# Longitudinal Study of Three Program Models for Language-Minority Students: A Critical Examination of Reported Findings ${ }^{1}$ 

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#### Abstract

This review examines the reported findings and corresponding implications of the national investigation entitled Longitudinal Study of Immersion Strategy, Early-Exit, and Late-Exit Transitional Bilingual Education Programs for Language-minority Children commissioned by the U.S. Department of Education in 1983 and completed in 1991. The review is intended to assist policy makers and practitioners in identifying the key outcomes of the study and to understand these outcomes within the context of other related research on languageminority education.


## Introduction

In 1983, the U.S. Department of Education commissioned a national investigation entitled Longitudinal Study of Immersion Strategy, Early-exit and Late-exit Transitional Bilingual Education Programs for Language-minority Children. 2 The Longitudinal Study has turned out to be the most comprehensive survey of language-minority education since the famous evaluation study of the Elementary and Secondary Education Act (ESEA) Title VII Spanish/English bilingual education programs in the late 1970s (Danoff, Coles, McLaughlin \& Reynolds 1978). According to the principal investigators (Ramírez, Yuen, Ramey \& Pasta 1991, Vol. I), the primary purpose of the study was to compare the relative

[^0]effectiveness of two alternative program models (structured English immersion and late-exit transitional bilingual education) with the one claimed to be most typically funded through the federal Bilingual Education Act (ESEA, Title VII), the early-exit transitional bilingual education program.

## Purpose of review

This review focuses on the reported findings and corresponding implications of the Longitudinal Study. It does not scrutinize the procedures and methodology nor present a technical critique. Instead this review is intended to assist policy makers and practitioners in identifying the key outcomes of the study and to understand these outcomes within the context of other related research on languageminority education. Additionally, this paper will address several of the possible misconceptions that may surface as a result of secondary reviews of the Longitudinal Study done by various interest groups and the popular press.

## Overview of the longitudinal study

The study was conducted between 1982 and 1989 in nine school districts in five states (California, Florida, New Jersey, New York, and Texas). Approximately 2,000 Spanish-speaking students who had been classified as limited English proficient ${ }^{3}$ were included in the sample. These pupils were distributed among 51 schools and 554 classrooms.

The researchers conducted a national search for programs which best represented the models of interest: structured immersion, earlyexit transitional bilingual education, and late-exit transitional bilingual education. The operational definitions of these models are provided later in this paper as part of the analysis of each of the program models. It is of interest to note the great difficulty encountered in locating authentic structured immersion and late-exit bilingual programs. Even after a rigorous national survey, few programs were identified which met the specifications contained in the operational definitions of these models (Ramírez 1991, personal communication). The search included letter and telephone contacts

[^1]as well as onsite visits. Only programs meeting the criteria stated in the operational definitions were included in the Longitudinal Study.

Students, grouped by school year cohorts, were followed over a four year period. Thus, in the case of the structured immersion and early-exit models, pupils were followed from kindergarten through third grade beginning with the 1984-85 school year. This was the maximum time period allowed under the contract provisions specified by the U.S. Department of Education. Because of these limitations, the late-exit model cohorts were made up of students enrolled in grades 3-6 in order to study the effects of exit in the upper elementary grades. In all cases, students in the cohorts studied were those who enrolled in the program of treatment at the kindergarten level and were followed through the third or sixth grade depending on the program model being studied. Only data from students with adequate attendance patterns were included in the analyses.

The investigators looked at a wide range of variables associated with each participant's academic performance and skills, family background, teacher, classroom, school, and district. The following data elements were collected on each of the approximately 2,000 students in the study:

## Child-Level Data

- oral English proficiency
- English language arts
- English reading
- math assessed in English
- oral Spanish proficiency
- Spanish language arts
- Spanish reading
- math assessed in Spanish
- class schedule
- special needs
- general ability


## Home Background

- income
- parent education/ employment
- home/community language
- parent participation
- parent attitudes
- length of residence


## School District

- proportion of language minority schools
- socioeconomic status
- availability of programs
- community characteristics


## Teacher

- training
- experience
- English and Spanish use in class
- attitudes
- language proficiency


## Classroom

- proportion of enrollment
- instructional materials
- teacher/child interactions
- engaged academic time
- student groups \& activities

These data were collected through a variety of means including testing, interviews, surveys, observations, and review of school and community records.

## Reports of results

As of the writing of this review, summaries of the Longitudinal Study have been reported in several publications: (1) the Executive Summary of the Longitudinal Study of Structured English Immersion Strategy Early-exit and Late-exit Bilingual Education Programs For Language-minority Children disseminated by the U.S. Department of Education (February, 1991); (2) articles appearing in recent issues of the newsletters of the National Association for Bilingual Education (Ramírez 1991) and the California Association for Bilingual Education (Cummins \& Genzuk 1991); and (3) a paper issued by Ramírez \& Terao (1991) and authored by the principal investigator. Since the Executive Summary represents the official report by the U.S. Department of Education, this review will focus on that document even though, in our opinion, the other reports are clearer and more accurate in their representations of the findings. Also, our selection of the Executive Summary is based on the fact that early news articles appearing in both the popular as well as professional press, use the Executive Summary as their primary source document (e.g., Schmidt 1991; Toth 1991).

The news media and others have usually referred to the concluding statements found on the Executive Summary when attempting to discern what they consider to be the most important outcomes of the Longitudinal Study. That section of the summary, entitled "Implications," contains the following slate of major findings and conclusions derived from the study:

1. English learners in all three instructional programs improved their skills in mathematics, English language, and reading as fast as or faster than students in the general population.
2. Providing substantial instruction in the child's primary language does not impede the learning of English language or reading skills.
3. Providing English learners with English-only instruction through grade three, as was done in the structured immersion strategy program, is as effective as an early-exit program.
4. Contrary to the objectives of the immersion strategy and earlyexit programs, most students remain in these programs much longer than expected. It is clear that the immersion strategy and early-exit teachers believe that the majority of English learners would be better off if they remain in the program for more than three years.
5. There is a need to improve the quality of training programs for teachers serving language-minority students, so that they can provide a more active learning environment.
6. Parental involvement appears to be greatest in the late-exit program. This suggests that schools should explore how they might use the home language of their students to engage parents in the schooling of their children.
7. There is some evidence to suggest that when English learners receive most of their instruction in their home language, they should not be abruptly transferred into a program that uses only English (adapted from page 40, Executive Summary).

These claims are central to understanding the implications of the Longitudinal Study. Each of the statements is discussed and critiqued in detail later in this review. First, however, we present a comprehensive analysis of the three program treatments, structured immersion, early-exit, and late-exit transitional bilingual education. The analyses includes an examination of the (1) validity of the operational definitions, (2) degree of implementation of the models, and (3) interpretations of the outcome data.

## Early-exit transitional bilingual education

In the Longitudinal Study, early-exit transitional bilingual education refers to a program model which adheres to the following practices:

1. Teacher is bilingual,
2. Teacher uses both first language (L1) and second language (L2) for instruction,
3. L1 language arts skills may be developed first, before introduction of L2 language arts, or at the same time,
4. Instruction in L1 is minimal, not more than one hour per day,
5. Use of L1 and L2 is not differentiated by teaching staff,
6. Teachers using L2 have native or near-native L2 skills,
7. Children are mainstreamed into English-only programs as soon as they have demonstrated proficiency in English. This transition into English-only programs usually occurs within two or three years after entry into the early-exit program,
8. There is a limited primary language component,
9. There is an L2 language arts component,
10. Cultural sensitivity is reflected in the program by the teacher, the instructional materials, and the children's tasks,
11. All content areas are taught in L2 (p. 39, Vol. I).

An analysis of this operational definition quickly leads to the conclusion that the type of early-exit model selected for the Longitudinal Study is decidedly a weak design when we consider the theoretical and research underpinnings of transitional bilingual education. For instance, in California, both through the legislation and corresponding official technical assistance documents produced by the State Education Agency (SEA), an enhanced form of earlyexit programs has been promoted. Some of the state-promoted elements which differ significantly from the operational definition in the Longitudinal Study are:

1. L1 is used for at least $50 \%$ of the time, especially in the early grades. As students progress in English, instruction in that language is added incrementally in the program
2. L1 is not only used for language arts and reading but also for at least three other subjects (mathematics, social science, science, and one elective),
3. L1 reading ability is to be developed to a significantly high level. Formal instruction in English reading is not to be introduced until individual pupils have met L1 reading performance criteria as well as L2 oral language proficiency criteria,
4. L1 speakers are to be given opportunities to practice reading skills and build an appreciation for reading through access to children's literature in the L1 (California Department of Education 1981).

The legal basis for these program elements is found in the former Bilingual Education Acts of 1976 and 1980. In addition, the SEA actively promoted such practices through onsite visits to school districts using the Bilingual Program Quality Review Instrument (California State Department of Education 1981). The SEA also conducted numerous conferences and regional workshops. The substance of all of these sessions was derived from a number of publications developed and disseminated by the SEA which reported on the available research evidence at the time. Most notable of these are: (1) Schooling Language-minority Students: A Theoretical Framework (California State University in Los Angeles 1981), (2) Basic Principles for the Education of Students: An Overview (California Department of Education 1983), and (3) Individual Learning Programs for Limited-English-Proficient Students: A Handbook for School Personnel (California Department of Education 1984).

These practices were required and/or promoted as a consequence of research suggesting that for language-minority students, the development of high levels of cognitive/academic language proficiency in the primary language: (1) forms the basis for similar proficiency in English, (2) allows normal academic progress, (3) assists in the acquisition of English by increasing the range of comprehensible input, and (4) promotes positive adjustment to both minority and majority cultural groups (Cummins 1979, 1981; Thonis 1981; Skutnabb-Kangas 1979; Krashen 1981). The premise was that language-minority students should be given the opportunity to progress in academic studies in their primary language while in the process of acquiring English. Most knowledge, skills, and abilities learned in the L1 form part of a common underlying proficiency which then is applicable and transferable to English, once sufficient proficiency is achieved in that language (Cummins 1981). Of course, to achieve these results, language-minority
students would need to participate in a comprehensive and well organized L1 academic program such as that specified by the Bilingual Program Quality Review Instrument (California State Department of Education 1981) and other SEA publications.

