

Bilingual Education: Current Challenges

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Table of Contents

Introduction	1
Chapter One Why Bilingual Education?	3
Chapter Two Comments on “English Language Education for Children in Public Schools” by Unz and Tuchman	7
Chapter Three The Dropout Argument	14
Chapter Four All in Spanish?	17
Chapter Five (Still More) Evidence for the Value of Education in the Primary Language (de facto Bilingual Education)	19
Chapter Six Do Other Countries Do Bilingual Education?	22
Chapter Seven The Taft School, SES, Bilingual Education, and Reading Scores	26
Chapter Eight Westminster: Did They Drop Bilingual Education?	28

Bilingual Education: Current Controversies

Each paper in this set is meant to be comprehensible on its own, without reference to the others. For this reason, references are provided separately for each paper, and there is a small amount of overlap among the chapters.

1. Why Bilingual Education? briefly summarizes the rationale for bilingual education and reviews some of the arguments discussed in my recent book, *Under Attack*. It describes the gradual exit plan, a plan that attempts to provide comprehensible English instruction as rapidly as possible, how some have apparently succeeded without bilingual education (an issue explored in more detail in chapter 5), the applicability of bilingual education to languages other than English, public opinion, the research issue, and how we might improve bilingual education. (Originally published by ERIC, Clearinghouse on Rural Education and small Schools, EDO-RC-96-8, January, 1997.)

2. The Unz-Tuchman Proposal: A Bad Idea is a commentary on a recent proposal submitted to the voters of California seeking to end bilingual education, reacting both to the proposal itself as well as to accusations made about bilingual education the proposal. It contests the claim that public schools are not serving immigrant students well and that bilingual education has failed. I argue in this section that the Unz-Tuchman proposal of one year of "sheltered English immersion" will not do the job of preparing limited English proficient children for the mainstream, providing empirical research showing that more is necessary. (Originally published in the CAFE Newsletter 21(3), 1997.)

3. The Dropout Argument explores one popular argument against bilingual education in detail. Because Hispanic students have a large dropout rate and because Hispanic students are the major participants in bilingual education, it is sometimes concluded that bilingual education must be the cause of dropping out. Data is presented in this section showing that the dropout rates presented to the public are inaccurate, and that when "background" factors are controlled, there is no difference in dropout rates between Hispanic and non-Hispanic students.

4. All in Spanish? contests the claim that students in bilingual programs do not receive early and sufficient exposure to English. The results of a study done in the Santa Ana district confirm that by the time bilingual education students are in grade three, they are doing a considerable amount of demanding academic work in English.

5. (Still More) Evidence for the Value of Education in the Primary Language (de facto Bilingual Education) addresses the question of how some people apparently acquired English without bilingual education. The results of several studies show that education in the primary language is a strong predictor of success in acquiring English. (Originally published in the CAFE Newsletter 1997 21,2:8,23.)

6. Do Other Countries do Bilingual Education? surveys bilingual programs of various kinds outside of the United States, answering critics who argue that other countries do not do bilingual education, and therefore it should not be done in the United States. Not only is bilingual education widespread, wherever it has been evaluated abroad, the results have been quite positive.

Two short case histories are also included:

7. The Taft School, SES, Bilingual Education, and Reading Scores examines the performance of one school that claimed success because they do not do bilingual education. My analysis shows that the performance of children in this school is nearly entirely predictable from their socio-economic status. (Originally published in the CAFE Newsletter, 1997 21 (3):12.)

8. Westminster: Did They Drop Bilingual Education? discusses a district in Southern California that claimed success without bilingual education. An examination of the actual data shows they never did bilingual education, nor did they achieve the success they claimed.

1. Why Bilingual Education?

When schools provide children quality education in their primary language, they give them two things: knowledge and literacy. The *knowledge* that children get through their first language helps make the English they hear and read more comprehensible. *Literacy* developed in the primary language transfers to the second language. The reason literacy transfers is simple: Because we learn to read by reading, by making sense of what is on the page (Smith, 1994), it is easier to learn to read in a language we understand. Once we can read in one language, we can read in general.

Subject matter knowledge and literacy, gained through the primary language, provide indirect but powerful support for English language development and are two of the three components of quality bilingual programs. The third component, of course, is direct support for English language development, via English as a second language classes and sheltered subject matter teaching, classes in which intermediate level ESL students learn subject matter taught in English in a comprehensible way.

In gradual exit bilingual programs, non-English speaking children initially receive core subject matter instruction in the primary language, along with ESL instruction. As soon as possible, they receive sheltered subject matter instruction in those subjects that are the easiest to make comprehensible in English, math and science, which, at this level, do not demand a great deal of abstract use of language. In later stages, math and science are done in the mainstream and other subjects, such as social studies, are taught in sheltered classes in English. Eventually, all subjects are done in the mainstream. In this way, sheltered classes function as a bridge between instruction in the first language and the mainstream.

	mainstream	ESL/sheltered	first language
beginning	art, music, PE	ESL	all core subjects
intermediate	art, music, PE	ESL, math, science	social studies, language arts
advanced	art, music, PE math, science	ESL, social studies	language arts
mainstream	all subjects		heritage language development

Once full mainstreaming is complete, advanced first language development is available as an option. This kind of plan avoids problems associated with exiting children too early from first language instruction (before the English they encounter is comprehensible) and provide instruction in the first language where it is most needed. These plans also allow children to have the advantages of advanced first language development.

Success Without Bilingual Education?

A common argument against bilingual education is the observation that many people have succeeded without it. This has certainly happened. In these cases, however, the successful person got plenty of comprehensible input in the second language, and in many cases had a de facto bilingual education program. Examples are Rodriquez (1982) and de la Pena (1991).

Rodriquez (1982) tells us that he succeeded in school without a special program and acquired a very high level of English literacy. He had two crucial advantages, however, that most limited-English proficient children do not have. First, he grew up in an English-speaking neighborhood in Sacramento, California and thus got a great deal of comprehensible input from classmates. Many limited English proficient (LEP) children encounter English only at school; they live in neighborhoods where the first language prevails. In addition, Rodriquez became a voracious reader, which helped him acquire academic language. Most LEP children have little access to books.

De la Pena (1991) reports that he came to the United States at age nine with no English competence and claims that he succeeded without bilingual education. He reports that he acquired English rapidly, and, "by the end of my first school year, I as among the top students." De la Pena, however, had the advantages of bilingual education: In Mexico, he was in the fifth grade, and was thus literate in Spanish and knew subject matter. In addition, when he started school in the United States he was put back two grades. His superior knowledge of subject matter helped make the English he heard comprehensible. There are many additional cases similar to this one (Krashen, 1996, Ramos and Krashen, 1996), as well as studies (Krashen, 1997) that confirm that children who arrive with a good education in their primary language do well. These children have already gained two of three objectives of a good bilingual education program - literacy and subject matter knowledge. Their success is good evidence for bilingual education.

What About Languages Other Than Spanish?

