likelihood that ELL children will also develop proper English speaking skills (August, Calderon, & Carlo, 2002). Thus, moving children out of their native language without developing proper language skills disrupts their ability to develop proper English language skills, which is a disservice to students, schools, and the goals of NCLB itself.

Second, individuals vary in how fast they are able to acquire language skills. By pressuring educators and students to move quickly, it increases

the likelihood of moving a child out of language instruction before they are ready to do so (Gandara, 1999; Hakuta, Butler, & Witt, 2000; Thomas & Collier, 1997; U.S. General Accounting Office, 2001). The end result may be that ELL students fail to become proficient in the English language.

Third, moving children quickly through programs fails to fully use what they already know. This information can be used to build strong academic skills (Patricia Gandara, personal communication, Spring 2004). Contextual experiences can be used to develop critical thinking and language skills.

Finally, moving children too quickly through language programs misses an important point—students need skills beyond oral proficiency to succeed academically. It may be argued, for example, that writing skills are crucial for academic success and can be developed during a child's stay in a language program.

Accountability. According to NCLB, ELL students will be held to the same academic standards as all students.⁴ Under NCLB, states must now set annual measurable achievement objectives for moving ELL students toward English-language proficiency and in meeting high academic standards. There are other concerns about NCLB. In a special issue of the newsletter of the Center for Research on Evaluation, Standards, and Student Testing (2002), several concerns were raised. First, the concern is that NCLB does not specify how results from state assessments can stop inaccurate inferences. Results from state assessments could reveal flat performances for at least three reasons: (a) tests underrepresent standards and objectives in the school, (b) the test has elements that are irrelevant to domain performance and instruction, and (c) because inadequate instruction has occurred. Also, if scores are positive, it may be because they are inflated. Moreover, there is the issue that broad-based assessments are unlikely to reflect the quality of instruction.

The second article in the collection raises several issues about yearly changes in student performance. The article states that goals set by the President's Report are much too high. States will simply not reach the goal of having all students being proficient by the year 2014. The reason this is an impossible task has to do with variability in the difficulty of tests used by states. Only states with weak tests, such as Texas, have a glimmer of reaching the goal; however, even Texas is revising its tests. Finally, there is the concern about subpopulations. For instance, even if all students in a school reach the proficiency level, if performance by students with disabilities and/or ELL falls short, the school will not have met the target goal.

Other NCLB mandates propose that state reports include (a) the percentage of ELL students who have been reclassified as fluent in English and

(b) the percentage of those who make adequate yearly progress on English-language achievement tests.

There is no set time frame for students to become fluent in English. Most researchers suggest that the time to proficiency ranges from 3 to 8 years (August & Hakuta, 1997; McLaughlin, Blanchard, & Osanai, 1995). NCLB ignores the fact that it is academic English that leads to school success and that it takes longer to become proficient in academic English.

Funding. Federal funding for ELL student programs will increase overall and will be distributed more broadly. However, because funding will change from a competitive grant program to one based on a formula, especially among states that have experienced large increases in ELL students, funds will be spread more thinly. For example, local education agencies will have about \$150 to spend per ELL student in Fiscal Year 2002. Funding has not kept up with inflation and is thus shortchanging ELL students and schools. The primary concern is that less spending per student translates into fewer resources, which negatively affects students' language transitions and academic performances.

Professional development. NCLB limits funding for professional development at levels that are less than half of Fiscal Year 2001. For example, in Fiscal Year 2001, funding for professional development was set at \$100 million dollars; in Fiscal Year 2002 and Fiscal Year 2003, the funding levels were \$38 million and \$38 million, respectively (Crawford, 2002).

Persons who are currently receiving funds will be allowed to complete their training. However, school systems are facing even more severe shortages of properly trained educators for ELL students. Cutting professional development funds by more than 50% is a great disservice to both students and their education. In addition, current federal funding has pulled back from providing doctoral level fellowships that can be used to prepare teachers for teaching ELL students.

Scientifically based research. The NCLB stipulation that programs be scientifically based creates two important challenges. First, NCLB indicates that it will allow flexibility to local education agencies in choosing which instructional approaches to use in educating ELL students. However, second, NCLB also mandates that such instruction reflect scientifically based research. The latter mandate opens up a Pandora's box about what is scientifically based research. Indeed, the mandate will reopen the long and heated debate about whether a single or multiple approaches (bilingual or all-English) have been proven to be scientifically appropriate.

As is the case with most scientific disciplines, there is a lack of consensus among researchers about theory, methods, and outcomes. The research surrounding ELL students is no different, and we can expect future debate.

Testing Issues⁹

Testing, in and of itself, is an interesting and complex field of study. The central issues in testing are validity and reliability. Validity refers to measuring what is intended to be measured, whereas reliability refers to consistency. Of these two testing concepts, the most important is validity. Language is an important topic in testing, because it affects the ability of understanding what is being asked on a test. The following equation clearly presents the issue:

$$S = T + E \tag{1}$$

Where S = one's test score, T = the true test score, and E = error. To acquire a true score (T), errors (E) must be eliminated or greatly reduced. But eliminating error is never easy. There are two components to E: systematic error (E_s) and random error (E_s) :

$$E = E_{s} + E_{r} \tag{2}$$

Regarding ELL students, two testing issues are of concern, and both involve systematic error; that is, error introduced into the testing environment: academic testing and language proficiency.

