## GAO Testimony

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## RESEARCH EVIDENCE CONCERNING

## BIIINGUAL EDUCATION

Statement of Eleanor Chelimsky, Director Program Evaluation and Methodology Division

Before the
Subcommittee on Elementary, Secondary, and Vocational Education
Committee on Education and Labor
House of Representatives


Mr. Chairman and Members of the Subcommittee:
We are very pleased to be here today to discuss research findings on bilingual education.

As you know, there has been extensive debate about the results of research on how to teach children who come to school knowing little English. Much of this debate has taken the form of rhetoric on the part of both opponents and proponents of bilingual education. In this atmosphere, the Chairman of the Committee on Education and Labor asked the GAO to assist the Subcommittee on Elementary, Secondary and Vocational Education by taking a new look at the research evidence on bilingual education and then examining whether statements made by senior officials of the Department of Education accurately reflected that evidence.

The department's policy is that the native-language teaching requirement should be dropped from the current Bilingual Education Act (20 U.S.C. 3223)/ As part of the supporting evidence for that policy, department officials have cited research and evaluations and have stated that, overall, the research in the area is inconclusive. At issue are these department interpretations of the large body of research findings pertinent to the native-language requirement.

REQUIREMENTS OF THE CURRENT LAW
AND ACTIVITIES SUPPORTED
The current Bilingual Education Act requires that in most school projects funded under the act the children's native language be used to the extent necessary. In addition, the law includes a category of projects that need not use the native language at all,
and 4 percent of the total appropriation is reserved for this category.

The law also requires that whether or not students' native language is used, all school projects funded under the act should aim to help students not only learn English but also keep up in their other school subjects and progress from grade to grade so that they do not fall behind during the time it takes them to learn enough English to do regular school work.

These requirements, it should be noted, do not affect all schools in the United States but only those that want to receive project grants under the act. In 1985, the department supported 538 programs of transitional bilingual education, serving about 174,500 students and about 35 special alternative projects that were not required to use native languages, serving about 12,000 students. The department estimates that between 1.2 and 1.7 million children 5 to 17 years old live in language-minority households, make substantial use of minority languages, and have limited proficiency in English. This definition of a target population is itself controversial, and others estimate that the number of children limited in English proficiency is much higher.

## THE EVALUATION APPROACH WE USED

The Subcommittee's question to the GAO presented us with four design constraints. First, the very large number of studies in the field (over 1,000 ) and the amount of time we had to do the work, precluded a new evaluation synthesis by the GAO. Second, the question did not lend itself well to an experimental or national
survey design. Third, specific types of expert judgments in both technical and substantive areas would be required to determine:
(a) what the proper interpretation of the research might be, and (b) whether a particular interpretation should be called accurate or not. Finally, it was clear that any statements to be made about accuracy would need to be focused on the existing body of studies and on some cross-section of department statements.

Given these constraints, we developed an evaluation design, as agreed with the Subcommittee, that would do two things. First, it would take advantage of the multiple reviews and syntheses already published in the field. Second, it would bring together a set of expert technical judgments on what the evidence is about bilingual education and how the department has interpreted it. This approach had the added advantages of allowing us to provide information to the Subcommittee in a much shorter time than if we had attempted a new meta-evaluation and preventing duplication of the literature review commissioned from the Congressional Research Service of the Library of Congress.

We proceeded as follows:

- First, we searched comprehensively for bilingual education research reviews or syntheses that met our standards for coverage and quality (see attachment I). Of 23 reviews published since 1980 we chose 10.
- Second, after reviewing all instances we could find in 1985 and 1986 (and in the previous reauthorization hearings) in which specific senior department officials
cited research and evaluation results or interpreted what is known in the field regarding the impact of using native languages in teaching, we selected a cross-section of 31 of these statements. Third, we talked with authorities nation-wide, including department officials, to identify experts in bilingual education and social science. We sought persons who were expert in combining results from many studies to answer policy questions and persons known for their expertise in the research area of language learning and the more applied area of bilingual education. Recognizing that our method would depend heavily for its credibility on the technical and substantive expertise of our research panel as well as on its balance, we sought representatives of diverse research backgrounds, sections of the country, and perspectives on bilingual education. In particular we tried to achieve an equilibrium in the group that would ensure fairness to the department. Of the 10 experts we selected (see attachment II) five had been cited by department officials in support of their position on what research says in this field (and, in addition, department staff members personally nominated three of these when we asked for recommendations). One of the five had testified for the department's position at a hearing on the previous reauthorization. And a sixth had consulted extensively with department officials
in the preparation of the department's review of educational research entitled, What Works.
- Fourth, we presented each expert with the 10 research reviews, the 31 department statements, and a structured instrument asking their judgment, in writing, of the match between the two.
- Fifth, we included several steps of careful, independent review of our work such as checking our bibliography with 21 experts (different from those on our panel) before choosing our 10 reviews, reviewing our evaluation design and data-gathering instrument with experts in research and methods, sending our draft report text back to each expert on our panel for review and confirmation that we represented their responses correctly, asking an outside consultant to review all the experts' responses and our draft to ensure we were accurate, and finally, having the draft read by three additional consultants representing diverse views on the subject.

We believe that the approach we used was appropriate for answering the Subcommittee's question, which involved the task of reaching broad judgments about the weight of evidence across more than 1,000 studies. The limitation of this approach is that one cannot guarantee the representativeness of this group of experts, any more than one can ever guarantee the representativeness of any sample of experts, no matter how carefully selected. In the present case, as I have explained, we made every effort to assure
balance in our panel, along with the research competence necessary to answer the Subcommittee's question. I should also note that the approach we used is quite a routine one for answering this type of evaluation question. Indeed, there are not many other ways to resolve disputes of judgment over the interpretation of a large body of research except by using expert opinion. The National Institutes of Health, for example, use this approach in their Consensus Development Methodology, as do other agencies. SCOPE OF THIS TESTIMONY

My testimony today is based on the judgments provided by our panel of experts. It is their survey responses that make up the data in our report.

Our work allows us to address only the questions on research evidence posed by the Subcommittee. Our evaluation design does not enable us to reach independent conclusions on the overall merit of the current native language teaching requirement or alternative proposals. Such conclusions would require the analysis of evidence on many criteria, such as the cost and feasibility of each policy option.

## WHAT THE EXPERTS SAID

Although our report addresses many other issues, I would like - to highlight the experts' views on two key issues today: research evidence concerning the use of native-language teaching as an aid to learning English and keeping up in other subjects, and evidence on the merit or promise of alternative methods that do not use native language.

## Effects of Native-Language Teaching

On the first major issue, department officials have stated their belief that past federal policy has "discouraged" the use of English, which "may consequently delay development of English language skills." Similarly, many department statements assert that while transitional bilingual education may be effective in some circumstances, it is unproven that it is generally better than any other approach.

From our survey, we found that only 2 of the 10 experts agreed with the department that there is insufficient evidence to support the law's requirement of the use of the native language to the extent necessary to reach the goal of learning English. That is, 8 of the 10 experts we consulted read the evidence as sufficient to support the law's requirement.

We posed a second direct question about the evidence for student learning, this time about learning other subjects. Though the department has rarely mentioned this second goal, the law does require that projects under the act permit students to make academic progress and maintain grade promotion. Consistent with its views on children's learning of English under various teaching approaches, here also department officials have stated that evidence for student learning of other subjects when taught using native language to some degree is "neither strong nor consistent" and thus fails to support the law's requirement of native-language use.

We found that analysis in this area must be more tentative because evaluations are less common, but 6 of the 10 experts nevertheless agreed that the research evidence does support the law's requirement.

## Effects of Alternative Approaches

On the second major issue, the promise of alternative approaches, the departmental officials have interpreted research as suggesting that "immersion" approaches which do not use any native language appear to have promising results. Seven of the 10 experts on our panel judged these statements incorrect in characterizing the research evidence as showing the promise of teaching methods that do not use native languages.