Porter (1990) states that "even if there were a demonstrable advantage for Spanish-speakers learning to read first in their home language, it does not follow that the same holds true for speakers of language that do not use the Roman alphabet" (p. 65). But it does. The ability to read transfers across languages, even when the writing systems are different. Studies cited in Krashen (1996) confirm that reading ability transfers from Chinese to English, Vietnamese to English, Japanese to English, and Turkish to Dutch, and there is also evidence that literacy transfers from Arabic to French (Wagner, Spratt, and Ezzaki, 1989).

Bilingual Education and Public Opinion

Opponents of bilingual education tell us that the public is against bilingual education. This impression is a result of the way the question is asked. One can easily get a near 100% rejection of bilingual education when the question is biased. Quite often, the question asked presupposes that education in the first language is bad for English or that bilingual education delays English. Consider this question, asked by the Center for Equal Opportunity (1996):

"In your opinion, should children of Hispanic background, living in the United States, be taught to read and write Spanish before they are taught English, or should they be taught English as soon as possible?"

One would expect parents to respond that children should be taught English as soon as possible. The way the question is phrased, however, suggests that learning to read and write in the first language will delay the acquisition of English. But bilingual education can contribute to the rapid acquisition of English.

A series of studies, Shin and colleagues (Shin and Gribbons, 1996; Shin and Lee, 1996; Shin and Kim, in press), shows that when bilingual education is carefully defined, support is high. Shin found that many interviewees agreed that developing literacy in the first language helped literacy development in English, that subject matter learning in the primary language was useful in making subject matter in English more comprehensible, and that continuing first language development had cognitive and economic benefits.

The number of people opposed to bilingual education is probably even less than these results suggest. Many people who say they are opposed to bilingual education are actually opposed to certain practices (e.g. inappropriate placement of children) or are opposed to regulations connected to bilingual education (e.g. forcing teachers to acquire another language to keep their jobs).

Despite what is presented to the public in the media, there is support for bilingual education. McQuillan and Tse (1996) reviewed publications appearing between 1984 and 1994, and reported that 87% of academic publications supported bilingual education, but newspaper and magazine articles tended to be anti-bilingual education, with only 45% supporting bilingual education. In addition, less than half of the opinion articles about bilingual education referred to educational research. One wonders what public support would look like if bilingual education was covered more accurately in the press.

The Research Debate

It is sometimes claimed that research does not support the efficacy of bilingual education. Its harshest critics, however (e.g. Rossell and Baker, 1996) do not claim that bilingual education does not work; instead, they claim there is little evidence that it is superior to all-English programs. The evidence used against bilingual education is not convincing. One major problem is labeling. Several critics, for example, have claimed that "English immersion" programs in El Paso and McAllen, Texas, were superior to bilingual education. In each case, however, programs labeled "immersion" were really bilingual education, with a substantial part of the day taught in the primary language. In another study, Gersten (1985) claimed that all-English immersion was better than bilingual education. However, the sample size was very small and the duration of the study was short; also, no description of "bilingual education" was provided. For detailed discussion, see Krashen (1996).

On the other hand, a vast number of studies have shown that bilingual education is effective, with children in well-designed programs acquiring academic English as well and often better than children in all-English programs (Willig, 1985; Cummins, 1989; Krashen, 1996). Willig concluded that the better the experimental design, the more positive were the effects of bilingual education.

Improving Bilingual Education

Bilingual education has done well, but it can do much better. The biggest problem, in my view, is the absence of books, in both the first and second language, in the lives of students in these programs. Free voluntary reading can help all components of bilingual education: It is a source of comprehensible input in English, a means for developing knowledge and literacy in the first language, and a way of continuing first language development.

Limited English proficient Spanish-speaking children have little access to books at home (about 22 books per home for the entire family according to Ramirez, Yuen, Ramey and Pasta, 1991) or at school (an average of one book in Spanish per Spanish-speaking child in some school libraries in schools with bilingual programs, according to Pucci, 1994). A book flood in both languages is clearly called for. Good bilingual programs have brought students to the 50th percentile on standardized tests of English reading by grade five (Burnham-Massey and Pena, 1990). But with a good supply of books, students can go far beyond the 50th percentile. We may even get the Lake Wobegon effect, where all of the children are above average. We can finally do away with the tests, and put the money saved to much better use.

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2. Comments on "English Language Education for Children in Public Schools" by Unz and Tuchman

"English Language Education for Children in Public Schools" is a proposal submitted to California voters by Ron Unz and Gloria Matta Tuchman. Several aspects of the Unz-Tuchman proposal are not in question at all: "Immigrant parents are eager to have their children acquire a good knowledge of English," English is an important language, and we certainly have an obligation and duty to provide children with English literacy. The rest of the proposal extremely problematic. Its claims and proposed changes are completely unsupported.

A Poor Job?

The proposal asserts that " the public schools of California currently do a poor job of educating immigrant children ..."

This attack on public education is unjustified. In the last decade, the burden on California's school system has increased incredibly, and schools have done as well as could be expected with the resources they have:

1. California has the worst school libraries in the country. California is next to last in terms of books per student (White, 1990) and are dead last with respect to the number of librarians per student (Snyder and Hoffman, 1995).
2. The number of limited English proficient children in California has increased from about 600,000 in 1987 to about 1,300,000 today.
3. California's public libraries have declined in access and quality. McQuillan (1995) notes that book budgets in public libraries in California have been cut by 25% since 1989, and the number of hours public libraries are open has declined 30% since 1987. Children's services have been hit the hardest by these cuts.
4. McQuillan (1995) also notes that the absolute number and percentage of school age children in poverty has increased dramatically in California. California ranks 41st out of 50 in terms of the percentage of children living in poverty, and there was a 25% increase from 1989 to 1993 in the number of children in poverty in California. The NAEP reported that California ranks near the bottom of the country in the percentage of homes with more than 25 books.

Despite these problems, reading scores in California have held steady (McQuillan, 1995), and dropout rates among Hispanic students decreased from 1988 to 1992 (Little Hoover Commission, 1993).

Failed Programs?

" ... wasting financial resources on costly experimental language programs whose failure over the last two decades is demonstrated by the high dropout rates and low English literacy levels of many immigrant children"

The "experimental" language program referred to is bilingual education. Empirical studies of bilingual education show that children in these programs, when they are set up correctly, do well, acquiring English literacy better than children in all-day English programs (Krashen and Biber, 1988; Krashen, 1996). (1)

One cannot blame bilingual education for the high dropout rate of Latino students. First, not all Hispanic youngsters are limited English proficient. In California, less than half of Hispanic students are classified as limited English proficient. Second, as noted above, of those who are limited in English, not all are in bilingual education: In California, about 50% of limited English proficient children are in programs that have any kind of non-English language support, and 21% receive no

special instructional services at all (Han, Baker, and Rogriquez 1997, Snyder and Hoffman, 1996, Macias, 1996.) Third, well-designed bilingual programs produce better academic English, which suggests that bilingual education is part of the cure, not the disease.

Finally, approximately 40% of all Chicano children live in poverty in the US, and economic factors have been linked to dropout rates (Rumberger, 1991; Portes and Rumbaut, 1996; Rumbaut, 1997). Poor children have far fewer books in the home, in their school libraries, and in the public libraries in their neighborhoods, and go to schools that are often poorly funded, among other problems. When one asks male Hispanic dropouts why they dropped out, only 4% claim it was due to poor performance in school (compared to 8% of non-Hispanic whites), while 38% give economic reasons (compared to 22% of non-Hispanic whites)(Rumberger, 1983).