Thus, in California and other parts of the country, a different form of the early-exit transitional program has been promoted by the SEA and frequently implemented by school districts. Of course, some districts develop divergent models based on philosophical differences; however, lack of implementation of the primary language component in many of these early-exit programs is just as often a result of shortages of human and material resources and poor planning at the district and school levels (Dolson 1979). Until the late 1980s, when California's Bilingual Education Act experienced "sunset," many transitional programs attempted to meet, or at least move toward, the standards promoted by the SEA. This continues to be the situation presently.

The point is, an early-exit design with an extremely weak mother tongue component was purposefully selected for the Longitudinal Study. Even if we agree that the operational description reflects a common version of the early-exit programs implemented by school districts, then at best, it represents nothing more than a "popular" design rather than an optimal one. We would argue that as was the case with structured immersion and late-exit models, a more fully implemented, stronger early-exit design with closer adherence to a theoretically-based operational definition should have been selected for the Longitudinal Study.

If the operational definition for the early-exit model is questionable, at least the fidelity of implementation of the model is carefully documented through observations, interviews, and records. The evidence shows that both the primary language and perhaps even the English academic components were crudely implemented. For instance, as a group, the early-exit teachers did not possess the Spanish language proficiency necessary to provide instruction in and through that language. On the basis of a language proficiency scale developed by the Defense Language Institute, the average score of the early-exit teachers in Spanish was only 2.7. A level 5 represents educated native speaker ability and a level 4 signifies full professional proficiency. A score of 2.7 falls below minimum professional levels. On the other hand, the average English proficiency score for the structured immersion teachers was 4.7, just shy of topping Out on the scale. From a language
proficiency point of view, the structured immersion teachers were better prepared to provide the required English-only instruction than were the early-exit teachers to conduct the primary language component.

The low levels of Spanish language proficiency among the earlyexit teachers is probably one of the principal reasons that they used very small amounts of the primary language for instructional purposes. For instance, at one early-exit site, English was used more than $98 \%$ of the time. At other sites, it was not uncommon for English to be used in excess of $90 \%$. In fact, when interviewed about language use attitudes, $70 \%$ of the early-exit teachers did not feel that Spanish should be used for formal instructional purposes. Only $21 \%$ felt that language-minority students should be encouraged to use Spanish during classroom instructional periods.

The Spanish language proficiency and attitudinal data suggest that many of the early-exit teachers were unprepared and often unfriendly towards the use of their pupils' primary language. This would likely lead to the creation of a highly stigmatized environment in which students would not feel comfortable using their primary language let alone develop attitudes of valuing their language and culture. As indicated by a number of researchers, the children are often made to feel that their heritage language and culture are handicaps that must be eradicated if they are to learn English and progress academically (Skutnabb-Kangas 1991). This of course leads to a substractive bilingual situation with its corresponding negative linguistic, academic, social, and psychological consequences (Lambert 1984).

Another important consideration with regard to the degree of implementation of the early-exit model is the component dealing with content instruction given in English in the academic subject matter areas. According to the operational definition, the early-exit teachers provided all math, science, social science, and other content instruction through English. But unlike the structured immersion teachers, whom we assume were provided with training associated with a second language content-based instructional approach (commonly known as sheltered English or sheltered content instruction), there is no mention of the methodologies used by earlyexit teachers to deliver the core curriculum in English. This leads to the speculation, based on past observations of such situations, that without guidance and a specific instructional protocol, many earlyexit teachers might resort to a submersion-like approach for the
portion of the school day dedicated to subject matter through English.

Given the serious shortcomings of the early-exit model both in terms of the operational definition as well as the lack of appropriate implementation, it is surprising that this form of transitional bilingual education had results equal to or in some cases better than the structured immersion program. On the other hand, even though the Longitudinal Study does not provide information on the possible long term effects of early-exit, that is, the language and academic outcomes of program graduates when they reach the fifth and sixth grades, it appears that the results of early-exit pale when compared to those of the late-exit design. What the study does suggest is that the early-exit model does not adequately promote high levels of language, academic and crosscultural development among languageminority students.

The Longitudinal Study, as well as a number of other investigations (Fishman 1988; Cummins 1990; Hernández-Chávez 1984; Spener 1988) which have focused on early-exit transitional programs seem to consistently indicate that this "quick fix" version of bilingual education is severely limited in its ability to address the overall scholastic needs of language-minority pupils. This has two major implications for school districts. First, early-exit is not an especially effective model and districts would be well advised to consider instead full bilingual approaches such as late-exit, maintenance, two-way and other forms of enhanced bilingual designs. These models are discussed later in this report. Secondly, if implemented as a phase in the evolution of a full bilingual educational model, early-exit may be a suitable interim programmatic measure. After all, according to the Longitudinal Study, early-exit results are similar to those of structured immersion. Furthermore, school districts which select this more progressive approach have the added benefit of establishing a foundation upon which they may develop a full bilingual education program. That model, if implemented properly, should eventually result in superior outcomes.

## Structured immersion program

The Longitudinal Study was designed to compare the early-exit bilingual transitional model to two alternative programs, one of which was the structured immersion design. The primary goal of this English-only approach is for students to learn English rapidly
and be exited to mainstream programs as soon as possible. For the purposes of the Longitudinal Study, structured immersion was defined as a program with the following characteristics:

1. Teacher uses L2 exclusively for instruction. Teacher's use of L1 is informal, such as giving or clarifying directions
2. Content areas are used to teach L2,
3. L2 is used to teach content,
4. Students are free to use L1 among themselves and with the teacher,
5. Teacher is bilingual,
6. Children are mainstreamed as soon as they demonstrate proficiency in English. This transition into an English-only program usually occurs within two or three years after entry into the immersion strategy program,
7. There is a limited primary language component (p. 39, Vol. I).

These programmatic elements were selected as a result of favorable research and evaluation reports from Canada on the implementation of French immersion programs. Yet, the structured immersion design differs from the Canadian original in several fundamental ways. Table 1 displays some of the more important differences. The comparison shows that French Immersion is unmistakenly an enrichment program that promotes additive bilingualism. At no time is the home language, ethnic culture, or academic performance of the participants in any jeopardy. The U.S. model is compensatory in nature with an overriding preoccupation with English language acquisition and little or no regard for safeguarding the heritage language and culture of the students. Even academic achievement is a secondary concern as the students are provided subject matter instruction only through their weaker language.

Another point of contention is the exclusive use of bilingual teachers in the structured immersion model. In Canada, bilingual teachers are indicated for implementation of the dual language immersion approach. In the U.S. use of bilingual teachers for what is virtually a monolingual program is questionable on logistical grounds. Consistent with the structured immersion model, the Spanish proficiency level of participating teachers averaged approximately 2.5 on the Foreign Service Inventory (FSI) scale. The functional abilities of these teachers in Spanish were sufficient

Table 1
Comparison of Key Elements
Canadian French vs. U.S. Structured Immersion

| Programmatic Element | Canadian Model | U. S. Model |
| :--- | :--- | :--- |
| Population Served | Mostly middle class <br> majority children | Mostly lower socio- <br> economic class children |
| Goal | Full bilingualism \& normal <br> academic development | Proficiency in English |
| Grade Span | Kindergarten to Grade 8 or 12 | Kindergarten to Grade 3 |
| Language Use | L2=60\%/L1=40\% | L2=95\%/L1=5\% |

(Adapted from: Studies in Immersion Education: A Collection for United States
Educators, Hernández-Chávez 1984)
for them to carry on casual conversations on concrete topics and everyday events. Although the teachers provided instruction almost exclusively in English, they were able to understand what students said in Spanish and thus gear their responses in English accordingly. Moreover, the teachers could empathize with the English learners since they too had a background which included learning a second language. There is little doubt that the bilingual abilities of the structured immersion teachers enhanced their overall performance. Yet, California has available only 8,000 bilingual teachers to serve a population of more than 860,000 English learners (California Department of Education 1991b). The shortage throughout the nation is similar. Given these circumstances, we would presume that most school districts would be reluctant to assign bilingual teachers to monolingual teaching assignments.

Already in short supply, bilingual teachers would be severely underutilized in the structured immersion program. It is one thing to argue for the use of structured immersion in the situations where the implementation of bilingual strategies is difficult because of a lack of human and material resources, logistical complexities related to a very small concentration or a scattered distribution of students, or
requests from parents for an alternative program. It is quite another to imply that L2 sheltered instruction is superior to L1 medium instruction when the provision of bilingual classes is feasible. Suggesting that bilingual teachers abandon bilingual classroom assignments in favor of structured English-only classes carries the debate to an extreme.

Structured immersion is founded on the premise that languageminority students can progress adequately in academic subject matter classes (mathematics, science, and social studies) as a result of specially designed content instruction delivered in English. This construct has been borrowed from Canadian immersion programs and adapted in the United States under the labels of "sheltered language" and "comprehensible input." While very little research has been done to study the effects of using these methodologies to promote acquisition of a second language among language-minority students in English-only school settings, even less is known about the influences of these strategies on the academic achievement of English learners. This state of affairs is reflected in the practices of the teachers in the structured immersion classrooms. They used English almost exclusively for instruction, between $94.3 \%$ and $98.6 \%$ of the time. Since the teachers did not assume English proficiency on the part of the students, content area instruction was modified to accommodate the various English comprehension levels of the pupils. The teachers "sheltered" their use of English in what might be considered rather superficial ways by using gestures, realia, pictures, and a less complex speech register to help demonstrate concepts and ideas. All of this was done without relying on research evidence to identify the essential elements of sheltered instruction or prioritize those elements of the strategy considered to be the most critical to the acquisition of language and content simultaneously.