Issues related to academic testing. Testing ELL students to determine their academic status and progress is necessary if ELL students are to be moved out of English-language programs. However, there are problems and the most important is validity—Are ELL students being tested for their content knowledge, and how are language skills being introduced into the equation? The most important problems revolve around inclusion and accountability, accommodations, and which academic subject areas to test ELL students.

*Inclusion and accountability.*¹⁰ Recent federal legislation makes it mandatory that states include all students, even ELL students if they have been in a language program for at least 1 year, in large-scale assessments. However, such inclusion creates a number of important challenges:

- Identifying which ELL students to include in the testing population varies from state to state, thus making comparisons impossible.
- States differ on inclusion and exclusion policies, the type and use of accommodations, and the reporting of accommodations (Rivera, Stansfield, Scialdone, & Sharkey, 2000). Moreover, policies change quite frequently as a result of a state's changing student demographic profile and the current status of knowledge regarding best practices.
- Standardized tests are normed on native English speakers, and the accuracy of test results will affect states with large ELL student populations.
- States vary in their approach to testing. Some states use proficiency measures; others use a combination of indicators, such as the number of years in the system, tests, school academic performance, and the evaluations of teachers (August & Hakuta, 1997).
- If the performance of ELL students is low, it may be impossible to determine if the score is based on limited language proficiency, low content knowledge, or the interaction of both (Abedi, Leon, & Mirocha, 2001).
- Inclusion fails to address varying language and content skills within the ELL student population. Although ELL students tend to perform lower than non-ELL students do (Abedi & Lord, 2001), they have a broad performance range (Butler & Castellon-Wellington, 2000), suggesting a broad range of skills and knowledge.
- Test scores for ELL students may be used to sort and track ELL students or to pull them out of their regular classrooms and into less rigorous academic programs.

Accommodations. Accommodations can complicate test results. Accommodations are intended to level the playing field in the sense that they are used to make language a nonfactor. The decision to use an accommodation, and what type, should be based on four factors (Abedi, 2001). Note that validity is by far the most important (see Thurlow, Liu, Erickson, Spicuzza, & El Sawaf, 1996):

Validity: Does the accommodation change the assessment construct?

Effectiveness: What accommodations work best to reduce the testing gap that is due to language?

Differential impact: Which ELL background trait affects the accommodated assessment?

Feasibility: Which accommodation is most feasible?

The academic subject on which to test ELL students is another issue, because some subjects are language demanding whereas others are not. Abedi and Leon (1999) found that non-ELL students score higher in math and science than ELL students do. However, Abedi et al. (2001) found that the performance gap is greatly reduced or disappears altogether on certain math questions that have less language demands. Some researchers also find that ELL students who read well perform better on tests with stronger language demands than ELL students who do not read as well (Abedi & Leon, 1999; Abedi et al., 2001). So language skills may be a systematic error introduced into the testing environment.

Issues related to language-proficiency testing. Language proficiency is a controversial topic. What exactly is English-language proficiency? Does it mean commonplace communication skills? Or does language proficiency mean proficiency in academic English language? The research in this area is mixed, controversial, and lacks consensus. To begin with, there is a lack of consensus about the nature of language fluency. For example, Dulay, Burt, and Hernandez-Chavez (1978) use models with 64 components of language proficiency. Oller (1980) suggests that language proficiency is a single construct. Also, most language proficiency tests tend to assess discrete points of language skills, but theory suggests that it is a unitary construct best measured or assessed through integrative procedures (Canales, 1992).

In contrast, there are those arguing that language proficiency is a dual concept. On one hand, it is a concept based on the notion of common usage. On the other hand, another view focuses on academic language. Thus, Cummins (1981b, 1984) distinguishes between Basic Interpersonal Communicative Skills and Cognitive Academic Language Proficiency. Although the former is perfectly adequate for everyday usage and communication, the latter, academic fluency, is highly correlated with academic performance (see August & Hakuta, 1997; Gandara & Merino, 1993).

The relationship between language proficiency and academic achievement is problematic. Academic assessment procedures are developed under the assumption that language proficiency and academic achievement are highly correlated and that a causal relationship exists between the two: Language proficiency drives achievement. However, correlation is not causation, and this viewpoint needs additional research and thought (Saville-Troike, 1991), because the causal direction could be in the opposite direction, and there might be any number of intervening variables.

A final issue addresses the concept of reclassification. Reclassification is meant the transferring of ELL students out of language programs as fully English proficient (FEP). There is the research reality and the practical

school reality about reclassification. The research reality casts its eyes on issues related to average time to exit or to be FEP. Many factors affect the time to exit (e.g., age, motivation, personality, etc.; Krashen, Long, & Scarcella, 1979; Scovel, 1989). Some researchers believe that it is impossible to predict the time to exit language programs (Dulay et al., 1978). Other researchers discuss a normal pace for language acquisition (Swain, 1985). In general, taking into account many factors, including age, it takes from 3 to 8 years to be FEP.

Practicality is a second reality. In reality, ELL students are in language programs, on average, for about 3 years (Cardoza, 1984). Gandara and Merino (1993) find that many factors affect the time to exit: school size, the proportion of ELL enrollment in a school, whether the school was a magnet or a nonmagnet program, student mobility, and the level of emphasis placed on reclassification procedures. So time to exit is complex as exemplified by the many school factors that affect time to exit.