Research has shown that when one takes background factors into consideration, i.e. socioeconomic status, print in the home, family factors (e.g. single parent vs. two parent families) and recency of immigration, differences between Hispanic children and majority children in dropout rate disappear (e.g. Rumberger, 1995; White and Kaufman, 1997).

Sheltered English Immersion

“Children who are English language learners shall be educated through sheltered English immersion during a temporary transition period not to exceed one year.”

The initiative defines sheltered English immersion as follows: “an English language acquisition process for young children in which nearly all classroom instruction is in English but with the curriculum and presentation designed for children who are learning the language.” It defines bilingual education as follows: “a language acquisition process for students in which much or all instruction, textbooks, and teaching materials are in the child’s native language.”

There are many problems with this plan:

1. “Sheltered English immersion” is not a term in current use in the language education profession but is a confusing combination of terms. “Sheltered subject matter teaching” is a method used with INTERMEDIATE, not beginning, second language students in which content is made comprehensible (Edwards, Krashen, Wesche, Clement, and Krudinier, 1983; Krashen, 1991).

Sheltered subject matter teaching was inspired by the success of Canadian immersion programs, but the “immersion” aspect of these programs was not the factor we adopted: Rather, it was the fact that subject matter was presented in a comprehensible way. (The term “immersion” has been used in several different ways, some of them contradictory. See the appendix to this report, “A note on immersion,” for more details.)

2. Note that structured English immersion, as defined above, allows some first language use, contrasted with bilingual education, in which “much or all” of instruction is in the first language. Since NO bilingual education program is ALL in the first language, these two programs differ only in how much first language use is allowed. Just how much is too much? Who decides? Will there be language police to determine when a teacher is using too much of the child’s first language?

The “gradual exit” program used in El Paso and California uses BOTH sheltered subject matter teaching and instruction in the first language, with varying amounts depending on the level of the child. Its status under the Unz-Tuchman proposal is not clear. Sheltered subject matter is a valuable part of programs for LEP children: It is used as a transition between the first language component and the mainstream.

3. The proposal sets ONE YEAR as the standard for special English instruction. After one year, it is expected that students will participate in mainstream classes. This criteria is wildly optimistic, one Unz has noted is based on "common sense" and not research. Even those who are opposed to or are highly critical of bilingual education note that it takes more than one year to acquire academic language, the kind of English language competence children need to succeed in school (e.g. the heavily anti-bilingual education Little Hoover Commission report (1993) notes that "some experts believe that English can be academically comprehensible for children in *as little as two years* (emphasis mine), while others believe that six or more years of assistance is necessary"; p. 36).

The evidence we have suggests that one year of intensive English is not enough to bring children to the level where they can do grade level work.

Goldberg (1997) describes an all-English program for limited English proficient students. In kindergarten, there was no instruction at all in the primary language, and no ESL, but children "receive a language-rich curriculum (in English) based on thematic units" (p. 64). While 90% of the students showed some growth in English during the year, most still scored in the "beginner" range on the PreLAS in English, clearly nowhere near ready for a full academic program in English.

Kreuger and Townsend (1997) describe a program for limited English proficient first graders in Quebec who were given a great deal of help in English literacy: Small group work (three to four students per group) for two hours daily devoted exclusively to literacy development, based on Reading Recovery. Nineteen of the 23 went on to grade 2, but the students were still well behind native speakers of English, scoring at the middle of grade 1 in reading at the end of the year, "still well below the class average" (p. 127). These students, in addition, had already had a full year of kindergarten entirely in English, in a semi-sheltered situation: 75% of the class consisted of second language acquirers.

Finally, in a recent evaluation of LEP children in the Santa Ana school district (Mitchell, Destino, and Karan, 1997), students with relatively more English on entering were placed in an "immersion" program, similar to what Unz and Tuchman recommend. After one year, they showed some growth in English but nowhere near what was required to do academic work in the mainstream: They moved from 2.18 to 2.84 in English, on a five point scale, where 4.0 is considered good enough to do demanding academic work in English. Even after a second year of immersion, their mean English rating was only 3.24.

Thus, focusing only on English in very young children has been tried. Focusing on the primary language works better, even for English language development. When the Carpentaria preschool program drastically reduced the amount of English and increased Spanish, focusing on language and cognitive development, dramatic gains were seen in school readiness measures as well as in English! As the designers noted, English improved because the children were better able to understand the English they were exposed to outside of school, thanks to their improved cognitive development (Keating, 1984).

4. The proposal encourages grouping by English language proficiency alone. If "sheltered English immersion" is in fact sheltered subject matter teaching, this means one class with a group of beginners in English studying subject matter that can be at very different levels - even if the program is limited to children younger than age ten (as the Unz-Tuchman plan proposes). This is a nightmare for the teacher and will result in a great deal of dead time for children exposed to lessons that are completely inappropriate for them.

Children who "know English" are excused from sheltered English immersion. To demonstrate that they know English, they must score at or above the state average for his grade level or above the 5th grade average, whichever is lower ..." on standardized tests of reading comprehension. Unz-Tuchman is thus

demanding that second language acquirers score better than 49% of the native speakers of English in the state to be excused from the special program.

Why Bilingual Education?

Bilingual education is sensible: A limited English proficient child who knows the subject matter will understand more in a class taught in English than one who does not. The more math the child knows, for example, the easier it will be to understand a math class taught in English. The more the child understands, the faster he or she will acquire English. Bilingual education gives children subject matter knowledge and thus speeds their English language development. Also, children who develop literacy in their primary language have a much easier time developing literacy in English: It is easier to learn to read in a language you already know, and once you can read, this ability transfers to English. Thus, in addition to making sure children do not fall behind in subject matter, bilingual education makes a powerful contribution to their language and literacy development.

Published research supports bilingual education (Krashen, 1996): Children in well-designed programs, programs that give them solid subject matter instruction in the primary language, literacy in the primary language, and ESL, acquire academic English as well and usually better than children in all-English programs.

In addition, it is a shame not to promote primary or heritage language development. Children who develop their primary language, in addition to English (not instead of), show superior cognitive development in some areas, typically do better academically than their monolingual peers from the same group, and do better in the work world (see papers in Krashen, Tse and McQuillan, in press). Our country and economy benefit from bilinguals. (2)

The best solution for our limited English proficient children is a solid academic foundation in the first language, with ESL beginning immediately, and with subjects being taught in English as soon as they can be made comprehensible for the child.

A Note on Immersion

"English for the Children" explicitly supports "sheltered English immersion" and argues that "learning a language is much easier if the child is immersed in that language." As I noted in Krashen (1996), there is a great deal of confusion about this term. One definition of immersion is "submersion," or "sink or swim," (doing nothing) an approach that English for the Children does not support.

