

Seventh Annual Brown Lecture in Education Research

Educating Language Minority Students and Affirming Their Equal Rights: Research and Practical **Perspectives**

Kenji Hakuta

This article describes one researcher's journey as an experimental psycholinguist through changes in practice and policy in the education of English language learners in the United States from the 1970s to the present day. The development of key debates on issues such as bilingualism, language of instruction, and the inclusion of English language learners in reform movements are described from the perspective of a researcher, and future prospects for work are outlined.

Keywords:

bilingual education; bilingualism; Castañeda standards; Common Core State Standards; Elementary and Secondary Education Act; English Language Learners; language minority students; language policy; Lau v. Nichols; No Child Left Behind Act; second language acquisition; standards-based reform

his narrative is about my journey as a researcher through the landscape of policy, politics, and the education of language minority students in the United States. I began my research career as an experimental psycholinguist, conducting studies of first and second language acquisition, focusing on the comparison of languages. Thirty-six years later, I find myself working at the interstices of policy and practice, advocating for better use of information from research as decisions get made in the real world. In this article, I trace that journey and draw possible pathways into the future.

The Legacy of Lau v. Nichols

I often use the picture in Figure 1 of schoolchildren in Chinatown to evoke the circumstances surrounding a class-action suit brought on behalf of a student in the San Francisco Unified School District, Kinney Lau. The suit claimed that the district did not provide access to English language acquisition or to

a meaningful curriculum for children who were limited in their English proficiency and that this violated Title VI of the Civil Rights Act of 1964, in particular the prohibition of discrimination based on national origin. Lau v. Nichols (1974) was decided unanimously in favor of plaintiffs by the U.S. Supreme Court, ruling that "there is no equality of treatment merely by providing students with the same facilities, textbooks, teachers and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education." The important takeaway points were that students with limited proficiency in English became a protected class, that for these students the same treatment did not constitute equal treatment, and that schools bore an affirmative obligation to address both the language and curricular needs of the students.

While stating that educators had an obligation to do something, the court stayed out of the business of prescribing remedies. This was, however, a period when Congress was also active in responding to the advocacy of constituencies, particularly Latino (Crawford, 2004). In 1968, Congress passed the Bilingual Education Act as Title VII of the Elementary and Secondary Education Act of 1965 (ESEA) offering capacity building in the form of grants to local districts and states to develop and offer educational programs in the native language. Although the bilingual programs were primarily transitional in intent—that is, the native language would be provided as a temporary crutch for several years during which children learned sufficient English to survive—this transitional period also supported a zeitgeist of maintenance bilingualism fortified by a spirit of "affirmative ethnicity," as it was labeled by a Washington Post columnist (cited in Epstein, 1977). Advocacy for the value of bilingualism created a counterforce from new coalitions such as U.S. English (founded in 1983 by S. I. Hayakawa) and other defenders of the melting pot ideal who wanted to support the common language of English and saw bilingual education as needless pampering of immigrants. One set of beliefs honored where kids came from; the other honored where they would end up, as speakers of English. As a result of these conflicting values, the seeds of at



FIGURE 1. Group of Chinese children posing for a photo in Chinatown, San Francisco. From Historical Photograph Collection of San Francisco Public Library's San Francisco History Center.

least two defining questions in the education of language minority students were planted: (a) Is bilingual education effective? and (b) How long does it take for students to learn enough English?

The knowledge base during this period came primarily from studies of the early efforts to develop and evaluate French immersion programs in Canada (Lambert & Tucker, 1972), an educational innovation with very different goals, serving a constituency with a different socioeconomic composition than that of U.S. language minority students. The early Canadian immersion programs served predominantly middle-class Englishspeaking students whose parents wanted access to bilingualism in order to remain competitive in an officially bilingual nation. In America, by contrast, English-language-learner (ELL) students tended to be seen as lower class, and the educational system did not value their bilingualism as an end goal—if allowed, it was more as an instrument toward the learning of English. Only a smattering of studies addressed bilingual education in the United States; most notable was a case study of a bilingual program created in Dade County, Florida, to serve the initial wave of Cuban refugees (e.g., Mackey & Beebe, 1977).

Another source of stigma about bilingualism stemmed from the IQ debates of the 1920s and 1930s and the common belief that bilingual children suffered a language handicap in their measured intelligence. This belief is captured in the following summary quote of the early literature from child psychologist George Thompson (1952):

There can be no doubt that the child reared in a bilingual environment is handicapped in his language growth. One can debate the issue as to whether speech facility in two languages is worth the consequent retardation in the language of the realm. (p. 367)

The anti-immigrant, eugenic rhetoric of that period, as reflected in the following quote from Sir Francis Walker, president of MIT, also fueled the fire: "These immigrants are beaten men from beaten races, representing the worst failures in the struggle for existence. . . . Europe is allowing its slums and its most stagnant reservoirs of degraded peasantry to be drained off upon our soil" (quoted in Ayres, 1909, p. 103).

I reviewed this early literature on the negative consequences of bilingualism and on anti-immigrant sentiment as a young scholar during my very first sabbatical year at the Center for Advanced Study in the Behavioral Sciences in 1982–1983, and I published a review of it in my first book, Mirror of Language: The Debate on Bilingualism (Hakuta, 1986). The negative view of bilingualism in the American literature impressed me with how contradictory it was to the rosy picture of bilingualism painted by the Canadian immersion literature. Furthermore, there were case studies of bilingual children by linguists, such as Werner Leopold, who produced an intricate diary of his bilingual daughter's development and identified how her bilingualism led to a precocious awareness of language. Rafael Díaz and I had already begun some of our early work on the cognitive benefits of bilingualism (Hakuta & Díaz, 1985), following in the footsteps of the seminal work of Elizabeth Peal and Wallace Lambert (1962). All of this research suggested that bilingualism could have cognitive advantages.

Carrots and Sticks

The carrots and sticks of federal education policy—in this case, the carrots being funds through the Elementary and Secondary Education Act and the sticks being Title VI of the Civil Rights Act interpreted through the Lau decision—worked themselves in complex ways through the 1970s. The carrots, especially through the Bilingual Education Act (Title VII of ESEA), fostered the development of programs that used the native language in spite of resistance. A 1984 reauthorization of ESEA placed a 4% funding cap on programs that were not bilingual, that is, those that used only English, known as SAIPs (Special Alternative Instructional Programs). The cap drew the attention of William Bennett, newly minted as Ronald Reagan's secretary of education in 1985. Bennett used his bully pulpit to attack it as an example of irrational federal regulation and an intrusion on state rights:

Despite a Federal investment of \$1.7 billion over 17 years (currently about \$139 million annually), research has not shown transitional bilingual education to be more successful than other methods of instruction in helping non-English-speaking children become proficient in English. (William Bennett, September 26, 1985, cited in Hakuta, 1991, p. 210)

Bennett's "SAIP cap attack" was politically effective, and in the 1988 reauthorization, the cap was moved to 25% (the wisdom of political compromise, I am told—the conservatives wanted 50% or total cap elimination, so 25% was somewhere in the middle).

