

Hispanic High School Student Graduates of Two-Way Bilingual Programs: Attitudes Toward School, Education and the Two-Way Program

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Nationally, the academic performance of minority students is considerably below majority norms (e.g., August & Hakuta, 1997; Darling-Hammond, 1995; National Center for Educational Statistics, 2000; Padilla & Lindholm, 1995; Portes & Rumbaut, 1990; Riley, 2000). Newer research suggests that the drop out rate for Hispanic students has risen at the same time as it has decreased for other minority groups (“Hispanic Drop Out Rate Rising”, 2000; President’s Advisory Commission on Educational Excellence for Hispanic Americans, 1996; Riley, 2000). In California, where Hispanics represent 44% of the enrolled students, the drop-out rate for Hispanics is 15% compared to only 6.7% for non-Hispanic whites.

While there are a number of risk factors implicated in school drop out for ethnic and language minority students, one of these risk factors includes limited English language proficiency at school entry. Recent reports and reviews of research in California and the US in general provide an overall picture of the persistence of unfavorable educational conditions for language minority students throughout the US. (August & Hakuta, 1997; Lindholm & Borsato, 2003; National Center on Educational Statistics, 2000; President’s Advisory Commission on Educational Excellence for Hispanic Americans, 1996; Ramirez et al., 1991; Riley, 2000). However, reviews of research on high quality bilingual programs show that EL students who participated in bilingual programs had higher outcomes than both EL and English speaking Hispanic students who did not participate in these programs (Lindholm-Leary & Borsato, 2003; Willig, 1986).

Longitudinal or retrospective studies that assessed students in high school who had been in bilingual programs in elementary school have yielded results favoring bilingual education. Burnham-Massey and Pina (1990) reported an initial lag in performance, as measured by standardized tests in reading, language and mathematics, of students in transitional bilingual education (TBE), but found that the students in TBE programs caught up to their English-only Hispanic low-income peers by fifth grade and surpassed them in mathematics (but scored comparably in reading) by seventh and eighth grades. By 11th grade, all previous TBE participants passed the High School proficiency subtests. Similar results favoring bilingual education were obtained by Curiel et al (1986) who matched seventh through tenth grade students on several background characteristics (gender, birthplace of mother/father, dual/single parent family, parent education, father's occupation). Their results showed that the Mexican American students who had participated in a bilingual education program in elementary school had higher grade point averages and attendance, and a lower high school drop-out rate than English speaking Hispanic students who had received English mainstream education during elementary school. Further, the longer the ELs had participated in bilingual education instruction, the more positive were the results.

Length of time in the US is another important variable related to the achievement of Hispanic and immigrant students in general. In a study of Hispanic bilingual, Hispanic English monolingual, white bilingual, white English monolingual, Fernandez & Nielsen (1986) found that the longer the family has resided in the US, the *lower* was the students' school achievement. Adams et al (1994) analyzed data from the ASPIRA Association Five Cities High School

Dropout Study and found that more recent immigrants performed at higher levels than second or third generation Hispanic students. These results are consistent with a body of research showing that first-generation immigrant studies are actually more successful than second and later-generation students (Fernandez & Nielsen, 1986; Nielsen & Fernandez, 1981; Rumbaut, 1995), though a current study that examined generational status while controlling for other background and school characteristics found that the achievement trajectories of immigrant and second generation students did not differ from third generation students (Glick & White, 2000). These results suggest that not only are Hispanic language minority students at risk, but perhaps their second and third generation low-income English monolingual Hispanic peers may be at least as vulnerable for academic underperformance and school drop-out.

