



## Summary of Research In Bilingual Education

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The history of the debate on bilingual education is characterized by inattention to relevant research. Both opponents and advocates of bilingual education have been influenced by popularly held opinions more than by expertise, and have invoked research, if at all, haphazardly, unsystematically, and without the desired thoroughness or rigor. We therefore welcome this opportunity to outline the conclusions to be drawn from research on bilingual education and bilingualism in children.

Research refers to a diverse collection of activities. Out of this diversity, *evaluation research* has dominated the spotlight in the current debate. This type of research has typically compared bilingual education to alternative forms of education, usually some form of submersion education with an ESL (English as a Second Language) component. Critics of bilingual education have used the rather equivocal conclusions from evaluation research to support their point.

Another strain of research, which might be called *basic research*, has received less emphasis in the debate over bilingual education. Basic research focuses on the linguistic and psychological processes in the development of bilingual children. This research attempts to understand how children learn a second language, how their two languages interact, how language is related to thinking, and how children learn at different rates and develop different styles in their language and cognitive abilities. Basic researchers include psychologists, linguists, anthropologists, and sociologists. In general, they are not directly tied to the practice of bilingual education, although their research has often been conducted in the context of bilingual education.

The information produced by basic research is crucial to policy considerations. The importance of basic research is heightened by the fact that there are severe technical and conceptual problems with the

evaluation studies; indeed, these problems are so severe that relying on the results of these evaluation studies to guide policy-making could be dangerous.

### Evaluation Research

Attempts to evaluate the effectiveness of bilingual education programs, such as the often-cited large-scale study by the American Institutes for Research and the Baker and de Kanter synthesis of smaller evaluation studies, have been criticized by many researchers. These studies generally concluded that bilingual programs are no more effective in promoting English language and other school skills than alternative programs. The alternative programs most often included in the evaluation were "submersion" programs, in which non-English speaking children are placed in regular, mainstream classrooms, perhaps with a few hours a week of ESL help. The lack of positive evaluation results has led opponents of bilingual education to argue for alternative instructional methods.

One problem with evaluation research has been the selection of the comparison group against which the bilingual education treatment group is assessed. As one researcher, A.C. Willig, has pointed out, very few studies use the ideal method of "random assignment." In some studies, the comparison group included students who had formerly been in bilingual programs, which made the findings uninterpretable by biasing the results in the direction of the comparison group (since students who have exited from bilingual programs early tend to be the more academically gifted students).

An even more serious problem is the extreme diversity of instructional methodology *within* programs that have been labeled as bilingual. Recent studies by Wong Fillmore (1985) show large variations in instructional practice across bilingual classrooms. Some classrooms in "bilingual programs" looked very similar to some "submersion" classrooms. Many "bilingual" teachers were found to have limited proficiency in the children's native languages. Thus,

although the evaluation studies allegedly compared bilingual programs with alternative programs, in fact they only compared programs labeled bilingual with programs labeled submersion. Without actual classroom observation and description of the instructional characteristics of the various programs, we do not really know what was being compared with what. Under these circumstances, any conclusions about the effectiveness of bilingual practice are premature.

Willig concluded, "the overwhelming message derived from these data suggests that most research conclusions regarding the effectiveness of bilingual education reflect weaknesses of the research itself rather than effects of the actual programs."

At the same time that we urge caution because of the weaknesses of current evaluation research, we realize that the public cannot afford to wait for the results of more refined research. Given the information that we do have available, we can, however, determine where the weight of the evidence falls.

Perhaps most illuminating in this regard is Willig's finding that *the better the methodology used in the studies the greater was the effect in favor of bilingual programs.*

Thus, at present, our best informed judgment forces us to conclude that bilingual education is indeed superior to submersion, that poorly conducted evaluation research has obscured this fact, and that evaluation research conducted with greater rigor would bear out the superiority of bilingual education as an instructional method in many educational contexts. At the same time, we underscore the importance of making improvements in the quality of research to evaluate bilingual programs in the future.

### Basic Research

Although basic research has often been conducted outside the context of the American bilingual education classroom, it has generated conclusions\* that have direct bearing on the current policy debate on bilingual education.

People tend to think of language, like intelligence, as a single, simple, unitary capacity, easily measurable by a single test. However, recent research indicates that language is not a unitary skill, but rather a complex configuration of abilities. Most importantly, it seems that language used for conversational purposes is quite different from language used for school learning, and that the former develops earlier than the latter.