The research studies that Bennett was referring to were evaluation studies to see whether bilingual or English-only programs were more effective in promoting student achievement. One early study mandated by Congress and conducted by the American Institutes for Research (AIR; Danoff, Coles, McLaughlin, & Reynolds, 1978) found equivocal results and was roundly criticized by advocates of bilingual education for methodological flaws in creating appropriate comparison groups (e.g., students who were in English-only programs had in some instances formerly been in the bilingual programs; see Hakuta, 1986). Also controversial was a research review conducted internally by staff at the Office of Planning, Budget and Evaluation (OPBE) in the U.S. Department of Education (Baker & de Kanter, 1983). This review, predating the general acceptance of meta-analysis, set up methodological criteria and then counted how many studies favored or did not favor bilingual education. Again, the results were equivocal. So Bennett's remark referring to the lack of definitive research evidence to support the case for bilingual education was appropriate, at least in a narrow sense. However, he was incorrect to conclude that the lack of good research meant that bilingual education was ineffective.

On the "sticks" side of the policy equation, there was also considerable tension and turmoil. The Office for Civil Rights in the Department of Education under the Carter administration had developed a set of "proposed remedies" for the enforcement of the Lau decision. These regulations proposed mandating bilingual education in schools with at least 25 limited-English-proficient (LEP) students from the same language group in K-8. The proposed regulations were later withdrawn by the Reagan administration, in 1981, because they were considered "harsh, inflexible, burdensome, unworkable, and incredibly costly." Instead, school districts would be permitted to serve the needs of LEP

students in any way they had found to be successful. So, in short, it was concluded that anything goes.

Guidance came in the form of a legal opinion from the Fifth Circuit Court of Appeals, written by Judge Carolyn Randall (currently King), in a case known as Castañeda v. Pickard (1981) that interpreted the meaning of "appropriate action" as stated in the Equal Educational Opportunities Act of 1974, which codified LEP students' rights, consistent with the Lau decision. In Randall's opinion, the role of the court in determining appropriateness should be guided by three standards: that the educational approach be based on sound educational theory; that the approach be implemented adequately; and that, after a period of time, the approach be evaluated for its effectiveness in remedying the inequity. An implicit fourth standard was that if an approach is not effective, the implementation or the theory must be revised until the inequity is remedied.

Commonsensical as this approach may seem, the Castañeda standards helped organize our field by linking theory to programs, implementation, and outcomes. According to attorneys with whom I have consulted over the years, including the late William (Bill) L. Taylor, this link is a privilege for those of us who work in advocating for equity for ELLs. The framework has been particularly influential in that, although it is not the "law of the land" in the way that a unanimous Supreme Court decision might be, the framework has been adopted by the Office for Civil Rights in its guidance for compliance with Lau (see Office for Civil Rights, 1991).

Developing Sound Theory

My early and pertinent empirical work on bilingualism actually dates back to a publication (Hakuta, 1974) more or less coinciding with work by Heidi Dulay and Marina Burt (1973) that led to the Bilingual Syntax Measure, one of the first assessment tools for LEP students. These were the early days of basic research on second language acquisition, and I contributed a detailed case study of a 4-year-old Japanese girl learning English.

I then went about doing research on the acquisition of English and Japanese syntax in very young, monolingual children, and eventually I came around to doing some work on adult second language acquisition, through funding from the National Institute of Education (NIE; Hakuta, 1986). The NIE funding then led to a grant to study the effects of bilingualism on cognitive flexibility, in which we looked at Puerto Rican children in bilingual education programs in the New Haven (Connecticut) public schools (Galambos & Hakuta, 1988; Hakuta, 1987; Hakuta & Díaz, 1985). We found that the degree of bilingualism for LEP students was positively correlated with cognitive flexibility measures and metalinguistic awareness.

I did not realize it then, but my budding research program was feeding off NIE in its waning days, during a period when it was providing funding to productive lines of research on what are now known as the learning sciences. My funding came from the Part C funds, research funds authorized under Part C of the Bilingual Education Act (Title VII) to conduct research on LEP children. A Part C Coordinating Committee was set up within the Department of Education to distribute those funds, and much of it was going to the NIE to fund basic research work in this area. I remember meeting Lily Wong Fillmore, Guadalupe Valdés, Henry Trueba, Luis Moll, Bill Tikunoff, Steven Arvizu, and other early researchers in this area at conferences organized through the NIE network. One could see in this agenda the possibilities of understanding teaching and learning, second language acquisition and biliteracy, assessment practices, the culture of schools, and community engagement with schools.

These were promising times, but the music quickly stopped as NIE lost political traction (a longer story than I have room for here). As I have documented elsewhere (Moran & Hakuta, 1995), funding available through Part C abruptly shifted from NIE to the OPBE, where program evaluation studies to test the effectiveness of bilingual education were funded. The earlier available research on this question by AIR and the OPBE staff were clearly insufficient, and so the funding focus was shifted to directly address the question in a more rigorous fashion.

The OPBE funded two very large studies. One was a quasiexperimental comparison of three types of programs that differed by the amount of English used—an English immersion model, an early-exit model, and a late-exit model (Ramirez, Yuen, Ramey, & Pasta, 1991). Another was a naturalistic longitudinal study tracking a large, nationally representative sample of students who differed by the type of program they attended; the design reflected the prevalent optimism about the ability of LISREL as a statistical model to tease out causality through rigorous modeling (Development Associates, 1986). Considering the amount of funding put into these studies, they were a disappointment, noted mainly for their design flaws. The one defensible conclusion from the Ramirez et al. study was that early-exit bilingual programs appeared to yield better outcomes in English literacy than did the English immersion programs.

A National Research Council committee (Fienberg & Meyer, 1992) was asked to examine these studies and concluded that "the formal designs of the longitudinal and immersion studies were ill-suited to answer the important policy questions that appear to have motivated them" (p. 103) and that "both the longitudinal and immersion studies suffered from excessive attention to the use of elaborate statistical techniques intended to overcome the shortcomings in the research design" (p. 104). These were harsh words; in short, the committee said that in the zeal to answer burning policy questions, the Department of Education threw in a lot of money and employed ill-suited methods with an ill-founded faith that statistics would play magic. Garbage in, garbage out.