A second use of the term is the program used in Canada for French as a foreign/second language development for English speaking children. Canadian type immersion IS bilingual education: It satisfies the three requirements for proper bilingual education (Krashen, 1996): (1) comprehensible input in the second language (French in this case); (2) literacy development in the first language (English in this case); (3) subject matter learning in the first language. In addition, because the vast majority of the children in these programs are middle class, they do a considerable amount of reading outside of school (Eagon and Cashion, 1988). Much of the curriculum is in the first language (English), and the goal is bilingualism, development of both languages.

A third type of immersion is "structured immersion." Structured immersion uses the first language only minimally, and includes direct teaching of grammar and preteaching of vocabulary (Gersten and Woodward, 1985). The results of structured immersion research are not at all convincing: Gersten and Woodward (1985) report that children in structured immersion in Uvalde, Texas reached the 30th percentile of the reading comprehension subtest of the Metropolitan Achievement Test at the end of grade three. After leaving the program, however, they dropped to the 15th and 16 percentiles in grades

five and six (Becker and Gersten, 1982). While this performance was better than a comparison group, it is still dismal. In addition, we have no idea what the comparison group did. (Uvalde children did somewhat better on the WRAT reading test, which emphasizes “decoding skills.”)

In a second study of structured immersion, Gersten (1985) claimed that more LEP children in a California school district in structured immersion performed at or above grade level than comparison children in bilingual education. There were several serious problems with this study. First, no details were provided about the bilingual education program. Second, the sample size was small (28 children in bilingual education, 16 in structured immersion). If performance of just a few children had varied slightly, the results of this study would have looked very different. Third, the study followed children only to grade two. Gersten and Woodward reported that the structured immersion children did extremely well in a follow-up study, reaching the 65th and 78th percentiles two years later, but only two groups of nine children each were studied.

A fourth definition of immersion is sheltered subject matter teaching, which, as noted in the text, was inspired by Canadian type immersion. These are classes, used in both second and foreign language teaching situations, in which intermediate level language students get subject matter instruction with the second language used as a medium of instruction. Native speakers and beginners are not included in these classes, in order to make sure that the input is comprehensible. Studies show that students in sheltered classes make at least as much progress in the second language as students in regular intermediate language classes, and usually more, and learn subject matter at the same time (Krashen, 1991). In addition, they acquire “academic language.”

As noted above, the gradual exit program uses sheltered subject matter teaching as a an intermediate stage between classes taught in the first language and the mainstream.

Notes

1. The Rossell and Baker (1996) critique of bilingual education research is not convincing. I reviewed their survey in Krashen (1996). Briefly, I found that those studies considered to be not in favor of bilingual education suffered from vague labeling, i.e. some successful programs labeled “immersion” were actually bilingual education, with a significant amount of first language use. And in many cases, unsuccessful programs labeled “bilingual education” were clearly bad programs in which the critical components of properly designed bilingual programs were not provided. Also, several studies interpreted as not supporting bilingual education were very short term, not nearly long enough for bilingual education to show an effect. Interestingly, the vast majority of studies Rossell and Baker considered to be scientifically unacceptable support bilingual education. The flaws in these studies, however, were not threats to the validity of the conclusions, in my view.

2. Rumbaut (1995) examined the progress of over 15,000 high school students in San Diego from language minority groups. Predictably, those classified as limited English proficient had lower grade point averages and were more likely to drop out. What is very interesting, however, is that those classified as “fluent English proficient” (in other words, bilingual), had better grades and slightly lower dropout rates than those rated English-only. This was the case even though parents of “English-only” students were of higher socio-economic status than parents of the bilingual students.

Rumbaut also found that parents’ “ethnic resilience and reaffirmation” was a positive predictor of grade point average: Those parents who felt that “their ethnic group must stay together as a community to preserve their own culture and identity even as they adapt to the U.S. economy to ‘make a living’” but were not planning to return to their homelands had children who performed better in school (p. 51). As Rumbaut points out, this result provides support for the concept of “additive” rather than “subtractive” acculturation (p. 52).

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3. The Dropout Argument

Critics of bilingual education have cited the high Hispanic dropout rate as evidence against bilingual education. Since most bilingual programs are Spanish-English, it is concluded that bilingual education must be responsible. In this note, I review what is known about dropout rates among Hispanic students.

Do Hispanic Students Drop Out More?

The latest figures from the US government have been recently released, covering the academic year 1994-1995 (McMillan, Kaufman, and Klein, 1997). Defining the dropout rate as the proportion of young adults (ages 16 to 24) who are not enrolled in a high school program and who have not completed high school, there is no question that Hispanic students have higher dropout rates: 30 percent of Hispanic young adults were classified as dropouts, compared to 8.6% for non-Hispanic whites and 12.1% for non-Hispanic blacks.

Among Hispanic young adults, however, dropout figures include many who never enrolled in school, foreign born immigrants who apparently came to the US for work and not education (p. 31). The government report calculates that about one-third of the 30% dropout figure for Hispanic young adults is due to non-enrollees. The true Hispanic dropout rate is thus about 20%.

Is Bilingual Education to Blame?

It is true that most students in bilingual education speak Spanish, but not all Spanish speaking children are in bilingual education. Far from it. Fewer than half of the Spanish speaking children in school in California are limited English proficient (Han, Baker, and Rogriquez 1997, Snyder and Hoffman, 1996). Of these, not all are in programs that provide instruction in the primary language; according to Macias (1997), about 30% of limited English proficient children were in programs that had academic instruction in the primary language while another 22% had "informal" support in the first language. Thus, most Spanish speaking children are NOT in bilingual education. 1 The 20% dropout figure applies to all Spanish speaking children.

What Accounts for Dropout Rates?

Not surprisingly, English language speaking ability is a factor. Limiting the analysis to those who actually enrolled in school, those who reported speaking English "not well" had a 32.9% dropout rate, while those who spoke English well or very well had a 19.2% dropout rate (McMillan, Kaufman and Klein, 1997). This is, once again, not an argument against bilingual education, because studies have shown that children in well-designed bilingual programs do well in English.

Several "background factors" have been identified as consistent predictors of dropping out: Socioeconomic class, time spent in the US, the presence of print, and family factors. Students in wealthier families drop out less, those who have been here longer and who live in a more print-rich environment drop out less, those who live with both parents, and whose parents monitor school work drop out less, and those who do not become teen parents drop out less.

What is of great interest to us is that **these background factors appear to be responsible for the difference in dropout rates among different ethnic groups.** In other words, when researchers control for these factors, there is no difference in dropout rates between Hispanics and other groups. This result holds for those who drop out between grades 8 and 10 (Rumberger, 1995) as well as for those who drop out later (Rumberger, 1983; White and Kaufman, 1997; Pirog and Magee, 1997).

Rumberger (1995), for example, concluded: " ... Black, Hispanic, and Native American students have

twice the odds of dropping out compared to White students ... however, after controlling for the structural characteristics of family background - particularly, socioeconomic status - the predicted odds of dropping out are no different than those for White students" (p. 605).

Hispanic students are well behind majority children in these areas. Approximately 40% of Hispanic children live in poverty, compared to 15% of white non-Hispanic children, and 45% live with parents who have completed high school, compared to 81% of non Hispanic white children. Only 68% live with both parents, compared to 81% of non Hispanic white children (Rumberger, 1991).

