

Bilingual Education Accelerates English Language Development

By Stephen Krashen

University of Southern California

A primary goal of bilingual education is English language development. In fact, we can define bilingual education as a means of using the child's first language to accelerate the acquisition of English. How does this work? Let's start with some basic principles.

Making English More Comprehensible

Bilingual education helps English in two ways. First, teaching subject matter in the child's first language provides knowledge, which helps the child understand instruction when it is presented in English. Let's compare two children, both limited in English, entering a 4th grade classroom where math is taught only in English. Child number one, thanks to a good education in her first language, knows her math. Child number two does not. Child one will do better in the 4th grade math class. She will learn more math and acquire more English, because what she hears is more comprehensible. Child two gets neither math nor English.

A Short Cut to English Literacy

The second way bilingual education accelerates English is by providing literacy development in the first language, which is a short cut to English literacy. It is much easier to learn to read in a language you already know, and once you can read, you can read. The ability to read transfers rapidly across languages, even when the writing systems are different. We now have evidence that reading transfers from Spanish to English, Japanese to English, Vietnamese to English, Chinese to English, Turkish to Dutch, Turkish to Norwegian, and Arabic to French.

Early Exposure to Comprehensible English

Good bilingual programs provide exposure to comprehensible English from the very first day and introduce subject matter teaching in English as soon as it can be made comprehensible.

Scientific Studies Support Bilingual Education

Children in bilingual programs typically do better than children in all-English programs on tests of English reading. This is a stable result in the research literature. It has been established using scientific, controlled studies, which compare the progress of two groups of children with very similar backgrounds. The instructional treatment given to the children is identical, except that instruction provided to one group includes the use of the child's first language and the instruction provided to the "comparison" group is all in English. Students in these studies have equivalent knowledge of English at the start of the study (or their English knowledge is statistically controlled). Finally, both groups are given the same tests at the end of the study, usually tests of reading comprehension in English.

Table I presents the results of several "meta-analyses" of scientific research comparing bilingual education and English-only instruction. Meta-analysis is a precise method of reviewing research studies that allows reviewers to calculate the "effect size," or degree of superiority of one treatment over another.

As seen in Table I, reviewers agree that bilingual education has a modest advantage over English-only methods. (The average "effect size" is about .26, which means that the average

student in the bilingual education group scored about a quarter of a standard deviation above the average of students in the all-English group.)

Table I. Advantage for Bilingual Education in Five Meta-Analyses

	N	ES
Rolstad et al, 2005	17	0.23
Slavin & Cheung, 2005	17	0.33
Willig, 1985	23	0.33
Greene, 1997	11	0.18
McField, 2002	10	0.28

N = number of studies covered; ES = effect size

Source: Krashen and McField (2005)

Table II presents the actual studies that different reviewers included in their reviews (from Krashen and McField, 2005). There is some overlap in the studies analyzed in the reviews, but reviewers clearly did not examine the same studies. In fact, most studies appeared in only one or two of the five meta-analyses. When individual studies did appear in more than one review, however, there was agreement about their interpretations. Also included in Table II are the results of a study by Rossell and Kudar (2005). Rossell is a critic of bilingual education; it is interesting that the Rossell and Kudar results were close to those of the others.

Table II. Studies of Reading Comprehension Included in Meta-Analyses

	Slavin & Cheung				McField	Rossell & Kudar
		Rolstad et al.	Willig	Greene		
Alvarez (1975)	-0.23					-0.05
Huzar (1973)	0.31			0.18	.31, .01	0.16
Plante (1976)	0.5			0.52		0.52
Ramirez et al (1991)		0.01		0.12		-0.25
Campeau et al (1975) CC	0.45					0.45
Maldonado (1994)	1.66					0.12
Campeau et al (1975) Alice	0.49					0.45
Saldade et al (1985)	0.89	1.47			0.42	1.47
Morgan (1971)	0.26				0.26	0.27
Doebler & Mardis (1980)	0.15					0.15
Covey (1973)	0.72		0.74	0.74	0.74	0.66
Medrano (1986, 1988)		.10, -.18				
Kaufman (1968)	0.23		0.31	0.2	.49, .11	0.2
Danoff et al (1977)			0.01	-0.12		0.12
McSpadden (1979)			0.2			
Olesini (1971)			0.97			

Stebbins et. al. (1977)			-0.06			
Stern (1975)			-0.48			
Lindholm (1991)		-0.59				
Medina et al (1985)		-.3, - .57			-.22, -.13, -.51	
TEA (1988)		-0.06				
Powers (1978)				-0.33	-0.44	-0.35
Rossell (1990)				-0.05		-0.25
Bacon et al (1982)				0.68	.82, .98	0.7
Cohen (1975)	0					-.21, .08, -.28

Source: Krashen and McField (2005)

A Recommendation

The single most important step we can take to improve language development for limited-English-proficient children is to enrich their print environment. Most English learners are children of poverty. It is well established that children of poverty have very little access to interesting and comprehensible reading material in their homes, in their communities, and in school. It is also well-established that those who have more access to books read more, and those who read more read better (and write better, have larger vocabularies, spell better, and have better control of grammar) (Krashen, 2004).

The relationship between access to books and literacy has been confirmed by studies showing that school library quality is related to performance on tests of reading (Krashen, 2004; for a state of Texas study confirming the positive relationship between school library quality and reading scores, see Smith, 2001).

References

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