Language of Instruction: The Wrong Focus

As a result (I was a member of the National Research Council committee that evaluated this research), my perspective on the field was that comparing programs on the basis of language of instruction was bound to be a difficult endeavor because of the problem of accounting for program quality. There are wellimplemented and poorly implemented programs of both varieties. Good bilingual education is difficult to mount because of the shortage of bilingual teachers. You cannot have bilingual programs staffed by teachers taking Spanish classes at night any more than you can have planes piloted by crews who are learning navigation during their off-duty hours. That is why Castañeda was, and continues to be, so appealing to me, with its combination of a theoretical premise with implementation followed by evaluation. It encourages efforts to improve programs, rather than racing horses and picking a winner.

In the mid-1990s, I had the privilege of chairing a different National Research Council committee, which resulted in a report titled Improving Schooling for Language-Minority Children: A Research Agenda (August & Hakuta, 1997). The charge to the committee was very broad. The review found, in a field that bore the marks of a history dominated by the bilingual wars, sporadic attention to basic research and the huge needs of the field to answer fundamental questions about language, learning, instruction, and context. The LEP student population (now called *English language learners*) was growing throughout the nation—not just in the traditional states but in places such as South Carolina and Iowa. The agenda of standards-based reform was increasingly shaping new questions (more on this in a bit), and the opportunity was there to move past the language of instruction. Questions such as literacy development, content area learning, appropriate assessment, and teacher preparation practices loomed large, and the report made recommendations on needs in these areas. The "bilingual education" question occupied just one short, 22-page chapter in a book with 11 chapters and 486 pages.

The Bilingual Debate Refuses to Die

Back in California, in July of 1997, I received a call from a Silicon Valley entrepreneur named Ron Unz, who had been rumored to be brewing a state ballot initiative to essentially ban bilingual education in the state—what eventually became Proposition 227. Peter Roos, an attorney and good friend who specialized in litigation on behalf of education rights for LEP students, convinced me that we should speak with Unz to persuade him against such an initiative, because it was highly likely to be a wedge issue and probably would gain the sympathy of voters, given California's history with prior anti-immigrant initiatives (Proposition 63 and Proposition 87). So I invited Mr. Unz to lunch at the Stanford Faculty Club, and Peter and I made our pitch about how divisive politics was going to be harmful; how the issue was improving programs, not restricting options for educators; and basically how the proposed initiative was a very bad idea. We were evidently not very persuasive. At the end of the lunch, he invited us to join his advisory committee; we declined. So Proposition 227 made it onto the ballot for the June 1998 election, and it passed with 61% of the votes.

What became clear from this incident, which spread across the country as similar initiatives were passed in Arizona and Massachusetts, was the resilience of the issue of language of instruction. Bilingualism in any form appears to be a culturally radioactive topic (see Crawford, 1992). It remains a real boon to politicians wishing to find a wedge issue—from William Bennett to Ron Unz.

There is irony in the fact that, as Claude Goldenberg (2008) recently noted, some of the strongest research evidence to date in the education of English learners supports the conclusion that instruction in the native language results in better outcomes in literacy in English after all. This conclusion is backed by a number of meta-analyses showing effect sizes larger than those found for class size reduction; but as Goldenberg notes, the work on bilingual education is not seen as credible. In my opinion, the bilingual issue as a research topic has become a distraction from our ability to pay attention to the need for program improvement, and until

Americans can get over the cultural stigma surrounding bilingualism, no amount of evidence will be persuasive except to a boutique constituency interested in the cultural values of linguistic diversity. I wish it were different, but rarely do my wishes come true.

How Long Does It Take?

This question was posed to me by the late Senator Claiborne Pell when I testified before a subcommittee on ESEA reauthorization. "Tell me, professor, how long do you think it takes for these students to learn English?" My answer may have been an academically guarded one, to the effect that it depends on how you define proficiency in English and it would vary a lot depending on the child, but I gave my answer as 5 to 7 years, to which he replied, "Respectfully, professor, I disagree. It should be 6 months." This is a policy-relevant question because it speaks to what kinds of time limits could be established for special programs available to ELLs.

The question has haunted ESEA programs through repeated reauthorizations. It was resurrected in strong form during the Proposition 227 debate because children were mandated to be educated "through sheltered English immersion during a temporary transition period not normally intended to exceed one year." What kind of theory would hypothesize one year as a normative period for second language acquisition?

I raised this issue through the courts in an expert declaration submitted to accompany an appeal to block the implementation of Proposition 227 (Valeria v. Davis, 2002), where I claimed that no theory of second language acquisition would find one year to be a credible time window and therefore that such a window was not consistent with the first Castañeda standard. The case was thrown out of court for other reasons, but in any event, it illustrates how valuable the Castañeda framework could be in drawing from research knowledge.

I do have to admit that the evidence in 1998 was quite thin with respect to time expectations for second language acquisition. In 2000, I threw together some existing evidence with the cooperation of a small school district with good data and a strong record of academic progress with ELLs, and I drew the conclusion that it could take 4 to 7 years for most students (80%) to attain proficiency in English, depending on whether it was oral proficiency or included academic criteria (Hakuta, Butler, & Witt, 2000). And now, as school district and state data systems become more sophisticated in tracking English language proficiency development, to be discussed later, we can expect much more robust estimates of expected time frames for development.

Standards-Based Reform

Standards-based reform entered national discussion in the wake of A Nation at Risk (National Commission on Excellence in Education, 1983), taking various institutional forms such as the National Education Goals panel, various standards-writing efforts, and federal legislation such as Goals 2000 and the reauthorization of ESEA as the Improving America's Schools Act (IASA) of 1994 (McLaughlin, Sheppard, & O'Day, 1995). The implications of this movement for ELLs were obvious. Prior to this new paradigm, the system had a categorical mentality, identifying classes of students and paying for educational services that targeted their needs. With standards-based reform, there was a lofty goal of high standards for all—"all" including ELLs—and a focus on outcomes

accompanied by accountability. Targeted services now needed to be viewed in this emerging context of systemic reform.

As early as 1992, I was approached by the Carnegie Corporation of New York, which was helping to fund a group engaged in Chapter 1 (Title I) issues in the context of standards-based reform, and the corporation asked if I could organize an effort through a grant to bring the advocacy, practice, and research communities together to address the issue of LEP students. The group, cavalierly calling itself the Stanford Working Group (1993), included Diane August, Delia Pompa, Jennifer O'Day, and Josue Gonzalez, among others. We came up with a set of principles to guide recommendations in the reauthorization of ESEA that led to IASA in 1994. The guiding principles were simple:

- Language-minority students must be provided with an equal opportunity to learn the same challenging content and highlevel skills that school reform movements advocate for all
- Proficiency in two or more languages should be promoted for all students. Bilingualism enhances cognitive and social growth, competitiveness in a global marketplace, national security, and understanding of diverse peoples and cultures.