White and Kaufman (1997), in their study of high school dropouts between 1980 and 1986 provide a clear example of the impact of these factors.

Probabilities of dropping out of high school: impact of SES, social capital, generation

White - low SES, low social capital = .23

Black - low SES, low social capital = .22

White - high SES, high social capital = .08

Black - high SES, high social capital = .08

Mexican - immigrant, less than 6 years in US, low SES, low social capital = .40

Mexican - immigrant, more than 6 years, high SES, high social capital = .12

Mexican- second generation or native, high SES, high social capital = .10

Asian - immigrant, less than 6 years in US, low SES, low social capital = .31

Asian - immigrant, more than 6 years in US, high SES, high social capital = .08

Asian - second generation or native, high SES, high social capital = .07

social capital = living with both parents, parents monitor schoolwork, siblings in college
from: White and Kaufman (1997)

Note that Hispanic lower social class new immigrants without family factors working in their favor have a high probability of dropping out, but when factors are more favorable, there is no significant difference in the probability of dropping out among the groups.

Additional evidence that there is strong economic pressure on many Hispanic students comes from Rumberger (1983), who listed the reasons students gave for dropping out. Only 4% of Hispanic male dropouts said that the reason was "poor performance" in school (compared to 8% of male non-Hispanic white students). On the other hand, 38% of the Hispanic students gave economic reasons (desire to work, financial difficulties, home responsibilities), compared to 22% of the non-Hispanic white students. Similar tendencies were present for female dropouts.

Does Spanish Language Development Increase the Odds of Dropping Out?

Maintenance of Spanish language and culture may prevent dropping out. The US Government report found that for those Hispanic young adults who were enrolled in school in the US, there is no difference in dropout rates between those who said they spoke Spanish at home (20.3%) and those who said they spoke English at home (17.5%). White and Kaufman (1997) and Rumberger (1995) report similar results.

Rumbaut (1995) examined the progress of over 15,000 high school students in San Diego from language minority groups. Predictably, those classified as limited English proficient had lower grade point averages and were more likely to drop out. What is very interesting, however, is that those classified as "fluent English proficient" (in other words, bilingual), had better grades and slightly lower dropout rates than those rated English-only. This was the case even though parents of "English-only" students were of higher socio-economic status than parents of the bilingual students.

Conclusions

There is no "Hispanic dropout mystery" (Headden, 1997). No direct link has been reported between dropout rates and participation in bilingual education. A minority of Hispanic children in California are in bilingual programs, and the reported dropout rates refer to all Hispanic children. In fact, because well-designed bilingual programs produce better academic English (Krashen, 1996), bilingual education is part of the cure, not the disease.

Some factors predicting dropout rates have, however, been identified: Low English language ability, poverty, length of residence in the US, the print environment, and family factors. The important finding from the research is that when these factors are controlled statistically, there is no difference among groups in dropout rates. Hispanics do not drop out anymore than other groups do, when one considers socio-economic class and other background factors.

Finally, there is evidence showing that development of the first language, in addition to fluent and proficient English, is advantageous: Those who speak Spanish at home do not drop out significantly more than those who speak English at home, the results of one study suggest that those who continue to develop their primary language after achieving proficiency in English drop out less.

Note

1. California data tells us how many children are in bilingual program but does not break this down by native language. Jim Crawford has pointed out to me, however, that 96.3% of bilingual teachers provide instruction in Spanish. We can thus assume that about 96% of the children are in Spanish language programs. If so, 36% of Spanish language LEP children were in full bilingual programs in California in 1997 (total Spanish-speaking LEP = 1,107,186, total in bilingual education = 410,127, estimate of Spanish-speaker LEP in bilingual education = 394,952).

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4. All in Spanish?

A persistent claim is that bilingual programs delay exposure to English for many years. Amselle (1997), for example, claims that "bilingual education theory dictates five to seven years of instruction in the native language before children are taught English" (p. 53).

A recent report of bilingual education in the Santa Ana School District shows that this is not the case. Table 1, from Mitchell, Destino and Karan (1997), shows that a great deal of the school day is in English quite early in the child's school career. By grade 3, about 3/4 of math, science and social studies is taught in English, and half of language arts, and by grade 5, it is about 90% in all subjects except reading. (This data is for bilingual education; children in a combination bilingual education/immersion program have even more instruction in English; these children, however, entered school with higher levels of English language proficiency.)

Table 1. Primary language use in bilingual education (percentage)

	Reading	LArts	Math	Science	Social Science
K	100	95	93	92	91
3	98	55	28	24	27
5	71	12	10	9	9

from: Mitchell et al, 1997

Taking a closer look at the reading data, where the most first language use is present, shows that by grade 5, 15% of the children in bilingual education (n = 201) are in transitional reading and 14% are in "mainstream" reading (n = 199), and 71% reading in the first language (n = 976). In social studies, however, a subject with heavy language demands, only 9% are still doing all their work in the primary language (n = 128), while 62% are doing sheltered social studies (n = 856) and 28% are in the mainstream (n = 391) (table 2).

Table 2. Language use in bilingual education in grade 5 (percentage)

	reading	language arts	math	science	social science
native	71	12	10	9	9
sheltered	15	58	60	61	62
mainstream	14	30	31	30	28

from: Mitchell et al, 1997

Clearly, in the Santa Ana district, children in bilingual education are getting substantial exposure to comprehensible English long before the "five to seven years" Amselle refers to.

Santa Ana bilingual education English language results are consistent with the data on language use (table 3). Despite having started out well behind LEP children in other programs, children in bilingual education have reduced the gap, and have nearly reached level 4 in English language development by grade 5, a level high enough to do demanding subject matter work in English.

Table 3. English language development in the Santa Ana district

grade	TBE	TBE/Immersion	Immersion	Mainstream LEP
K	1.23	1.98	2.18	1.89
3	3.02	3.38	3.66	3.34
5	3.81	4.09	4.42	4.13

from: Mitchell et. al.

1 = preproduction; 2 = early production; 3 = speech emergence; 4 = intermediate fluency (engages in discussions, debates, extended dialogs); 5 = advanced fluency (fully conversant)

Note that "immersion" students do not reach anywhere near full competence in English in one year. In addition, these students entered with considerably more proficiency than those who were placed in bilingual education. The Unz-Tuchman proposal assumes a student will go from level 1 to level 4 in one year. Not even those who came in at 2.18 can do this.

Table 4. Progress of immersion students

K	2.18
1	2.84
2	3.24
3	3.66
4	4.14

from: Mitchell et. al., 1997

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5. (Still More) Evidence for the Value of Education in the Primary Language (de facto Bilingual Education).

It has been suggested that the value of education in the first language is due to two related contributions: Subject matter knowledge gained in the first language makes English input more comprehensible, and literacy developed in the first language facilitates literacy development in English. Good bilingual programs attempt to provide these two components.

This analysis helps to explain cases of "success without bilingual education." Those who do well in English academic language development have frequently had a good education in their primary language before coming to the US (Krashen, 1996). The universality of this phenomenon was confirmed by Ramos and Krashen (1996), who reported success stories of educated immigrants to Spain.

I present here some additional cases that confirm the existence of this phenomenon and that show its great strength, as well as its robustness: It is found using different research techniques and among different groups.