Over the past several years, the U.S. Department of Education has funded numerous Two-Way Bilingual--also called Two-Way Immersion or Dual Language Education--programs at elementary schools across the country. One major purpose of these programs is to provide a high quality educational experience for language minority students and to promote higher levels of academic achievement. These Two-Way programs integrate native English-speaking students (including Hispanic students) and English Language Learning students for all content instruction in two languages. The goals of these programs are to promote high levels of bilingual proficiency, academic achievement, and positive attitudes toward school, self and others. Studies of several elementary school programs show that the two-way programs that are implemented correctly have very positive student outcomes at the elementary and early middle school levels for both English speakers and English learners (Christian et al., 1997; Kirk Senesac, 2002; Lindholm, 1991, 1994; Lindholm-Leary, 2001; Lindholm & Molina, 2000; Thomas & Collier, 1997, 2002). While Thomas and Collier (2002) have reported lower drop-out rates among students in late-exit/enrichment language education programs, there is little additional information about whether low-income Hispanic students' participation in these programs has had an impact on their success in high school or in their preparation for college; that is, whether these programs have assisted low-income Hispanic ELL and English speaking students in becoming more academically successful and better prepared for college.

Purpose of Study

The purpose of this study is to examine the influence that participation in a two-way bilingual, elementary program has had on graduates' (current high school students) college plans and attitudes toward school. A secondary purpose is to compare the outcomes for three groups of students: 1) Hispanic Spanish bilinguals (who began program as English Language Learners)—Hisp-SB; 2) Hispanic English bilinguals (who began program as English only or English dominant speakers)—Hisp-EB; and 3) Euro American English bilinguals (who began the program as English only speakers)--Euro.

Method

Participants

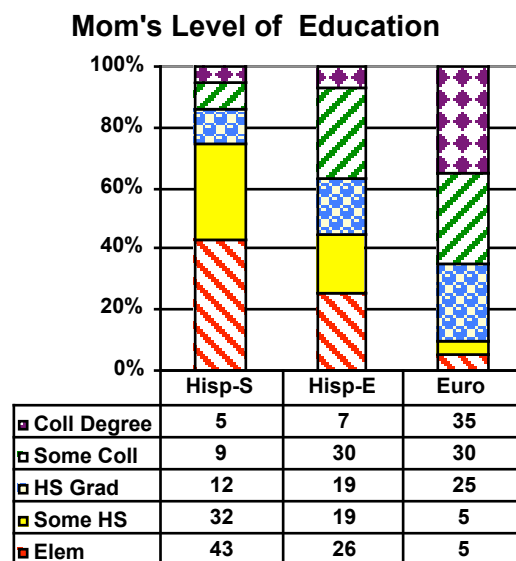
A total of 142 ninth-grade through twelfth-grade students participated in the study; they had been enrolled in a two-way bilingual program since kindergarten or first grade at one of three public elementary schools in California. Considerably more students from School A (n = 81) and School C (n = 56) returned questionnaires than students at School B (n = 5). Approximately equal numbers of boys (46%) and girls (54%) were represented among the students. About half of the students were 9th or 10th graders (49%) and half were 11th and 12th graders (51%)—with approximately one fourth of students representing each grade level. Of the 142 students, 84% identified as Hispanic/Latino/Mexican; 13% as Anglo/Euro American/White non-Hispanic; 2%

as African American/Black, and 1% each as Asian and Native American. About 19% of the students identified themselves as biracial.

Students were categorized into one of three groups on the basis of their ethnic group (for biracial students, the first ethnic group they identified with) and language background. While all students were bilingual at the time they responded to the questionnaire, they were classified according to whether they began school as a native English speaker or a native Spanish speaker/English learner. For this sample, 66% of students were Hispanic Spanish bilinguals (Hisp-SB); 20% were Hispanic English bilinguals (Hisp-EB); and 13% were Euro American English bilinguals (Euro- EB). The remaining eight students were not classified into one of these or another category because there were too few African American, Asian American, or Native American students who participated in the study.

Significantly more Hisp-SB students (77%) had participated in the free lunch program during elementary school than Hisp-EB (56%) and Euro (29%) students ($\chi^2 = 15.58, p < .001$).

Students in these three ethnic/language groups differed significantly with respect to their mother's educational background. As the figure to the right shows, significantly higher levels of education were represented among the parents of Euro American students, followed by Hispanic EB students, and the lowest levels of education among Hispanic SB students ($\chi^2 = 38.8, p < .001$). In fact, 43% of Hisp-SB students, 26% of Hisp-EB and 5% of Euro students had moms with an elementary-level education. In contrast, 65% of Euro, 37% of Hisp-EB and only 14% of Hisp-SB students had mothers who had earned a college degree or attended some college.