The resulting lack of research support for an operational definition of "sheltered instruction" coupled with correspondingly weak teacher training components, exacerbates the confusion often linked with content-based L2 instruction. Many teachers associate sheltered strategies with those used in compensatory education programs with native speakers of English. Often, the distinction between structured immersion and compensatory education becomes blurred. For example, during the 1990-91 school year, more than $20 \%$ of the California school districts claiming to implement sheltered instruction were found by state review teams to be legally
non-compliant with the requirement to provide specially designed academic instruction in the content areas (California State Department of Education 1991a). Failure to provide adequate sheltered instruction means that the English learners were denied access to the core curriculum, a situation strikingly similar to submersion programs.

According to the Longitudinal Study, submersion models provide minimal or no specialized assistance to English learners in the core curricular areas. These students are often placed in classrooms with native speakers of English where inadequately trained teachers offer little if any sheltered instruction.

The general elementary teacher, lacking a language development framework, not only lacks an understanding of how the native English speaking student learns to read, write, and speak, but also how these skills interrelate, and how they can be developed through the various content areas. The typical teacher possessing a general teaching credential would have even less understanding of how to address these needs among children who do not have English as their first language. Yet these are precisely the teaching skills needed by teachers of second language learners (p. 11, Vol. 11).

In the end, the structured immersion model proved to be unsuccessful in achieving its primary objective, to mainstream students after two or three years of intensive instruction. Based on the entire sample of structured-immersion school sites in the Longitudinal Study, data indicate that even after four years of treatment, most students were still not ready to be mainstreamed into regular programs. Although $66 \%$ of the structured immersion participants were reclassified from limited to fluent English proficient status at the end of the third grade, only one-fourth of them were actually mainstreamed or otherwise exited from the program. Even then, more than $31 \%$ of the students in the latter group were determined to need remedial Chapter I (Compensatory Education) services.

The finding that $75 \%$ of the subjects in the structured-immersion classes were not ready for mainstreaming after four years of instruction raises questions about the general soundness of the approach. For instance, proponents of the quick-exit designs argue
that language-minority students can acquire English rapidly while making normal progress in the core curriculum (Baker \& de Kanter 1981; Gersten \& Woodward 1985). This is supposedly accomplished through the utilization of sheltered English-only instruction. However, in looking at the classroom interactional patterns of teachers and students, it appears that the sheltered approach does not necessarily guarantee satisfactory comprehension on the part of the learners. The researchers in the Longitudinal Study note that, "Although immersion teachers across all grades seldom use Spanish, when it is used, they focus almost exclusively on concepts" (p. 117, Vol. I). Apparently, as students move up the grades, the cognitive demands of the material outpace the students' ability to understand the English-only sheltered messages of the teachers. To compensate, when the immersion teachers resorted to Spanish ( $2 \%$ to $6 \%$ of the time), it was increasingly for the purpose of explaining concepts. The percentage of such explanations in Spanish increased from $4.3 \%$ at the kindergarten level to $16.5 \%$ in the third grade. Additionally, the structured immersion teachers observed what appears to be L2 fatigue on the part of some of the English learners. Almost $4 \%$ of the participants were subsequently transferred to bilingual programs, evidently unable to tolerate the English-only environment of the structured immersion program.

A number of articles have been written on the nature and possible uses of sheltered English approaches (Northcutt \& Watson 1986; Cantoni-Harvey 1987; Chamot \& O'Malley 1987). These and other investigations point to two situations where L2 content-based instruction might be particularly beneficial to language-minority pupils: (1) as a component in a bilingual program and (2) as the primary strategy to provide access to the core curriculum when L1 medium instruction is not possible or severely limited in scope. Sheltered L2 instruction as part of an immersion program seems especially well suited for English-speaking students in the U.S. who wish to acquire higher levels of proficiency in a second language than are usually obtained in more traditional foreign language classes.

The fact that language-minority students in the structured Immersion programs observed in the Longitudinal Study were advancing at a similar rate when compared to the norming Population is an encouraging sign. However, since the outcomes of the English-only model were similar to the weakly implemented early-exit and inferior to those of the late-exit design, the limits of
the L2 content-based instruction must be recognized. Once again, structured immersion appears to be a possible alternative to bilingual instruction when the latter can not be implemented. Even when used as a backup for bilingual instruction, it appears that structured immersion programs should be embellished by the addition of various components such as: (1) personalized instruction, (2) cooperative learning, (3) crosscultural training, (4) ethnic heritage studies, and (5) primary language support. ${ }^{4}$ Only then would these programs contain elements which address academic, social, cultural, and psychological factors in ways which potentially could improve their outcomes with language-minority students.

## Late-exit transitional bilingual education

The late-exit model represents an alternative to early-exit programs; however, unlike the early-exit models which attempt to force rapid acquisition of English with secondary concern for academic achievement and primary language attainment, late-exit designs reflect more closely the developmental nature of language acquisition in a bilingual context. Cognitive growth is promoted through the mother tongue while language-minority students gradually add English to their linguistic repertoire. Effectiveness in late-exit models is determined by the eventual academic and language attainments of English learners measured after five to seven years of treatment.

The operational definition of late-exit transitional bilingual education selected for the Longitudinal Study contains the following programmatic and supportive features:

1. Teacher is bilingual;
2. Teachers use both L1 and L2 for instruction;
3. L1 language arts skills are developed first, before introduction of L2 language arts;
4. L1 is used substantially for instruction. At least $50 \%$ of the total instructional time (approximately three hours per day) is in L1;

[^2]5. Use of L1 and L2 is differentiated by teaching staff (e.g., teacher A only uses L1 and teacher B uses L2);
6. Teachers using L2 have "native" or "near-native" L2 skills;
7. This is a late-exit program. That is, children are not mainstreamed into English-only program until the end of fifth or sixth grade;
8. There is an L1 language arts component;
9. There is an L2 language arts component;
10. Cultural sensitivity is reflected in the program by the teacher, the instructional materials, and the children's tasks;
11. Math is taught in L1 (p. 40’ Vol. I).

After an extensive search, staff from the Longitudinal Study identified only five school sites in the United States which appeared to be implementing the late-exit model according to the criteria found in the operational definition. Three of these schools agreed to participate in the study.

Like the early-exit version, the late-exit design is a compensatory program. Language-minority students are provided with primary language instruction for a specified period of time. After the sixth grade, use of the L1 is not considered necessary nor particularly desirable. On the other hand, the late-exit model selected for the Longitudinal Study guaranteed L1 instruction through the sixth grade for all language-minority participants. This is contrasted by reclassification practices in California and other states where English learners, on an individual basis, are exited from the program once they meet specific academic and language criteria. This means that late-exit students from the study sample, ready for reclassification as early as the third grade level, received three additional years of L1 instruction.

The late-exit protocol calls for equal amounts of L1 and L2 instruction at each of the seven grade levels included in the program design, kindergarten through grade six. This 50/50 ratio differs from other transitional bilingual education models where larger amounts of L1 are used in the lower grades and decreasing proportions at the upper grades. For instance, in California, the SEA suggested approximately $80 \%$ L1 use at kindergarten diminishing to around $20 \%$ by sixth grade (California State Department of Education 1984). The heavy use of primary language instruction initially corresponds to the level of bilingual proficiency of the English learners when they first enroll in school. As their
ability in English develops, increasing amounts of English medium instruction are added to the curriculum.

Except for one major feature, the school sites selected for inclusion in the Longitudinal Study implemented the late-exit model according to the operational definition for that design. In part, this can be attributed to the fact that the teachers had the necessary training and language skills to follow the protocol. Late-exit teachers, as a group, spoke Spanish at a level approximating educated native speakers. Furthermore, they possessed bilingual teaching credentials and had participated in specialized training which prepared them to work effectively with ethnolinguisticminority children.

Nevertheless, the three sites vary significantly in the amounts of Spanish used for instructional purposes. One site for example, averaged more than $75 \%$ in Spanish for kindergarten through third grade. This is contrasted by another site which averaged just more than $13 \%$ in Spanish for grades 3-6. This deviation in implementation appears to be a factor in the variation of results across late-exit sites. The Longitudinal Study reports that:

Students who are provided with substantial amounts of primary language instruction are also able to learn and improve their skills in other content areas as fast as or faster than the norming population, in contrast to students who are transitioned quickly into English-only instruction (Executive Summary, p. 36).

The students at the site which abruptly decreased the amount of Spanish instruction at the third grade and beyond appear to be losing ground in relation to the norming population. In contrast, students at the two other late-exit programs which consistently provided L1 instruction, continue to close the gap between themselves and native speakers of English. The site most faithful to the late-exit protocol, Site E, experienced a superior growth rate. Table 2 provides a visual display of these phenomena.

The most favorable pattern of language allocation was the heavy use of Spanish initially with gradual increments of English instruction. The second most effective pattern was the nearly even split between the two languages maintained at all grade levels. Showing the poorest results was the late-exit site most resembling
an early-exit approach. At that location, staff virtually ceased using Spanish as a medium of instruction in the fifth and sixth grades.

Table 2
Relationship of L1 Use to
Growth Patterns at the Late-Exit Sites

| School | \% of Spanish Use in Site | Growth Pattern Grades 4-6 |
| :--- | :--- | :--- |
| Site G | Abrupt decrease to eventually <br> only 4\% | Somewhat slower than norm group |
| Site D | Constant at 40\% level | About equal to norm group |
| Site E | Gradual decrease to 23\% | Somewhat faster than norm group |

Overall, students enrolled in the late-exit programs showed faster academic growth than the norming population. Although the rate of growth was more pronounced in the early grades, upper grade performance was sufficient enough to further close the gap. The pace of learning was such that somewhere between the sixth and ninth grade, the English learners should catch up to and perhaps even surpass native speakers of English. Of the three treatments investigated in the Longitudinal Study, the late-exit model proved to be the most effective in eradicating the traditional pattern of academic failure experienced by most language-minority students. As favorable as these results are, a review of other research and evaluation literature on schooling bilingual children suggests that the late-exit program design could be strengthened in several ways. Programmatic features/components in need of modification include those such as: (1) entry-exit criteria, (2) compensatory context, (3) the amount, duration, quality and proportion of L1 and L2 use, (4) interaction between minority and majority participants, and (5) status enhancement of the minority group. These features will be discussed in the summary of this review.