In the context of bilingual education, this means that children become conversationally fluent in English before they develop actual ability to use English in academic situations. Bilingual programs are commonly criticized for keeping students too long, even after their English is "adequate." English skill judged as adequate in an informal conversation, or even a simple test, may not mean that the child's skills are adequate for understanding a teacher's explanation, for reading a textbook, or for writing a composition. Research tells us that conversational adequacy is not the appropriate criterion for mainstreaming students.

We recommend that one major goal of bilingual education should be the development of *the full repertoire of linguistic skills in English*, in preparation for participation in mainstream classes.

### The Two Languages

A major argument against bilingual education has been that it does not develop English rapidly enough because of its emphasis on the native language. However, the major premise of this argument is overwhelmingly rejected by research. First, a strong native language foundation acts as a support in the learning of English, making it easier and faster. Second, most of the learning that goes on in the native language readily transfers to English. This is not only true for content areas like math, science, and social studies, but also in skills in speaking, reading, and writing. The child who already understands why "*tres por ocho es igual a cuatro por seis*"\* will not need to be taught such number equivalences again in English.

There is a persistent belief that, for minority children, bilingualism confuses the mind and retards cognitive development. However, current research shows that there is not such thing as retardation caused by bilingualism; if anything, the development of a second language can have positive effects on thinking skills. The advantage of bilingual children over monolingual children in cognitive flexibility has been shown in a number of different studies, particularly in contexts of additive bilingualism where the second language is added while the native language is maintained.

These findings suggest that there is no cognitive cost to the development of bilingualism in children, and

\*three times eight equals four times six

very possibly bilingualism brings with it the added bonus of the enhancement of childrens' thinking skills.

The most recent results of the National Assessment of Education Progress indicate that Hispanic children still lag far behind English-speaking children in reading achievement.

Many factors contribute to children being good or poor readers, as documented in the recent report of the Commission on Reading, "Becoming a Nation of Readers." One source of help to children's reading is the home; homes where children have access to time alone with adults, where literacy is modeled, displayed and valued, and where parents' attitudes emphasizing learning and school achievement typically produce children who have little difficulty learning to read.

Bilingual education programs should have the flexibility to adjust to large individual and cultural variations; it is not abnormal for some students to need bilingual instruction for relatively long periods of time, whereas others for whom all the individual and cultural factors support second language learning, may exit from bilingual programs quite quickly.

### **Optimal Age**

The common belief that young children are fast and effortless second language learners has no basis in fact. Teenagers and adults are much more efficient learners than elementary school children, and fourth to seventh graders are faster than first to third graders. Research in Canada has shown that one year of immersion in the second language classroom environment at seventh grade is worth three years' immersion starting at first grade. Especially for primary grade children, it is important to realize that second language learning is likely to be a very slow process; but also that it can still be successful if started much later than age five or six.

Bilingual programs should be designed with the expectation that young school age children learn second languages rather slowly, and will need several years of learning before their English is as good as that of children who have been speaking it at birth. Complimentarily, it should be recognized that starting to speak English even as late as high school is no barrier to learning to speak it very well.

Children whose homes support literacy acquisition will be able to learn to read in a second language with little trouble; children whose homes can offer little support need the help of excellent schools, excellent teachers, and a reading program in the home language.

Bilingual programs should concentrate on providing literacy skills in the home language, especially for those children whose parents have little education and poor literacy skills. Reading achievement in English will be higher, and will be attained in less time, if reading is taught first in the home language.

### **Social Interaction**

A criticism often leveled at bilingual programs is that they isolate non-English speaking children from the English speakers who should be their friends, and who should be helping them to learn English.

Children, like adults, only interact with people they like or admire. If non-English speaking children in mainstream classrooms come from groups that are negatively stereotyped by the English speakers, they will not easily find English speaking playmates. A major factor in giving minority children access to social interactions with English speaking peers is upgrading the status of the minority group in the eyes of the majority. One way to do this is to recognize the value of the minority group's language and culture, for example, by using the language in the school and by hiring teachers and administrators from that ethnic background.

Social interaction with English speakers can contribute to children learning English. But just putting minority children in mainstream classrooms does not ensure interaction. Submersion in mainstream classrooms is most likely to result in rapid progress in English for children who do not come from negatively stereotyped minority groups, and for children who have strong language, literacy, and school-relevant skills in their native language. Other children need bilingual programs.

Basic research is often dismissed as irrelevant to practical problems. We feel, though, that much information of importance to policy makers in the area of bilingual education has emerged from research motivated by theoretical questions about language and cognition. ■