There are other "school reality" factors that affect the testing for language proficiency. One factor, for example, centers on the differential use by educators of identifying methods. Some educators use methods for identifying ELL students that include scanning enrollment records, conducting home language surveys, interviews, personal observations, referrals, school grades, and test results (LaCelle-Peterson & Rivera, 1994). Also, states do not have a universally agreed on definition of an ELL student (U.S. General Accounting Office, 2001). Moreover, issues of instruction are tied to tests. To begin with, there is no agreement about the best instructional programs for ELL students. In fact, there is considerable debate about whether language instruction should be English based or provided in a student's native language (Crawford, 2002). There is also much controversy about whether ELL students are to be taught using the same materials as mainstream students or if they are to be held to different standards. Generally, ELL students do not have access to the same courses as mainstream students. and they tend to be taught by teachers who are not adequately trained and who also tend to be less experienced (LaCell-Peterson & Rivera, 1994). Finally, societal issues affect the testing topic. Levin (1996), for instance, notes that ELL students are concentrated in high-poverty areas and lack adequate educational resources (see also, Verdugo & Saucedo, 2005).

Language Acquisition Among ELL Students

How ELL students acquire language skills and how these skills are isolated from other needs has been a topic of much research. Four topics dominate

this body of research: (a) the roles the home and community play in language acquisition; (b) the stages of language fluency; (c) differences between academic language and everyday communication skills; and (d) the isolation of language from other needs.

The home and community play an integral role in English-language acquisition (Nathenson-Mejia, 1994). During the first 4 years of life, for example, children spend time gathering and sifting through an enormous amount of data about language (Genishi & Dyson, 1984; Halliday, 1973). It is during these formative years that children internalize and examine information that will affect their later written and oral language skills (Ferreiro & Toberosky, 1982). For example, children that come from literate households whose parents have been formally educated and where literacy is practiced on a regular basis are more likely to become successful readers (August & Hakuta, 1997). The level of language proficiency a child develops at home in the native language has a direct positive relationship to the acquisition of another language, the greater the proficiency a child has in his or her native language, the greater the likelihood of English-language acquisition and proficiency (August & Hakuta, 1997).

The time to English-language fluency is a major issue and one fraught with much complexity and therefore much controversy. The time it takes a student to become proficient in English is based on their time in the United States, the time they have been in school, and their length of time in a particular language program. Thus, placing a specific time for a student to become English proficient is an arbitrary approach and not helpful to students, educators, or schools. Instead, research suggests an approach that assesses and evaluates students prior to drawing any conclusions about their English-language proficiency (Hakuta & Beatty, 2000). Taking stock and identifying the development (stages) of language proficiency among ELL students helps educators develop and tailor strategies to meet the specific language needs of ELL students.

McLaughlin et al. (1995) identify these stages in the following manner.

Stage 1: The child uses his or her native/home language.

Stage 2: The nonverbal period, where children attempt to communicate by using nonverbal cues. This is also the stage in which children begin to crack the L2 code. In fact, (Saville-Troike, 1987) notes that children will practice their L2 by repeating what they hear others speak but will do so in a low voice and by playing with sounds.

Stage 3: In this stage, a child is ready to go public. There are two characteristics of Stage 3: telegraphic traits and the use of formulas. Telegraphic traits is meant that speakers use only a few content words without functional words

or morphological markers. For instance, a child may say "food, here," when he means "I want my food over here on this table." Formula speech means the use of large bits of words that a child hears; the bits of words are used over and over long before the child knows their meaning (Wong, 1976).

Stage 4: In this last stage, a child begins to use language productively. The child uses words he or she understands and in the proper syntactical form. Children eventually develop productive control over the language. Of course these stages are not clear cut, and some children stay in one stage longer than others, and moreover, there is considerable variability in how children proceed through these stages. Nonetheless, an understanding of these stages is essential for educators of ELL students. Shore (2002) provides a somewhat similar scheme.

Academic language fluency is especially important for academic achievement. Distinguishing between oral and academic language is important for improving the academic progress of ELL students. It is well known, for example, that individuals can easily learn basic conversational language skills, but it takes longer to acquire academic language skills (August & Hakuta, 1997; Hakuta et al., 2000). Indeed, it takes about 4 to 7 years to develop academic English proficiency. Academic English is meant the ability to use spoken English with such complexity that one's academic performance is not impaired. One significant component of this definition is the notion that English-language proficiency is not static but changes depending on grade level and teachers' and educators' expectations. A second important component is its link to socioeconomic status; the greater is a student's socioeconomic status, the more likely are they to master academic English. So the implication is that academic English is a very specific way of thinking and expressing oneself.

Isolating language from other factors that affect academic performance is an important yet difficult task (e.g., ability, skill, and knowledge). Consequently, ELL students need to be evaluated on a regular basis to modify the content of their programs in meeting their language and educational needs (National Research Council 1999a, 1999b). What is crucial is not the means by which students are evaluated but that English language proficiency is viewed as a variable, or continuum, with gradual, individual progress as the goal. It is also important that educators plan the time students need to progress so they will eventually be able to operate in the school without supports.