## Interpretations of major findings

The authors of the Longitudinal Study in concert with directives from project officers at the U.S. Department of Education, carefully crafted seven summary statements and grouped these in the final section of the Executive Summary under the title of "Implications." These statements presumably, represent the major findings and
conclusions to be garnered from the study. Educators and members of the general public who are not familiar with the literature in the field of language-minority education might be inclined to draw varying and possibly erroneous interpretations of the seven claims. Worse yet, journalists representing educational periodicals as well as newspaper and magazine reporters might inadvertently promulgate misconceptions and false assertions regarding the Longitudinal Study, if not provided with a careful and thoughtful review. For these reasons, we shall critique the seven concluding statements found in the Executive Summary as a way of presenting our perspectives on these important issues.

Finding \#1: Structured immersion, early-exit, and lateexit programs are similar in effectiveness in terms of promoting the development of math, reading and language skills among English learners.

This claim is based on standardized achievement test results using the reasonably complex Trajectory Analysis of Matched Percentiles (TAMP) approach to compare outcomes across the three programs of treatment. The TAMP shows that English learners in the three program options are learning at a rate equal to or faster than the norming population. Further scrutiny of the TAMP data reveals that students in the structured immersion and early-exit programs experienced an initial spurt of growth, but by the third grade, the rate of growth had leveled off substantially. This is contrasted by the students in the late-exit program whose growth is somewhat more modest in the early grades, but who continue to grow at an accelerated rate through grade six.

This means that while language-minority students in early-exit and structured immersion are closing the academic and language gaps with their English-speaking counterparts, their progress in accomplishing this is painfully slow. There is no guarantee that the gap will be closed before the students reach the twelfth and final grade offered through public schooling. We can predict that, as in submersion programs, many English learners will become discouraged and drop out. It is only in the late-exit programs that language-minority children are growing at a rate that will allow them to close the gap somewhere between, perhaps, the sixth and ninth grades.

As mentioned previously, performance data on students in the structured immersion and early-exit programs were collected only
through the third grade. The fact that students in these programs showed a pronounced leveling off in academic and language growth is cause for concern. Other studies have provided data suggesting that English learners in English-only and quick-exit programs not only level off at around the third grade, but that often these students actually lose ground when compared to peers at the sixth grade and beyond (Cummins 1989).

The finding that students in the three programs had similar achievement patterns at the third grade level is often interpreted as evidence that "..the English-only programs seemed just as effective as those that provided a great many classes in Spanish" (Toth 1991). Actually, the early-exit program did not provide a "great many classes in Spanish" and was weakly implemented. Still the results are comparable to those of the structured immersion design. The program which did provide a significant amount of instruction in and through Spanish, the late-exit design, actually resulted in outcomes which were superior to the other two models. The advantages demonstrated by the students in the late-exit program are not an isolated occurrence. This finding from the Longitudinal Study is consistent with a body of research which indicates that the positive effects of bilingual schooling are cumulative, showing themselves most distinctly and robustly after five to seven years of instruction (Cummins 1981; Lambert, Holobow, Genesee \& Chartrand 1991; Swain \& Lapkin 1990).

To tell educators and the general public that structured immersion, early-exit, and late-exit programs produce similar academic and language results is not only inaccurate, but misleading. There is strong evidence in the Longitudinal Study, further corroborated by numerous educational research investigations from around the world, to document the relative superiority of long term bilingual schooling such as that provided by the late-exit model. The technical comparisons in the Longitudinal Study focused solely on language and academic objectives. Even then, the outcomes firmly favored the late-exit design. The analyses did not take into account the various psychological, crosscultural, and ethnic heritage goals that minority parents may have for their children (Dolson 1985). For instance, in the Longitudinal Study, parents of the more than 2,000 student participants were surveyed regarding their attitudes toward bilingualism and biculturalism. More than $75 \%$ of the parents believed that the school is responsible to undertake the development of Spanish language skills for their
children. An overwhelming $93 \%$ of the parents want the school to encourage their children to become part of both the English-speaking and Hispanic cultures. What is interesting is that even among parents with children in the English-only structured immersion program, a majority ( $60.9 \%$ ) favored Spanish language development sponsored and conducted by the school. This suggests that many language-minority parents are not being provided with reliable information on the nature of implementation and the potential outcomes of the various program models being offered to their children.

Finding \#2: Providing substantial instruction in the child's primary language does not impede the learning of English language or reading skills.

The major variation across the three program models in the Longitudinal Study was in the amount of Spanish used for instructional purposes. Spanish was rarely used in kindergarten through the third grade in the structured immersion program (less than 1.5 percent of the time). The use of Spanish in the early-exit model averaged 28 percent through grade three. The late-exit sites incorporated the most Spanish with an overall 42.5 percent average in kindergarten through the sixth grade. All groups of students, regardless of the language in which they received instruction, were tested in English. The results indicate a positive relationship between the quantity of Spanish instruction and English academic achievement.

At the end of third grade, the structured immersion and early-exit program students demonstrated comparable results on tests of English language, mathematics and reading skills. It is significant that similar English performance levels were achieved by both groups in spite of the fact that the structured immersion students received an English-exclusive curriculum and the early-exit pupils were taught up to one hour daily in Spanish. The late-exit model students received more than forty percent of their instruction in Spanish. The late-exit pupils made growth in the same content areas of English language, math and reading. Their growth was at the same rate or faster than the norming population. These data provide additional evidence which validates a basic theoretical underpinning of bilingual education: the Linguistic Interdependence Hypothesis (Cummins 1981). Cummins suggests that first and second language academic skills are interdependent. That is to say, cognitive-
academic skills can transfer across languages. If students learn a mathematical concept in their primary language, they will be able to express that knowledge in their second language without having to re-learn the concept. This explains why the late-exit students who had the opportunity to develop their conceptual foundations in Spanish achieved the greatest growth in English academic areas.

These data indicate an inverse relationship between the amount of English instruction and English achievement patterns and are at variance with the "insufficient exposure" assumption. Proponents of English-only programs argue that the more English students are exposed to, the better and quicker they will acquire English. Baker articulates this notion in his statement that: "Practice makes perfect. English is best learned by using it as much as possible throughout the school day" (as cited in Crawford 1989, p. 118). The "insufficient exposure" argument is refuted by the Longitudinal Study finding that the late-exit bilingual program students who received the most content area instruction in Spanish made greater growth in English than students who participated in other models with mostly English medium classes.

There are several limitations in the Longitudinal Study which forestall a more comprehensive analysis of the effectiveness of the three program models. The first limitation was the fact that data for the structured immersion and early-exit models were collected through the third grade only. Consequently, the long term effects of these program treatments cannot be determined. What is known, however, is that neither the structured immersion nor early-exit models met the stated goal of preparing students for a rapid transfer into a regular English classroom. After four years of participation in either the structured immersion or early-exit programs, most of the students were not yet mainstreamed into regular classrooms. Moreover, despite initial academic growth spurts, neither program was able to assist the students in significantly closing the achievement gap between themselves and the norming population.

A second limitation was that the Spanish achievement scores were not analyzed for any of the treatment groups. Consequently, the Longitudinal Study provided no direct quantitative data to indicate the relationship between the degree of L1 cognitive development and L2 academic achievement. However, the English achievement patterns of the late-exit model pupils indirectly demonstrated that fundamental concepts learned in Spanish later converted to cognitive development and academic growth in

English. The late-exit program students demonstrated superior growth patterns on English tests even though they had received the majority of their core curriculum in Spanish. These results support the Linguistic Interdependence Hypothesis previously discussed. Spanish achievement data most likely would have further corroborated this finding.

An analysis of Spanish achievement results would also shed light on the relationship between L1 and L2 development in the structured immersion and early-exit programs. What we do know from the Longitudinal Study is that almost no L1 instruction was provided to students in the structured immersion program and only modest amounts were delivered in the early-exit design. Based on that evidence, we would expect minimal, if any development of Spanish cognitive and academic skills. Since the students in these two designs made less growth in English development than their counterparts in the late-exit model, it could be assumed that the low levels of development in English are related to inadequate development of Spanish. The correlation between L1 and L2 development can not be determined directly unless the Spanish achievement test results are analyzed.

In light of the testing results in English, researchers from the Longitudinal Study concluded that primary language development does not impede the learning of English language or reading skills. Unfortunately, the Spanish achievement scores have not yet been analyzed for each of the treatment groups in the investigation. Should that analysis be conducted, the finding predictably could be revised to read: "providing substantial instruction in the child's primary language promotes the learning of English language and reading skills."

## Finding \#3: Providing English learners with Englishonly instruction through grade three, as was done in the structured immersion strategy, program is as effective as an early-exit program.

Several of the reasons for the similarity in language and academic outcomes of students in the structured immersion and early-exit programs at grade 3 were given as part of the response to Finding \#1 presented earlier in this paper. Briefly, the results can be attributed to a number of issues centering on the nature of these two program models and the relationship between the models and the use of norm referenced standardized tests in English. We have
previously provided evidence which shows that the early-exit bilingual program was poorly designed and weakly implemented. The use of Spanish was limited to modest amounts of instruction in reading/language arts. This was provided by teachers who were not professionally proficient in Spanish. All access to subject matter (mathematics, science, and social studies) was done in English in a manner which was not necessarily designed for language-minority pupils. The structured immersion program on the other hand, was a tightly and neatly organized approach in which all of the teachers not only had educated native speaking ability in English (a level higher than professional proficiency) but also utilized content-based, sheltered instructional approaches when delivering lessons.