In the world of standards-based reform, which seeks to align key components such as curriculum, instruction, teacher capacity, assessment, and system support through explicit and coherent standards, issues of ELLs need to be kept in mind and infused into the systemic changes.

Standards and Assessment

Given the minefield of bilingual education that has been a theme throughout this discussion, one of the key tricky issues has been the language and form of the assessment. Section 1111(b)(3)(F) of the law ultimately required states "to assess LEP students, to the extent practicable, in the language and form most likely to yield valid results." That section also requires states to provide reasonable accommodations and adaptations necessary to measure the achievement of LEP students relative to state content standards. The law therefore allows states to assess in the native language where instruction is indeed provided in the native language. The question of what a valid accommodation or adaptation might be is an area of research that gained considerable momentum from the policy press created during this period leading to the enactment of IASA (Abedi, Hofstetter, & Lord, 2004; Francis, Lesaux, Kieffer, & Rivera, 2006).

This period also gave rise to the notion of English as a second language (ESL), or English proficiency standards. Because all of the content area constituencies had developed a set of standards—beginning with the National Council of Teachers of Mathematics and the National Council of Teachers of English organizations representing ESL teachers such as TESOL (Teachers of English to Speakers of Other Languages) responded by also developing a set of standards. Because language is a medium of communication rather than the subject area of learning, the standards are not parallel, and they set into motion the question of what it would mean if English language proficiency were aligned with the subject area of English language arts.

The next reauthorization of ESEA, better known as the No Child Left Behind Act of 2004 (NCLB), further focused reform on the assessment and accountability components of standardsbased reform, triggering various actions when schools and districts did not meet progress targets for student achievement. In my opinion, NCLB simply elaborated and made accountable what was already set into motion by IASA, but there were some major notable changes for ELLs. Symbolically, Congress renamed the Bilingual Education Act as the English Language Acquisition, Language Enhancement, and Academic Achievement Act (and renumbered this section of the law as Title III). It furthermore made the act primarily into a formula program, which meant that funds were allocated according to a preset formula taking into account the number of ELLs in the domain of a given subgrantee (usually a school district).

A major change was the requirement that each state adopt English language proficiency standards and an aligned assessment. Accountability targets were set for progress of ELLs on the English language proficiency assessments and also for progress in attaining proficiency in the content area, effectively importing accountability provisions of Title I into Title III accountability. These changes were implemented within the first few years of the law, and by 2006, for the first time, all states were annually administering uniform (within each state, not nationally) English language proficiency tests to ELLs, in addition to the state content tests (Ramsey & O'Day, 2010).

I go into these details of the law and its implementation to underscore the fact that the implementation of standards-based reform has triggered the accumulation of a large amount of data, not just in performance in the content area tests but also in English language proficiency. Analyses of the data are just beginning, but already we are learning a considerable amount about setting realistic expectations for English language proficiency growth (e.g., Linquanti & George, 2007) and about the relationship between language proficiency and content test performance (e.g., Cook, Boals, Wilmes, & Santos, 2007). The data are also starting to shed light on the issue of long-term English learners, many of whom do not attain a high level of proficiency in English (particularly in literacy) by middle school even if they were born in the United States (Olsen, 2010). The prevalence of such students has been discussed informally for a while, but districts are now beginning to recognize how often these students constitute the majority of English learners in secondary schools. This elevated awareness has also led to calls for common definitions of long-term English learners so that they can be better monitored and understood.

Data: A View From a District

I now turn to provide a quick glance into ELL performance in a small school district, the Sanger Unified School District in rural central California, just outside Fresno. Sanger Unified recently gained considerable attention among California educators because of its success with student outcomes and especially with ELLs. I do this partly because my discussion so far has been somewhat abstract, and what matters is in the arena of students and their academic achievement.

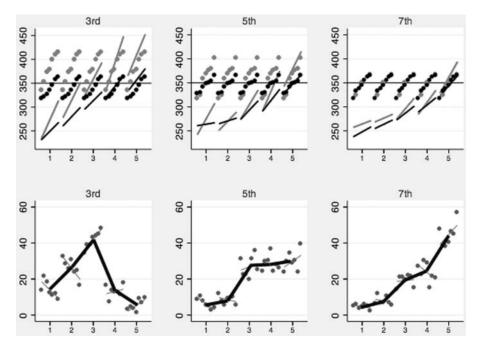
Sanger Unified has a population of approximately 11,000 students, who attend 12 elementary schools, one middle school, and one high school. The students are predominantly minority (82%) and poor (76% receive free or reduced-price lunch), and many (24%) are ELLs. In 2004, Sanger went into district Program Improvement status under NCLB. In the 7 years since, Sanger has gone through a transformation in which the schools exited Program Improvement. Thirteen schools have been named California State Distinguished Schools, and two have attained National Blue Ribbon School status. The superintendent, Marc Johnson, was just selected as National Superintendent of the Year by the American Association of School Administrators for 2011. Clearly, positive things are happening in Sanger.

The district attributes the improvement primarily to a turnaround process supporting the development of professional learning communities focused on student learning, data, and instructional strategies. While the district process is still being documented and studied (e.g., David & Talbert, 2010), Karen Thompson and I have been looking at the long-term trends and longitudinal data for individual students (Thompson & Hakuta, 2011). One illustrative set of graphs (Figure 2) packs information that illustrates the progress made by the ELL students.

First, let us examine English language proficiency. The bottom row of panels on the graph shows the distribution of student scores on the annually administered state English proficiency test (known as CELDT-the California English Language Development Test) for Grades 3, 5, and 7. At each point in the distribution, the time trends can be seen in the individual dots that plot data from 2003 to 2009. A regression line fitted to these points shows the time trend. Overall, these data show that the distribution of the English proficiency distribution is shifting toward proficient (5) with increasing grades and, furthermore, that within each grade over time, the slopes are moving in the direction of increased English language proficiency development. That is to say, generally over time, the proportions of students in the lower CELDT levels are decreasing, and the proportions of students in the higher levels are increasing.

Now we can examine the performance on the state content assessments in English language arts and math as a function of student English proficiency level, as shown in the upper panel of the graph. The state "proficient" level is represented in the solid horizontal bar at 350. The trend lines show quite clearly that English language proficiency is strongly related to and predictive of performance in English language arts and math and that ELL students, by the time they are proficient in English, also attain proficiency in these subject areas.

