BILINGUAL EDUCATION

A New Look at the Research Evidence
March 10, 1987

The Honorable Augustus F. Hawkins
Chairman, Committee on Education
and Labor
House of Representatives

Dear Mr. Chairman:

At your request, we assessed the validity of certain statements by officials of the Department of Education concerning how to teach children who come to school knowing little English. To support their policy position that a requirement of native-language teaching be dropped from the current Bilingual Education Act (20 U.S.C. 3223), department officials have cited research and evaluations on particular points and have claimed 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.

This report presents the results of our inquiry into the validity of the specific statements department officials made during the period we reviewed. The information in this report is based on judgments provided by a panel of 10 experts.

This report addresses only the issue of what the research evidence says. Our work was not designed to enable us to reach independent conclusions on the overall merit of the current native-language requirement or alternative proposals, since we did not address the full range of criteria that could be applied (such as the cost and feasibility of each policy option or its conformance with other statutory provisions governing federal activities in education). Thus, this report does not assess the department's overall policy position on bilingual education and it may not address interpretations of research made since the period we covered in our search for official statements.

Background

The Bilingual Education Act authorizes funds for programs in U.S. schools for children whose English is limited. The law requires that in most projects funded under the act, the children's native language be used to the extent necessary. (The law also includes a category of projects that need not use the native language at all; 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 other school subjects and progress from grade to grade, so that they do not fall behind during the time it takes them to develop enough English to do regular school work.

The department has proposed to drop the act's native-language requirement. In support of the proposal, department officials have stated repeatedly that they are relying on research evidence. The department interprets this evidence as failing to show superiority of native-language methods, for example, and as showing promising positive results for alternative approaches that do not use native languages. The department has thus concluded that there is no sound research basis for requiring most projects under the act to use native languages in teaching.

The law affects not all school districts but only those that want to receive project grants under the act. The federal bilingual education program in fiscal year 1985 supported over 500 projects in schools, including $77 million for transitional bilingual education projects affecting 174,000 students and $5 million for alternative projects (not using native languages) for 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. Others estimate that the number of children limited in English proficiency is much higher.

**Objective and Method**

Our objective was to assess the degree of correspondence between research knowledge on bilingual education and statements by department officials about that knowledge. To do this, we drew on expert opinion, asking 10 individuals to examine 31 specific department statements about research and to compare them with the findings and conclusions presented in 10 reviews of the literature. Our objective and methodology are described in detail in appendix I. The survey instrument the experts used includes the department statements and is reproduced in appendix II. The reviews we provided the experts are listed in the bibliography.

The experts (listed in appendix III) were carefully chosen for their expertise and their diversity of viewpoint on bilingual education. We took special care to include persons who had been nominated by department staff and whose work had been cited by the department in support of its position.
Reliance upon a group of experts is both a strength and a weakness of our work. To maximize the strength of the approach, we made efforts to insure that the group consisted of respected individuals with contrasting views and diverse but appropriate expertise. We made equal efforts to be fair to the department by including individuals whose work it cites in its own support; more than half the group met this requirement. And we made sure that persons representing quite different viewpoints along a spectrum of opinion were included in the group. Thus, we believe the strength of our method is in the quality, diversity, and representativeness of the group of experts we assembled. Nevertheless, we cannot guarantee that a different group would not give different assessments of the department’s uses of research.

A possible limitation of our report derives from the use we made of existing reviews of the research literature. Despite our efforts to select reviews that were both impartial and technically sound, they could contain biases that are difficult to detect. In this respect, however, they are not unlike the research studies on which they are based, which may themselves contain biases. (The weaknesses of individual studies are less troublesome in this project, since we were seeking the broad trend of findings across hundreds of studies.)

Finally, the method we used did allow us to be as responsive as possible to your request that our information be developed quickly. Using reviews of literature and experts’ judgments, we were able to assist the committee much more rapidly than if we had had to locate and review the many evaluations and research studies in this field. We performed our work from January to November 1986; the experts completed our survey in June 1986.

Results in Brief

The experts’ views on the official statements we asked them to review indicate that the department interpreted the research differently in several major ways. First, only 2 of the 10 experts agree with the department that there is insufficient evidence to support the law’s requirement of the use of native language to the extent necessary to reach the objective of learning English. Second, 7 of the 10 believe that the department is incorrect in characterizing the evidence as showing the promise of teaching methods that do not use native languages. Few agree with the department’s suggestions that long-term school problems experienced by Hispanic youths are associated with native-language instruction. Few agree with the department’s general interpretation that evidence in this field is too ambiguous to permit conclusions.
Although the experts warned us of the weakness of some parts of the overall body of research and evaluation in this field, and suggested ways that it could be strengthened, the majority told us in response to numerous questions in our survey that there was adequate reliable evidence to permit them to reach conclusions about the research basis for the legal requirement.

Agency Comments and Our Response

The department officials strongly objected to a draft of this report, which we sent them for comment, stating that the report “misrepresents the Department’s position on bilingual education.” (The department’s letter is in appendix IV.) More specifically, the department says that our report “selectively quotes Department officials to imply that the Department opposes transitional bilingual education.” Rather, the department argues, its “position is not that use of the child’s native language is an ineffective instructional method, but that there is insufficient evidence that it works best under all circumstances.” Or, put another way, “It is not the Department’s position that bilingual programs are unsuccessful, only that there is insufficient evidence that there is only one most successful method of instruction.”

However, department officials have also made many public statements saying that research showing the limited effectiveness of transitional bilingual education is a major reason for the department’s proposal to drop the requirement that native languages be used to the extent necessary. The secretary of the department has called bilingual education “the same failed path on which we have been traveling” and has suggested that the current law is a “bankrupt course” and that the result of the current law is that “too many children have failed to become fluent in English.” He has suggested that proposed changes in the law are needed lest we “throw good money after bad.”

From our perspective, the single most important issue in this discussion is whether what we presented is accurate. We requested the experts’ judgment on six specific questions about what the research on language learning says, exemplified by 31 specific quotations from statements by department officials. It is these questions and quotations that the experts reviewed and responded to and that are the subject of our analysis. The department has not disputed the accuracy or completeness of the specific questions we posed or the quotations from its officials that we presented to our panel.
The department commented on other issues and, in general, rejected the findings of our report. After considering all the comments, we have made a number of changes in an effort to reduce the possibility of a reader's misinterpreting the report or reaching unwarranted conclusions about the department's position or ours on the matters discussed in this report. However, we are satisfied that our work has presented the situation fairly. We have evaluated and responded to the department's comments in detail in the last section of the report.

As we arranged with your office, no further distribution of this report will be made until 30 days from its issue date, unless you publicly announce its contents earlier. At that time, we will send copies to those who are interested and make copies available to others upon request.

Please call me (202-275-1854) or Lois-elain Datta (202-275-1370), if you need further information.

Sincerely,

Eleanor Chelimsky
Director
## Contents

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Activities Funded by Current Law</td>
</tr>
<tr>
<td></td>
<td>Proposed Changes in the Bilingual Education Act</td>
</tr>
<tr>
<td></td>
<td>How We Assessed the Department's Use of Research</td>
</tr>
<tr>
<td></td>
<td>The Organization of This Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2</th>
<th>Results of Survey of Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Native-Language Requirement and the Learning of English</td>
</tr>
<tr>
<td></td>
<td>The Native-Language Requirement and the Learning of Other Subjects</td>
</tr>
<tr>
<td></td>
<td>The Merits of Alternative Approaches</td>
</tr>
<tr>
<td></td>
<td>Long-Term Educational Outcomes</td>
</tr>
<tr>
<td></td>
<td>Targeted Versus Generalized Conclusions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3</th>
<th>Agency Comments and Our Response</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Appendixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix I: Objective, Scope, and Methodology</td>
</tr>
<tr>
<td>Appendix II: Survey Instrument</td>
</tr>
<tr>
<td>Appendix III: Experts Surveyed</td>
</tr>
<tr>
<td>Appendix IV: Comments From the Department of Education</td>
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Page 6
Abbreviations

ESL  English as a second language
GAO  General Accounting Office
LEP  Limited English proficient
TBE  Transitional bilingual education
Section 1

Background

The chairman of the House Committee on Education and Labor asked us to provide information to help assess statements by Department of Education officials concerning their interpretation of research evidence in bilingual education. By agreement, our review focused on the use of evidence on the effectiveness of different teaching approaches for children and youths whose proficiency in English is limited. This evidence has been widely cited by department officials to support proposals to change current law.

### Activities Funded by Current Law

Part A of the Bilingual Education Act authorizes a variety of bilingual education programs in local school districts. (Part B of the act authorizes data collection, evaluation, and research; part C authorizes training and technical assistance.) Of the overall appropriation in any year, the act directs the secretary to reserve 60 percent for programs under part A and to further reserve 76 percent of this amount for programs of transitional bilingual education. (This and other terms are defined in the glossary at the end of this report.) The law defines transitional bilingual education as providing

"structured English language instruction, and, to the extent necessary to allow a child to achieve competence in the English language, instruction in the child's native language." (20 U.S.C 3223)

Thus, most school projects under the act must use teaching methods involving some use of native languages other than English. In addition, the act directs the secretary to reserve 4 percent of the total appropriation for special alternative programs for children whose proficiency in English is limited. These must have "specially designed curricula" but need not use the students' native language.

The Bilingual Education Act requires that both types of programs must have two goals: they must allow a child to achieve competence in English and also meet grade-promotion and graduation standards.

School districts with children whose English is limited do not receive funds automatically. Funds are granted to projects rated highest in national competition. In 1986, from a total appropriation for bilingual education of $139.1 million, the Department of Education awarded about $94.9 million in grants for bilingual programs under part A of the act, including $77.3 million for 538 projects of transitional bilingual education that served about 174,500 students. The department also
awarded $5.3 million for 35 special alternative projects that served about 12,000 students.

Proposed Changes in the Bilingual Education Act

The secretary of the Department of Education has proposed to strike from the law the specific reservations of funds. The secretary and other department officials advocate this change, in part, by citing evaluations of past programs. Specifically, the department believes the research and evaluation results are too ambiguous to support the current legal requirement that most projects use teaching methods involving children’s native language. At issue is the department’s interpretation of what is known about how to teach students with limited English proficiency.

How We Assessed the Department’s Use of Research

As agreed with the committee, in the time available we could not do a new synthesis of the large body of literature in this field, which includes not only hundreds of program evaluations in the United States and elsewhere but also a more general body of scientific literature on learning first and second languages. Therefore, we used reviews of the literature to represent what is known.

Our objective was to assess the degree of correspondence between research knowledge on bilingual education and statements by Department of Education officials about that knowledge. We used a methodology allowing us to draw upon expert opinion and implemented the work through three tasks, all described in more detail in appendix I. First, we reviewed specific department statements on bilingual education between 1983 and 1986, identified all the instances we could find in which research and evaluation were cited in support of proposed changes in the law, and selected a representative collection of these statements. Second, we searched comprehensively for research summaries or reviews and selected those that met our standards for coverage and quality. Third, we talked with authorities (including department officials) nationwide 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 development and the more applied area of bilingual education.

Of the 10 experts we selected, 5 had been nominated by department officials, or their work had been cited by department officials in support of proposed policies in bilingual education, and a sixth had consulted
extensively with department officials in the preparation of the department's review of educational research entitled What Works. We presented each expert with the research reviews, the department statements, and a structured instrument asking their opinion of the match between the two. The structured instrument clustered the department statements into six topics and then asked the experts to give their views of the department's use of research in each topic by answering questions and writing narratives.