We also noted earlier that the operational definition of the structured immersion program called for the placement of bilingual teachers instead of monolingual language development specialists. This bolstered the progress made by the structured immersion pupils in somewhat of an artificial way. It is unrealistic to think that school districts will actually use bilingual teachers in this manner. Given the shortage of bilingual staff and the inherent inefficiency of using these staff members in English-only models means that most structured immersion teachers will be monolingual. They will not be able to negotiate meaning as effectively, use the primary language for critical interactions or emergencies, nor maintain effective home/school communication. We would speculate that the structured English immersion approach would not have as favorable results if conducted with monolingual teachers.

Although the subjects in the Longitudinal Study were tested in both English and Spanish, only the results from the English testing program are reported. This circumstance is unfavorable to the earlyexit programs in several ways. First the pupils, were tested in English even though their primary language is Spanish and they had received all or part of their initial literacy instruction in that language. Secondly, the materials and methods used for initial Spanish literacy/language arts instruction, by definition, are not as closely aligned with the English version of the norm referenced standardized test as the English language counterparts. There is a clear test bias in that the English instruction in the structured immersion program was much more similar to standardized test content than the corresponding instruction in Spanish. Thirdly, the primary language instructional component in the early-exit model was limited in scope. Spanish-speakers were not given ample opportunity to
develop and practice the types of higher level literacy skills in Spanish which are most likely to transfer effectively to English. Thonis (1981) and others have cautioned that strongly acquired literacy skills will probably transfer from Spanish to English well while weakly acquired ones may not. Finally, in the primary grades, the cognitive demands of the norm referenced tests are relatively low. Language-minority students tend to perform better on such tests at these grade levels regardless of the type of program treatment. It is only at the upper grades, when the cognitive demands of both instruction and testing increase dramatically would we expect to see a significant difference between bilingually- and monolingually-schooled subjects.

The comparison of the outcomes between the early-exit and structured immersion models might look differently if: (1) student performance had been observed at the sixth grade level instead of the third, (2) the early-exit model had been designed and implemented~ a more appropriate manner, (3) the structured immersion approach had been conducted with language development specialists instead of bilingual teachers, and (4) test results were reported for both the English and Spanish versions of the standardized tests and analyzed within the context of bilingual child development.

Finding \#4: Contrary to the objectives of immersion strategy and early-exit programs most students remain in these programs much longer than expected. It is clear that immersion strategy and early-exit teachers believe that the majority of limited-English proficient students would be better off if they remain in the programs for more than three years. The limited evidence from this 3 study suggests that limited-English proficient students may need prolonged assistance if they are to succeed in an English-only mainstream classroom.

A characteristic of both the structured-immersion and early-exit models is the explicit intent to exit the children into mainstream English classrooms as soon as they are reclassified as being Fluent-English-Proficient (FEP). The underlying philosophy of both programs is to expedite this process so that students are mainstreamed within approximately two to three years.

It is important to distinguish between reclassification to FEP status and program exit. The reclassification process involves the determination, through a variety of measures, that a student is
proficient in her/his ability to understand and express herself/himself fluently in English. Exit refers to the point at which FEP students no longer require any program services normally provided to LEP students. Typically, FEP students are transferred to regular classrooms and educated alongside and in the same manner as their native English-speaking peers.

In many short-term programs such as the structured-immersion and early-exit transitional models, instruction is often focused on oral English language development at the expense of academic growth. Although basic oral English skills may develop rapidly, these skills alone do not necessarily convert to academic English proficiency. When English learners are quickly reclassified based mostly on their surface fluency, then transferred into a regular classroom, they may be unprepared for English-only instruction.

The findings from the Longitudinal Study clearly demonstrate that although many students in both the structured-immersion and early-exit programs were reclassified as FEP by the end of third grade, they were not ready to exit these programs. After four years, even though two-thirds of the immersion and nearly three-fourths of the early-exit program students had been redesignated as FEP, threequarters of the immersion students and over four-fifths of the earlyexit students were still not ready for a mainstream English-only curriculum (Vol. I, p. 370). Table 3 contains data by grade level for each treatment group regarding the rates of reclassification and program exit.

Table 3
Comparison of student rates of reclassification and exit across
program treatments

|  | Structured | Immersion | Early-Exit |  | Late-Exit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\%$ <br> reclassified | $\%$ <br> exited | $\%$ <br> reclassified | $\%$ <br> exited | $\%$ <br> reclassified | $\%$ <br> exited |
| K | 3.9 | 1.3 | 12.6 | 1.6 | 11.8 | N/A |
| Grade 1 | 21.2 | 10.7 | 25.4 | 9.1 | 2.7 | N/A |
| Grade 2 | 37.9 | 19.4 | 43.8 | 14.0 | 28.0 | N/A |
| Grade 3 | 66.7 | 25.6 | 72.0 | 16.9 | 50.8 | N/A |
| Grade 4 | N/A | N/A | N/A | N/A | 67.0 | N/A |
| Grade 5 | N/A | N/A | N/A | N/A | 78.6 | N/A |

The Longitudinal Study findings compliment international research (Cummins 1989; Skutnabb-Kangas \& Toukomaa 1976)
which contains evidence that L2 only-immersion programs are not more efficient in achieving positive academic outcomes for minority L2 learners. It may take up to seven years for students to acquire cognitively demanding literacy-related skills in a second language. The principal researcher of the Longitudinal Study supports this concept in his comment that "Learning English takes more than six years, regardless of the instructional approach" (Ramírez \& Terao 1991).

Program effectiveness should be judged on whether or not at the end of the treatment period, language-minority children are achieving adequately. Adequate achievement is defined as a level of performance comparable to non-minority native speakers of English of the same age and grade level. In terms of effectiveness, neither of the two short-term programs, structured immersion nor early-exit bilingual, meet the criterion. Yet, claims are often made that these programs are effective and efficient.

Efficiency, in turn, should be judged on the basis of meeting the purposes of the program within a specific time period. Since the structured immersion and early-exit participants, as a group, did not reach an adequate level nor rate of achievement by grade 4, these programs can not be considered efficient. Simply exiting or mainstreaming language-minority students on the basis of arbitrarily derived timelines without regard for their level of academic development can not, in itself, be considered in any way an efficient practice.

Since short-term models do not appear to be pedagogically sound nor the most efficient programs for language-minority students, educators must question why they are promoted as such. Programs for language-minority students are influenced by macrosocietal pressures resulting from such things as politics, finances and "linguicism". 5 For example, rather than focusing on the overall academic success for language-minority students, pressure has been applied on educators to provide "quick fix" programs which move students into mainstream English-only classrooms as rapidly as possible. However, these programs often disregard the academic,

[^3]cultural, and psychosocial needs of English-learners by promoting only superficial English skills.

Educators are charged with the responsibility to facilitate opportunities for academic success for all students. They should question "quick-fix" approaches on the grounds that these types of actions often leave students unprepared to face academic challenges. The practices of accelerated reclassification and early-exit must be re-examined since they have not proven beneficial to languageminority students. The programs which demonstrate the most promise are those which promote high levels of both primary language and English cognitive development over a period of five to seven years.

Finding \#5: There is a need to improve the quality of training programs for teachers serving languageminority students at both the university and school district levels, so that they can provide a more active learning environment for language and cognitive skills development. Effective training models do exist which can help teachers provide a more active learning environment for language and cognitive skill development. Efforts should be made to disseminate this information and support implementation of the models.

The conclusions on teacher training and effectiveness were based on coded information garnered from tape recordings and direct observations of subject matter lessons. The Longitudinal Study reported that the teachers in all three treatment groups provided passive learning environments in which active learning strategies were not promoted. In passive learning situations, students are relegated to closed-ended activities which rely mostly on rote memorization and providing "correct" answers to questions. The antithesis to a passive learning environment is one in which students actively explore new ideas by thinking critically and analytically, and proposing complex solutions to problems. The three program models were found to be "passive" learning environments, providing few opportunities for students to develop higher-order thinking skills.

The investigators are careful to caution readers that passive learning environments are not characteristic of only bilingual programs, but that "this finding is consistent with studies of
mainstream English-only teachers" (Vol. I, p. 433). The sweeping educational reforms of the past decade have witnessed a proliferation of literature which addresses teacher training and instructional strategies (California State Department of Education 1990; Goodlad 1984). These nationally recognized studies document the need for change within the general teaching population to move towards providing learning environments which promote students' higher order thinking abilities more effectively. Goodlad (1984) conducted a multi-year study which investigated over 1,000 classroom and teachers. He observes that:

Only rarely did we find evidence to suggest instruction likely to go much beyond mere possession of information to a level of understanding its implications and either applying it or exploring its possible application.. .Our data reveal.. .the consistent and repetitive attention to basic facts and skills...If we want students to learn to think, we must encourage teachers to go beyond present methods. (p. 236)

The fact that bilingual teachers tend to implement passive classrooms indicates that these teachers, like their mainstream counterparts, need additional inservice training. Unfortunately, the I finding from the Longitudinal Study has also been misinterpreted as evidence that bilingual teachers are less adequate in their performance than non-bilingual teachers. For example, the executive director of the U.S. English organization has commented: "The teacher training information is the most significant part of the study. It's not the methodology that's in question, it's the quality of (bilingual) teaching in the classroom" (cited in Education U.S.A. 1991).

This claim is certainly unfounded and not based on the available evidence. Still, it does not mean that teachers serving languageminority children should overlook professional improvement. Every teacher should benefit from staff development opportunities aimed at establishing active and rigorous instructional environments for all students. Bilingual and other teachers of language-minority pupils should be given priority attention. After all, the pupils they attend to constitute one of the most "at risk" populations in the nation.

Finding \#6: Parental involvement appears to be greatest in the late-exit program. This suggests that schools should explore how they might use the home language of their students to engage parents in the schooling of their children.