In terms of previous achievement for these students, according to standardized norm-referenced achievement tests in English reading, there was a statistically significant difference in grade 2, with Euro students (NCE = 44) scoring significant higher than Hisp-SB students (NCE = 16), who scored extremely low. Note that by sixth grade, there was no statistically significant difference, as all three groups were scoring about average. Interestingly enough, while the Hisp-SB started at a significant disadvantage due to their limited English proficiency, they outscored the Hisp-EB group, which was proficient at school entry. Results are similar according to differences in Mom's educational level: only at grade 2 were there significant differences favoring students with more educated moms. As a group, by sixth grade, these students have the reading skills of the average California English speaking student, and therefore ought to be able to keep up in their various content areas that require reading skills in English.

Table 1
Mean NCE Scores (and Standard Deviations) for Reading Achievement in English

ITEMS	Hisp-SB	Hisp-EB	Euro	Differences
Grade 2 (n=24, 11, 9)	15.5 (11.1)	29.8 (22.7)	44.4 (31.0)	Euro>Hisp-SB**
Grade 6 (n=26, 14, 6)	46.7 (10.6)	44.6 (18.3)	53.6 (15.3)	NS
Grade 8 (n=10)	50.9 (15.2)			

	Elem-Some HS	HS Grad	College	Differences
Grade 2 (n=26, 7, 13)	18.4 (15.3)	24.1 (20.7)	37.7 (29.6)	College>Elem*
Grade 6 (n=26, 14, 6)	46.7 (10.6)	44.6 (18.3)	53.6 (15.3)	NS

Note. Scores are averaged for all students who had 2nd or 6th or 8th grade scores.

Instrumentation

Students in the study completed a questionnaire that comprised questions concerning identity and motivation; attitudes toward school; current schooling path and college ambitions; attitudes toward bilingualism and the two-way bilingual program; parental involvement and attitudes; school environment—discrimination, school safety and supportive school personnel. Most of the items were rated on a five-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5). Some items asked students specific questions about the type of college students wanted to attend, how important it is to do well, their support systems, and their participation in extracurricular activities. Other items requested demographic information (e.g., ethnicity, mom's educational background, participation in free lunch program, household composition).

Procedures

Students were contacted through their classroom teacher to complete the questionnaire. Students filled out the questionnaire on their own and returned them in a sealed envelope either directly to the author or to their teacher, who sent them on to the author.

Results and Discussion

Overall, there were very few ethnic/language group differences among the two-way students. Results are summarized below.

1. Academic Competence and Attitudes Toward School

Students scored close to 4 (indicating agreement) on items about their academic competence, their motivation and persistence, their participation in school tasks (discussion, homework), and their attitudes toward school subjects (reading, math) and school in general. Items representing behaviors associated with academic challenge (like challenging problems, take time to figure out school work, go back over work they don't understand, take part in classroom discussions, do homework on time) were rated slightly lower than the more attitudinal items about academic competence (good student, good at school work, read well in English, can do almost any problem). Two-way students' responses did not vary significantly according to their ethnic/language background, with only one exception. Though it was not statistically significant, when answering the item "I read well in English", Euro students had the highest score ($M = 4.4$), followed by Hisp-EB ($M = 4.1$), and lastly by Hisp-SB ($M = 3.8$). There was a moderate, but significant correlation between students saying they like to read and they read well in English ($r = .41$, $p < .001$), while there was a highly significant correlation between their ratings of reading well in English and their scores in English reading achievement in 8th grade ($r = .63$, $p < .01$) and their self-reported grades in language arts/social studies ($r = .30$, $p < .01$).

2. Attitudes Toward and Preparation for College

Most students of all three ethnic/language backgrounds fairly strongly agreed that: they want a college degree, getting a good education is important, and good grades are important. The only ethnic/language difference was that Hispanics, both SB and EB ($M = 4.6$) more strongly agree that they want a college degree than the Euro ($M = 4.1$) students. In examining the knowledge base supporting college entrance (i.e., knowing the entrance requirements and having attended college presentations), two-way students did not vary.