The first issue in our survey concerned a methodological point about the usefulness of program labels in aggregating evidence. The experts' views on this are presented in appendix I. The five other issues in the survey concerning the department's interpretations of research are discussed in section 2 in this order:

- the native-language requirement and the learning of English,
- the native-language requirement and the learning of other subjects,
- the merits of alternative approaches,
- long-term educational outcomes, and
- targeted versus generalized answers about approaches to teaching students whose proficiency in English is limited.

The discussion of each issue includes five elements: a summary of the department statements, the question we posed to experts, a tally of the quantifiable answers, a discussion of the yes-no responses and the additional comments the experts provided to explain them, and (for five of the six issues) our overall summary and analysis of the experts' answers. The full text of the department statements we presented to the experts for review and the exact wording of all the questions the experts answered are reprinted in appendix II.
Section 2

Results of Survey of Experts

The Native-Language Requirement and the Learning of English

Department Statements

For the Department of Education, the native-language requirement and the learning of English constitute the central issue, to judge by the number of statements that stress its importance. The department has stated, for example, that "past federal policy has discouraged the use of English and may consequently delay development of English language skills." The department also stresses that it is unproven that transitional bilingual education is better than other approaches: "the mandated method [using] native language was no more effective than alternative methods of special instruction using English."

The department's statements reflect a stress on English competence as the major educational goal and a concern that time spent in teaching in a native language may subtract from time that could be used more effectively in teaching English. The advocates of transitional bilingual education disagree, believing that exposing students to too much uncomprehended English frustrates, fatigues, and discourages them in their efforts to learn the new language.

Question Posed to the Experts

Although the law does not narrow the bilingual program to this single objective, we asked the experts to consider the restricted question, "Considering one of the objectives in the current law authorizing the bilingual education program (achieving competence in English), do you consider the department correct that there is insufficient research evidence about ways to reach that objective to support the law's requirement of some degree of teaching in the native language?"

Experts' Responses

Yes (considered evidence insufficient), 2
No (considered evidence sufficient), 6
Can't answer, 2
Comments and Observations Provided With Experts' Responses

Of the 2 experts who considered the department correct that the evidence was insufficient, 1 said that the evidence for the supposed merits of native-language teaching was poor, while the second questioned the objectivity of research in the field. One of these 2 also noted that it was hard to doubt that more time spent hearing and speaking English would lead to greater learning, which suggested to this individual a basic logic to the department’s argument for removing the required use of native languages.

The 6 experts who considered the evidence sufficient and the department incorrect said they believed the research showed positive effects for transitional bilingual education on students’ achievement of English-language competence. Four of the 6 relied on the program evaluation literature in forming this conclusion. These studies used achievement test scores as the standard, comparing students taught by transitional bilingual educational approaches with similar students taught in other ways.

The fifth expert who considered the evidence sufficient did not find the school bilingual program evaluation literature convincing but noted that it is important to consider more general research findings about school performance and second-language learning. This expert cited research results showing that those who learn to read first in their native languages are able to transfer this skill to English after they learn to speak English.

The sixth in this group noted that the appearance of inconclusiveness in the research may result from an inappropriate combining of shorter and longer studies. For this individual, most program evaluations did not help answer questions about children’s language learning, since the evaluations were short term and look at students’ growth over 1 or a few years. This expert believes the effects of transitional bilingual education may take 3-6 years, so adequate studies must have equally long term designs.

Two experts declined to respond, although their comments showed that they found the evidence in support of the native language requirement convincing, because they did not accept our separation of the question of bilingual education’s effectiveness into two parts (learning English and maintaining academic progress in other subjects). In view of the combination of both goals in the law, these experts would not answer questions about them separately. One expert explained that if teaching spoken English were the only goal of the legislation, then a “preference
Section 2
Results of Survey of Experts

Our Analysis

Considering the first of two objectives in the current law (learning English), 8 of 10 experts read the evidence as sufficient to support the law’s requirement of some degree of use of the native language (to the extent necessary) in the classroom. They believed this either because it helps students learn English in general or because it strengthens literacy in the native language, which eventually transfers to English-reading skill. Four reached their conclusions from the program evaluation evidence they reviewed, finding that students with limited proficiency in English who are taught this way learn better than when they are taught other ways. The four based their opinions on the results from a quantitative research synthesis (called “meta-analysis”) by Ann Willig (included among the reviews we provided to all the experts). Willig concluded, after an analysis that one expert asserted was exposed to a “stringent peer review,” that “bilingual education programs consistently produced small to moderate differences favoring bilingual education.” (Willig showed from her review of studies that students learned more if they were in any type of program using some native language, compared to students in other programs using none. She found smaller differences in student learning among the various native-language approaches.) Four others cited broader literature as well.

The experts’ comments also indicate that comparing the effects of different approaches to improving the English of students whose proficiency is limited is complicated by differences in how outcomes are defined and measured. They thought that discussions of what works in teaching English should be more precise, making clear what is meant by “achieving English competence.” Does this mean an ability to speak or
read in everyday situations or an ability to handle school texts and discussions of abstract concepts?

## The Native-Language Requirement and the Learning of Other Subjects

### Department Statements

In contrast to the goal of having students in Bilingual Education Act programs learn English, the goal of having them make academic progress is rarely mentioned in Department of Education statements. When learning in school subjects other than English is mentioned, the department finds the evidence of the effectiveness of different methods inconclusive. For example, the department has said “the evidence that TBE [transitional bilingual education] is an effective method for improving . . . math performance . . . is neither strong nor consistent.”

### Question Posed to the Experts

“Does the research and evaluation evidence on the learning of students with limited English proficiency in school subject areas other than English support the legal requirement of instruction to the extent necessary in the native language?”

### Experts’ Responses

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<td>No (evidence does not support the legal requirement)</td>
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<tr>
<td>Yes (evidence does support the legal requirement)</td>
<td>5</td>
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<tr>
<td>Can’t answer</td>
<td>2</td>
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### Comments and Observations Provided With Experts’ Responses

Three experts answered “no” to this question of the adequacy of research support for the native-language requirement. Two of these found the evidence too poor and inconclusive to justify a legal mandate. The third, who found the research on learning English sufficient to support the requirement, found the research on learning other subjects too incomplete and mixed in results to permit a judgment in favor of the legal requirement.
Five experts found the evidence adequate to sustain the native-language requirement. Three of these cited the Willig meta-analysis in support of their claim that research showed positive effects for using native language in teaching other academic subjects. (But this body of evidence was smaller, it was noted by one skeptical expert, since Willig could find fewer studies in which learning in other subjects was examined.)

One of the 5 who believed the research was adequate to establish the soundness of the law's requirement that native languages be used cited a review in addition to those we selected. This expert said that this review, made by the National Center for Bilingual Research with funds from the Department of Education, concluded that students whose English proficiency is limited and who are enrolled in Elementary and Secondary Education Act title VII bilingual programs "make one and 1/2 months academic progress per month in reading, language arts, and math," compared to national norms.

Two said they could not answer definitely. One (who answered the same way on the previous issue and generally viewed the research as supporting the legal requirement) noted that there is so little teaching of subject matter to students limited in English in any of their native languages that a judgment of its effectiveness is difficult. This expert stressed the law's goal of academic progress, commenting that some native-language teaching "increases the likelihood that [students] will get some content while they are in the process of learning English" and that they will thus meet the dual goals of the law. The other individual acknowledged the studies included in Willig's findings but concluded that the research was too incomplete to permit an answer.

However, the 2 experts just cited, along with a third expert, made the point that for learning more complex subjects and developing higher-level skills, the use of the native language in teaching is preferred. One pointed out that the successful Canadian and U.S. immersion programs use students' native language when the material to be covered is difficult. Another pointed out that the teaching approach often mentioned by the department as an alternative to transitional bilingual education, called "structured immersion," may not work as well as native-language instruction except in very early grades. Structured immersion uses a simplified vocabulary and a slower pace, called "sheltered English," which may unnecessarily slow the acquisition of content for many students in higher grades. One expert cited the basic, logical incompatibility of the two goals: "students need periods of time when they can deal
Section 2
Results of Survey of Experts

with knowledge and skill acquisition directly without the added complexity of dealing simultaneously with the acquisition of the language itself.

Our Analysis

Six experts (5 who answered yes and 1 who did not answer yes or no) believed that the evidence about students' learning in subjects other than English supported the requirement for using the native languages to the extent necessary. However, conclusions on the beneficial effects of native-language instruction on students' learning of other subjects are relatively tentative because program evaluations are less common. The body of research is incomplete. The experts' comments suggest that more evaluations (using the strongest possible randomized comparison group designs) are needed.

As we noted in the discussion of the previous issue, some of the experts observed that learning English cannot be easily disentangled from making academic progress, arguing that the two objectives of the law may at times be in competition. They felt that teachers may have to use more native language in classes to ensure that students limited in English make satisfactory academic progress in a range of subjects and achieve regular grade promotion than the teachers would have to use were the aim simply to teach English. However, both objectives are required for programs under the Bilingual Education Act.

The Merits of Alternative Approaches

In addition to interpreting some research as inconclusive about the effects of native-language teaching approaches, the department interprets other research as suggesting that there are merits to approaches that do not involve the use of children's native language by either teachers or students. For example, the department has said that research on immersion programs "makes an impressive case" and is "consistently positive." Similarly, the department believes the evidence shows that "alternative programs such as ESL [English as a second language], immersion, or simply Chapter-1-style remedial English are more appropriate for many" children limited in English. In light of what the
**Results of Survey of Experts**

Department considers equivalent results for other methods, department officials believe that "there is no justification to be found for a Federal policy that excludes ESL [English as a second language] as an alternative to TBE [transitional bilingual education] (and immersion) as an appropriate instructional method."

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<th>Question Posed to the Experts</th>
<th>Experts' Responses</th>
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| "Does the research and evaluation evidence suggest that the department is correct in characterizing the likely promise of teaching methods that do not use the native language?" | Yes (promise of alternatives correctly characterized), 1
No (promise of alternatives incorrectly characterized), 7
Can't answer (or yes and no), 2 |

Comments and Observations Provided With Experts' Responses

The 1 expert who agreed that research suggested that nonnative language alternatives are promising did not stress the findings about any one approach. Instead, this expert saw a general "suggestiveness in the reviews as a set" in the direction of a reduced use of native languages and increased time spent learning and practicing English.

Seven of 10 experts clearly disagreed with the department's view of research evidence that such alternatives are promising. The basis for their position was the limitation of the evidence available on the subject.

One limitation they cited is that since relatively few alternative programs are in operation, few evaluations have been done. Another limitation, according to the comments, is that one body of research on the alternative of teaching by immersion was not clearly relevant for the United States. Six experts noted that evaluations of Canadian immersion programs may show success but that the experience is not necessarily transferrable to the United States, because of differences in the students' backgrounds, families, communities, schools, and cultural settings in the two countries.

Three experts suggested that some immersion teaching approaches 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
the department appear to involve at least some use of native languages. (This is an example of the problem of labeling essentially similar programs with different terms, which we asked experts about and discuss in appendix I.)

Two experts raised again the issue of the goals of instruction, agreeing that some alternatives, such as an adequate program in English as a second language, might develop students' English proficiency, as the department states. However, several also noted that English as a second language is not a program that teaches other subjects needed for academic progress and grade promotion.

Of the 2 experts who did not answer, 1 said that it is incorrect to apply the Canadian findings to the United States and that there was no other definitive evidence on alternatives. The other expert saw an unsettled controversy over the merits of alternatives, preventing a clear-cut answer to the question. This individual nonetheless believed that the department is correct to press for the least restrictive policy.