As part of the Longitudinal Study, information was collected on the family background characteristics of the students enrolled in each of the three types of programs. These data were gathered from parent interviews, pupil records, and information provided by the teachers. In most respects, the students and their families did not differ significantly in their home background characteristics including: income level; parent attitudes, education and employment; home and community language; and length of residence in the United States. The families of late-exit program students did differ from those of the structured immersion and early-exit programs in two ways: (1) a greater percentage of late-exit families received Welfare Aid to Families with Dependent Children (AFDC) and food stamps, and (2) parents of children in the late-exit treatment demonstrated the greatest amount of parent involvement.

There are several factors associated with the higher level participation of the late-exit model parents in their children's schooling. First of all, the design of the late-exit program was the most closely linked to the parents' strengths and background. The late-exit protocol required the greatest use of Spanish; consequently, the parents were not linguistically isolated from school-related communications and activities. Since the late-exit program teachers had the greatest fluency in both languages, the parents could comfortably speak in Spanish with the teachers about concerns for the education of their children.

Data from the Longitudinal Study also show that late-exit teachers assigned, graded, and returned homework more often than teachers in the structured immersion or early-exit programs. Since the homework was usually assigned in Spanish, the parents could understand, assist with, and monitor their children's homework. Consequently, the parents' status was raised in the eyes of the children since they viewed their parents as resources. Ramírez \& Terao (1991) comment:

Increasing the use of the primary language for instruction appears to contribute to greater involvement by languageminority parents in the schooling of their children. They are
more aware of their children's work and are more likely to help their children and to make sure that homework is completed than language-minority parents who have their children in a structured English immersion or an early-exit program.

Of the three programs examined in the Longitudinal Study, the late-exit program was the treatment most preferred by the greatest proportion of parents. Ninety-three percent of the late-exit program parents chose to enroll their children in that program, which is a higher percentage than that of the structured immersion (63\%), or early-exit program ( $78 \%$ ). The late-exit program seems to be the model most closely aligned with the goals of the parents: "The majority of parents across programs want their children to know Spanish and English equally well. Thus, it appears that immersion strategy programs may not completely reflect the language goals of their students' parents." (Vol. 1, p. 369)

The late-exit model promoted the most active parent participation of the three designs investigated in the Longitudinal Study. Parent involvement is an important variable for school effectiveness since it is correlated highly with student achievement (Tizard, Hewison \& Schofield 1982; Ramírez, Douglas \& Vargas 1989). The California Department of Education (1990) concurs that home-school collaboration enhances school achievement patterns for the general population. It states that: "If parents assure that their children do their homework, stay on top of their children's performance, and read to their children, student attitudes and performance will soar dramatically." (p. 9)

Thus, parent involvement is a highly critical element for the education of all students and is especially important for programs enrolling language-minority students. Cummins (1989) underscores the importance of parent collaboration: "When educators involve minority parents as partners in their children's education, parents appear to develop a sense of efficacy that communicates itself to children with positive academic consequences." (p.62)

In summary, exclusionary patterns of parent participation in the school community are counterproductive for the scholastic performance of language-minority pupils. The parents of students in the late-exit treatment took the most collaborative role in the education of their children. This may have occurred, in part,
because the parents' linguistic abilities were viewed as a resource instead of a handicap.

Finding \#7: There is some evidence to suggest that when English learners receive most of their instruction in their home language, they should not be abruptly transferred into a program that uses only English.

This statement is derived from the observation of differential outcomes in student performance among the three late-exit bilingual program sites. These variations appear to be related to the amount and duration of Spanish language instruction in the programs.

As indicated in the Table 4, Spanish use in kindergarten through grade 3 at sites G and D were very similar while Site E had much higher amounts. After grade 3 however, we can observe even greater variation. There is a dramatic decrease in Spanish use at Site G and in the sixth grade at Site E. In fact, the pattern at Site G comes uncomfortably close to resembling an early-exit approach.

Table 4
Language use at the three late-exit program sites percentage of Spanish instructional time

| Grade Level/ <br> School Site | K | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site G | N/A | $45 \%$ | $44 \%$ | $28 \%$ | $17 \%$ | $5 \%$ | $4 \%$ |
| Site D | $60 \%$ | $43 \%$ | $42 \%$ | $31 \%$ | $43 \%$ | $50 \%$ | $33 \%$ |
| Site E | $83 \%$ | $75 \%$ | $87 \%$ | $60 \%$ | $45 \%$ | $40 \%$ | $23 \%$ |

When the researchers in the Longitudinal Study analyzed the relationship between the use of Spanish and English in the three lateexit models and academic performance they discovered a pattern consistent with the hypothesis that L1 language development facilitates L2 and subject matter acquisition: "Those students who had substantial amounts of instruction in Spanish and a slow increase in the use of English for instruction grew the fastest relative to the norming population. This growth was realized even though
these students had the lowest distribution of initial academic skills ${ }^{6} . . . "($ p. 622, Vol. II)

Alternatively, at the grade levels where Spanish medium instruction was mostly replaced by English, students consistently lost ground to the norming population. This evidence can be interpreted as further support for the premise that English learners, as a group, take from five to seven years to acquire cognitive/academic language proficiency at levels equivalent to native English speaking peers of the same age and grade levels (Collier 1987; Cummins 1979).

More than a decade ago, Cummins (1980s) pointed out the fallacy of quick-exit practices. In the early grades, bilingual instruction is seen as effective in promoting the acquisition of subject matter knowledge and English. This is based on the notion of a Common Underlying Proficiency (CUP) across two languages, in which skills learned in the L1 transfer to L2 contexts, once sufficient proficiency is developed in L2. Around grade three, however, early-exit advocates abandon this framework because it is feared that English skills will not develop adequately unless language-minority students are placed in intensive English-only instructional settings. Data from the Longitudinal Study refute the underlying "maximum exposure" hypothesis of the quick-exit model. At the third grade level, students in the bilingual program models had made as much progress in English language and subject matter classes as those in the highly intensive structured immersion approach.

A number of studies (Dulay \& Burt 1980s; Hernández-Chávez 1978) have looked into the issue of reclassifying students from limited-English-proficient to fluent English status. Little progress has been made in determining the "optimal" moment when an English learner is ready to be mainstreamed. It is clear that there are so many variables affecting language proficiency in a bilingual setting that no single testing instrument or set of criteria will be effective in determining the readiness of English learners to succeed in English-only classes. According to the Longitudinal Study, the more prudent approach would be to gradually increase the amounts of English instruction while carefully monitoring student progress.

6 Students at site E come from an inner city, poverty-stricken neighborhood. plagued by high crime, unemployment, overcrowding, poor school facilities, and rundown tenements.

## Summary and conclusion

In the past, the Bilingual Education Office at the California Department of Education has played a successful role in making information garnered from research and evaluation studies understandable and useful to school district practitioners. In the case of the Longitudinal Study, a tremendous amount of fresh data is available which provides additional insights into the merits and shortcomings of the three instructional models of interest, structured immersion, early-exit, and late-exit transitional bilingual education programs. The contribution from the Longitudinal Study provides us with an opportunity to re-evaluate our standing recommendations regarding these program models.

In this section of the summary, we shall consider each of the three program models separately attempting to identify: (1) the inherent limitations of the design, (2) the conditions necessary for successful implementation, and (3) the contexts in which the program has the greatest potential to meet the scholastic needs of language-minority students.

## Structured-Immersion:

Overall, the structured immersion approach did not produce results equivalent to the late-exit program and showed no particular advantages over the early-exit model. The fundamental limitation of the program is the adherence to arbitrary prohibitions concerning the amount and type of L1 use without replacing this powerful educational resource with an instructional element of demonstrably equal effectiveness.

In situations where school districts are able to provide bilingual learning opportunities, L1 instructional models seem to be better choices than structured immersion designs. This is not to say however, that a form of structured immersion would not be appropriate in circumstances where the human and material resources are not currently available to implement comprehensive bilingual models. An adaptation of structured immersion is probably also useful in contexts where schools enroll very small numbers or have extremely scattered distributions of students of the same minority language group.

Whenever a form of structured immersion is used, a number of key safeguards are necessary to insure that the program addresses academic, psychosocial, and crosscultural needs of L2 learners. In fact, the magnitude of remodeling necessary to make structured
immersion a more effective response to the needs of languageminority students means that the current label for this program option is no longer suitable. We suggest that the term "structured immersion" be replaced with that of "partial bilingual instruction". To obtain this new and improved design, the following issues should be addressed:

1. Access to the core curriculum should be a primary concern in such programs. An understanding of strategies such as "sheltered" subject matter instruction ${ }^{7}$ is essential. Teachers must be able to make messages understandable to non-native speakers of English while at the same time presenting a high quality core curriculum.
2. The program model should be designed to meet the long-term needs of language-minority students. As a group, the L2 learners will take from five to seven years or even longer to develop all of the skills and abilities they need to function as native speakers. Those projects which continue to embrace the quick-exit philosophy will doom many, if not most, of their participants to academic underachievement.
3. Even in structured immersion approaches, the primary language of L2 learners should be ~used as much as resources allow. For instance, if a bilingual resource teacher is available, he/she may be assigned to provide L1 cognitive-academic development in a number of classrooms or in a lab setting. At the same time, the resource teacher could oversee an instructional aide who in turn conducts a supervised children's literature reading program with individual students. In cases where bilingual staff are not available other strategies may be used. For example, home/school reading programs have proven to be very successful when the assistance of language-minority parents is solicited (Tizard, Schofield \& Hewison 1982). Cross-age tutors are another possibility.

7 Sheltered subject matter instruction is a pedagogy adapted from observation of Canadian immersion programs. The instructional strategy is supposedly designed to deliver subject matter content in English to English learners. This new pedagogy, while popular, has little research and practical experiential support. For a perspective on the design and implementation of sheltered instruction at the secondary level see Berman \& Weiler Associates (1991).
4. The school is responsible for establishing an environment in which the minority languages and cultures are not only respected but promoted. Use of strategies such as cooperative learning (Kagan 1986) and Teacher Expectations and Student Achievement (Kerman 1980s) are very helpful in this regard. Additionally, students should be exposed to role models from their own as well as other ethnic groups. Appropriate attention needs to be given to the study of the history and the practices of the cultural attributes of ethnolinguistic groups represented in the school. Literature about the groups suitable for children should be made available. Much of this literature should be authored by persons from the respective minority groups.