The other data represented in the graphs are the performance of the native English speakers (known as EO-English only). These are represented, just to be distinctive, by individual dots that create a pattern of bubbles for time trends. Because EOs are not distinguished by level of English proficiency, the data from these students are simply replicated at each English proficiency level. These data show that English-proficient ELLs are at the same level of performance as EOs. Looking at the distribution of English proficiency levels in the lower panel reminds us that the district is moving more kids into the English-proficient group over time. Although it is notable, incidentally, that the ELL students who are proficient in English at third grade are actually performing strikingly above the level of EO students, it is also important to note that there are relatively few students in this category and that their high performance therefore can be

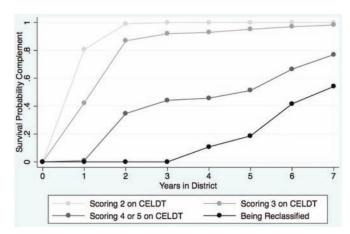


Comparison of trends for Sanger Unified School District English learners (ELLs and former ELLs) and English-only students (EOs) during 2003–2009. The top row shows time trend data for state content area assessment in English language arts and math as a function of student English language proficiency; the bottom row shows the proportional distribution of students at each level of English language proficiency. All data are disaggregated by grade level (3rd, 5th, and 7th). The top row also shows performance for native English speakers, depicted as dots and replicated for each level of English language proficiency for better visualization of the gap between ELLs (including former ELLs) and EOs. In the top row, the lines represent time trends in the California Standards Test (CST) mean scale score for ELLs (including former ELLs) at California English Language Development Test (CELDT) levels over time; the dots represent CST mean scale scores for EOs. Math is shown in gray and English language arts in black. In the bottom row, showing the proportion of students at each CELDT level over time, the lines show time trends between 2003 and 2009. Former ELLs who have attained proficiency in English are included in CELDT Level 5. From Thompson & Hakuta (2011).

attributed to the fact that the ELLs who are proficient in English are a highly select group.

Several other aspects of the Sanger data are worth noting. In one analysis, we looked at the probability of students passing the California High School Exit Exam at 10th grade (in 2009) depending on their CELDT scores in earlier grades. If students scored between beginner (1) and intermediate (3) on the CELDT in 4th grade, their risk of failing on the exit exam in 10th grade was still relatively low—19%. However, if students were still at the English-proficiency level in 7th grade, that risk increased greatly, to 52%. The latter group, in current parlance, are the long-term English learners. Schools are correct to be concerned about the graduation prospects of students in this group.

Another analysis of Sanger's data shows the probability of attaining different levels of proficiency on the CELDT for a cohort of students who entered kindergarten in 2003. This is depicted as the inverse survival probability for attaining given levels of proficiency. As can be seen in Figure 3, more than 80% of students attain intermediate proficiency (3) within 2 years, and nearly 80% attain proficient status within 7 years. The probability of being reclassified, which depends in addition to English proficiency on academic proficiency status in English language arts, is considerably lower and takes more time. I was of course completely gratified to see that these data mirror those of the small district I examined in my earlier paper (Hakuta,



Estimated probability of reaching English proficiency milestones by number of years in the Sanger Unified School District for students who entered kindergarten in 2002. The black line represents being reclassified as English proficient. Successively lower levels of English language proficiency attainment are depicted in lighter shades of gray. From Thompson & Hakuta (2011).

Butler, & Witt, 2000), and I can say honestly to Senator Pell, posthumously, that I was basically right when I answered his question!

Effective Schools

The availability and increasing quality of state, district, and school data, especially after the implementation of NCLB, has created opportunities to understand characteristics of school environments that are related to school achievement for ELLs. In one study that took advantage of school-level state achievement and English language proficiency data, a group of us (Williams et al., 2007) looked at California school-level state achievement scores for ELLs (known as the English Learner Academic Performance Index, or EL-API), as well as the state English language proficiency indicators, and related them to self-reported school characteristics that were collected independently from teachers and principals at 237 California elementary schools with significant ELL populations. Schools were selected within a narrow band of relatively low socioeconomic characteristics, and we explored variation within this band.

The study showed that many of the same characteristics of schools that produced high EL-API scores for all students (reported in Williams et al., 2005) also worked for ELLs. The results showed the strongest predictors of student achievement to be in schools reporting that they used assessment data, had instructional resources available, focused on coherent standardsbased instruction, and prioritized student achievement. Also significant were reported high expectations for student behavior, the involvement of parents, and a culture of teacher collaboration. Generally, having in place an explicit program of instruction for ELLs and enhancing ELL students' access to and comprehension of core academic subjects such as math were found to yield benefits to their academic language development in English.

These results are consistent with those of other reports on effective practices for English learners (Garcia, 1994; Parrish et al., 2006). A recent case study from the Council of Great City Schools (Horwitz et al., 2009), which conducted historical case reviews of four school districts that appeared to be relatively successful in educating ELLs, also would suggest that their success was due to the districts' ability to create a coherent vision, often in response to a trigger such as an Office for Civil Rights review, and then follow up with actions and resources. For instance, successful districts provided materials and district-wide professional development opportunities for teachers (both ELL-focused and general education teachers) and ensured the presence of administrative leaders who recognized the needs of ELLs.

Even recognizing school reforms, there are still unique tensions regarding ELLs. The idea of coherence in leadership, in instruction, and in the school community in general is broadly recognized by students of school improvement, such as Anthony Bryk and Richard Elmore (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Childress, Elmore, Grossman, & Johnson, 2007). The ELL dimension adds tension and complexity because language proficiency is an avenue of access to content rather than the content itself. The student must know English but must also master academic content, all within a zero-sum period of the school calendar. In addition, there is a political history in which advocates for ELLs have had to argue their way, often through litigious means, to get a seat at the table and have the needs of the students recognized; thus a fundamental tension still hovers in the background of many conversations.

Academic Language

The idea that the development of English language proficiency consists of more than basic communication has been around for a while. I remember receiving a call sometime in the 1980s from a reporter for the New Haven Register who claimed to have a scoop: She had been hanging around a bilingual education program and actually had a conversation in English with a student in the bilingual program, and she found that he could speak English perfectly well. "What did you talk with him about?" I asked, to which she replied, "I asked him where he lives and what he likes to eat."

In those days, I could turn to early scholars of this phenomenon, such as Catherine Snow (1987) and Jim Cummins (1981), who were writing about distinctions between conversational and formal language, or what Cummins labeled BICS (for basic interpersonal communicative skills) and CALP (cognitive academic language proficiency), which I explained to the reporter. A student who can converse in English may not have the English skills for academic success.

The notion of academic language is that the engagement of language in each of its structural levels (phonology and morphology, including vocabulary, syntax, semantics, pragmatics, and discourse) with academic content learning entails demands that are characteristic of school settings, and students need experience and practice. These early insights about academic language were important for the field to move away from a simple nativistic view of language acquisition, borrowed from the early child language literature, that language is essentially created by the mind through preprogrammed principles and simply comes into being, with few individual differences and robust to environmental variation (see Pinker, 1994).