Long-Term Educational Outcomes

Department Statements

Alternative teaching approaches for students limited in English might be evaluated on the criteria of long-term educational results as well as on the degree to which students learn English and other school subjects. In stressing the need for approaches other than those involving native languages, department officials cite data on long-term outcomes such as high-school completion, scores on college entrance exams, and post-high-school education plans and attainments, especially for Hispanics, the largest group speaking a minority language in programs under the Bilingual Education Act. Hispanic students show lower rates of achievement on such measures than other student groups in the U.S. population.

For example, a department official stated that "there is no evidence that language minority children have significantly benefited from the current bilingual program" and then cited the general Hispanic dropout rate. A department report to the Congress stated that after 17 years of bilingual education programs, "the condition of LEP [limited English proficiency] students in our nation's schools had not improved significantly," citing...
relatively low college entrance exam scores and college enrollments along with high dropout rates for Hispanics. A department official stated directly that "for those that have been locked into these [bilingual education] programs, sometimes for years on end, and still at the end of those programs are unable to master English, the frustration level must be a contributing factor to the dropout rate and to the other problems we have with the school." A fact sheet the department distributed to the Congress acknowledged that "many factors contribute to these problems" but noted that "the persistent educational disadvantage of Hispanic students signals that the Federal programs to aid this group are not achieving what was intended."

**Question Posed to the Experts**

Long-term outcomes can be positive, negative, or neutral. Although the department statements suggest negative outcomes for bilingual education, we thought it important to determine whether conclusive results exist in any direction. Therefore, we asked the experts to address the problem of the adequacy of evidence for claims either that the legal requirements and the bilingual programs have failed to cause enough long-term positive results or that they have in fact caused negative results. Thus, we framed a general question about any type of causal link to long-term results:

"Does the research and evaluation evidence support the claim that the bilingual education program generally and the legal requirements for native-language instruction in federally sponsored projects are causally related to long-term educational outcomes such as completing high school, college entrance exam scores, or rates of postsecondary education?"

**Experts' Responses**

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<tr>
<td>No (said that no causal link is warranted)</td>
<td>7</td>
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<tr>
<td>Can't answer</td>
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Comments and Observations Provided With Experts' Responses

The expert who answered "yes" agreed that there can be long-term outcomes of bilingual education but disagreed with some of the department's suggestions of what those outcomes are. This expert cited studies that supported the conclusion that as a result of some bilingual programs, students stay in school longer, have fewer behavior problems, and have high educational aspirations.

Seven experts rejected the idea that there was any support for connecting bilingual education, either positively or negatively, to later school outcomes. Several pointed out that it would be hard to trace backward from Hispanic students' school problems to a single major source in bilingual programs, because of the multiple problems of educating minority children in addition to the problem of language competence and the choice of instructional language for students limited in English proficiency.

The 2 experts who said they could not answer explained that they hesitated because of the weak and scanty research available.

Although our literature reviews did not address the topic, we asked the experts if they knew of evidence that any other alternative teaching methods (such as those using no native language) would be any more or less effective in the long term than the current range of bilingual programs. None of the experts cited any such evidence.

Our Analysis

The strong skepticism in the experts' responses suggests that the limitations of the research evidence require caution in making any type of association between current school outcomes for Hispanic youths and bilingual education programs. We note two issues. First, Is it plausible to expect long-term outcomes? The answer depends on the degree of children's exposure to bilingual education. Evaluations of programs that cover only a few years of school are inherently unable to show whether bilingual education alleviates or exacerbates the school difficulties facing Hispanic children. Second, Is there enough evidence to permit a search for any long-term effects that may be plausible? The experts' comments about the gaps in the available knowledge suggest that increased longitudinal research would be useful.
Targeted Versus Generalized Conclusions

Department Statements

The department argues for striking the requirement for native-language use from the law because of the lack of proof that teaching approaches of this kind help all students. The department has said, for example, "what best works for one group does not necessarily work best for another." The department cites a World Bank summary of worldwide research to support its position that the law should not overemphasize any particular approach, since no one method is best, and should permit complete flexibility for U.S. educators receiving funds under the law. The department quotes the study as saying, "there is not one answer to the question of what language to use ... but several answers, depending on the characteristics of the child, of the parents and the local community." Thus, the department has made some general statements that native-language teaching can be beneficial in some situations, but it has not thoroughly discussed what these situations are. If they are at all extensive, this could provide one type of rationale for the requirement in the law.

Question Posed to the Experts

The questions we have already discussed deal with the evidence on the general effectiveness of native-language teaching and its alternatives and on various outcomes in the short and long run. We also asked the experts whether research data could supply answers about approaches that work well for subgroups of students. Whether or not they could generalize about methods that work for all students, we wanted to know if they believe the literature supported methods that work with one or more specific categories of students. The question was,

"Do you regard the evidence as so ambiguous that no firm conclusions can be drawn concerning the effectiveness of diverse approaches to teaching children limited in their proficiency in English in U.S. schools, with special reference to the role of native languages?"

If an expert answered that some conclusions were possible, we asked a follow-up question requesting more detail about the subgroups that seem to profit from particular teaching methods.
Section 2
Results of Survey of Experts

<table>
<thead>
<tr>
<th>Experts' Responses</th>
<th>Yes (ambiguity of evidence prevents conclusions), 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (evidence not so ambiguous; conclusions possible), 6</td>
</tr>
</tbody>
</table>

Comments and Observations Provided With Experts' Responses

This question required that the experts subdivide both the students limited in English and the overall body of research findings in order to determine if there was evidence that specific approaches may be effective for particular groups of students. Three viewed the evidence as too ambiguous for such fine-grained analysis. However, 1 of these 3 cautioned that while cultural diversity may require different approaches, it remains premature to abandon the use of native languages in U.S. schools.

Of the 6 others who addressed language use, 2 reiterated their responses to earlier issues that the research showed that students learn better with properly conducted teaching involving their native languages to the extent necessary.

The 4 others either directly cited the subgroups identified in the World Bank study or used the same terms to describe subgroups for whom evidence suggested native-language teaching is likely to be more effective than other teaching. Thus, these 4 interpreted the research, and especially the World Bank's summary of research, as encouraging the use of native languages under the conditions widely found in the United States for language-minority students. This is a different reading of the World Bank study from the department's, since the department cites it as evidence of inconclusive ambiguity in the field.

Because the World Bank study conclusions were cited by both the department and some of the experts, we summarize them here. The study pointed out that while worldwide prescriptions are impossible, evidence can support conclusions if two broad types of learning situation found in school programs are considered. The first is one in which it may be appropriate to begin teaching in the second language (English in the United States, as the department stresses). The World Bank found from a review of worldwide experience that if one or more of the following conditions existed, second-language instruction could be recommended:

1A seventh expert also answered that "no," evidence was not so ambiguous as to prevent conclusions. However, the narrative comments showed that this individual was commenting on the conclusiveness of all research on teaching in general, not the research we are examining on the use of different languages in teaching children limited in English.
1. the child's native language is well developed,

2. the parents freely choose instruction in the second language, or

3. the native language enjoys high status in the community.²

One of the experts pointed out that the Canadian examples of immersion programs that begin instruction in the second language from the earliest grades typically enroll middle-class students who arrive at school with a common level of development of language skills in English. The other conditions noted above are met also, and the use of a second language for initial instruction is not a significant barrier to learning.

The second learning situation is one in which the use of a native language (other than English, in the United States) is more appropriate, according to the World Bank study. One or more of the following conditions should apply before beginning instruction in the native language is recommended:

1. the child's native-language skills are not well developed,

2. the parents want native-language instruction, or

3. the native language has low status in the community.

One expert commented that

"The research is perfectly clear that middle class children tend to do well using any language while lower class ethnic subordinate minority children after several years tend to show more efficient learning of academic skills in bilingual programs" (emphasis in original)

A second expert, paraphrasing from the World Bank findings, suggested that in choosing whether to use native languages in the classroom, educators should consider a "child's proficiency in the native language, parent attitudes towards [the] second language and second language development, and the socioeconomic context of the child's community."

²Although the causal links are not easy to trace, the World Bank study says this variable of language status is linked to children's learning through students' general feelings of self-worth, which in turn affect achievement. Thus, for children from a linguistic majority, bilingualism can be additive. However, for children in a subordinate linguistic minority group, low feelings of self-worth can depress achievement in schools where teaching is in other languages. For them, beginning instruction in the native language can enhance feelings of self-worth that may strengthen school commitment and achievement.
Section 2
Results of Survey of Experts

Our Analysis

Six of the 10 experts reading the worldwide literature on language learning disagreed that knowledge in this field added up to ambiguity. These 6 added further comments on evidence for the effects of classroom use of native languages, and 4 of these further identified the characteristics of students limited in English who would benefit from teaching approaches that rely on the use of native languages to some degree.

The issue is to identify more precisely whether the characteristics of the U.S. population of students limited in English proficiency—or parts of it—show them to be those for whom native-language teaching has been found beneficial, including the students' initial language-skill levels, the degree of parents' interest in native-language teaching, and the status of the native languages in the broader community. In several experts' view, the conditions of students' modest skills in language, parental interest in teaching in the native language, and low status for the native language are met—which in turn suggests that there are benefits to a native-language teaching approach—for segments of major U.S. groups such as Hispanics. Several also noted that specific operational problems in creating native-language school programs, such as having too few students to make up a native-language classroom at a given grade level and the absence of native-language teachers or teaching materials, do not invalidate the basic conclusions that can be drawn from the research about the benefits of instructing in native languages where it is appropriate to do so.

3We asked the experts to evaluate the soundness of the knowledge base in bilingual education, compared to other policy areas, for drawing conclusions that would aid policy. The majority (5 of 9 answering) said it was no better or worse than other fields they knew, 4 said it was worse, and 1 did not know other fields.
The Department of Education provided comments on our draft report in a letter and attachments, which we reprint in appendix IV. We distinguish six topics in the department’s comments: (1) the authority for our review, (2) our conformance with applicable professional standards, especially concerning the qualifications and independence of our evaluators, (3) our objectives, (4) our methods, (5) our conclusions, and (6) the way we handled the report. The department’s comments on each topic appear in several places in its letter and attachments. In appendix IV, we have numbered the points that we address, and we provide these numbers in the discussion below, so the reader can follow our response to each of the six types of comment.

The department questions the authority for our review. The department believes that our review went beyond GAO’s legal mandate, since the review was not confined to evaluating the results of federally funded bilingual education programs (comments 4, 18, 32, and 33). The department also believes that this report goes beyond our customary practices in reviewing agency activity (comments 1, 3, and 36). These beliefs reflect a lack of understanding of GAO’s authority and functions. According to our basic legislative charter, we are authorized to provide information to the Congress on the effectiveness of programs or activities and possibilities for their improvement. Under 20 U.S.C. 1227(a), we also have specific authority to review the policies and practices of federal agencies administering education programs. These responsibilities often lead us to examine evidence and statements about programs or activities that both do and do not receive federal funds. We are also mandated under title VII of the Congressional Budget Act of 1974 to assist the Congress by assessing agency program reviews and evaluation activity. Evaluating the degree to which an agency is making decisions consistent with the results of evaluations and other research is a part of this overall responsibility. The department believes that this review is unprecedented in our reviews of the department, in that we have dealt here with areas “not subject to objective analysis” (comment 35). We disagree with this characterization of the subject matter of our review. That it may not have been done before is immaterial.