Conclusion

An important stratifying factor in the American educational system is English-language proficiency. The ability to speak and write in English is a crucial predictor of academic success and later socioeconomic success (Chiswick, 1991, 1999; Chiswick & Miller, 1992, 1995, 1996; Espenshade & Fu, 1997; Espinosa & Massey, 1997; Kossoudji, 1988). Although the U.S. educational system has attempted to educate ELLs as best it can, there are many challenges that affect student school performance and, indeed, school experiences. For scholars and policy analysts interested in the achievement gap and issues related to equality of educational opportunity, the educational challenges facing ELL students is a crucial topic.

The purpose of our article was to review what we believe are the four most important topics affecting the education of the ELL student population: language acquisition, testing, school capacity, and teacher preparation. We selected these topics based on two concerns. First, we were interested in what research said about what actually occurs in schools. Second, because our focus was on the school, we addressed those topics within the school that purportedly prepare students to become English-language proficient. Both concerns led us to key in on four broad topics that are reviewed in this article.

Language is a complex process and involves a multitude of individual, family, community, and societal factors. Moreover, although acquiring every-day English-language skills is relatively easy, it is mostly academic English that is difficult to grasp and which is highly correlated with academic success. Indeed, student academic performance is contingent on acquiring academic-English proficiency. If the focus is on reducing the achievement gap, and if ELL students are included in the analysis, not only must the many challenges facing this group of students be addressed, but their ability to master academic English must be addressed as well.

Testing ELL students has taken on greater importance in recent years because of the passage of NCLB. But testing ELL students is fraught with many problems, and identifying and understanding these issues is crucial not only for effectively testing such students but also for getting an accurate picture of the achievement gap. In our review, we were able to identify two broad testing topics: the impact of NCLB on testing and the psychometrics of testing. Although these are complex issues, at bottom, the issue is testing ELL students for content without including the confounding effects of language. These confounding effects can emerge if ELL students are removed from programs before they are ready to move on and by including them in the testing population and failing to provide appropriate accommodations. In essence, failing to address these issues introduces systematic error into the testing process.

A third topic centers on a school's capacity to adequately educate ELL students. Essentially, there are two issues: developing quality schools and

devising ways to effectively educate ELL students. In terms of quality schools, educators should consider creating an environment not unlike that described in the effective schools research (Verdugo et al., 1997; Verdugo & Schneider, 2004). That is, there should be a focus on building communities where good decisions are made with data, where adults care about and respect students, and yet hold students to high standards. When focusing on ELL students, schools should evaluate students' progress for formative reasons and use students' native language and culture in the teaching and learning process. The research clearly shows that the better the school quality, the better the student performance.

Finally, there is the issue of teacher preparation. Basically, there are not enough qualified teachers to teach ELL students. There is a great need for certified language teachers who not only speak more than one language but also are of the same race and ethnicity as the students they teach.

By reviewing these four areas, we have summarized what we believe to be the four central areas surrounding ELL students. Effective planning around these four areas will not only improve English-language proficiency but also improve their academic performance. ELL students, as is the case for all students, need qualified teachers; quality, well-resourced schools; they need to be tested for formative, not summative reasons; and educators need to especially pay attention to how and when children acquire language.

In conclusion, the issues surrounding the education of ELL students are complex and varied. They are not, however, insurmountable. In surmounting these barriers, a first set of steps is to identify and then attempt to understand the effects these barriers have on the education of ELL students. In this article, we have attempted to take such a set of steps. It is our hope that educators and researchers will benefit from this review.

Notes

- 1. Hakuta (1998) has a shorter list: adequately trained teachers, clearly articulated goals, systematic assessment, and opportunities for children to practice English.
 - 2. We rely heavily on the work of James Crawford (2002).
- 3. As in many fields, labels are not only important but can also be the basis for much controversy and debate. By English-acquisition programs, we refer to a wide range of programs (e.g., ESL, bilingual, etc.).
- 4. The No Child Left Behind Act has recently taken a flexible approach about standards for certain kinds of students. Test results for English-language learners (ELL) can be used in assessing adequate yearly progress if such students have been in a language program for at least 1 year. In addition, certain accommodations can be used in the testing environment.
- 5. We have provided this broad number of years because of the controversy surrounding the time it takes to become English proficient. To begin with, three studies indicate that it takes

from 4 to 8 years to develop English language skills so students can compete with native English speakers (Cummins, 1981a; Hakuta, Butler, & Witt, 2000; McLaughlin, 1985). These studies indicate that there are three factors that make it difficult to place an exact time on when ELL students develop English proficiency: (a) the main types of language instruction (English-based instruction and native-language based instruction) are designed to take different times. English-based instruction is designed to take from 2 to 3 years, whereas native-based instruction takes longer; (b) there is no consensus on how to measure or define proficiency. Basic skills can be developed in 2 years, but academic language skills take several years; (c) individual and family differences affect different rates of English-language acquisition.

In contrast, some researchers indicate that it takes fewer years to become English proficient (Baker, 1996). The argument appears to be based on using English-only instruction, which they argue takes fewer years. Unfortunately, most researchers argue that one approach is not adequate for all children. Programs must take into account many factors, including goals, objectives, students, and their backgrounds (August & Hakuta, 1997). For a detailed analysis of this topic, see the U.S. General Accounting Office (2001).