Gardner, Polyzoi and Rampaul (1966) studied the impact of education in the first language on progress in intensive ESL classes for Kurdish and Bosnian adult immigrants to Canada who had "virtually no English" when they arrived (p. 3). The subjects were classified into three groups, as presented in table 1:

Table 1: Characteristics of Subjects

subjects	n	years of formal education	age	length of study
high literates	6	15	31	18
semiliterates	4	7	28	21
preliterates	4	0	35	21

"age" = age of arrival in Canada

"length of study" = months in ESL program

from: Gardner, Polyzoi and Rampaul, 1966

Table 2 presents the gains made by each group on tests of oral and written English after participation in intensive ESL (20 hours per week, for 1 to 1.5 years). For both measures, it is clear that the higher the level of literacy in the primary language, the greater the gains. This was true of both measures, and extremely powerful in the written test, in which preliterates' posttest scores were lower than the high literates' pretest scores.

Table 2: Gains after Intensive ESL Instruction

ORAL test scores	pre	post
high literates	10	71
semiliterates	7	58
preliterates	1	43
WRITTEN test scores	pre	post
high literates	17	91
semiliterates	0	48
preliterates	1	10

perfect score = 100 for both tests; Oral test: Personal questions, picture description, discussion of leisure activities, family. Written test: write name, circle correct time, copy words, label pictures, answer personal questions, read text and write answers to questions, fill in blanks with correct prepositions,

verb tenses, multiple choice vocabulary. From: Gardner, Polyzoi and Rampaul, 1966
Three independent studies using multiple regression arrive at conclusions similar to those of Gardner et. al..

Chiswick (1991) studied the determinants of English language proficiency of 836 illegal aliens who had been apprehended in Los Angeles in 1986-1987. Chiswick reported a positive relationship between years of education in the home country and English proficiency, with each year of additional schooling raising English fluency and reading ability 1.3%.

Chiswick and Miller (1995) studied 4,166 immigrants to Australia, based on the 1981 and 1986 censuses. For those who immigrated to Australia from non-English speaking countries, each year of education in the home country raised English fluency 3.6% in the 1981 sample and 3.3% in the 1986 sample.

Espenshade and Lu (1997) studied predictors of English competence among 4,146 immigrants to the United States (November 1989 Current Population Survey) by immigrants to the United States. Again, years of education in the home country before immigration was a significant predictor of English language proficiency

All three studies controlled for the length of time the immigrant had been in the country and age at the time of immigration, and all considered the country of origin. But there were differences: Espenshade and Fu (1997) and Chiswick and Miller (1995) controlled for aspects of family and community life, and Chiswick (1991) included competence in English on arrival in the US.

The samples were different: Subjects in Chiswick (1991) and Chiswick and Miller (1995) were men, but differed in mean age (23 vs. 42.1 years), amount of education in the home country (7.1 vs. 10.7 years), and duration of stay in the host country (1.5 years vs. 19.8 years). Espenshade and Fu's subjects included men and women but gender was controlled statistically.

All three studies relied on self-report of English, with subjects responding on a four-point scale: not at all, not well, well, and very well. Different interpretations, however, were used. Espenshade and Fu simply used a four point scale, with 0 corresponding to "not at all" and 3 corresponding to "very well." Chiswick assigned a score of 0 for "not well" and "not at all" and 1 for "very well" and "well" but Chiswick and Miller assigned 0 to everything except "very well."

Despite these differences, the results of the three multiple regression studies are very similar, attesting to the robustness of the phenomena. (Chiswick and Miller also cite other studies done with immigrants to Israel and Canada in which education in the home country was a significant predictor of proficiency in the language of the country.)

McManus, Gould and Welch (1983) examined the determinants of English proficiency for Hispanic men who immigrated to the United States. For those who had all their schooling abroad, results agreed with those of the studies described above: More education was associated with better English. But for those who had some schooling in the United States and some abroad, more schooling abroad predicted lower English proficiency. McManus et. al., however, used a different definition of English ability: They included both self-reported competence and reported use of English. Some subjects were not rated high in English proficiency, even though they rated their English as "very good," because they did not use English at home (p. 127).

Comprehensibility of school input in the US could be a second factor. The mean number of years of education completed was 9.7. An immigrant who had two years of study in his home country and seven in the US thus reported better English than one who had seven years of study in his home country and two in the US. Students who come later will have a much harder time catching up to their fellow

students, because the language demands for upper grades are much greater than those for lower grades; in the above example, the first student faced the grade three curriculum, while the second faced the much more demanding grade eight curriculum. The later arrivals may thus get less comprehensible input in school, and make less progress, especially when special programs, such as bilingual education, are not available.

The positive effect of education in the primary language is accepted without comment or controversy in these studies. In fact, the multiple regression studies discussed here did not have the role of education in the primary language as their major focus. What is interesting is that the idea of supplying such education after immigration, as we do in bilingual education, is not mentioned as a possibility in any of the studies discussed here. One wonders how the low literates in Gardner et. al., for example, would have progressed if they had been given the opportunity of developing first language literacy and learning some subject matter in their first language after immigration. 1

Note

1. None of the studies considered the amount of EFL (English as a foreign language) study subjects had. It could thus be argued that more education in the home country simply meant more EFL, and that EFL was the cause of better English proficiency. Recall, however, that in Gardner et. al., subjects arrived with "virtually no English," thus controlling for this variable. Also, in Espenshade and Fu (1997), English proficiency at arrival was controlled, which in effect controls for EFL study.

None of the regression studies included the impact of ESL (English as a second language) in the host country. If those with more home country education are more likely to enroll in ESL classes, this is an alternative explanation for their higher proficiency in English. Note that Gardner et. al. show that those with more home country education profit more from ESL. Thus, even if those with more home language education do more ESL in the host country, education in the home country, in the primary language, is still advantageous.

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6. Do Other Countries Do Bilingual Education?

Do other countries do bilingual education? Yes, they do. There is a vast literature describing bilingual education in other countries, and the consistent result of studies of these programs is that they work, that students acquire the national language as well or better than students without education in their first language. In the first part of this paper, I describe instances in which research has been done probing the effectiveness of education in the first language. Much of this research can be criticized: random assignment of students is usually not done, and students in comparison and experimental groups sometimes differ in variables other than the use of the first language. Nevertheless, the results are very positive and consistent:

for immigrant children:

<u>country</u>	<u>first language</u>	<u>results</u>
Norway	Turkish, Urdu Vietnamese	L1 support in math, social sciences, natural science, grades 1-4; bilingual ed students better than controls in math social/natural science in grades 4,5, perform close to native speakers of Norwegian (Ozerk, 1994).
Netherlands	Turkish	Bilingual students outperform control students in Dutch literacy in grade 2; differences not statistically significant (Verhoeven, 1991).
Netherlands (Leyden)	Turkish , Arabic	Bilingual students taught all in primary language for 1st year with Dutch as second language, 50% 2nd year. At end of 3rd year, outperform controls in Dutch language, fewer behavioral problems, had more social relations with Dutch children (Altena and Appel, 1982; Appel, 1988).
Netherlands (Enschede)	Turkish, Arabic	Full bilingual outperform controls ("few hours" of primary language) in Dutch reading, Turkish children approach native speaker level in reading, above norms in math 2 years after exit (Appel, 1988).

for indigenous minorities:

<u>country</u>	<u>first language</u>	<u>results</u>
China	Korean	full bilingual programs; more Korean speakers obtain higher education degrees than native speakers of Mandarin (Lin, 1997).
Sweden	Finnish	At grade 3, students outperform controls (speakers of other languages)(Lofgren and Ouvinen-Bierstam, 1982).
Sweden	Finnish	Graduates of bilingual programs do as well as controls (includes native speakers) in school achievement, slightly more continue to higher education than controls after grade 9 (Hagman and Lahndenpera, 1987).
Australia	Gapapuyngu	bilinguals outperform controls in grade 7 in math, English composition, tend to be better in English reading (Gale, McClay, Christie, and Harris, 1981)
Mexico	Tzeltal, Tzotzil	Reading taught in vernacular during preparatory year results in better Spanish reading (Modiano, 1968).