The children should be made aware that the school values the home language and culture and that although resources may be limited, the school sanctions and rewards individual and group efforts which promote bilingual and bicultural identities. As an illustration, school district officials might develop working relationships with representatives of local community language school associations to collaboratively work on projects such as: (1) a directory of the community schools, (2) visitation days to explain programs and recruit students, (3) cooperative instructional programs and/or staff development opportunities, and (4) granting course credit and giving recognition for bilingual bicultural community accomplishments.
5. According to the work of Derman-Sparks (1989) and other early childhood specialists, very young children absorb society's spoken and unspoken biases against people of different skin tones, cultures, languages, and lifestyles. Essential roles of any program should be to help children talk about and understand the difference among people to develop the skills for naming prejudice when it occurs, and to gain the strength to stand up against systematic oppression of one's own group and of other groups. To accomplish this, programs should include an anti-bias curriculum such as that promoted by the National Association for the Education of Young Children. In a publication entitled, Anti-bias Curriculum. Tools for Empowering Young Children (Derman-Sparks 1989), the author suggests four critical steps: (1) help children develop a solid sense of self-esteem, (2) help children recognize and name the diversity in human experience to be able to attain an accurate knowledge of human differences, (3) help children to develop the ability to
recognize injustice, both overt and covert, and (4) help children to develop a sense of empowerment and develop the skills to act alone or in concert with others against injustice. Implementation of an anti-bias curriculum begins with anti-bias training for teachers and other adults in the school. Derman-Sparks claims that, for those who instruct children, there is no way to work with them (children) without the basic messages of what you teach coming from who you are as a human being.
6. Minority students, regardless of the efforts of the school to promote equal educational opportunities, will be faced with manifestations of discrimination and prejudice at school as well as within the larger community. To assist minority students, the school should provide a "survival" training component which prepares these students to handle the symptoms of bias and intolerance which they encounter in everyday life. The training should consist of information on the presence of racism in the general society, how it effects minority and majority peoples, and schemes minority individuals can tap to counteract the negative influences it may have on their spirit and self-concept.

These safeguards are just a few that come to mind. As experience with partial bilingual programs increases, educators should be observant of other elements that ought to be restructured or added to the model. Of course, as in any program strategy, to be generally effective, the program must have a high quality curriculum, well-trained and committed staff, and adequate administrative and fiscal support. The need for a strong home/school connection is taken for granted.

We feel confident in recommending the partial bilingual program (A.K.A. modified structured immersion) as described in this section in settings where full bilingual education programs are impossible to implement. After all, even the structured immersion model implemented according to the dictates of the operational definition found in the Longitudinal Study showed favorable outcomes when compared to regular compensatory programs. The partial bilingual design described here can be expected to have superior results than either the original structured immersion model or other compensatory approaches.

## Early-Exit programs:

Even though the early-exit transitional bilingual education design achieved results similar to those of the structured immersion model, the imperfections of this short-term partial bilingual approach are easily spotted. Several of the more conspicuous flaws are discussed in this section.

The quick-exit structure does not match the developmental nature of child development in two languages. Unrealistic pressure is often placed upon teachers and students to have the latter achieve full academic English proficiency within a period of two or three years. All students are expected to progress at the same rate irregardless of background factors or the quality of the program being provided.

The use of the students' native language in early-exit programs frequently takes on a compensatory and stigmatized character. Instead of viewing the language as a potent resource and advantageous educational tool, it is seen as a handicap or crutch which must be shed as soon as possible. Continued reliance on the L1 is interpreted as detrimental to L2 development. Bilingualism is not considered a positive personal nor societal attribute. Under these conditions, staff and students are often reluctant to use the minority language for scholastic purposes for any significant period of time. In fact, many cases have been documented where students become ashamed of their language and culture and take steps to avoid association with their ethnic heritage (Skutnabb-Kangas 1991). This means that frequently, the L1 component is weakly implemented for a relatively short period of time and then abruptly terminated. This was the case at almost all of the early-exit schools sites observed in the Longitudinal Study.

In addition, the quick-exit approach flies in the face of the reality of language-minority student enrollment patterns. Such students enter the public school system at all grade levels, not just kindergarten and first grade. In the early-exit design, bilingual classrooms are usually established only at the primary grade span. Yet, new immigrants and transfer students enroll also in grades 412. Because of the quick-exit framework, few if any resources are allocated for upper grade programs. Additionally, students who participate in the bilingual program in the primary grades but whose rate of progress does not coincide with the school's arbitrary reclassification timeline, are often neglected or inappropriately served in compensatory programs when they reach the intermediate and secondary levels of schooling.

The seriousness and irreparable nature of the shortcomings of transitional bilingual programs suggest that, with perhaps one important exception, the primary value of this program model is as a transitory phase in the development of a late-exit design. Early intervention as well as sustained and consistent instructional delivery are hallmarks of effective language-minority programs. That being the case, it is logical to begin program development at the preschool and kindergarten levels and add grade levels to the program in a consecutive manner. As the program approaches the third and fourth grades, it may, for awhile, take on the appearance of an early-exit model. When human and material resources become available, additional grade levels can be added so that eventually, bilingual instruction is offered at all grades, kindergarten through grade 12. At that point, a bonafide late-exit program will be achieved. Under this scenario, early-exit becomes a legitimate foundation for the subsequent development of a late-exit model.

Another possible use of the early-exit transitional bilingual model is with middle and secondary school students who have satisfactory levels of academic and mother tongue attainment when they immigrate to the United States. Since these students have only three to four years remaining until graduation, an accelerated approach is necessary. Also, because of their advantaged scholastic and L1 standing, these students are in a favorable position to quickly transfer skills acquired and learned through L1 to L2 contexts. The modest L1 support provided in the early-exit program would be predicted to be adequate for this type of language-minority student. Note that this suggestion does not extend to secondary level language-minority students who are not fully literate and at grade level academic performance in their native language. A different and more intensive L1 program is indicated for that group of pupils.

Whether utilized as a phase in development of a late-exit program or as a response to advantaged secondary L2 learners, early-exit approaches must address the multifaceted needs of language-minority students. Issues of concern include: (1) access to the core curriculum, (2) the nature and quality of "sheltered" instruction whenever utilized, (3) the status/support conferred upon the language and culture of the L2 learners, and (4) assistance provided to the language-minority students to deal with the manifestations of prejudice and discrimination prevalent in the wider society. These concerns are just as relevant to early-exit programs as they are to structured immersion. Our discussion of the elements
of remodeling required for that design also apply to early-exit models.

## Late-Exit programs:

Of the three program models investigated in the Longitudinal Study, the late-exit design appears to be the most effective in reversing the negative educational outcomes experienced by many language-minority students in the United States. The model seems especially well suited for school communities with large numbers of L2 learners from a single linguistic group.

The superior outcomes of the late-exit program when compared to its structured immersion and early-exit counterparts may be attributed to several features such as: (1) better alignment between the goals of the program and the goals of the language-minority community, (2) closer adherence to the pedagogical principles associated with additive vs. subtractive bilingualism and the period of time needed for an individual to fully acquire a second language, and (3) the fact that in order to implement the late-exit language protocol, the school has made a commitment of human and material resources in favor of the language-minority population.

Yet, evidence from the Longitudinal Study suggests that the lateexit program could be improved in several important ways. Observations of this program option revealed the following weaknesses:

1. Adherence to Program Design. In some cases, late-exit programs fail to adhere to the adopted program design and revert to an early-exit model. This may occur when planning for such programs is done solely on an annual basis instead of addressing longer term (5-10 years) time spans. For instance, without a long range view, schools may encounter serious shortages of bilingual teachers or advanced materials in the primary language of the target students. This may result in inconsistent implementation and a quick-exit atmosphere. Of course, poorly planned and implemented late-exit programs take on a compensatory character which works against the school staff as they attempt to develop an additive bilingual crosscultural environment.
2. School and Community Support. Awareness and knowledge of the late-exit program model goals, purposes, methodologies, Operating procedures and time span on the part of administrators,
teachers, and community are essential to the well-being of the program. If persons associated with the school do not understand the nature of bilingual childhood development, they may develop expectations which are not in alignment with late-exit realities. For instance, administrators may not fully understand how to order materials in English and the primary language if they believe all subjects have to be taught bilingually at all times. Teachers who are not bilingual might not understand the types of roles they may play as "English models" or, equally important, monolingual teachers may fail to support bilingual staff in the attempts to serve as L1 models. Parents may become concerned about "language mixing" or the perceived "slow" rate of academic growth of their children in English. Lack of knowledge about late-exit programs often leads to a lack of confidence in the approach. This in turn frequently translates itself into lower levels of support or even outright hostility to the program.
3. Societal Conditions. There is little doubt that the United States is a multilingual country with a predominant monolingual attitude. For various reasons much of our populace has developed negative attitudes towards bilingualism. Association of bilingualism with such ideas as underachievement and retardation as well as with poverty and un-Americanism is still a common notion. Even though bilingualism is a much more "normal" and frequent condition in the world (including the United States) than is monolingualism, and, even though there is no evidence that bilingualism is a cause of any individual or social ill, many educators as well as members of the public at large continue to embrace a negative view of bilingualism. This negativity towards bilingualism is based almost exclusively on folk notions and "conventional" wisdom. Schools wishing to implement a program in bilingualism must daily battle a heavy dose of opposition. Opposition which is grounded in the ignorance, fear and downright prejudice underlies this continuing negative attitude towards bilingualism. Such conflicts divert attention and energy from the primary purposes of bilingual education programs which allow children to learn through their primary language. Eventually the supporters of the bilingual programs may become "battle weary" and disenheartened at the seemingly unending opposition. The staff involved in bilingual programs become dissatisfied with the superhuman levels of energy required to keep the programs functioning at even survival levels let alone at a level of growth and
expansion. Reinforcements and incentives are needed to maintain focus and motivation.
4. Minority Focus. The operational definition of late-exit transitional bilingual education adopted for the Longitudinal Study addresses only the direct needs of students who are classified as LEP. There is no mention of any provision of instructional services for language-minority children who are originally FEP nor students for whom English is the only language of the family. This means that the LEP students are probably isolated from English-speaking counterparts or that the English-speakers in late-exit classrooms are provided with the same type of curriculum and instruction as English-speakers in regular classrooms.