- 6. For example, growth rates were especially significant for Kansas (290%), Georgia (392%), Oregon (480%), and North Carolina (809%). Traditionally, these states did not receive a fair share of federal spending for ELL students. Instead, a lion's share of these funds went to California, New York, and Texas (Crawford, 2002).
- 7. Is this really a decline? One way to examine this trend is by looking at limited-English proficiency (LEP) enrollment and Department of Education funding for English-language acquisition programs. In 1989, there were 2.2 million LEP students enrolled in the United States, and the budget appropriations for that year were \$197 million. Thus, on average, there was \$92 per student. By 2001, there were 4.7 million LEP students, and the appropriations for that year were \$446 million, or \$94 per LEP student. In current dollars, there is no change, but in constant 1989 dollars, there has been a decline. Based on 1989 dollars, the 2001 funding would be \$134 per student, but it was not. In essence, LEP funding has not kept up with inflation.
- 8. Marcelo Suarez-Orozco states in a recent *New York Times* article that if limited English students were taught in classes of size 17 (the national average), up to 290,000 teachers would be needed to teach them (Zhao. 2002).
- 9. The field of testing concerning ELL students is very complex and beyond the scope of this proposal. The intent of this section is to present an overview of key issues in the area of testing as they affect ELL students.
- 10. Theoretically, tests have five purposes: (a) they provide for accountability (e.g., performance measures for the school system); (b) they are used to make decisions about students; (c) they are used for program evaluation; (d) they can be used to track long-term trends; and (e) they serve a diagnostic function in determining strengths and weaknesses to improve teaching and learning.
- 11. L1 and L2 are symbols used by researchers to identify first language (L1), and second language (L2).

References

Abedi, J. (2001). Assessment and accommodations for English language learners: Issues and recommendations. Los Angeles: Center for Research on Evaluation, Standards, and Student Testing, UCLA.

- Abedi, J., & Leon, S. (1999). Impact of students' language background on content-based performance: Analyses of extant data. Los Angeles: Center for Research on Evaluation, Standards, and Student Testing, UCLA.
- Abedi, J., Leon, S., & Mirocha, J. (2001). Impact of students' language background on standardized achievement test results: Analyses of extant data. Los Angeles: Center for Research on Evaluation, Standards, and Student Testing, UCLA.
- Abedi, J., & Lord, C. (2001). The language factor in mathematics tests. *Applied Measurement in Education*, 14, 219-234.
- August, D., Calderon, M., & Carlo, M. (2002). Transfer of skills from Spanish to English: A study of young learners. Washington, DC: Center for Applied Linguistics.
- August, D., & Hakuta, K. (1997). Improving schooling for language minority children: A research agenda. Washington, DC: National Academy Press.
- Baker, K. (1996). What bilingual education research tells us. In J. Amselle (Ed.), *The failure of bilingual education* (pp. 29-32). Washington, DC: Center for Equal Opportunity.
- Berman, P., Chambers, J., Gandara, P., McLaughlin, B., Minicucci, C., Nelson, B., et al. (1992). *Meeting the challenge of diversity: An evaluation of programs for pupils with limited proficiency in English*. Berkeley, CA: BW Associates.
- Berman, P., McLaughlin, B., McLeod, B., Minicuccie, C., Nelson, B., & Woodworth, K. (1995). School reform and student diversity: Case studies of exemplary practices for LEP students. Berkeley, CA: National Center for Research on Cultural Diversity and Second Language Learning and BW Associates.
- Buriel, R. (1983). Teacher–student interactions and their relationship to student achievement: A comparison of Mexican-American and Anglo-American children. *Journal of Educational Psychology*, 75(6), 889-897.
- Butler, F. A., & Castellon-Wellington, M. (2000). Students' concurrent performance on tests of English language proficiency and academic achievement. In Validity of administering large-scale content assessments to English language learners: An investigation from three perspectives (Final Deliverable to Office for Educational Research and Improvement/Office of Bilingual Education and Minority Language Acquisition; pp. 51-83). Los Angeles: Center for Research on Evaluation, Standards, and Student Testing, UCLA.
- Calderon, M., Hertz-Lazarowitz, R., & Slavin, R. (1996). Effects of bilingual cooperative integrated reading and composition on students' transition from Spanish to English reading. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Canales, J. (1992). Innovative practices in the identification of LEP students. In proceedings of the Second National Research Symposium on Limited English Proficient Student Issues: Focus on Evaluation and Measurement (pp. 89-122). Washington, DC: U.S. Department of Education, Office of Bilingual Education and Minority Language Affairs.
- Cardoza, D. (1984). The reclassification survey: A study of entry and exit classification procedures. Los Alamitos, CA: National Center for Bilingual Education.
- Carter, T., & Chatfield, M. (1986). Effective bilingual schools: Implications for policy and practice. American Journal of Education, 95, 200-232.
- Center for the Future of Teaching and Learning. (1999). *The status of the teaching profession,* 1999: Research findings and policy recommendations. Retrieved October 9, 2006, from www.cftl.org/documents/stp1999full.pdf
- Center for Research on Education, Diversity, and Excellence. (1999). Standards and indicators. April 14, 2005, from www.crede.berkeley.edu/standards/standards.html