Most students plan to attend a four-year college (60%), regardless of their ethnic/language background. However, 10% fewer Euro students expect to attend a two-year college compared to the Hispanic students. Hisp-SB students were most likely (68%) to want to go to college right after high school compared to Hisp-EB (56%) and Euro (40%) students.

While the results are very positive regarding the percentage of students who view college and good grades as important for their future success, the actual grades students say they receive tell a slightly different story. Many students report average grades (Bs&Cs) in language arts, social studies, math and science. However, grades in these areas vary significantly by group. Hisp-SB students received more Bs/Cs/Ds than the other groups. Euro students were more likely to obtain mostly As or As/Bs in language arts and social studies, though Hisp-S received higher grades than Hisp-E students ($\chi^2 = 14.08, p < .05$). While Hispanic students received more Bs/Cs/Ds in math and science than Euro students, there was no statistically significant difference in the distribution of grades across the three ethnic/language groups. The students self-reported grades in language arts/social studies was highly correlated with their reading achievement scores in English ($r = .72, p < .01$).

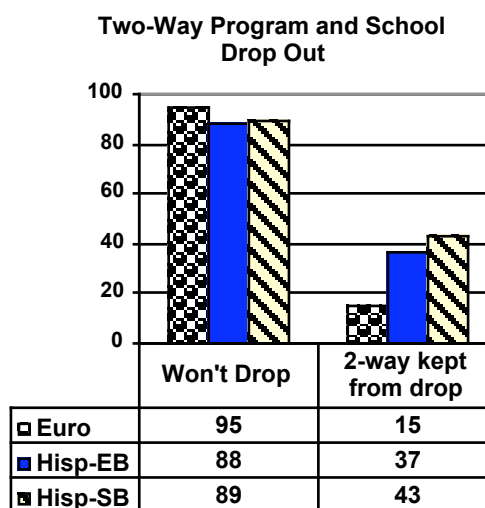
When students were asked about the likelihood of taking an Advanced Placement (AP) course, their responses varied according to ethnic language group ($\chi^2 = 16.52, p < .05$). About half of Euro students indicated that they probably or definitely would take an AP course, compared to only 20% of Hisp-SB and 31% of Hisp-EB students. With respect to enrollment in Spanish AP, one fifth of Hispanic – both EB and SB – were currently enrolled in AP Spanish compared to only 6% of Euro students. Few students had totally ruled out taking AP Spanish.

3. School Drop Out

Obviously, these students are still enrolled in school, as they answered this questionnaire. In one question asking whether students intended to drop out of school, overall 89% said they will not and 11% indicated they might. While there were no statistically significant group differences in this item, more Euro (95%) than Hisp-EB or Hisp-SB (88-89%) felt they would not drop out of school. Further, almost half (47%) of students reported that they like school and will not drop out; almost half (41%) are bored but will stick with it. When students were asked why they considered, if they did, dropping out of school, about a third selected “work” as the major reason (32%). In questioning students why they did not drop out of school if they had considered it, over half of the students said they needed an education (57%).

Most students indicated that they were not going to drop out anyway. Thus, they did not feel that the two-way program kept them from dropping out of school. However, there was a significant difference between the three ethnic/language groups in the perception that the two-way program kept the student from dropping out of school. More

Hispanic, both SB (43%) and EB (37%) than Euro (15%) students indicated agreement that the two-way program kept them from dropping out of school ($\chi^2 = 15.3, p < .05$).