The problems associated with these practices are varied. For example, one-way bilingual programs for minority students only send a compensatory message that the language is a crutch to be used solely by "deficient" pupils until they can function "normally" in English. It tells the language-minority students that their language and culture are not sufficiently valued by the school as to make them part of the curriculum for all students, including the English speakers. Such designs set up a "we~~ versus "they~~ arrangement where the different programs for the two groups vie for prestige, resources, and power. Tension will be created between the English speaking and language-minority communities. Since the one-way bilingual program is often perceived to be operated solely for the benefit of the minorities, little value is placed upon and almost no support given to the program by the language-majority group. Since the English-speakers often represent the economic and political power in the school community, this means that the socioeconomic foundations of one-way early-exit programs are usually weak. Whenever complaints surface or budget cuts are imminent, it seems as though the very existence of the program must be justified regardless of the actual effectiveness of the model or the level of implementation at the local school.

There may be various strategies to address, individually or collectively, each of the four shortcomings of late-exit programs discussed in this section. One exciting possibility is to turn such models into two-way bilingual designs that address comprehensively the language, academic, crosscultural, and other scholastic needs of all groups of children with the underlying objective of promoting high levels of additive bilingualism among
the participants. We shall end this review by describing the twoway model and the advantages it has when compared to structured immersion (partial bilingual), early-exit, and late-exit transitional bilingual programs.

## Two-Way bilingual education:

Although a number of two-way bilingual program designs have evolved over the last two decades, one of the more promising for the United States context is the bilingual immersion approach. This type of program combines the most significant features of late-exit or maintenance bilingual education for language-minority students with those of early full immersion education for language-majority pupils. The term bilingual immersion is used to refer to this model because initially, language-minority students receive subject matter instruction through the medium of their mother tongue while language-majority students (English speakers) receive the core curriculum mostly through the L2.

The bilingual immersion approach, which is intended to cover kindergarten through at least grades S or 6 (but optimally would extend through grade 12 and include preschool), encompasses four essential features: (1) the program involves some form of dual language instruction where the non-English language is used for a significant portion of the instructional day; (2) there are periods of instruction during which one language is used; (3) both native speakers of English and native speakers of another language represented in balanced numbers are participants; and (4) the students from both groups are integrated for most content instruction.

There are seven major goals for bilingual immersion programs: (1) students will develop high levels of proficiency in their L1, (2) students will achieve high levels of proficiency in an L2, (3) academic performance will eventually be at or above grade level in both languages, (4) students will demonstrate positive cross-cultural attitudes and behaviors, (5) students will show evidence of high levels of psychosocial competence, (6) schools will have programs of academic excellence for language-majority and language-minority students, and (7) communities and society-at-large will benefit by having citizens who are bilingual and biliterate, who are more positive toward people of different cultural backgrounds, and, who can meet our national needs for language competence and a more
peaceful coexistence with people of different nations. Each of these goals will be discussed separately.

1. L1 development. A major overriding goal of bilingual immersion programs is to further develop the student's L1 to a high level of communicative and literacy proficiency. More specifically, all students are expected to develop the appropriate vocabulary, grammar, word meanings, pronunciation, and social rules (e.g., politeness) to function effectively in face-to-face interactions and in reading and writing tasks.
2. L2 development. Although the goal for second language development is that both groups of students will achieve high levels of proficiency in the second language, the expectations vary slightly for native and non-native speakers of English. For non-native speakers of English, the expectation is that the students will acquire native-like proficiency in English. For native English speakers the goal is to have the students develop native-like skills in the nonEnglish language. Immersion research indicates that most students do not acquire the pronunciation or grammatical skills necessary to qualify as native-like speakers. Thus, the expected outcome for native English speakers is to develop high levels of oral proficiency in L2. It is important to recognize the significance of this objective. In bilingual immersion programs, native English speaking students are given the opportunity to develop proficiency in an L2 with a level of proficiency that they may never be able to achieve later in life. Foreign language programs in high school and college rarely develop, in their students, the level of oral comprehension and speaking skills attained by most immersion and bilingual immersion students.

In bilingual immersion programs, then, both groups of students are expected to acquire the vocabulary, grammar, word meanings, and social rules to enable them to communicate effectively in conversations with native speakers, and, to achieve academically in the L2.
3. Academic performance. The overarching goal of bilingual immersion programs is that the students will perform well academically. This goal can be broken down further to better define what we mean. First, we expect that students will be able to perform on standardized achievement tests at levels comparable to
their peers in both the English and the non-English language. Thus, students are expected to perform at or above the 50th percentile on normed tests, or, comparable to age-mates in non-bilingual immersion programs, in language arts, reading, math, and other subject matter areas. Realistically, it takes several years to achieve enough competence in an L2 for students to meet grade-age norms on standardized tests. However, at the end of five to seven years, it is expected that all bilingual immersion program students will reach this goal.
4. Cross-cultural attitudes and behaviors. Despite the fact that desegregation and integration have been stated goals of boards and departments of education at the federal, state, and local levels for many years, truly integrative programs are rare. Bilingual immersion programs are truly integrative, not only because they offer both groups the opportunity to learn each other's language proficiently, but because the students also learn about and appreciate the other cultural group. This goal is increasingly important given the demographic trends in the United States. Bilingual immersion programs provide a social context of cultural and language I enrichment in a setting supportive of cultural and linguistic diversity. Monolingual English speaking children, through constant interaction with language-minority children develop early in their academic life positive feelings toward children of diverse racial and linguistic backgrounds. The program can be made even more powerful by the adoption of an anti-bias curriculum such as that developed for the National Association for the Education of Young Children by Derman-Sparks (1989).

The expected outcome of bilingual immersion education, then, is that all students will develop positive attitudes toward the language, culture, and peoples of their group and other groups.
5. Psychosocial competence. One original goal of traditional bilingual education programs has been to promote the self esteem of the program participants. Bilingual immersion education maintains this critical goal in attempting to enhance the psychosocial competence of both groups of students where psychosocial competence is defined as the students' perceived competence in their academic and social abilities. This goal may be particularly critical for those language-minority children who might otherwise underachieve and drop out of school.
6. Program of academic excellence. Generally schools seek to offer children a diverse curriculum and provide them with an array of academic knowledge, skills, and experiences. Also, many schools attempt to provide language-minority students with special programs of instruction to meet their scholastic and language needs. However, these programs vary considerably in quality, and, consequently, in their ability to meet the needs of students (Willig 1985). Studies demonstrate that a holistic program of instruction is superior to piece-meal approaches in meeting the language and scholastic needs of language-minority children. Bilingual immersion is the epitome of a potentially exemplary academic excellence program because it is a high quality holistic program that can use the standard curricula of any particular locality and challenge the students to develop not only the content knowledge, but also academic proficiency in two languages. Thus, it is a cost-effective program that can promote academic excellence even for students which some schools would find ordinarily very difficult to serve.
7. Bilingual/biliterate and multicultural citizens. As we take greater strides toward a technological society, our world becomes smaller as we increasingly interact with people of other nations. Our businesses and government will increasingly rely on individuals who are linguistically competent and culturally sophisticated to negotiate transactions. An important outcome of bilingual immersion programs at community, national, and international levels is that program graduates will have the linguistic and scholastic competence, and, cultural awareness that is so necessary to collaborate internationally and which will enable them to interact with the multicultural and multilingual communities throughout the United States.

Bilingual immersion education and other two-way program designs appear to be educationally and socially more potent models than late-exit transitional designs. For most of the last decade, much rhetoric has been put forth associating excellence in education with high expectations for all students. By adopting bilingual immersion programs at appropriate school sites, school districts have a unique Opportunity to transform what was once a compensatory approach Into an enrichment model, an approach which provides equal educational opportunities for the ever increasing population of language-minority students while at the same time addressing the

L2, crosscultural and academic needs of English-speaking Americans. Perhaps, by implementing such programs on a wider scale, we can alter, in a positive direction, the pernicious cycle of underachievement among language-minority youth. Bilingual immersion offers educators an alternative to other school programs which neglect the invaluable multilingual and crosscultural resources brought to our schools by immigrant and other language-minority pupils. We might also prevent the limited world view and ethnic bias of native speakers of English that often results from monolingual schooling. No other program seems as well positioned to promote positive intergroup relations among the U.S.A.'s multiethnic student body.

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[^0]:    1 This manuscript was developed by David P. Dolson, Manager, Bilingual Education Office, California Department of Education (CDE), and Jan Mayer, Visiting Scholar with the Bilingual Education Office, CDE. The views expressed in this paper do not necessarily represent those of the CDE.

    2 For the sake of brevity, subsequently referred to as the "Longitudinal Study" in this review.

[^1]:    3 In this review, the term English learner or Spanish-speaker will be used instead of limited English proficient student. This is to avoid using a stigmatized pejorative label for a group of students which now represents approximately $20 \%$ of the total school enrollment in California.

[^2]:    4 Primary Language Support is defined here as any type of activity supplementary to the regular core curriculum in English such as: (1) L1 development classes; (2) home/school. library/reading programs; (3) L1 study hall; (4) individualized tutoring or other activities where the L1 is used as the medium of communication.

[^3]:    5 Linguicism is here defined as: Ideologies, structures and practices which are used to legitimate, effectuate and reproduce an unequal division of power and resources (both material and non-material) between groups which are defined on the basis of language (Skutnabb-Kangas, 1991).