Policy has recognized the importance of academic language in very rough form. NCLB requires states to develop English proficiency assessments in the four skill areas of listening, speaking, reading, and writing and to administer them annually and report on results. In addition, the law states that the measures must also assess attainment of the state content standards (NCLB, 2002, § 3121[d][2]). The logical interpretation is that the law expects the state English proficiency tests to align with academic content (Cook, 2007). Theoretically, then, state English language proficiency assessments should place the "proficient" bar at a point when students are also expected to be able to learn and perform at a level of engagement with academic content (e.g., many districts in California set the "reclassification" criteria as attaining proficiency in CELDT and performing at a level of basic or above on the state English language arts assessment, plus teacher recommendation).

Looking at the data from Sanger (Figure 3), attainment of proficiency in the construct of academic language is located in the space between the lines representing probabilities of attaining CELDT Level 4-5 and redesignation. Contained therein might be the following kind of academic language use: In a middle school science class, a student is shown a graph showing data from a chemical reaction observation in which the temperature is plotted as a function of time, and the student is asked, "At what temperature did the reaction stop? How can you tell?" This makes use of academic vocabulary (temperature, reaction), as well as structural forms that make reference to quantitative graphics, "At

what ____," to which a response might be, "The reaction stopped when the temperature reached 5 degrees Celsius."

Researchers have started roughly equating the various English language proficiency measures with aspects of academic language functioning as in the Sanger graph (Figure 3). However, it remains an open question how specific one needs to get with respect to academic language within the content area domains. I think that the Common Core State Standards Initiative creates an opening within the English language arts standards that begins to raise this question, by specifying literacy standards in history/ social studies and science for Grades 6-12.

Some Summative Observations

Before concluding with some observations about the emerging issues that I see on the horizon, I would like to make some capsule points of what I think we can say so far:

- · We don't need to be scared by bilingualism, although we probably will continue to be, because it's a cultural
- · Language of instruction is not the question researchers should focus on, unless bilingualism is the explicit goal.
- English language development takes time—we can be more focused and direct, but it still takes time.
- There is something called "academic language" that goes beyond just the vocabulary of the content glossary—and it would be a good thing to get content teachers engaged with its development.
- Long-term English learners demand particular attention.
- Language proficiency is not the same as mastery of academic
- Strong relationships exist between English proficiency development and content area achievement, even using imperfect present-day measures.
- Appropriate assessment of ELLs remains a challenge—we probably need something like Castañeda standards defining appropriate assessment practices.
- Standards, assessment, and accountability practices that are inclusive of ELLs have gained some ground and traction in school and district practice.
- School and district organization and leadership aiming to create coherence do seem to matter.

These observations are supported or illuminated to varying degrees by hard empirical evidence. I do think that we know enough to say that when my current graduate students write essays of this sort, when their careers have begun to mature, these issues are likely to be some of the defining problems of our field—with hopefully many more paths and elaborations.

Road to the Future

If I had to pick three areas currently in play that I think are key and likely to help shape our knowledge building in the next few years, they would be (a) the ESEA reauthorization and Common Core State Standards, (b) the organization and coherence of schools and districts, and (c) the benefits of bilingualism. This list should not surprise the reader, given that I've already stated my full subscription to the principles of the Stanford Working Group, worth reiterating here:

- Language-minority students must be provided with an equal opportunity to learn the same challenging content and highlevel skills that school reform movements advocate for all
- Proficiency in two or more languages should be promoted for all students. Bilingualism enhances cognitive and social growth, competitiveness in a global marketplace, national security, and understanding of diverse peoples and cultures.

The form through which equity is pursued in education reform has evolved, and the need for global citizenship has emerged even stronger than ever, but these core principles should remain as key references to the progress made by the field.

ESEA and the Common Core

The ESEA reauthorization process is currently under way in a policy environment where education is as prominent as it has ever been. In addition, because of the growth in the ELL population nationally, particularly in states where this population was not historically present (such as Georgia, South Carolina, and the Midwest), there has been increased attention to educational issues confronting ELLs. The accountability requirements of NCLB have brought into sharp focus the achievement gaps and the urgent need for schools and districts to address these gaps, particularly as they seek to avoid or to exit from Program Improvement sanctions (Boyle, Taylor, Hurlbut, & Soga, 2010). Furthermore, the various programs funded under the American Recovery and Reinvestment Act of 2009 have added new fuel to the reauthorization discussions, including the issue of measuring teacher effectiveness and how that information might be used.

Many issues important to researchers are contained in this reauthorization discussion. Key among them are issues related to the identification, monitoring, and assessment of, and accountability for, ELLs. Large questions loom, such as how best to respond to the mandate for appropriate assessment "in a valid and reliable manner and [provide] reasonable accommodations on assessments administered . . . including, to the extent practicable, assessments in the language and form most likely to yield accurate data" (ESEA, 1965, § 1111[a][3][ix][III]). A number of recommendations for reauthorization along these lines have been made by an ad hoc group of researchers (myself included) called the Working Group on ELL Policy (2010).

Under the assumption that the Common Core State Standards will be equivalent to the "challenging state content standards" for all but a few states under the renewed ESEA, two important blocks of issues emerge.

One block of issues is how the Common Core State Standards can be made accessible to ELLs and appropriately assessed. These issues apply across all subject areas (including the science framework currently approaching completion by the National Research Council), but English language arts will be especially salient because the standards already specify (as noted above) the inclusion of literacy in social studies and science for Grades 6-12. Under "Integration of Knowledge and Ideas" in the 7th Grade Reading Standards for Science is the following: "Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words (Standard 7)." Success in this standard will entail a great deal of support for academic language, as discussed previously in the example on "chemical reaction" and "temperature" (Common Core State Standards Initiative, 2010).

Another block of issues related to the Common Core State Standards is their implications for the state English language proficiency assessments that have already been developed (Ramsey & O'Day, 2010). Since these assessments are expected to be aligned to the state content standards (at least in present law, which is unlikely to change), ergo the Common Core, we can assume that the coordination of the English language proficiency standards and content will continue to be an issue. For the most part, this will be a welcome development, since there is strong agreement that all teachers need to think of themselves as teachers of academic English (e.g., Short & Fitzsimmons, 2007). But it raises the question of whether it makes sense to have a separate assessment of English language proficiency if the language issues (particularly those affecting students in the beginning-to-intermediate levels of English language proficiency) are adequately addressed in the Common Core.