Less convincing, but nevertheless impressive evidence is the fact that so many countries do some form of bilingual education. In the following list, I present the countries and the languages involved. All are state-supported.

Programs with intensive first language instruction have been described for children of immigrants in Bavaria (in Germany). Some children are placed in all-German programs with supplementary instruction in the home language for eight lessons per week (home language enrichment, see below) while those with less knowledge of German receive all their instruction in their home language, with German taught as a foreign language for eight periods per week, with German also used in art, music and physical education (Nist, 1978, p. 210). The goal of the latter program was "to bring the foreign child to a level of proficiency whereby he/she can choose to continue in the mother-tongue classroom or move to a German language classroom" (p. 211). Such programs also exist in the Netherlands for Turkish and Moroccan children (Vallen and Stijnen, 1987), in Sweden in Finnish, Swedish, Turkish, Serbocroatian, Greek and Arabic (Hagman and Lahndenpera, 1987), and in several countries for

indigenous minorities: In Basque in Spain (Cummins, 1993; Arzamendi and Genesee, 1997), in Inuit in Canada (Stairs, 1988), in Quechua and Aymara in Peru (Hornberger, 1987,1988), and were established for speakers of minority languages in the former Soviet Union (Kreusler, 1961). In China, "by 1995, 23 minority groups (Mongolians, Tibetans, Koreans, Uygar, and Zhuang, among others) were using their own language, or both their own language and Mandarin, to teach (Lin, 1997, p. 195).

Glenn (1997) describes a variety of programs for immigrant children in a number of countries. "Bilingual reception programs" are designed for students "arriving beyond the usual school-entry age" and "make use of the home language of pupils' to ease their adjustment and speed their learning of language and other skills considered necessary before they are mainstreamed" (p. 452). Such programs exist in Belgium (Arabic, Turkish), Germany (Turkish), and the Netherlands (Arabic, Berber, Turkish).

In "integrated bilingual" programs "language minority and majority students learn together, with a carefully crafted emphasis on both languages" (p. 461), similar to two-way programs in the United States. Such programs exist in Denmark (Turkish), Belgium (Spanish), Sweden (Finnish), and Germany (Turkish, Greek). Integrated bilingual programs are also available in the Netherlands for Frisian, the language spoken in Friesland, a part of the Netherlands (Vallen and Stijnen, 1987; Zondag, 1989), and Denmark provides German/Danish integrated bilingual schooling for its German-speaking minority in the Jutland area. Sondergaard and Bryam (1986) report that 22% of the students in these schools report German as their only home language. Gerth (1988) reports that in the north of France, "French and immigrants' children, from Portugal or Algeria or Morocco or Italy, are put together in the same class. They all get about six hours a week in that foreign - or native - language. All subjects can be taught in that language as far as the teachers' work is related to the official French syllabus" (p. 200).

"Home language enrichment" programs were often originally designed to help guestworkers and their families re-integrate into their original homelands but continue for those who are clearly permanent residents. These are often after-school programs, but are occasionally integrated into the school day; in France, for example, home language enrichment is provided for three hours per week as part of the school day, and in the Netherlands the law allows for two and a half hours per week of home language enrichment during the school day and two and a half hours after school per week. State supported home language instruction is provided in Australia (Italian, Dutch, Hebrew, Ukrainian, Lithuanian, Greek, Latvia, Polish, Hungarian, Vietnamese, and Turkish, among others), Belgium (Arabic), Canada (Chinese, Greek, German, Italian and Ukrainian), Denmark (Arabic, Turkish, Serbocroatian, Greek; according to Pavlinic-Wolf, Brcic, and Jetic, 1988, "in the school year 1985-86, mother tongue instruction in Copenhagen was organized for the speakers of 25 non-Danish languages," p. 152), France (Italian, Arabic, Spanish, Serbocroatian, Turkish, Portuguese; see also Gerth, 1988, who reports that Catalan, Basque and Breton are taught in French schools in certain areas for three hours per week), Germany (Turkish), the Netherlands (Turkish, Spanish, Portuguese, Italian, Arabic), Sweden (Spanish, Arabic), and the United Kingdom (Punjabi, Cantonese, Italian, Bengali). In addition, Darnell and Hoem (1996) describe schools for Saami speaking children in Sweden, largely in Swedish but with instruction in Saami language and culture, and in Norway, using the Saami language as the language of instruction.

Another category is language revival programs, in which curriculum is taught in a language that few in the community speak. Their design is similar to Canadian French immersion programs. They exist in New Zealand for Maori (Shafer, 1988, Cazden, 1989, Benton, 1989), in Canada for Ukrainian (Muller, Penner, Blowers, Jones and Mosychuk, 1977), and in English-speaking Wales in Welsh (Thomas, 1991, Macnamara, 1967).

If one expands the definition of bilingual education even more, one could include situations such as Hong Kong, where both Cantonese and English are widely used; while clearly a Cantonese-speaking city, 27% claimed that they knew English "quite well" in 1993, up from 5% in 1983; Bacon-Shone and Bolton,

1998). Primary education has been in Cantonese in Hong Kong, with most students attending English medium schools at higher levels; in the last two decades, both Cantonese and English have been used in higher education (texts in English, oral instruction in Cantonese or both) (Boyle, 1997, Johnston, 1998). Similarly, one could include schools in the Catalan-speaking areas of Spain that teach in Catalan, with Spanish introduced by grade three; Catalan/Spanish bilingual programs also exist for native speakers of Spanish living in these areas, with all instruction in Catalan for the first two to five years (Artigal, 1997) as well as Basque/Spanish bilingual schools in the Basque-speaking areas of Spain, which service both native speakers of Basque and Spanish (Arzamendi and Genesee, 1997).

This survey does not include "immersion" programs, which are "bilingual" in that two languages are used for subject-matter instruction, but one is actually a foreign language. Originally done in English-speaking Canada for French, they are now in operation in several other countries, including the United States (Johnson and Swain, 1997).

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7. The Taft School, SES, Bilingual Education, and Reading Scores

"Matta Tuchman says Taft shows what other schools could do if allowed to convert to English immersion " (Anderson, 1997, p. A 18).