- Center for Research on Evaluation, Standards, and Student Testing. (2002, Spring). CRESST Newsletter, Special Issue! "No Child Left Behind." Retrieved April 14, 2002, from www.cse.ucla.edu/products/newsletters/clspring02final.pdf
- Chamot, A. U., Dale, M., O'Malley, J. M., & Spanos, G. (1992). Learning and problem solving strategies of ESL students. *Bilingual Research Journal*, 16, 1-33.
- Chiswick, B. R. (1991). Speaking, reading, and earnings among low-skilled immigrants. *Journal of Labor Economics*, 9, 149-170.
- Chiswick, B. R. (1999). Are immigrants favorably self-selected? American Economic Review, 89, 181-185.
- Chiswick, B. R., & Miller, P. W. (1992). Language in the immigrant labor market. In B. R. Chiswick (Ed.), *Immigration, language and ethnicity: Canada and the United States* (pp. 229-296). Washington, DC: American Enterprise Institute.
- Chiswick, B. R., & Miller, P. W. (1995). The endogeneity between language and earnings: International analyses. *Journal of Labor Economics*, *13*, 246-288.
- Chiswick, B. R., & Miller, P. W. (1996). Ethnic networks and language proficiency among immigrants. *Journal of Population Studies*, 9, 19-35.
- Cohen, D. C. (1994). Teacher their families well. Education Week, 14, 30-32.
- Comer, J. P. (1984). Home-school relationships as they affect the academic success of children. Education and Urban Society, 16, 323-337.
- Cummins, J. (1981a). Age on arrival and immigrant second language learning in Canada: A reassessment. Applied Linguistics, 2, 132-149.
- Cummins, J. (1981b). The role of primary language development in promoting educational success for language minority students. In California Department of Education (Ed.), Schooling and language minority students: A theoretical framework (pp. 3-49). Los Angeles: Evaluation, Dissemination and Assessment Center, California State University.
- Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. San Diego, CA: College Hill Press.
- Crawford, J. (2002). Section G: Programs for English language learners (Title III). Retrieved April 14, 2005, from http://ourworld.compuserve.com/homepages/JWCRAWFORD
- Delpit, L. (1995). Other people's children: Cultural conflict in the classroom. New York: Free Press.
- Dianda, M., & Flaherty, J. (1995). Effects of success for all on reading achievement of first graders in California bilingual programs. Los Alamitos, CA: The Southwest Regional Educational Laboratory.
- Dulay, H., Burt, H., & Hernandez-Chavez, E. (1978). The process of becoming bilingual. In S. Singh & J. Lynch (Eds.), *Diagnostic procedures in hearing, language, and speech* (pp. 251-304). Baltimore: University Park Press.
- Edelsky, C., Draper, K., & Smith, K. (1983). Hookin' em in at the start of school in a 'whole language' classroom. *Anthropology and Educational Quarterly*, 14, 257-281.
- Escamilla, K. (1994). The sociolinguistic environment in a bilingual school: A case study introduction. *Bilingual Research Journal*, 18, 21-47.
- Espenshade, T. J., & Fu, H. (1997). An analysis of English-language proficiency among U.S. immigrants. *American Sociological Review*, 62, 288-305.
- Espinosa, K., & Massey, D. S. (1997). Determinants of English proficiency among Mexican immigrants to the United States. *International Migration Review*, 31, 28-50.
- Ferreiro, E., & Teberosky, A. (1982). Literacy before schooling. Portsmouth, NH: Heinemann.
- Gandara, P. (1999). Review of research on the instruction of limited English proficient students: A report to the California legislature. April 14, 2004, from the University of California Language Minority Institute, www.lmri.ucsb.edu/resdiss/pdf_files/Gandara.pdf

- Gandara, P., & Maxwell-Jolly, J. (2000). Preparing teachers for diversity: A dilemma of quality and quantity. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- Gandara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). Listening to teachers of English language learners. Santa Cruz, CA: Center for the Future of Teaching and Learning.
- Gandara, P., & Merino, B. (1993). Measuring the outcomes of LEP programs: Test scores, exit rates, and other mythological data. Educational Evaluation and Policy Analysis, 15, 320-338.
- Garcia, E. E. (1996). Preparing instructional professionals for linguistically and culturally diverse student. In J. Sikula (Ed.), *Handbook of research on teacher education* (pp. 802-813). New York: Simon & Schuster.
- Genishi, A. C., & Dyson, A. H. (1984). Language assessment in the early years. Norwood, NJ:
 Ablex
- Gersten, R. (1996). Literacy instruction for language minority students: The transition years. *Elementary School Journal*, *96*, 228-244.
- Goldenberg, C., & Gallimore, R. (1991). Local knowledge, research knowledge, and educational change: A case study of first-grade Spanish reading improvement. *Educational Researcher*, 20, 2-14.
- Goldenberg, C., & Sullivan, J. (1994). Making change happen in a language minority school: A Search for coherence (Educational Practice Report No. 13). Santa Cruz, CA: Center for Research on Education, Diversity, and Excellence.
- Haberman, M. (1996). Selecting and preparing culturally competent teachers for urban schools. In J. Sikula (Ed.), *Handbook of research on teacher education* (pp. 747-760). New York: Simon & Schuster.
- Hakuta, K. (1998). Supplemental declaration in plaintiff's legal brief requesting preliminary injunction on Proposition 227, U.S. District Court, San Francisco, the Honorable Charles A. Legge presiding, July 15.
- Hakuta, K., & Beatty, A. (2000). Testing English-language learners in U.S. schools. Washington, DC: National Academy Press.
- Hakuta, K., Butler, Y. G., & Witt, D. (2000). *How long does it take English-Language learners to attain proficiency?* Unpublished manuscript, Stanford University, CA.
- Hanushek, E. A. (1986). The economics of schooling: Production and efficiency in public schools. *Journal of Economic Literature*, 24, 1141-1177.
- Henderson, R. W., & Landesman, E. M. (1992). Mathematics and middle school students of Mexican descent: The effects of thematically integrated instruction (Research Report No. 5). Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning.
- Hernandez, S. (1991). Assisted performance in reading comprehension strategies with non-English proficient students. *Journal of Educational Issues of Language Minority Students*, 8, 91-112.
- Kossoudji, S. A. (1988). English language ability and the labor market opportunities of Hispanic and East Asian immigrant men. *Journal of Labor Economics*, 6, 205-228.
- Krashen, S., Long, M., & Scarcella, R. (1979). Age, rate, and eventual attainment in second language acquisition. *TESOL Quarterly*, *13*, 573-582.
- La Celle-Peterson, M. W., & C. Rivera. (1994). Is it real for kids? A framework for equitable assessment policies for English-Language learners. Harvard Education Review, 64, 55-75.
- Laosa, L. M. (1977). Inequality in the classroom: Observational research on teacher-student interactions. Aztlan International Journal of Chicano Studies Research, 8, 51-67.
- Levin, H. M. (1996). Economics of school reform for at-risk students. In E. A. Hanushek & D. W. Jorgenson (Eds.), *Improving America's schools: The role of incentives* (pp. 225-240).