The experts gave several reasons for this view. First, there is simply not enough evidence. Since few alternative programs are in operation, few evaluations have been done. Second, a body of research often cited concerning the alternative of teaching by immersion is not clearly transferable. Six of the 10 experts noted that evaluations of the Canadian immersion programs (teaching French to English-speaking children from early grades) may show success but that the experience is not necessarily generalizable to the United States because of differences in the students' backgrounds, families, communities, schools, and cultural settings in the two countries.

Sorting out which programs are which, in order to discuss eligibility or effectivenesss of programs is sometimes difficult, as the experts' responses to this issue illustrate. Three experts
suggested that some "immersion" teaching programs may not in fact be distinct alternatives. The act defines transitional bilingual education as involving the use of native languages to the extent necessary, and both Canadian and some U.S. alternative programs cited by department officials appear to involve at least some use of native languages.

From this it is clear that most of the experts in our panel saw, in the research reviews and syntheses that we presented, enough reliable evidence to permit them to reach conclusions at least on the main question concerning the evidence for a link between native language instruction and the two goals of the law (learning English and keeping up in school). In other words, there is disagreement by the majority of the panel with the statements of education officials that evidence in this field is too ambiguous to permit conclusions.

Finally, I would note that the issue of the law's dual goals appears to be central. It is difficult to separate the question of the effects of native language teaching on learning English, versus the effects of that teaching on learning other subjects necessary for keeping up in school. Some experts noted that even if the two could be separated as research matters, the law includes both as goals for students. This is important in considering the merits of native-language versus non-native-language programs. As several experts pointed out, alternative approaches with little or no native-language component might be successful in teaching a basic or "survival" knowledge of English; however, they noted the
evidence showed that learning enough English to obtain a highquality education in English while at the same time keeping up adequately in other subjects, almost certainly required the use of native-language approaches to the extent necessary, as called for in the law.

## CONCLUSION

In answer to the question posed by the subcommittee -- whether statements by senior Department of Education officials about research evidence in bilingual education have accurately reflected the weight of that evidence -- we report to you that the majority of the experts we surveyed do not believe they did. Most (but not all) of the group we surveyed report that the act's native-language requirement has research support. Most (but not all) assert that education officials are incorrect when they state that research evidence shows the promise of alternative techniques that do not involve native-language teaching.

The Department of Education objected to our report but brought no new information in its comments to cause us to materially change our presentation of the experts' views of the research evidence, nor did it find inaccuracies in our quotes from department officials or any lack of qualifications among the experts we consulted.

What then can the Congress glean from our study? The bottom line is that a majority of 10 highly distinguished and recognized experts from the relevant research disciplines do not construe the research evidence in the way the education officials do, either
with regard to bilingual education in general, or with regard to native-language versus non-native-language approaches in particular. It is thus incorrect to speak of agreement in the research field that the evidence is too inconclusive to support the Bilingual Education Act's native-language requirement.

Mr. Chairman, that concludes my statement. I will be happy to answer any questions the Subcommittee may have.

## ATTACHMENT I

Standards for Coverage and Quality of Reviews
(1) balance, or care and impartiality in analysis of the studies under review;
(2) breadth of coverage of research on different parts of the United States and different language groups;
(3) diversity of teaching approaches covered in the studies reviewed;
(4) rigor of approach to locating, selecting, and analyzing the specific studies reviewed;
(5) recency of publication; and
(6) diversity of learning outcomes analyzed (other than shortterm test score gains)

## Panel of Experts

Fred Bryant
Professor of Psychology
Loyola University
Chicago, Ill.
Courtney Cazden
Professor of Education
Harvard Graduate School of Education
Cambridge, Mass.
Richard Duran
Professor of Education
University of California
Santa Barbara, Calif.
Lily Wong Fillmore
Professor of Education
University of California
Berkeley, Calif.
Gene Glass
Professor of Education
Arizona State University
Tempe, Ariz.
Christina Bratt Paulston
Professor of Linguistics
University of Pittsburgh
Pittsburgh, Penn.
David Ramirez
Study Director
SRA Technologies
Mountain View, California
Diane Ravitch
Professor of Education
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Richard Tucker

- Director
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