Children at the Taft School in Santa Ana scored at the 48th percentile in English reading on the CTBS in Spring, 1997, well above the district average of 22.5. The claim has been made that Taft produces superior results because they refuse to do bilingual education.

Los Angeles Times reporter Nick Anderson, however, notes that Taft "has some demographic advantages. About 36% of Taft students are classified as 'limited English proficient,' less than half the average for Santa Ana elementary schools. The campus also draws from a neighborhood more prosperous than the city as a whole" (A 18).

The LA Times published Reading Comprehension scores for each of the 31 schools in the Santa Ana district, along with the percent of children in each school eligible for reduced or free lunch (a proxy for socio-economic class), and the percentage of children classified as limited English proficient. The district means, calculated from the LA Times' data, are presented below, with standard deviations in parentheses:

	CTBS Reading, grade 5	% free/reduced lunch	% LEP
District	22.5 (11.09)	80.1 (17.9)	77.8 (20.1)
Taft	48	43.8	36.2

This data confirms Anderson's observation that Taft has demographic advantages. Taft lies two standard deviations above the mean for free/reduced lunch as well as for percent of limited English proficient students.

Correlational analysis confirms that these variables are very strongly related: Schools with higher reading scores had fewer children on free/reduced lunch and fewer LEP children. These results are similar to those reported in Krashen (1996), in which exit rates for Los Angeles clusters were closely related to socio-economic factors.

	CTBS Reading	% free/reduced lunch
% free/reduced lunch	-.926	
% LEP	-.946	.960

There are several reasons why socio-economic factors are strongly related to literacy development, other than the superior material benefits that accompany economic advantages. The first is the print environment. It is well established that the availability of print and reading scores are closely related (Krashen, 1993) and that more advantaged children have more access to print at home and at school (McQuillan, 1996; Smith, Constantino and Krashen, 1997). Second, higher SES children are more likely to have had quality education before coming to the US. They have had, in other words, de facto bilingual education (Krashen, 1996): Subject matter knowledge and literacy development in the primary language, two of the three components of quality bilingual education programs. The powerful influence of economics found here does not, therefore, negate the value of bilingual education: It is consistent with the view that providing good education in the first language is an advantage.

It would be of value to include in such an analysis the impact of bilingual education programs. Unfortunately, this data was not provided, other than the knowledge that bilingual education is not done at Taft: "Matta Tuchman and her colleagues at Taft Elementary have kept the school an English-immersion oasis ..." (Anderson, 1997, p. A16).

Regression analysis shows that Taft's reading score is accurately predicted by socio-economic factors:

The following regression equation was computed, based on the Times' data:

$$\text{Reading score} = 68.6 - .576 (\% \text{ on free/reduced lunch})$$

Taft's predicted score, according to this equation, is 43.3. Taft's actual score, 48, is not significantly larger than the predicted score (standard error of the estimate = 4.25), which means that the lack of a bilingual education program at Taft did not make a difference: It did not help and it did not hurt.

Taft's "success" has, most likely, nothing to do with the absence of bilingual education. In fact, some of it could be due to "de facto" bilingual education, the superior education in the primary language that more advantaged children tend to have.

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8. Westminster: Did They Drop Bilingual Education?

The Westminster School District has claimed that it has achieved success without bilingual education. In an article in the Long Island Newsday with the title "Booting Bilingual Education" (Elias, 1997), it is claimed that "after 18 months of instruction only in English ... pupils have made better academic progress and learned more English than they did when taught in their native languages."

There are two serious problems with this claim: 1. One cannot claim the current program is better than bilingual education: Westminster never had a full bilingual program and has actually increased the amount of first language support it provides. 2. The gains made by LEP children in Westminster in the past year are modest, and no comparison has been made with any previous programs.

"Bilingual Education" in Westminster

What changes have actually occurred in Westminster? According to Language Census data gathered by the State of California, Westminster has dramatically changed its services to LEP students in recent years, but has not reduced bilingual education; in fact, it has increased the amount of first language support it gives its LEP children. In addition, more children in Westminster are now getting SDAI (specially designed academic instruction, i.e. content taught in English in a comprehensible way for limited English proficient students), more are getting first language support, and substantially more are getting services of some kind.

year	ESL only	ESL/SDAI	L1 support	bil ed.	no services	total n
1997	0	34%	57%	2%	7%	4,176
1993	34%	0	28%	0	38%	3,456

According to district director of special projects Tracy Painter, Westminster director of special projects, the impetus for applying for a waiver of bilingual classes in 1995 was not a rejection of bilingual education, but was because of a shortage of teachers who spoke Vietnamese: About half of the LEP children in the district are Vietnamese speakers (Elias, 1997).

Recent reports confirm that help in the primary language is currently provided by bilingual teaching assistants. In an article in the Los Angeles Times, Nguyen (1997) quotes Painter as saying that "our programs could not succeed without our bilingual instructional assistants." In one second grade class described by Nguyen, in which 17 of 19 students are Vietnamese speakers, a Vietnamese-speaking teaching assistant "spends 17 1/2 hours a week in the class, where he speaks Vietnamese to explain concepts to small groups of students." Thus, it is clear that Westminster never had a Vietnamese bilingual program, because of the teacher shortage, and is doing a form of bilingual education with teaching assistants.

Progress in English Reading

Westminster compared English reading results in Spring, 1997 to those in Spring, 1996 (Westminster School District, 1997) - this comparison thus measures growth of children in the academic year 1996-1997. (The 1996 program in Westminster was similar to the 1997 program described above: 12% of the LEP students were in ESL only, 30% in SDAI, 57% had first language support and 1% were described as being in a full bilingual program.)

Westminster claimed that their LEP students had increased their scores three NCE points, from the 27th to the 30th percentile. This calculation, of course, was based on students who had taken the test the year both times, 1588 children out of an LEP population of 4,176 children (29%). Gains in Language were similar, from the 35th percentile to the 38th percentile. These gains are not impressive. At this

rate, it would take the children another seven years to reach the 50th percentile in reading, and another four to reach national norms in language.

Westminster also claimed that 76% of the LEP children progressed at least one level on the IPT measure of English oral fluency, a test with seven levels, but Westminster only included gains on the first five levels in their analysis. The average gain was 1.1 level (Westminster, 1997). Thus, one quarter of the LEP children in Westminster failed to make measurable progress in oral English in a one year period! Unfortunately, we do not know what the average gain was on these measures under the previous program. We have no idea how well Westminster LEP children performed in 1993, for example, compared to 1997. All we know is that LEP children made very modest gains in one year under the new program.

Can we interpret this data as showing that the new "bilingual" program is not effective? Unfortunately, there is very little we can conclude. The new program relies on paraprofessionals, not qualified bilingual teachers, to provide first language support: We do not have real details on its implementation (some models of bilingual education are more effective than others), and many other crucial factors (e.g. the print environment), are not described. From the reports in the newspapers, it appears that literacy is not provided in the first language, nor is there direct subject matter instruction through the first language, factors considered crucial to successful bilingual education. Finally, there is no data comparing achievement under the old and new programs. All we can really conclude about Westminster is that reports of what has occurred there have been inaccurate.

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