- Washington, DC: National Academy Press, Board on Science, Technology, and Economic Policy, National Research Council.
- Lucas, T., Henze, R., & Donato, R. (1990). Promoting the success of Latino language-minority students: An exploratory study of six high schools. *Harvard Educational Review*, 60, 315-340.
- Mace-Matluck, R., Alexander-Kasparik, R., & Queen, P. (1998). Through the golden door: Educational approaches for immigrant adolescents with limited schooling. McHenry, IL: Delta Systems and Center for Applied Linguistics.
- McLaughlin, B. (1985). Second-language acquisition in childhood, Vol. 2: Schoolage children. Hillsdale, NJ: Lawrence Erlbaum.
- McLaughlin, B., Blanchard, A., & Osanai, Y. (1995). Assessing language development in bilingual preschool children (National Clearinghouse of Bilingual Education Program Information Guide Series, No. 22). Washington, DC: National Clearinghouse of Bilingual Education.
- Milk, R., Mercado, C., & Sapiens, A. (1992). Rethinking the education of teachers of language minority children: Developing reflective teachers for changing schools (National Clearinghouse of Bilingual Education Focus: Occasional Papers in Bilingual Education, No. 6). Washington, DC: National Clearinghouse for Bilingual Education.
- Minicucci, C., & Olsen, L. (1992). Programs for secondary limited English proficient students: A California study (Focus No. 5). Washington, DC: National Clearinghouse for Bilingual Education.
- Moll, L. C. (1988). Some key issues in teaching Latino students. Language Arts, 65, 465-472.
 Moll, L. C., Diaz, E., Estrada, E., & Lopes, L. (1981). The construction of learning environments in two languages. San Diego, CA: Laboratory of Comparative Human Cognition.
- Muniz-Swicegood, M. (1994). The effects of metacognitive reading strategy training on the reading performance and student reading analysis strategies of third-grade bilingual students. *Bilingual Research Journal*, 18, 83-97.
- National Research Council. (1999a). High stakes: Testing for tracking, promotion, and graduation. In J. P. Heubert & R. M. Hauser (Eds.), Committee on appropriate test use. Board on Testing and Assessment, National Research Council. Washington, DC: National Academy Press.
- National Research Council. (1999b). *Testing, teaching, and learning: A guide for states and school districts.* Washington, DC: National Academy Press.
- Nathenson-Mejia, S. (1994). Bridges between home and school: Literacy building activities for non native English speaking homes. *Journal of Educational Issues of Language Minority Students*, 14, 149-164.
- No Child Left Behind Act. (2001). Public Law No. 107-110.
- Oller, J. (1980). Research in language testing. Rowley, MA: Newbury House.
- Pease-Alvarez, L., Garcia, E. E., & Espinosa, P. (1991). Effective instruction for language minority students: An early childhood case study. Early Childhood Research Quarterly, 6, 347-361.
- Rivera, C., Stansfield, C., Scialdone, L., & Sharkey, M. (2000). An analysis of state policies for the inclusion and accommodation of English language learners in state assessment programs during 1998-1999. Arlington, VA: The George Washington University, Center for Equity and Excellence in Education.
- Romo, H., & Falbo, T. (1996). *Latino high school graduation: Defying the odds*. Austin, TX: University of Texas Press.
- Roseberry, A. S., Warren, B., & Conant, F. R. (1992). Appropriating scientific discourse: Findings from language minority classrooms. *Journal of Learning Science*, 2, 61-94.