It is clear that the department has based its position on bilingual education in part on research, as evidenced by the numerous quotations in our survey instrument (reproduced in appendix II). The research the department cites includes the examination of programs outside the United States. Indeed, the department’s position on the likely promise of alternatives to native-language instruction, such as structured immersion, rests more heavily on Canadian than U.S. evidence (since there is much
Agency Comments and Our Response

section 3

less teaching of that kind here). Thus, we could not possibly have reviewed the way in which the department represents the research it is using to develop or support its position without looking beyond the United States. (The reviews we provided the experts included a discussion of the applicability of Canadian evidence, and we addressed this in section 2 of our report.) There is clearly no legal bar to our consideration of the Canadian evidence. The department's position on this point appears to lack consistency, since one of the experts whose letters to us the department thought useful to include argues for placing more weight on evidence from foreign countries, nonfederally funded programs, or the U.S. military.

The department questions the independence of our evaluators: "Important questions might also be raised as to the report's conformance . . . with GAO's own audit standards," including "the qualifications and independence of the evaluator, and due professional care in carrying out the audit" (comment 2; see also comments 8 and 34). The department offers no evidence that our evaluators' independence was impaired or that our evaluators lacked qualifications for the work or failed to exercise professional care.

Alternatively, the department may mean that the experts we consulted are violating professional standards. The department appears to take as evidence of violations that 2 of the experts were authors or co-authors of reviews we provided to the group and that 1 was co-author of a study the department has publicly criticized. The department states that our expert group included researchers who had previously taken stands opposed to the department's views (comments 21 and 22).

We sought and formed a panel of nationally recognized experts with the kind of diversity of research knowledge—in language development, bilingual education, and the synthesis of findings—that was essential for this assignment. We were attentive also to other aspects of diversity, making sure to include both minority-language researchers and researchers whose prior work was generally consistent with the department's views. That is, we chose the panel carefully so that, in its aggregate, it would provide as balanced and objective a view as possible. We also used care by pointing out in our report that the views of these panel members might differ from those of another panel of experts.

It is not clear to us that being cited in any way by the department is to be understood as signifying bias in an expert's views. However, we note that the department has cited the work of 5 of our 10 experts in public
statements in support of its position and that 1 of these 5 has testified in support of the department. A sixth is a consultant to the department on education research and is acknowledged for contributions to a book the department has recently issued. Thus, by the department's logic, 60 percent of the panel could have been expected to favor the department's reading of research evidence in bilingual education. Therefore, we reject the department's view that our effort to ensure the panel's fairness is a violation of professional standards pertinent to our work.

The department makes a number of critical assessments of our report that appear to be based on a misunderstanding of our objective and method. For example, the department says our report is a "seriously deficient attempt to assess the validity of the Department's policy concerning bilingual education" (comment 15). The department also says our work is "neither . . . a satisfactory opinion poll . . . nor . . . a full-scale research review, synthesis or meta-analysis" and that we did not "furnish [our] readers with enough information on the basis of which to form their own conclusions" or "assess the validity of the reviewers' judgments" (comments 6 and 27; see also comment 40). None of these is a correct characterization of either our objective or our method.

Our aim was, as we noted in our report, to examine the research support cited by the department in its proposal to remove the native-language requirement from the Bilingual Education Act. In our report, we acknowledge that this proposal has bases other than research, so our efforts to clarify the research arguments would not necessarily address all questions on the merit of the policy.

In doing our work, as agreed with the committee, it was never our intention to poll public opinion or conduct a new synthesis of research literature. The first is irrelevant with regard to judging a complex body of research. The second has already been done for the committee by the Congressional Research Service. We also did not intend to provide extensive details that permit a reader's independent analysis of the research evidence. We deliberately employed a method involving the selection of a balanced panel of experts who would bring great depth, judgment, and breadth of knowledge to our questions but without detailed documentation. This method is particularly appropriate for the review of syntheses and meta-analyses (we repeat that we were not ourselves performing a meta-analysis). In addition, the use of expert testimony it is not in any way unusual; it is a conventional way of settling disputes about research findings. We note that the department has not contested the expertise of the members of our panel.
The department argues with several aspects of our method. It comments on our use of officials' statements (comments 7, 30, and 38), the reviews of literature we provided the experts (comments 5, 20, and 23-26), and the experts themselves (comments 21 and 22).

The department believes that we inaccurately represented its policies in our use of officials' statements (comments 7, 30, and 38). Our aim was not to present the department's policies. Instead, we were asked to evaluate the department's statements about research as they have been used to support proposed policy. The department does not deny that we accurately cited its statements. We point out in the report that the department does sometimes say that native-language instruction can be beneficial. But the department's articulated proposal is that the native-language requirement be dropped from the law, and a major rationale for this change, cited frequently by the department, is that the requirement lacks support from research and evaluation.

We believe we have accurately characterized the department in both respects. The number and length of the department's actual statements that we presented to the experts provide ample evidence of the department's uses of research, the one subject we were examining. Before sending the survey instrument to the experts, we took care to review it with three outside experts knowledgeable about bilingual education, the policy debate, and survey design, to aid us in making the best possible presentation of the statements and the issues we wanted the experts to address. The department's statements in its comments on our report were highly consistent with the earlier department statements we examined (that the research is inconclusive; that native language cannot be said generally to be useful in teaching, although it may be in some cases; and that there is no research base for requiring "only this among the many possible approaches"). All were included in our presentation to the experts, and all were judged to be inaccurate notions about the state of research knowledge by most of (but not all) the experts we consulted.

The department comments further on our methods, calling the literature we provided the experts "a handful of studies" and a "set of research reports" that "failed" to be "anything resembling a comprehensive set of studies from the vast research literature" (comments 5, 20 and 23). The department says that it regards only two studies in our list as comprehensive and that we omitted two others it regards as comprehensive (comments 24 and 25). The department believes that the two reviews it
Section 3
Agency Comments and Our Response

regards as comprehensive support its position (comment 24). In addition, the department asserts that two of the experts notified us that the research was incomplete (comment 26).

In describing our materials, the department seems to misunderstand our method. We provided to the experts not individual research studies but reviews or syntheses of many studies. As we agreed with the committee, given the size of the body of relevant literature, it was not feasible, and hence it was not our assignment, to do a new review of individual studies. We carried out an extensive procedure to identify and select the reviews. The 10 reviews we chose totaled hundreds of pages and collectively covered a wide range of current knowledge applicable to the subject of native-language teaching and alternatives. We never said the coverage was complete, nor do we see any reason to have tried to achieve complete coverage. Rather, our claim is that these reviews were both extensive and representative. The department is incorrect in stating that all thorough or comprehensive reviews support its position; indeed, the review regarded as the most thorough and competent by a number of experts—the quantitative research synthesis by Willig—reaches conclusions opposite to those of the department about the merits of native-language teaching. (The department criticizes the Willig review in comment 39, but the department’s statements are too brief to evaluate. The experts who addressed the review directly commented favorably on its quality and usefulness.) We considered the two other reviews the department cites in its comments and rejected both for not meeting our criteria of scope and methodological quality. The readings we did provide the experts included reviews sponsored and published by the department, the American Educational Research Association, the Congressional Research Service, and the World Bank. There is no basis at all for the contention that the information we supplied for the experts' use was either narrow or constricted.

The department says that two panelists stated in letters to us that the research “was incomplete” (comment 26). Only 1 of the 2 experts whose letters the department encloses did in fact comment on shortcomings in the literature we provided. This person expressed a preference for “earlier research . . . , and research carried out in foreign countries, and by the U.S. military” (see page 72). These preferences seem at least as debatable as the selections we made, and this expert provided no citations on the survey other than to his own work. Contrary to the department’s claim, the other letter the department encloses did not comment on the selection of literature we provided.
In the remainder of its comments on our methods, the department makes a general charge, without direct attributions, that specific past activities of some members of our expert group cast doubt on their objectivity. For example, the department notes that several of the experts have taken stands in opposition to the department and adds that 2 are authors or co-authors of items in the readings we provided and 1 was co-author of a study the department publicly criticized (comments 21 and 22). We have already noted that some other members of the group of experts have been cited and have even testified in favor of department policies, and we do not regard this as disabling.

In a field of public policy with significant controversy during almost two decades (the Bilingual Education Act was first passed in 1968), it is not surprising that experts have at times been advocates. We acknowledged this inevitability and chose a balanced group of individuals with differing degrees of involvement in policy debates and with varying substantive views, after seeking nominations from many sources, including the department. We added several experts who had not taken any advocacy role that we knew of. Most importantly, the prior involvement of experts in policy discussions should not preclude the use of their views, provided that readers are made aware of who the individuals are. We have fully disclosed the experts' names and affiliations, as we told them we would do, in appendix III. We do not believe the specific authorship issues the department raises had any effect on the group's responses to our survey, nor do we believe the department offers any evidence of an effect other than speculations.

The department comments on our analysis. It states that it "rejects the findings of GAO's report" and believes its "position on bilingual education is valid and unscathed by this inept report" (comment 16). However, it is not the department's overall position on bilingual education that is at issue but, rather, its interpretations of research. On this, the department misstates our analysis, saying, for example, "there is no disagreement among the Education Department, the GAO and the panel it polled that the research to date is inconclusive" (comment 9). On the contrary, most of the experts we surveyed do not find the research inconclusive relative to the department's statements.

The department is also mistaken in saying the central issue is "the superior effectiveness of one method" (comment 12). We sought experts' views on the research support for the requirement, a requirement the department seeks to eliminate, that federally supported bilingual education projects must use some degree of native-language teaching to meet
two goals: learning English and keeping up in other subjects. Experts find reasonable research support for this requirement, in light of these goals, as we report. Our work does not deal with the issue of the effectiveness of specific methods of instruction; no methods of instruction are specified in the law. The department's restatement (in comments 9-12, 17, 29, 31, 38, and 41) of its own reading of the research does not provide new evidence to cause us to reconsider our analysis, nor do the department's efforts to reinterpret the experts' judgments from our text show that we needed to change our presentations (comments 28, 29, 40, and 42).

The department goes to some length in its letter to point to difficulties with research on native-language teaching while avoiding (for example, in comments 11 and 12) the issue of the strength of research support for the alternative teaching approaches that it believes are equally (if not more) promising and that do not involve any use of children's native languages. The department seldom gives equal attention to warning flags about the data on alternative approaches, such as those raised by the experts we consulted. (Experts' concerns include the small amount of evidence that was available on alternatives; the applicability of evidence from the Canadian experiments, done under very different conditions from those in the United States; and the degree of true distinctiveness within the "immersion" alternatives that contain some degree of native-language use, as the law now calls for.) From concerns such as these, most (but not all) of the experts we surveyed questioned the department's assertions about the strength of research support for nonnative-language approaches.

The department makes comments on our handling of the draft report, including the degree of review it received prior to release and to whom and when it was released. In general, the department states that "It is regrettable that the confidentiality of the draft report and the integrity of the process were violated" (comment 13). All these comments are inaccurate.

The department believes that the report "was made public prior to competent peer review by disinterested experts" (comment 14). Prior to releasing the draft to the department, we sent it to each of the experts for their review of the accuracy of our presentation of their views. Four additional consultants reviewed the draft, including an expert on Canadian immersion programs, a policy analyst sympathetic to the department's position, a bilingual education research expert, and a social scientist not involved in bilingual education but especially strong in
evaluation methodology. The last of these four also reviewed all the original surveys and compared them to our text. All these individuals were cautioned to avoid premature disclosure of the report.