5. Attitudes Toward the Two-Way Program

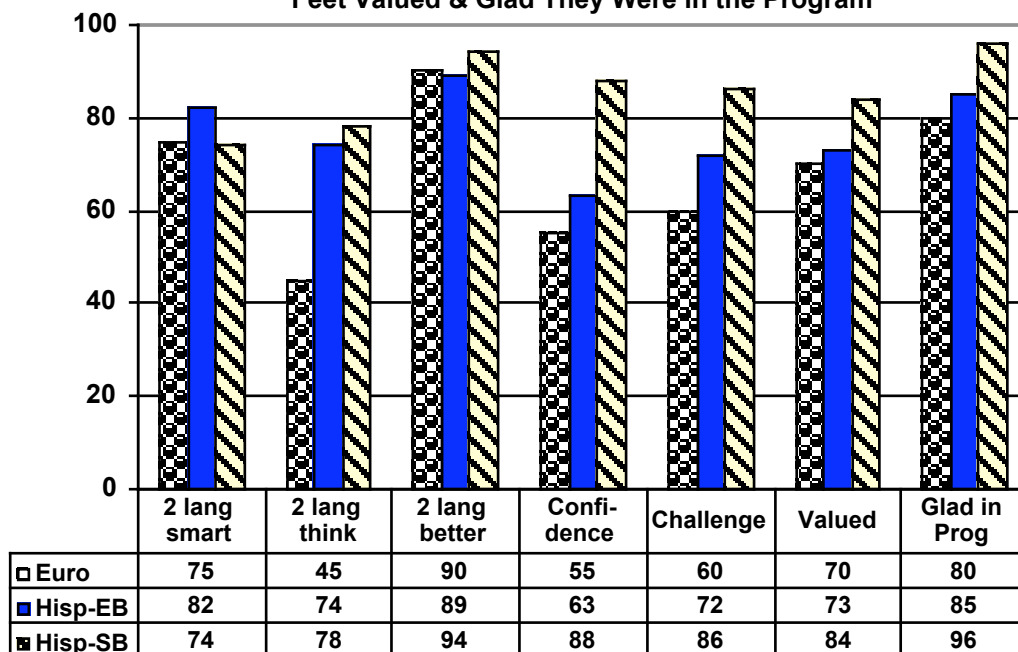
Most students agreed that learning two languages made them smarter ($\underline{M} = 4.2$), and helped them learn how to think better ($\underline{M} = 4.1$), and helped them to do better in school ($\underline{M} = 4.5$). Students also tended to agree that learning in two languages gave them a sense of accomplishment ($\underline{M} = 4.1$), gave them confidence to do well in school ($\underline{M} = 4.1$), and challenged them to do better in school ($\underline{M} = 4.2$). While there were no statistically significant group differences for most of these items, Hispanic, especially SB, students tended to have higher levels of agreement than Euro students. The difference was statistically significant for the item that the program

challenged them to do better in school.

Most students also agreed that learning through two languages enabled them to get a better education than they would have otherwise. In addition, Hispanic, especially SB, students more strongly agreed that being in the two-way program gave them a better education than they would have gotten had they been in some other program, though the group differences were not statistically significant.

For the items about feeling valued in the program and glad they participated, Hispanic, especially SB, tended to agree more strongly than Euro students ($F(2,119)=6.6, p < .05$ and $F(2,121)=4.0, p < .05$). When students were asked how they compared in their schoolwork with their peers who were not in two-way program, a fifth of students felt they were behind compared to students in non-two-way programs; 41% felt they were ahead of their peers. The remaining third of students felt their academic performance was comparable to that of their peers. While not statistically significant, twice as many Hisp-EB (64%) compared to Hisp-SB and Euro students (35-37%) felt they were ahead of their peers in their school-related skills.

Learning in 2-way Made Students: Smarter, Think Better, Do Better in School, More Confidence, More Challenged, Feet Valued & Glad They Were in the Program



Conclusions

Results suggest that students who participated in the two-way bilingual program intend not to drop out of school, have the desire to attend college, understand the importance of getting good grades, have positive academic attitudes, and tend to perceive that they received a better education in the two-way program and that they are doing at least as well as, if not better than, their non-two-way peers. These results are all important in showing that the students, particularly the most at-risk previous EL students, appear to be more successful than the average Hispanic students depicted in the literature and in the state of California, despite their very low socio-economic level and parental education level. Furthermore, while not enough of these

students are receiving the A/B grades to get them into the better universities, there are some EL students that are. These results, together with their grade-level performance in English reading achievement by sixth grade, suggest that the two-way bilingual program may provide the academic preparation and schooling attitudes that enable these students to be more successful than the average at-risk Hispanic and low socio-economic students described in the literature.