- Rumberger, R. W. (2000). Educational outcomes and opportunities for English language learners. Santa Barbara: University of California Linguistic Minority Research Institute.
- Rutter, M., Maughan, B., Mortimer, P., & Ouston, J. (1979). Fifteen thousand hours: Secondary schools and their effects on children. Cambridge, MA: Harvard University Press.
- Samaniego, F., & Eubank, L. (1991). A statistical analysis of California's case study project in bilingual education (No. TR #208). Davis: University of California, Intercollegiate Division of Statistics.
- Saunders, W. M., & Goldenberg, C. (1999). The effects of a comprehensive language arts transition program on the literacy development of English learners. Retrieved October 16, 2006, from http://crede.berkeley.edu/research/llaa/1.5_upscaling.pdf
- Saville-Troike, M. (1987). Bilingual discourse: The negotiation of meaning without a common code. *Linguistics*, 25, 81-106.
- Saville-Troike, M. (1991). Teaching and testing for academic achievement: The role of language development (Occasional Paper No. 4). Washington, DC: National Clearinghouse for Bilingual Education.
- Scovel, T. (1989). A time to speak: A psycholinguistic inquiry into the critical period for human speech. New York: Newbury House.
- Shore, J. (2002). Language development attributes chart. Washington, DC: National Clearinghouse for English Language Acquisition and Language Instructional Programs.
- Short, D. (1997). Newcomers: Language and academic programs for recent immigrants: A research summary. Washington, DC: Center for Applied Linguistics.
- Slavin, R. E., & Madden, N. A. (1987). What works for students at risk: A research synthesis. *Educational Leadership*, 46, 4-17.
- Slavin, R. E., Madden, N. A., Dolan, L., & Wasik, B. (1995, April). Success for all: A summary of the research. Paper presented at the annual meetings of the American Education Research Association. San Francisco.
- Slavin, R. L., & Yampolsky, R. (1992). Success for all. Effects on students with limited English proficiency: A three-year evaluation (Report No. 29). Baltimore: Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Glass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Rowley, MA: Newbury House.
- Tharp, R. G. (1982). The effective instruction of comprehension: Results and description of the Kamehameha Early Education Program. Reading Research Quarterly, 17, 503-527.
- Thomas, W. P., & Collier, V. P. (1997). School effectiveness for language minority students. Washington, DC: National Clearinghouse for Bilingual Education.
- Thurlow, M., Liu, K., Erickson, R., Spicuzza, R., & El Sawaf, H. (1996). Accommodation strategies for students with limited English proficiency: Analysis of guidelines for states with graduation exams (Minnesota Report No. 6). Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Tikunoff, W. J. (1983). An emerging description of successful bilingual instruction: Executive summary of part I of Significant Bilingual Instructional Features Study. San Francisco: Far West Laboratory for Educational Research and Development.
- Tikunoff, W. J., Ward, B. A., van Broekhuizen, D., Romero, M., Castaneda, L. V., Lucas, T., et al. (1991). Final report: A descriptive study of significant features of exemplary special alternative instructional programs. Los Alamitos, CA: Southwest Regional Educational Laboratory.
- Tomas Rivera Center. (1993). Resolving a crisis in education: Latino teachers for tomorrow's classrooms. Claremont, CA: Author.

- U.S. General Accounting Office. (2001). Meeting the needs of students with limited English proficiency. Washington, DC: Author.
- Verdugo, R. R., Greenberg, N. M., Henderson, R. D., Uribe, O., Jr., & Schneider, J. M. (1997). School governance regimes and teachers' job satisfaction: Bureaucracy, legitimacy, and community. *Educational Administration Quarterly*, 33, 38-66.
- Verdugo, R. R., & Saucedo, T. (2005, March). The demography of ELL students: Concentration, segregation, and exposure. Paper presented at the annual Hispanic Issues Conference. Washington, DC: National Education Association.
- Verdugo, R. R., & Schneider, J. M. (2004, January). School quality, safe schools: An empirical analysis. Paper presented at the annual meeting of the International Congress on School Effectiveness and Improvement. Barcelona, Spain.
- Weinstein, R. (1989). Perceptions of classroom processes and student motivation: Children's views of self-fulfilling prophecies. In R. Ames & C. Ames (Eds.), Research on motivation in education: Goals and cognition (Vol. 3, pp. 187-221). New York: Academic Press.
- Wong, L. F. (1976). The second time around: Cognitive and social strategies in second language acquisition. Unpublished doctoral dissertation, Stanford University, CA.
- Wong, L. F., Ammon, P., McLaughlin, B., & Ammon, M. (1985). Learning English through bilingual instruction (Final report). Berkeley: University of California.
- Zeichner, K. (1996). Educating teachers for cultural diversity. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), Currents of reform in preservice teacher education (pp. 113-175). New York: Teachers College Press.
- Zhao, Y. (2002, August 5). Wave of pupils lacking English strain schools. *New York Times*. Retrieved October 16, 2006, from http://www.nytimes.com
- **Richard R. Verdugo** is a senior research scientist at the national education association. Verdugo has a doctorate in sociology from the University of Southern California. His areas of research interest include racial stratification, the sociology of labor markets, the sociology of education, and statistics and methods. He has won many awards for his research, and in 2003, he was a Fulbright scholar studying the demographic challenges facing Germany. His current research focuses on comparative educational systems, a cross-national study on the relationship between education and earnings, immigrant workers in the Sunbelt region, a cross-national study of student achievement, and a study on effective and ineffective schools.

Brittney Flores is a student at San Diego State University. She is a communications major, is pursuing a career in broadcast journalism, and is particularly interested in the status of disadvantaged minorities in the Southern California area.