The department states that the “contents of the draft report have already been released to the press and were cited in numerous newspaper articles” before the department had reviewed the draft (comment 36; see also comments 19 and 37). We regret that news stories appeared before the department received a copy of the draft. However, it is not clear from any of the press accounts that we have seen that any reporter actually received a copy of our draft. We are not aware of any such release of the report, but, if one occurred, we were not the source.
Appendix I

Objective, Scope, and Methodology

Our objective for this report was to systematically gather expert opinions of the match between research knowledge in bilingual education and statements by Department of Education officials concerning this knowledge. Thus, our work involved three main components: (1) identifying and selecting Department of Education statements in which research and evaluation results were cited, (2) identifying and selecting literature reviews representing the state of knowledge, and (3) identifying and selecting a group of experts in bilingual education and social science. We then sent these experts the reviews and a structured instrument for answering closed and open-ended questions about their views on the match between the department statements and the state of knowledge. The experts' responses formed the data we present in this report. Our procedures for all three segments of the work and the gathering of the experts' views are summarized below. In addition, we discuss the experts' views on a methodological question we included in our survey, concerning the appropriateness of aggregating evidence from specific research studies under broad program labels.

Identify and Select Department of Education Statements

Our approach was to locate statements of officials of the Department of Education that refer to the effectiveness of bilingual education and alternative strategies for educating language-minority children. We were looking for the use of research and evaluation results in claims about effectiveness. It was acceptable to the chairman of the committee that we focus our search, with one exception, on statements made in 1986-86 by the secretary, the undersecretary, the assistant secretary for educational research and improvement, and the director of the office of bilingual education and minority language affairs. The exception was that we examined department testimony in several 1983 and 1984 hearings leading to reauthorization of the Bilingual Education Act as part of Public Law 98-511 in 1984.

To locate speeches and other general sources of specific statements, we asked the department to provide us every official statement on bilingual education by the officials listed above. In addition, we searched published sources such as preambles to regulations and congressionally mandated reports such as The Condition of Bilingual Education, and we asked department staff members knowledgeable about research, as well as observers of bilingual education policy, to inform us of occasions when officials had used research evidence. Using all these approaches, we found 39 sources, from which we extracted 65 specific statements referring to the results of research and evaluation.
Two of our staff members independently reviewed the statements and then reached consensus on the main themes or issues by which to organize them. Some statements were duplicates of others; after another independent review by two staff members, we selected 31 statements to represent the department’s view on six issues. We incorporated these into a draft instrument for the experts that we reviewed with several other experts to ensure that it was clear. The final instrument is reproduced in appendix II.

We began our search for reviews of the effectiveness of different teaching approaches for language-minority students with examinations of computerized bibliographic files, including American History and Life Database, Dissertation Abstracts, ERIC, Exceptional Child Educational Resources, Public Affairs Information Service, and Social SciSearch. These searches, restricted (to the degree possible) to summary and review articles, produced 540 references, many with abstracts. We also scanned the programs for the last three annual meetings of the American Educational Research Association, examined the bibliographies of recent publications in the field, and searched Bilingual Education Bibliographic Abstracts, maintained by the National Clearinghouse on Bilingual Education.

From all these sources, we obtained 929 references. From abstracts, we selected 52 references that appeared to analyze multiple empirical studies to draw conclusions about the effectiveness of teaching methods for students with limited proficiency in English. Then we collected these documents from libraries, authors, and others and screened them further. We found 29 that analyzed a significant number of studies. We sent the list of 29 to 23 knowledgeable researchers, policy analysts, and others for their review, which allowed us to confirm the adequacy of coverage of our initial list and add some items cited in a few recently completed works.

Retaining 23 reviews published since 1980 for further consideration, we evaluated each on six criteria: (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 short-term test score gains).
Appendix I
Objective, Scope, and Methodology

We chose some references for unique qualities that went beyond the six criteria. Because the department's review of the literature has been widely cited and discussed, we selected it as our first item. Its methods and conclusions have been commented on in numerous other reviews, and we included one of these. Then, since the department stresses the potential benefits of immersion techniques, and since this approach is not covered thoroughly in either the department's review or the other general reviews, we included 2 reviews of this method alone, 1 pro and 1 con. The 6 other reviews we selected are in the fields of language learning and various teaching approaches for students with limited English proficiency. The 10 reviews we finally selected are listed in the bibliography.

Although the shortcomings of studies in this field are widely discussed, we noted that several of the reviews we chose seemed to agree that a sizable body of acceptable evidence may be examined for possible conclusions. For example, using criteria similar to those we could have used in screening original studies, 2 different reviews agreed that 23 specific studies were adequate and could be usefully analyzed.

Identify and Select a Group of Experts

We wanted to assemble persons who could assess the department's use of research evidence knowledgeably and objectively. We looked for experts who specialized in language learning, in bilingual education, and in reviewing or aggregating social science evidence and drawing conclusions from many studies. We asked research and evaluation staff in the Department of Education, the director of the National Clearinghouse for Bilingual Education, and others active in related fields of research to nominate experts for us.

We selected 10 names from those we obtained from these sources and from our own knowledge of published authors in the field. In composing the group, we aimed for representation of diverse research backgrounds, sections of the country, and perspectives on bilingual education policy. Eight were knowledgeable about research and evaluation on language learning and schooling for limited-English-proficiency children; 2 were knowledgeable about social science cumulation and synthesis. In particular, we tried to have a group balanced in terms of fairness to the department. Five were nominated by department officials, were authors of research publications that the department cited in support of its position, or had testified in support of the department, and a sixth had been
consulted extensively by the department about research findings in education in the preparation of the department's book *What Works*. The 10 experts are listed in appendix III.

### Survey Experts

We sent the 10 literature reviews in advance to each expert. Then we sent them the survey instrument containing the department's statements and our questions. The experts worked individually; we did not bring them together to discuss their views or reach consensus. This report is based on the experts' written responses to our survey. We sent them a draft of this report and gave them the opportunity to clarify and correct our presentation of their views.

### Strengths and Limitations of Our Approach

Our approach allowed us to provide information much more rapidly than if we had had to locate and review the thousands of evaluations and research studies. By using reviews, we were able to place before the experts extensive and representative examinations of several bodies of literature, including evaluations of diverse teaching methods in school programs and more general research studies on learning a second language. By providing the experts the March 1986 review of literature by the Congressional Research Service, we helped ensure that they had a current and independent summary of the state of knowledge along with the other reviews. Two other strengths are our comprehensive search for Department of Education statements and the diversity and knowledgeability of our panel of experts.

Several limitations are inherent in our indirect approach to the complex topic of claims about methods of teaching for nonnative speakers. Using literature reviews meant that the selection of studies and their interpretation were beyond our control and subject to unknown biases. Using a structured instrument to gather the views of the expert panel meant that we had to accept necessarily brief written answers and to forgo more extended comments from them, such as we might have gathered in an interview. Most importantly, by using a group of experts, we rest the credibility of our results on them, since our key information base is their opinions and judgments. While we believe that their diversity and expertise are strengths in our work, we cannot guarantee that a different group would not have given different assessments of the match between research knowledge and Department of Education statements.
Appendix I
Objective, Scope, and Methodology

Results of Survey of Experts on the Usefulness of Program Labels

<table>
<thead>
<tr>
<th>Department Statements</th>
<th>The department consistently refers to the native-language requirement and the transitional bilingual education program set-aside in the Bilingual Education Act as a single method or approach. For example, the department uses such phrases as “this educational method imposed from Washington,” “Federal funds may support only one type of instructional method,” which is “the transitional bilingual method,” and it is “unwarranted . . . to insist that local school districts use only one approach” (emphasis added).</th>
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<tbody>
<tr>
<td>Question Posed to the Experts</td>
<td>To weigh the evidence about the effects of a teaching method, it is important to know if programs or classrooms described by a common label are applying a consistent approach. Wide variation in actual teaching practices could make it difficult to draw overall conclusions from the results of evaluations of the outcomes. If attempts to characterize bilingual education are flawed—for instance, if goals, materials, and use of time vary greatly in the different versions of bilingual education in the schools—it could be inappropriate to aggregate studies of bilingual education. We wanted experts to address this methodological question as well as look at the substantive research results cited by the department and reviewed in the literature. Thus, our first question to the experts was, “In your view, does the weight of research evidence suggest that teaching methods can be validly described and evidence of their effectiveness aggregated and characterized in the general manner indicated by department statements?”</td>
</tr>
</tbody>
</table>
| Experts’ Responses | Yes (methods can be described and evidence aggregated), 2
No (can’t describe and aggregate), 5
Can’t answer (or yes and no), 3
Appendix I
Objective, Scope, and Methodology

Comments and Observations Provided With Experts' Responses

Two experts were comfortable with the labels ("transitional bilingual education," "immersion," and the like) that are used to describe teaching methods and evaluation results in bilingual education. One of these argued in favor of labels by noting that some research reviews (Willig, for example, among the reviews we selected and list in the bibliography) do find an overall effect for programs that have in common simply that they use children's native language to some degree (compared to other programs that do not), which suggests that genuinely different programs are involved. Another expert accepted the current terms but cautioned that education research showed that effective teaching (for pupils of any language background) can generally be characterized much more precisely and powerfully with other terms.

Five of the experts disagreed with the use of aggregate labels for teaching methods. They generally stated that labels such as "transitional bilingual education" may describe the broad intent or orientation of a program but are oversimplified. These experts believed that different versions of a method may vary on critical dimensions that help determine the effectiveness of teaching, such as the division of time between a native and a second language, the purpose for which each is used in school, the year the teaching of the second language starts, the teachers' language competence, and so forth.

The remaining 3, who said they could not answer definitively, made a combination of the points above. One agreed that the terms were general but argued that simplifications are necessary in policy discussions and that terms in this field appear to be no worse, perhaps, than those in some other fields of public policy. Another agreed on the "complexity of pedagogy" and criticized the current law for mandating a single method. The third said that bilingual education is not a method but said also that the terminology is not very significant for decisions.

Our Analysis

Although some of the experts were critical of the common use of labels not only by the department but also by most people who discuss different approaches to teaching students whose proficiency in English is limited, others did not complain (even some who agreed on the imprecision of terms such as "transitional bilingual education" or "immersion"). Concerning this methodological step in our assessment of the use of research on bilingual education, we found no consensus among experts that would discredit the department's use of terms and program labels in statements about the effectiveness of one approach compared to another.
The experts' comments suggest, however, that where comparisons are being made of programs that, despite a common label, may have had different objectives and methods, and especially when high stakes are attached to the outcome of the comparisons, the most concrete terms possible should be used to describe features of programs that appear to work (for example, the extent to which a native and a second language are used, for how long, and for what purposes). Discussion of language policy can be aided by reducing confusion in the referents for program labels ("transitional bilingual education," "immersion," "English as a second language," and so on), which would in turn make research results clearer, if observed effects can be linked to specific program features.
Appendix II

Survey Instrument

United States
General Accounting Office
Washington, D.C. 20548

Program Evaluation and
Methodology Division

SURVEY OF EXPERT OPINION ON BILINGUAL EDUCATION

Introduction
Thank you for agreeing to help the Program Evaluation and Methodology Division (PEMD) of GAO evaluate the use of research in bilingual education policy discussions.

The current Bilingual Education Act, as most recently amended in 1984, requires most bilingual education projects funded by the U.S. Department of Education (ED) to provide structured English language instruction, and instruction in the native language to the extent necessary to achieve English competency and to meet local grade-promotion and graduation standards.