School Coherence, Organization, and Leadership

My experience in Sanger, as well as my collaborations with other school districts, hints strongly at the value of a better understanding of the culture of schools. School and district leaders are generally quite eager to engage with researchers to work on continuous improvement, and many would welcome efforts at solving district-defined problems, such as the work of the Chicago Consortium on School Research (Bryk et al., 2010) and the Strategic Education Research Partnership (2011), whose goals have included the establishment of long-term relationships with the Boston Public Schools and the San Francisco Unified School District. There are many district- and school-based issues involving ELLs that can engage researchers, such as identifying potential long-term English language learners early in their development, coordinating the language and content components of curriculum and instruction, developing strategies to increase ELLs' opportunities to practice and produce meaningful language, enhancing the mainstream or subject area teachers' capacity to teach ELLs, creating formative assessments that are appropriate for ELLs both for English language proficiency and content learning, promoting a culture of trust and professional communities at school sites, and developing policies to optimize the distribution of ELLs across school sites. The point is that there is a long list of areas where good research is possible and greatly needed (Goldenberg & Coleman, 2010).

Being Bilingual

In closing, I want to return to the fundamental value of bilingualism. As I observed, we should not be afraid of the "B" word, although I remain pessimistic that society can build the courage, given that the deficit view of bilingualism is so deeply embedded in history. The research evidence on the cognitive benefits of bilingualism, particularly in the area of executive function, is now very strong, thanks in great measure to Ellen Bialystok's productive line of research (Bialystok, 2005, 2010; Bialystok & Craik, 2010). Research even shows a delay of onset of dementia by approximately 4 years for bilinguals (Bialystok, Craik, & Freedman, 2007). It is furthermore important to recognize that bilingualism has inherent value in terms of communication and cultural value, not just bestowing a cognitive side benefit. What is not happening in policies and practices to support the native languages of immigrant communities is very unfortunate.

Let me use a simple analogy. If you were in the Christmas tree business and you found some land on which pine saplings were already growing, would you (a) bulldoze the area and plant new saplings or (b) take care of the land and cultivate the samplings? You would choose (b) unless the existing saplings were not of value to you or got in the way of commercial productivity.

Since we are fairly certain that bilingualism is of great value, and since we know that promotion of two languages does not interfere with school learning, it seems that a rational policy should encourage the development of bilingualism. Why delete the languages that are naturally spoken by immigrants and their children and then get frustrated by the poor efforts of institutions of higher education to teach those very same languages to the elites? That was a question that Joshua Fishman asked many years ago (Fishman, 1977) in distinguishing between elite bilinguals and folk bilinguals. Society admires the bilingualism of the diplomat but not the multilingualism of the cab driver.

In an increasingly global society, and in a nation that is linguistically and culturally diverse, it behooves us to build on our linguistic capacities and to understand ways to optimize what immigrants and their children bring. A valuable role for research would be to document and develop further insight into successful community initiatives that can amplify linguistic diversity.

REFERENCES

Abedi, J., Hofstetter, C., & Lord, C. (2004) Assessment accommodations for English language learners: Implications for policy-based research. Review of Educational Research, 74, 1-28.

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

Ayres, L. (1909). Laggards in our schools. New York: Russell Sage Foundation.

Baker, K., & de Kanter, A. (Eds.). (1983). Bilingual education: A reappraisal of federal policy. Lexington, MA: Lexington Books.

Bialystok, E. (2005). Consequences of bilingualism for cognitive development. In J. R. Kroll, & A. de Groot (Eds.), Handbook of bilingualism: Psycholinguistic approaches (pp. 417-432). Oxford, UK: Oxford University Press.

Bialystok, E. (2010). Bilingualism. Wiley Interdisciplinary Reviews: Cognitive Science, 1, 559-572.

Bialystok, E., & Craik, F. I. M. (2010). Cognitive and linguistic processing in the bilingual mind. Current Directions in Psychological Science,

Bialystok, E., Craik, F. I. M., & Freedman, M. (2007). Bilingualism as a protection against the onset of symptoms of dementia. Neuropsychologia, 45, 459-464.

Boyle, A., Taylor, J., Hurlbut, S., & Soga, K. (2010, March). Title III accountability: Behind the numbers (ESEA Evaluation Brief: The English Language Acquisition, Language Enhancement, and Academic Achievement Act). Washington, DC: American Institutes for Research.

- Bryk, A., Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. (2010). Organizing schools for improvement: Lessons from Chicago. Chicago: University of Chicago Press.
- Castañeda v. Pickard, 648 F. 2d 989 (1981).
- Childress, S., Elmore, R., Grossman, A., & Johnson, S. M. (Eds.). (2007). Managing school districts for high performance. Cambridge, MA: Harvard Education Press.
- Civil Rights Act of 1964, Pub. L. No. 88-352, 78 Stat. 241 (1964).
- Common Core State Standards Initiative. (2010). Read the Common Core State Standards. Council of Chief State School Officers and the National Governors' Association. Retrieved from http://www .corestandards.org/the-standards
- Cook, H. G. (2007). Some thoughts on English language proficiency standards and academic content standards alignment. Draft paper, WIDA Consortium, Madison, WI.
- Cook, H. G., Boals, T., Wilmes, C., & Santos, M. (2007). Issues in the development of annual measurable achievement objectives (AMAOs) for WIDA Consortium states. Madison, WI: WIDA Consortium.
- Crawford, J. (Ed.). (1992). Language loyalties: A source book on the Official English controversies. Chicago: University of Chicago Press.
- Crawford, J. (2004). Educating English learners: Language diversity in the classroom (5th ed.). Los Angeles: Bilingual Education Services.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority children. In California Department of Education (Ed.), Schooling and language minority children: A theoretical framework (pp. 3-50). Los Angeles: California State University, Los Angeles, Evaluation, Dissemination and Assessment Center.
- Danoff, M., Coles, G., McLaughlin, D., & Reynolds, D. (1978). Evaluation of the impact of ESEA Title VII Spanish/English bilingual education programs (3 vols.). Palo Alto, CA: American Institutes for Research.
- David, J., & Talbert, J. (2010). Turning around a high-poverty school district: Learning from Sanger Unified's success. San Francisco: S. H. Cowell Foundation.
- Development Associates. (1986). Year 1 report of the longitudinal phase [Technical report]. Arlington, VA: Author.
- Dulay, H., & Burt, M. (1973). Should we teach children syntax? Language Learning, 23, 245–258.
- Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, 79 Stat. 27 (1965).
- Epstein, N. (1977). Language, ethnicity, and the schools: Policy alternatives for bilingual-bicultural education. Washington, DC: Institute for Educational Leadership.
- Fienberg, S., & Meyer, M. (Eds.). (1992). Assessing evaluation studies: The case of bilingual education strategies. Washington, DC: National Research Council.
- Fishman, J. (1977). The social science perspective. In Bilingual education: Current perspectives (Vol. 1, pp. 1-49). Arlington, VA: Center for Applied Linguistics.
- Francis, D., Lesaux, N., Kieffer, M., & Rivera, H. (2006). Research-based recommendations for the use of accommodations in large-scale assessments. Houston, TX: Center on Instruction.
- Galambos, S., & Hakuta, K. (1988). Subject-specific and task-specific characteristics of metalinguistic awareness in bilingual children. Applied Psycholinguistics, 9, 141–162.
- Garcia, E. (1994). Attributes of effective schools for language-minority students. In E. Hollins, J. King, & W. Hayman (Eds.), Teaching diverse populations: Formulating a knowledge base (pp. 93–103). Albany: State University of New York Press.
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. American Educator, 32(2), 8-44.