The Department has several times in recent years proposed to eliminate the requirement of native language instruction, and bills for that purpose are now pending in Congress. Research findings on the effectiveness of bilingual education have been cited often in discussions of the proposals. At the request of the Chairman of the House Committee on Education and Labor, PEMD is evaluating the soundness of the research basis for a number of specific claims made by the Department in advocating changes in the law. This survey will obtain your views about the match between the state of knowledge on seven topics in this field, and statements made by officials of the U.S. Department of Education.

Instructions
In a separate packet you have received ten reviews of research and evaluation literature on bilingual education, including one prepared by Department of Education staff, a response to it, and eight other reviews. PEMD chose these using criteria of balance, representivity (of regions and ethnic groups), coverage of instructional methods, social science rigor, recency of coverage of the literature, and breadth of perspective (sensitivity to outcomes in addition to English proficiency), to present the state of knowledge concerning the effectiveness of methods of teaching limited English proficient (LEP) students. A variety of kinds of students, native languages, teaching methods, educational outcomes, and countries of the world are represented in the literature covered by the reviews. The most recent is a 1986 publication.
Please review the ten articles. Then read the claims about the state of knowledge made by various Department officials quoted below and give us your judgment whether the research evidence warrants the type of claim being made. The Department's claims are organized under six major headings or issue statements, with several quotes under each to exemplify the Department views. The issues begin with the general usefulness of broad labels to characterize teaching and the effectiveness of different approaches, and then move on to specific areas such as the effectiveness of using native language in teaching English and in teaching other subjects, the effectiveness of other methods not involving native language, evidence concerning long-term educational outcomes, and the possibility of reaching targeted conclusions even if the evidence does not permit general prescriptions.

In addition to your judgments whether the weight of research evidence does or does not support the Departmental statements on the issues, we have asked for brief explanations and interpretive comments that will help us understand your judgments, as well as an overall comment on the quality of the research base in this field compared to others. We would be happy to have any other views you wish to supply.

While for consistency, we encourage completion of the questions using the research and evaluation base provided by the selected reviews, we would be interested in your comments under question 1(b) on any issue suggesting other research you find persuasive that is not included in the reviews.

Uses of this information

There are eleven of you--individuals giving GAO expert judgments of the match between evidence and statements. We will prepare an oral briefing and a written report to the Chairman of the Education and Labor Committee on the views of this set of experts, and any additional GAO views that seem useful. The individuals may be named, as a set of informants, but no rating or comment you provide will be identified by name in any GAO report. We may quote from a comment, but without attribution.

***

If you have questions, please call either Fritz Mulhauser at 202-275-3902 or Rick Mines at 202-275-3971.

We would like to have your completed survey returned by June 10, 1986, to Fritz Mulhauser at GAO/PEMD, 441 G St. N.W., Room 5741, Washington, DC 20548. A postage paid envelope is enclosed.

***

2
Appendix II
Survey Instrument

Issue 1: Usefulness of Program Labels

There is a wide range of practice in teaching LEP students, including variation in the amount and manner of native and non-native language use. Policy discussion, however, tends to compress this variation. Does research evidence on theoretical and practical aspects of language learning show that educational methods for LEP students can be validly described and their effects contrasted at the general level suggested by the brief labels in common use? (Including "transitional bilingual education" (TBE), "immersion," "submersion," and "English-as-a-second-language." ) That is, does it make sense, according to the research, to speak of TBE, or any other of the named practices, as "a method" and to attempt to judge "its effectiveness"?

Department statements relevant to the issue


(a) Page 569: "The Department's [proposed] policy of allowing school districts to choose the method most suited to local children is supported by the results of the previously mentioned ongoing longitudinal impact study. Despite the past long-term Federal emphasis on transitional bilingual education, 57 percent of the Nation's schools with limited English proficient children use English as the medium of instruction for these students. Since there are no data showing that transitional bilingual education projects are more effective than alternative approaches, and since schools are choosing to use other approaches, the Department believes the past policy that Federal funds may support only one type of instructional method is not defensible. School districts are in a far better position than the Federal Government to design projects that respond appropriately to the needs of local children."


(a) Page 529: Q: Mr. Conte: "Do you, Mrs. Whitten, have a preference for any one method of teaching these children English, and would opening the field up jeopardize those school districts using the more traditional methods of instruction?"  

A: Mrs. Whitten: "No. The most proper assessment of the needs of the children in the community can be made by the local school district. Anything other than that restricts their choices. For example, an all-Hispanic community is very diff-

Page 43
ferent from a community composed of several different language minority groups. The transitional bilingual method might work beautifully with a homogeneous population but might not work well with a heterogeneous population. So I believe very strongly in alternatives."

22. Nov. 21, 1985. Remarks of Secretary of Education William J. Bennett in discussion with reporters. (GAO transcript of Department tape recording.)

(d) Q: "What do you not like about transitional bilingual education?"

A: Mr. Bennett: "I don't have anything against transitional bilingual education. I just don't think that we should tell everybody that's the way they have to do it....Why should we say one method will be the best? We don't know who the teachers are. We don't know who the students are. We don't know the facts and circumstances which are different from place to place. Let the proposal, the plans, fit the facts and circumstances and the people whom it's going to affect."

35. [undated] U.S. Department of Education, "Bilingual Education Fact Sheet" - distributed to congressional offices (first half of 1986?)

(a) Cover page: "[E]ducational research does not justify promoting only those methods that rely on native language instruction -- other methods are probably more effective in many cases;"


(b) Page 178: "In the absence of evaluation data showing the superiority of any one instructional approach, it is inappropriate for the Federal Government to favor a particular method. Teachers, parents, and local school officials are in a better position to make this choice than the Federal Government."
Appendix II
Survey Instrument

Questions About the Department Statements on Issue 1

1(a). In your view, does the weight of research evidence suggest that teaching methods can be validly described and evidence of their effectiveness aggregated and characterized in the general manner indicated by ED statements?

Circle one: YES NO CAN'T ANSWER

1(b). Please explain your answer, where possible with reference to specific reviews and literature you find especially convincing.

2. If you regarded the present labels as problematic for policy discussion, are there any alternative ways to characterize teaching approaches for LEP students that would be both more useful as well as more faithful to the research on actual practice than the present labels?

3. Do you have a comment on the quality of the research base for describing teaching practices for LEP children?
Research studies and local program experiences indicate that
transcultural programs change the bilingual education act.

...of excellent schools.'

...is very accessible many times, and can give a


English Coordinated?

Summarization of Nation Language Programs

While there may be many reasons for continuing some degree of

"There is a need for the United States to

..."
no one instructional approach is most effective in meeting this objective in all situations. Without clear evidence that the transitional method is more effective, we believe that the restriction on availability of funds for alternative programs requiring no use of the native language is unwarranted."

35. Funded by Department of Education, "Bilingual Education Fact Sheet"


(a) Page iv: "Congress had acted in good faith (in passing laws requiring instruction in children's native language), believing that research would prove TBE to be the one best method of instruction for LEP students. Research findings, however, have been inconclusive. Some studies show that TBE works under certain conditions, others have found that TBE has no effect on the learning of LEP students, and still others conclude that bilingual education may hinder learning. For example, Christina Brett Paulston, after conducting one of the most comprehensive reviews of the bilingual literature concluded that, "...research on bilingual education is characterized by disparate findings and inconclusive results." Iris C. Rotberg, of the National Science Foundation, concurs when she states that '(There is no) research evidence to support a Federal requirement that school districts use a particular instructional method ...Reviews of research findings comparing the effect of alternative instructional approaches on student achievement have shown that bilingual programs are neither better nor worse than other instructional methods.' Moreover, according to David Ramirez, of SRA Technologies, Inc., 'We still know very little about the typical programs children have had over 20 years. We know very little about how people learn language.'"
Appendix II
Survey Instrument

Questions About the Department Statements on Issue 2

1. Considering the objectives in the bilingual education program, how well do you think the state is meeting these objectives? (circle one)

   YES
   NO
   CAN'T ANSWER

1.b. Please explain your answer: where possible, with reference to specific evidence and literature you find especially convincing.

2. Do you have a comment on the quality of the evaluation and research base used to develop and support the implementation of the law? (circle one)

   YES
   NO
   CAN'T ANSWER
In the research and evaluation evidence adequate to draw conclusions about how well different teaching methods will cause students to learn English proficiency and subject matter competencies, there are some areas where the research methods are not adequate. The research is conducted in a way that makes it difficult to draw meaningful conclusions. The research is often conducted in ways that make it difficult to compare results across studies. The research is often conducted in ways that make it difficult to compare results across studies. Further, the research is often conducted in ways that make it difficult to compare results across studies.

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1. Do you have a comment on the quality of the research and evaluation evidence available on the impact of different teaching approaches (using different amounts of native language) on student learning in other subject areas?

2. Please explain your answer, where possible with reference to specific reviews and literature you find especially relevant. (b) Does the research and evaluation evidence support the legal requirement of instruction in the target language? In the past, what have you been taught in school?

Circle one:  
YES  
NO  
CAN'T ANSWER

Survey Instrument
Appendix II

GAO/PEMD-07-126 Research Evidence on Bilingual Education
Appendix II

Survey Instrument

Page 41

GAO/PEM-85-73B Research Evidence on Bilingual Education
13

Making it more effective.

The question is often asked: Why do we need a national test? In my opinion, the answer is clear. The number of schools that are getting lower scores at the same time as

the percentage of students doing well is increasing, has continued to rise, is not slowing. Yet, one cannot

This is a critical area to enhance the educational system. It is not enough to do reading and

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1c. Please explain your answer, where possible, with reference to:

(a) CAN'T ANSWER

(b) YES

(c) NO

14. Does this research and evaluation evidence support the claim: 

(a) Of the general population on average.

(b) Of the Hispanic population.

(c) Of the population of the United States.

15. Which of the following programs to aid this group are not consistent with what the Federal programs do or how they are designed?

(a) Programs that educate children.

(b) Programs that educate adults.

(c) Programs that educate parents.

35. (underlined) Department of Education, "Bilingual Education Fact Sheet." "Ours and to the other problems we have with the school."

36. (underlined) Department of Education, "Bilingual Education Fact Sheet." "More than 7,000,000 Hispanic children have been enrolled since 1971."
13

2. Do you have any comments on the quality of the research and educational outcomes for LEP students?

Evidence to suggest that immersion, ESL, or related methods, programs that do not use the native language, do you know of any

...long-term effectiveness of alternative teaching ap-

(c) Although the Department has not made specific claims for

Continuing...

To specific literature you find especially

Survey Instrument

Appendix II
This page contains a distorted or corrupted text, making it difficult to read or understand the content. It's challenging to extract meaningful information from this page due to the readability issues.
17. September 26, 1985. Press conference, Undersecretary Gary Bell, Deputy Director General Mission (DP direction)

...believe very strongly in alternative...
Appendix II
Survey Instrument

GAO/PEMD-87-128R Research Evidence on Bilingual Education
Please compare the current knowledge base in bilingual education to others you know of, and give an overall judgment of its

training. About treatments in mental health, critical factors, or job

You are probably familiar with bodies of research and

Overall judgment of the evidence

Bank accepted to answer in the literature

of those U.S. students for whom we could preclude (in the world

language group I.e., in your view, where are the characteristics

country a whole) for those in certain language groups in the

approaches for U.S. students in certain language groups. In the

knowledge, could one contradict that particular knowledge.

equivalent conclusions are warranted. After the general state of

1. If you answered no to 0.1, and you believe that score level

2.

continuing.

(0). Please explain your answer, where possible with reference

Circle one:

YES NO CANT ANSWER

reference to the role of native language approaches to teaching LEP children in U.S. schools, with special

correlation can be drawn concerning the effectiveness of diverse
do you regard the evidence as so convincing that no firm

According to the Department of Education on Language
(b) Please add further comments to explain your answer.

Following areas: worse than that in other areas I know, specifically the

Following areas: no better or worse than that in other areas I know, specifically the

Following areas: better than that in other areas I know, specifically the

Education:

For policy purposes, the knowledge base in bilingual education is inadequate for drawing conclusions of the sort needed by Congress.
New York, N.Y.
Columbia University
Teachers College
Professor of Education
Diane Ravitch

Mountain View, Califonia
SRA Technologies
Study Director
David Ramirez

Pittsburgh, Penn.
University of Pittsburgh
Professor of Linguistics
Christina Plato Rust

Tempe, Ariz.
Arizona State University
Professor of Education
Gene Glass

Berkeley, Calif.
University of California
Professor of Education
Lily Wong Fillmore

Santa Barbara, Calif.
University of California
Professor of Education
Richard Duran

Cambridge, Mass.
Harvard Graduate School of Education
Professor of Education
Courtney Cazden

Chicago, Ill.
Northwestern University
Professor of Psychology
Fred Bryant

Experts Surveyed
Appendix III
Appendix III
Experts Surveyed

Richard Tucker
Director
Center for Applied Linguistics
Washington, D.C.

Herbert Walberg
Professor of Education
University of Illinois
Chicago, Ill.
Appendix IV

Comments From the Department of Education

UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF THE ASSISTANT SECRETARY
FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

December 15, 1986

Honorable Charles A. Bowsher:
Comptroller General of the United States
General Accounting Office Building
441 G Street
Washington, D.C. 20548

Dear Mr. Bowsher:

Secretary Bennett has asked me to send you the Education Depart-
ment's comments on the GAO draft report entitled "Bilingual education:
Research Findings and Department of Education Statements." We welcome
their inclusion in the final report, per customary GAO practice.

We strongly recommend, however, that if any final report on this
subject is issued, it be radically revised so as to honor the usual
canons of scholarship, program evaluation and scientific research. The
GAO draft of November 17 is not a work of serious or conscientious
analysis. Its publication in this form could raise real questions about
the rigor and objectivity of the General Accounting Office.

As I understand it, the draft report was prepared at the request of
the Chairman of the House Education and Labor Committee to "assess
official interpretations by the Department of Education of research
evidence in bilingual education." However, as is confirmed by the draft
product, the assignment appears to go far beyond GAO's customary practice
in reviewing activities of this Department. Important questions might
also be raised as to the report's conformance, both in conception and
implementation, with GAO's own audit standards applicable to evaluating
program results, including general standards concerning the qualifications
and independence of the evaluator, and due professional care in carrying
out the audit. I am not aware of previous GAO reports relating to
education that have addressed a general research issue in this manner.
pronouncing judgment on areas of essentially academic inquiry on the
basis of an "analysis" of this sort. Indeed, as suggested in the
attached comments, there is some question as to whether the report even
comes within GAO's proper legal authority.

To enumerate some of the flaws in the draft report:
--- GAO constructed from a pastiche of comments and statements by
sundry persons on diverse occasions a set of conclusions or assertions
that it designated as "official interpretations by the Department of
Education" with respect to half a dozen issues framed as GAO saw fit
--- Rather than undertake any sort of objective or comprehensive
analysis of the extensive extant research and evaluation literature
bearing on those issues, GAO plucked a handful of studies called (in
some cases incorrectly) "reviews of the literature."
--- GAO picked eleven "experts" (one of whom later withdrew) to
individually examine the match between the assertions GAO had con-
structed as the Department's "official interpretations" and the evidence
assembled in the studies that GAO had chosen, as well as in other
unidentified "research" consulted by some of these experts.

WASHINGTON D.C. 02008
Appendix IV
Comments From the Department of Education

Comment 6
--- GAO tallied the "experts'" "votes" on each issue in order to reach its purported "conclusions."

In short, GAO neither conducted a satisfactory opinion poll (since those polled were not a representative sample of anything, their collective views have no greater statistical significance than their individual views), nor did it conduct a full-scale research review, synthesis or meta-analysis; nor did it furnish its readers with enough information on the basis of which to form their own conclusions.

Asked by a member of Congress to do something, GAO indeed engaged in considerable activity. But I cannot think of a single reputable scholarly journal that would approve of GAO's "methodology" or whose standards would be satisfied by the relationships GAO constructed among evidence, analysis and conclusions -- even assuming that the "hypotheses" GAO initially posed were accurate representations of Education Department policies, which in key instances they are not.

What happened to the standards of the General Accounting Office? Were they suspended for purposes of this particular exercise? I am not alone in asking these questions. At least two of the ten "experts" GAO consulted -- both of them distinguished scholars in the field of education -- raised virtually the same concerns in letters to Mr. Mulhausen.

As you know, the logical test underlying scientific research is the question of rejection of the null hypothesis. That is to say, the burden of proof rests on those who assert that some effect or event occurs. The presumption in all scientific research is that there is no difference until proven otherwise. Thus, on one (perhaps the central) issue posed by the GAO (one of authentic interest to the nation), it is not incumbent on the Department of Education to prove that "transitional bilingual education" is ineffective, as GAO states the issue. Rather, the burden of proof is on those who assert that such education is effective. When results are inconclusive, the correct scientific conclusion is to accept the null hypothesis, i.e. to conclude that those who assert effectiveness have failed to prove their claims. Observe that there is no disagreement among the Education Department, the GAO and the panel it polled that the research to date is inconclusive.

Yet the GAO persists in the illogical and scientifically improper assertion that the inconclusive nature of the research argues against the Department's "position." To the contrary, it is the inconclusive nature of the research that supports the Department's view that this unproven method ought not be mandated by law.

Let us be clear on this crucial aspect of the Department's position. We have never suggested that "transitional bilingual education" ought to be forbidden or eradicated, much less that the federal government should ban it. We have simply maintained that there is no sound basis in research for requiring local school districts to employ only this among the many possible approaches to bilingual education. In general, American society entrusts to local and state processes important choices among curricular and pedagogical strategies. Especially where the research presents no conclusive evidence as to the superior effectiveness of one method, let us permit diversity, innovation, experimentation and local options to flourish.

One final concern. GAO's draft report instructs recipients not to
"show or release its contents for purposes other than official review and comment under any circumstances." Yet during the two weeks prior to the Department's receipt of the draft report for comment, a number of stories appeared in the media reporting the "findings" of the report. Thus, Department officials were contacted by the press and asked to comment long before they had seen the confidential draft. Prominently featured in these press stories were statements about the contents of the report apparently made by staff members of the Congressional committee that requested it. It is regrettable that the confidentiality of the draft report and the integrity of the process were violated in pursuit of narrow political ends. Given the report's inadequacies, it is especially regrettable that it was made public prior to competent peer review by disinterested experts. I would be very surprised if such review did not cause the GAO to go back to the drawing boards on this entire matter.

Sincerely,

Chester E. Finn, Jr.
Assistant Secretary and Counselor to the Secretary

Enclosure
Department of Education's Response to GAO Draft Report
"Bilingual Education: Research Findings and Department of Education Statements (Code 973606)"

The GAO draft report, "Bilingual Education: Research Findings and Department of Education Statements," is a seriously deficient attempt to assess the validity of the Department's policy concerning bilingual education. The report has major flaws:

- It contains serious methodological shortcomings
  -- The selection of both the experts and the "studies" given to them for review raises serious doubts as to their objectivity, completeness, and balance.
  -- Several researchers did not confine their reviews to the ten studies provided by GAO, but the report does not include specific citations of these additional studies for independent review.
  -- The report does not critically assess the basis of the researchers' opinions on key issues.

- The Department's policy towards education for limited English proficient children is misrepresented in the narrative and by the panelists.

Because of these problems, the Department rejects the findings of GAO's report. Our position on bilingual education is valid and unscathed by this inept report. That position, it should be recalled, is the opposite of doctrinaire. We seek flexibility, diversity, and local option. Transitional bilingual education may be, and apparently has been, an effective instructional approach under some circumstances. But current research cannot sustain the conclusion that it or any other is the "best" (or only effective) method of instruction in any one set of circumstances, never mind for all limited English proficient students under all circumstances. School districts should be able to select among a range of instructional approaches, including those that involve use of the child's native language.

The Department also has serious concerns as to whether this report comes within GAO's proper authority. Because the report assesses the general research literature on bilingual education, rather than evaluating a Federal education program, it appears to be technically outside GAO's scope of activities. Further, GAO has mishandled this report by releasing the draft to the media before ED review and thus has unnecessarily politicized the review process.

Methodological Shortcomings:

Objectivity and Balance of the Panel: GAO selected a panel of ten researchers and asked them to review a small, pre-selected set of research reports. GAO admits in its discussion of the strengths and limitations of this approach that "we cannot guarantee that a different group would not give different..."
assessments of the match between research knowledge and Department of Education statements. The Department fully agrees with this statement and wonders why GAO would use such an unscientific method to assess the research.

A basic tenet of evaluation is that individuals with a vested interest in the outcome of an evaluation should not participate in the assessment. However, the panel included a number of bilingual education researchers who previously had taken stands in opposition to the Department's proposed policy. Two of the panelists are also authors or co-authors of two of the studies provided by GAO for review. One was co-author of a study publicly criticized by the Department. A quotation from the criticism was included in GAO's quotations provided to the panelists.

Objectivity and Comprehensiveness of the Research Literature. GAO failed to provide the researchers with anything resembling a comprehensive set of studies from the vast research literature on the effectiveness of bilingual education. Instead, GAO provided the panel with ten reports, including several literature reviews, a critique of one of the literature reviews, empirical studies, and essays. Only two of the ten reports are comprehensive reviews of the literature. Both of these, including a report by the Congressional Research Service, support the Department's position on bilingual education.

Major literature reviews that reach conclusions similar to the two comprehensive reviews sent to the panel were omitted. For example:

"The research, however, does not support transitional bilingual education as a superior instructional technique for increasing the English language achievement of limited-English-proficient children."


"[There is no] research evidence to support a federal requirement that school districts use a particular instructional method. . . . Reviews of research findings comparing the effects of alternative instructional approaches on student achievement have shown that bilingual programs are neither better nor worse than other instructional methods."


In addition, two of GAO's ten panelists -- nationally recognized experts in education research -- stated in separate letters to GAO that the research supplied to the panel members was incomplete (see Attachment 4). One wrote that "based on what we were asked to judge, I find the conclusions you report to be insupportable."

Lack of Documentation of Other Research Cited by the Panelists. The basis for panelists' responses to questions was not confined to the reviews provided by GAO. In several instances, the report failed to provide the specific "outside" citations on which the panelists had seemingly based
Comment 28

Failure to Assess Researchers' Judgments and Their Implications: In key places, the report does not critically assess the researchers' judgments or the grounds for them. For example, in Issue 2 (availability of research evidence to support expanding choices in instructional approaches), four panelists based their opinions on one, highly limited study. Another voted against the Department's position, but without a reasonable basis for his judgment. A sixth used other research for his judgment, but the report contains no information on the specific studies he used. Two more researchers objected on grounds that are discredited later in the report. The report provides no analysis of these problems, merely stating that most of the researchers opposed the Department's position. A critical analysis would have shown there was no firm research base for their conclusions.