- Goldenberg, C., & Coleman, R. (2010). Promoting academic achievement among English language learners: A guide to the research. Thousand Oaks, CA: Corwin.
- Hakuta, K. (1974). Prefabricated patterns and the emergence of structure in second language acquisition. Language Learning, 24, 287-297.
- Hakuta, K. (1986). Mirror of language: The debate on bilingualism. New York: Basic Books.
- Hakuta, K. (1987). Degree of bilingualism and cognitive ability in mainland Puerto Rican children. Child Development, 58, 1372-1388.
- Hakuta, K. (1991). What bilingual education has taught the experimental psychologist: A capsule account in honor of Joshua A. Fishman. In O. García (Ed.), Bilingual education: Focusschrift in honor of Joshua A. Fishman on the occasion of his 65th birthday (Vol. 1, pp. 203-212). Amsterdam: John Benjamins.
- Hakuta, K., Butler, Y. G., & Witt, D. (2000). How long does it take English learners to attain proficiency? (Policy Report No. 2000-1). Santa Barbara: University of California Linguistic Minority Research Institute.
- Hakuta, K., & Díaz, R. (1985). The relationship between degree of bilingualism and cognitive ability: A critical discussion and some new longitudinal data. In K. E. Nelson (Ed.), Children's language (Vol. 5, pp. 319-344). Hillsdale, NJ: Lawrence Erlbaum.
- Horwitz, A., Uro, G., Price-Baugh, R., Simon, C., Uzzell, R., Lewis, S., & Casserly, M. (2009). Succeeding with English language learners: Lessons learned from the Great City schools. Washington, DC: Council of Great City Schools.
- Lambert, W. E., & Tucker, G. R. (1972). Bilingual education of children: The St. Lambert experiment. Rowley, MA: Newbury House.
- Lau v. Nichols, 414 U.S. 563 (1974).
- Linquanti, R., & George, C. (2007). Establishing and utilizing an NCLB Title III accountability system: California's approach and findings to date. In J. Abedi (Ed.), English language proficiency assessment in the nation: Current status and future practice (pp. 105-118). Davis: University of California, Davis, School of Education.
- Mackey, W., & Beebe, V. (1977). Bilingual schools for a bicultural community: Miami's adaptation to the Cuban refugees. Rowley, MA: Newbury House.
- McLaughlin, M. W., Shepard, L. A., & O'Day, J. A. (1995). Improving education through standards-based reform. Report by the National Academy of Education Panel on Standards-Based Education Reform, National Academy of Education, Washington, DC.
- Moran, C., & Hakuta, K. (1995). Bilingual education: Broadening research perspectives. In J. Banks (Ed.), Handbook of multicultural education (pp. 445-462). New York: Macmillan.
- National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Washington, DC: U.S. Government Printing Office.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425
- Office for Civil Rights. (1991). Policy update on schools' obligations toward national origin minority students with limited-English proficiency (LEP students). U.S. Department of Education Memorandum to OCR Senior Staff, from Michael Williams, Assistant Secretary for Civil Rights. Retrieved from http://www2.ed.gov/about/offices/list/ ocr/ell/september27.html
- Olsen, L. (2010). Reparable harm: Fulfilling the unkept promise of educational opportunity for California's long-term English learners. Long Beach, CA: Californians Together.
- Parrish, T., Merickel, A., Pérez, M., Linquanti, R., Socias, M., Spain, A., et al. (2006). Effects of the implementation of Proposition 227 on the education of English learners, K-12: Findings from a five-year evaluation (Final report for AB 56 and AB 1116). Palo Alto and San Francisco: American Institutes for Research and WestEd.

- Peal, E., & Lambert, W. E. (1962). The relation of bilingualism to intelligence. Psychological Monograph, 76(546), 1–23.
- Pinker, S. (1994). The language instinct: How the mind creates language. New York: Morrow.
- Ramirez, D., Yuen, S., Ramey, D., & Pasta, D. (1991). Final report: Longitudinal study of structured-English immersion strategy, early-exit and late-exit transitional bilingual education programs for languageminority children. San Mateo, CA: Aguirre International.
- Ramsey, A., & O'Day, J. (2010, March). Title III policy: State of the states (ESEA evaluation brief: The English Language Acquisition, Language Enhancement, and Academic Achievement Act). Palo Alto, CA: American Institutes for Research.
- Short, D., & Fitzsimmons, S. (2007). Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners. New York: Carnegie Corporation of New York.
- Snow, C. E. (1987). Beyond conversation: Second language learners' acquisition of description and explanation. In J. Lantolf, & A. Labarca (Eds.), Research in second language learning: Focus on the classroom (pp. 3–16). Norwood, NJ: Ablex.
- Stanford Working Group. (1993). Federal education programs for limited-English-proficient students: A blueprint for the second generation. Retrieved from ERIC database (ED363095)
- Strategic Education Research Partnership. (2011). Retrieved from http://www.serpinstitute.org/
- Thompson, G. (1952). Child psychology. London: Harrap.

- Thompson, K. D., & Hakuta, K. (2011, April). Longitudinal analysis of English acquisition and academic achievement trajectories for students initially classified as English learners. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.
- Valeria v. Davis, 12 F. Supp. 2d 1014-15 (2002).
- Williams, T., Hakuta, K., Haertel, E., et al. (2007). Similar English learner students, different results: Why do some schools do better? A followup analysis, based on a large-scale survey of California elementary schools serving low-income and EL students. Mountain View, CA: EdSource.
- Williams, T., Kirst, M., Haertel, E., et al. (2005). Similar students, different results: Why do some schools do better? A large-scale survey of California elementary schools serving low-income students. Mountain View, CA: EdSource.
- Working Group on ELL Policy. (2010). Improving educational outcomes for English language learners: Recommendations for the reauthorization of the Elementary and Secondary Education Act. Retrieved from http:// ell policy.org/

AUTHOR

KENJI HAKUTA is the Lee L. Jacks Professor of Education at Stanford University, School of Education, 485 Lasuen Mall, Stanford, CA 94305-3096; hakuta@stanford.edu. His current research focuses on instructional, organizational, and systemic factors affecting the learning of language and content by English language learners.