In Issue 6 (whether any firm conclusions can be drawn about the effectiveness of approaches for subgroups of students), seven of the researchers believe that such conclusions can be drawn, but they drew widely varied conclusions about the issue. Some point out that native-language teaching is appropriate for children who meet the criteria in one of the studies provided. Another used general education research as his source, again without specific citations provided in the report. In many ways, the results of this section appear to confirm the Department's position; namely, that there is very little basis from which to draw any firm conclusions. Thus, the results are actually supportive of the Department's "local option, more diversity" position.

Comment 29

Misrepresentation of the Department's Position

In several key places, the report misrepresents the Department's position on bilingual education. For example, the report selectively quotes Department officials to imply that the Department opposes transitional bilingual education. The Department's position is not that use of the child's native language is an ineffective instructional method, but that there is insufficient evidence that it works best under all circumstances. Other methods sometimes work as well or better or are more appropriate.

Moreover, it is clear that some of the panelists misinterpreted the Department's position. The report states that one panelist who disagreed with the Department position felt that "the quality of the evidence is too weak for the Department to say we know definitely that bilingual programs are unsuccessful" (p. 27). It is not the Department's position that bilingual programs are unsuccessful, only that there is insufficient evidence that there is only one most successful method of instruction. In fact, the Department has formally recognized bilingual programs which are effective through our School Recognition Program.

Comment 30

The Report Exceeds the Scope of GAO's Authorized Activity

There is some question as to whether this report comes within GAO's proper authority. 31 U.S.C. 712 and 717, the Controller General is authorized to investigate the use of public money and, at the request of a cognizant

Comment 31

Quote on page 27 deleted

Comment 32
Congressional committees, to evaluate the results of Federal programs. In addition, under 20 U.S.C. 1277(a), the Comptroller General, upon such a request, may evaluate Federal education programs, including review of the policies and practices of Federal agencies administering the programs and providing recommendations for modifications in existing laws, regulations, and practices.

The report, however, considers summary evaluations of research on different bilingual education approaches whether Federally funded or not. It appears to be technically outside the scope of these authorities. The report does not in fact investigate the use of public money. Nor does it evaluate the Federal bilingual education program, assess the effectiveness of any policies or practices put into effect in that program, or make any recommendations for changes in the program.

In addition, the report appears to be inconsistent with GAO's own internal audit standards for essential element audits of program results, given the questionable "independence, capability, and performance" of the evaluators and the lack of any relationship between the evaluation and the actual achievement of Federal bilingual programs. In fact, it appears that unreported political factors external to the evaluation may have interfered with the evaluators' "ability to form objective opinions and conclusions." (For reference, see Chapter II of the GAO Standards of Audit of Governmental Organizations, Programs, Activities, and Functions, 1981.)

Beyond this technical legal consideration, the report appears inconsistent with the customary practice of GAO in reviewing activities of this Department. GAO has prepared many reports on the Department and its programs, but we are not aware of any that, prior to this report, has addressed an issue in this manner, pronouncing policy opinions in areas not subject to objective analysis, or, for that matter, using the dubious technique of polling the viewpoints of individuals as the basis for its "conclusions."

Mishandling of the GAO Report

The Department received the GAO draft report on November 18, with a notice on its cover that recipients were not to "show or release its contents for purposes other than official review and comment under any circumstances." Notwithstanding this admonition, contents of the draft report have already been released to the press and were cited in numerous newspaper articles. Prominently featured in these press stories were statements about the content of the report by House of Representatives committee staff. As a result of these premature disclosures, Department staff were placed in the position of reacting to press inquiries about GAO "findings," before even seeing the report. Moreover, if the report had been received, GAO policy would have prohibited us from making any comments on the draft report.

Because of the highly sensitive, political nature of bilingual education issues and the strong objections of two of the panelists to the methodology and conclusions of the report, it was incumbent upon GAO to pay careful attention to its own review policy. The premature release of the draft report's findings serves to raise additional questions about the objectivity of the study.
APPENDIX IV

Comment From the Department of Education

ANALYSIS OF ADDITIONAL ISSUES RAISED IN THE REPORT

Issue 2. The Native Language Requirement and the Learning of English -- Considering one of the objectives in the current law authorizing the bilingual education program (achieving competence in English), do you consider the Department correct that there is insufficient research evidence about ways to reach that objective to support the law's requirement of some degree of teaching in the native language?

Department's response:

Inaccurate Description of Department's Position. In the introduction to this section, GAO claims that the Department considers transitional bilingual education to be "a barrier to learning English." The Department does not hold this position. Transitional bilingual education is one approach to serving limited English proficient children which may work for many children. There are other approaches which also may work and should be eligible for Federal funding.

Inadequate Basis for Researchers' Judgments. Six researchers were counted by GAO as judging that there is sufficient evidence to support the present law's requirement to use some degree of teaching in the native language. Four of these cited the Willig meta-analysis study provided to the panel. However, the Willig study reviewed a non-representative and very small sample of the existing research and used an inappropriate methodology. It is by no means a comprehensive review of the literature.

A fifth researcher did not find the GAO-supplied material convincing but found support in research results from second language learning and school performance studies. GAO does not provide specific citations of these other studies, however, so there is no way to judge whether the researcher had selected valid and significant studies. The sixth researcher stated that the literature was too weak for the Department to say that bilingual education was unsuccessful. Presumably it is also too weak to sustain the converse conclusion.

Two researchers refused to respond because they believed that the goal of learning English cannot be separated from maintaining academic progress in other subjects. Both felt that for the goal of learning to speak English, ESL and immersion would probably be superior methods. However, they maintained that progress in other courses required use of the native language for instruction and could not be separated from the goal of learning English.

The Department believes that there is insufficient research to show that either native language instruction or structured English approaches enhance learning of other subjects than English. GAO fully agrees with this position in later statements in the report. The position taken by these researchers has no support from the research evidence, although GAO did not point out this fact.

Report's Conclusions Not Supported. The report's final summary states that most of the experts surveyed believe that research does not support the Department's proposal to change the legal requirement for some degree of native language use. Based on our review of the positions of the researchers, the Department feels that, for this key question, the conclusions drawn by "most" of the experts are not based on sound analysis.
Herbert J. Walberg  
University of Illinois at Chicago  
522 North Euclid Avenue  
Oak Park, IL 60302  
Tel. (312) 996-8133  
Home 386-8067  

September 22, 1986

Dear Mr. Mulheuser,

I seem to be in the minority on many points in Breslow Report on bilingual education policy for the House Committee on Education and Labor. But I feel no less confident in my opinion that the public and Department of Education are right in doubting the validity of a single approach to bilingual-education policy. For several reasons, I suspect that the policy employed in past years is inferior to a "total immersion" approach for teaching English and getting non-English-speaking students into the mainstream of American life.

First, there is the question of independence and objectivity of both the literature and experts in bilingual education. Because the Department had cited several of the experts GAO selected does not make the set objective, the Department may have cited representative points of view in fairness, and a particular selection could result in bias.

Actually, even the total population of opinion is likely to be biased because most of the research and synthesis in this field has been carried by those who have been funded by "true believers" within and outside government intent on showing the superiority of a single approach. Even the opinions of teachers and others funded in such programs are suspect because their jobs depend on such programs. Getting information from such sources is like asking your barber if you need a haircut.

Second, much of the research is wretchedly planned and executed, and little can be concluded from it. In combination, with the built-in bias of...
much of it, one has to greatly discount what seems to be concluded—even by experts.

That is why I place more weight on earlier research carried out before the single approach was pressed, and research carried out in foreign countries, and by the U.S. military. In my opinion, this research, which was not prominent in the selection of reviews GAO supplied to us, shows the superiority of large amounts of high-intensity exposure for learning a second language, which a gigantic amount of research on learning in general also supports. As you know, I cited this research in my comments on the forms.

Actually the position of the Department of Education seems more moderate than my own. They wish, as I understand it, merely to allow experimentation and use of a variety of approaches rather than a single one. But, if I had to pick one, it would have to be “total immersion.”

What would be best for all concerned, especially the children, would be independent and rigorous experimentation on the results of such programs. It is appalling to think that the Congress has spent so much money without knowing the effects of its actions.

Sincerely,

Herbert J. Walberg
September 18, 1986

Mr. Fritz Mulhauser
U.S. General Accounting Office
Program Evaluation Division
Washington, D.C. 20548

Dear Mr. Mulhauser,

Thank you for your recent letter asking for my response to your report on bilingual education. I did not respond earlier because I was frankly puzzled by the results you reported. You polled ten scholars and came up with a judgment favoring bilingual education; I was one of the minority who saw very clearly in the material you circulated the repeated statement that the research available is too weak, too inconclusive, and too politicized to serve as a basis for national policy. The paucity of the available research was noted in several of the articles you sent us. If the majority of the panel chose to ignore this, then I must say that I am not much impressed by the majority's vote. Perhaps the majority drew upon research that was not contained in the packet you distributed. Based on what we were asked to judge, I find the conclusions you report to be insupportable. I have no doubt that you accurately reflect those polled, but I am at a loss to understand on what evidence their judgments were based.

Yours truly,

Diane Ravitch
Professor of History
The 10 items in this bibliography are the 10 reviews of literature on the effectiveness of various teaching approaches for children speaking minority languages that we sent to our panel of experts.

A. The Department’s Review of Research

For compactness, we selected this shorter version of the authors’ work rather than the original, unpublished 1981 manuscript. The studies the authors reviewed and their conclusions are very similar in the two versions.

B. Response to the Department’s Review

Our experts received the main text of this paper. The full paper includes study-by-study annotations of each research study cited by Baker and de Kanter. The text we provided to the experts was the authors’ full summary of their conclusions from that analysis.

C. Reviews on Immersion Teaching Methods


D. General Reviews


## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Bilingual Education</strong></td>
<td>A general approach used by a variety of instructional programs in schools, in which subjects are taught in two languages, English and the native language of children with limited proficiency in English, and English is taught as a second language.</td>
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<tr>
<td><strong>English as a Second Language</strong></td>
<td>A teaching approach in which students whose proficiency in English is limited are instructed in the use of the English language. Their instruction is based on a special curriculum that typically involves little or no use of their native language and is usually taught only in specific school periods. For the rest of the school day, the students may be placed in regular (or submersion) instruction, an immersion program, or a bilingual program.</td>
</tr>
<tr>
<td><strong>Immersion</strong></td>
<td>General term for teaching approaches for language minorities not involving children's native language. For two specific variations of immersion, see Submersion and Structured Immersion.</td>
</tr>
<tr>
<td><strong>Sheltered English</strong></td>
<td>The simplified vocabulary and sentence structure used in teaching school subjects in immersion programs in which students lack enough English-language skills to understand the regular curriculum.</td>
</tr>
<tr>
<td><strong>Structured Immersion</strong></td>
<td>Teaching in English but with several differences from submersion: the teacher understands the native language and students may speak it to the teacher, although the teacher generally answers only in English. Knowledge of English is not assumed, and the curriculum is modified in vocabulary and pacing, so that the content will be understood. Some programs include some language-arts teaching in the native language.</td>
</tr>
<tr>
<td><strong>Submersion</strong></td>
<td>Programs in which students whose proficiency in English is limited are placed in ordinary classrooms in which English is the language of instruction. They are given no special program to help them overcome their language problems, and their native language is not used in the classroom. Also called &quot;sink or swim,&quot; submersion was found unconstitutional in the Supreme Court's decision in Lau v. Nichols, 414 U.S. 563 (1974).</td>
</tr>
<tr>
<td>Transitional Bilingual Education</td>
<td>Programs of bilingual education with emphasis on the development of English-language skills in order to enable students whose proficiency in English is limited to shift to an all-English program of instruction. Some programs include English as a second language.</td>
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