The debate over the past decade about the pedagogical effectiveness of bilingual education and the research evidence are reviewed. The case for bilingual education rests on the assumption that because children cannot learn in a language they do not understand, they will fall behind academically in programs taught only in that language. Against bilingual education is the argument that, if children are provided less instruction in English, they will achieve less in English academic skills. A large quantity of methodologically sound research on bilingual education refutes both positions. On the one hand, under some conditions both minority and majority students make good progress in programs taught only in the second language, while, on the other hand, the vast majority of bilingual program evaluations show no relationship between time spent with the majority language and achievement in that language. Research data indicate that first and second language academic skills are interdependent for manifestations of a common underlying proficiency. Poor school performance of minority group children may be linked to ambivalence or hostility toward the majority culture group and negative feelings about the minority language and culture. Effective bilingual programs can validate minority children's language and cultural backgrounds while reducing ambivalence toward the majority language and culture. (SW)
Interdependence and Bicultural Ambivalence: Regarding the Pedagogical Rationale for Bilingual Education

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In this paper I argue that the current debate regarding the effectiveness of bilingual education largely misses the point. The position that is commonly regarded as the pedagogical rationale for transitional bilingual education as well as the usual opposing argument for all-English programs are both demonstrably inadequate insofar as they fail to account for the research evidence. One theoretical principle does, however, emerge clearly from the research data, namely, that first and second language (L1 and L2) academic skills are interdependent or manifestations of a common underlying proficiency. There is also a considerable amount of research data relating to the questions of why certain groups of minority children tend to fail in school and the extent to which bilingual programs are capable of reversing these trends.

First, in order to place the current debate in context, the history of its evolution over the past decade will be briefly reviewed. Then the extent to which the opposing theoretical positions can account for the research findings will be considered and an attempt will be made to outline what can be said with confidence about the effects of bilingual education on the basis of the research.

Evolution of the Educational Debate

Early statements of the rationale for bilingual schooling (e.g., Gaarder,
1967) emphasized the potential benefits of initial LI instruction both in facilitating home–school relationships and in promoting a healthy self-concept among minority children as well as ensuring that children did not fall behind in academic content while English was being learned. However, subsequent to the Lau vs. Nichols decision and the widespread imposition of bilingual education on local school districts, attention increasingly focused on the linguistic mismatch between home and school as the cause of minority students' low achievement. This was due not only to the intuitive appeal of the argument that students could not learn in a language they didn't understand but also to the assumption that constructs such as "language proficiency" and "dominance" were measurable and could therefore be used as indices to assess when and for how long bilingual programs were "needed". Thus, students who were "non- or limited-English-speaking" (NES and LES) were eligible for bilingual instruction until they had become "full-English-speaking" (FES).

Although, since its inception, bilingual education has given rise to fears of fragmentation and divisiveness among many commentators, its pedagogical rational was initially not disputed in any sustained or systematic way. This is illustrated in a New York Times editorial entitled "Bilingual Danger," (November 22, 1976) which warned that bilingual education risked fostering the creation of permanent Spanish-speaking enclaves as well as cultural, economic and political divisiveness, but went on to say:

"We fully support the proper use of bilingual teaching as a pedagogically sound means of easing pupils' way toward full mastery of English and of making possible effective participation in the general business of learning from the very moment a non-English-speaking youngster enters school. But the purpose of such instruction must be to create English-speaking Americans with the least possible delay."
The first serious educational challenges to the rationale for bilingual education came in 1977 with the publication of Noel Epstein's monograph "Language, Ethnicity and the Schools" and the American Institutes for Research (AIR) study on the impact of ESEA Title VII Spanish/English bilingual programs (Danoff et al., 1977, 1978). Epstein (1977) pointed out that research evidence in support of bilingual education was meager and also that the rationale for bilingual education was by no means as clearcut as advocates suggested. The success of French immersion programs in Canada, he argued, constituted "the strongest argument against a need to teach students first in their mother tongue" (p.53) and showed that "the language factor itself can neither account for nor solve the educational difficulties of these minority students" (p.59). This was by no means a new insight. Paulston (1975) had previously argued convincingly that language was an intervening variable and that the fundamental causal factors for minority students' low achievement were social in nature. However, the impact of Epstein's analysis was considerable insofar as it undermined the assumptions upon which policy had been based and reinforced the growing suspicions of many educators and policy-makers about the "real" aims of bilingual programs.

These suspicions received a further boost when the AIR study reported that only one-third of the students enrolled in bilingual classrooms were classified as of limited English-speaking ability (although both Title VII and non-Title VII Hispanic students were functioning at approximately the 20th percentile on measures of English academic functioning). The results of comparative analyses were mixed in that Title VII students did better
than non-Title VII students in mathematics but somewhat worse in English skills.

Despite severe methodological criticisms (e.g. Gray, 1977; O'Malley, 1978; Su 1979), the AIR findings were interpreted as evidence that "bilingual programs are heading in the direction of native language maintenance" (Washington Post, April 19, 1977) and were frequently cited as evidence that the educational rationale for bilingual education lacked credibility. For example, Bethell (1979), after suggesting that the program represented "a surreptitious death wish" on the part of the federal government, went on to cite the AIR findings as showing that the program was not working. He also approvingly quoted Congressman John Ashbrook's statement that "the program is actually preventing children from learning English. Someday somebody is going to have to teach those young people to speak English or else they are going to become public charges" (p:32).

The most recent assault on the rationale for bilingual education comes from the literature review carried out by Baker and de Kanter (1981) of the Office of Planning, Budget and Evaluation in the U.S. Department of Education. Baker and de Kanter set up criteria for methodological adequacy which resulted in the exclusion of several studies hitherto regarded as strong evidence for the effectiveness of bilingual education (e.g. Egan and Goldsmith, 1980; Modiano, 1966; Rosier and Holm, 1980). They concluded on the basis of the evidence they regarded as acceptable that "there is no firm empirical evidence that TBE (transitional bilingual education) is uniquely effective in raising language-minority students' performance in English or in nonlanguage subject areas" (p.15), and thus exclusive
reliance should not be placed on TBE in federal policy decisions. They suggest on the basis of both the Canadian findings and an evaluation at the kindergarten level in Texas (Pena-Hughes and Solis, 1981) that "structured immersion" is a promising alternative to TBE.

As with the AIR study, the Baker and de Kanter report has been sharply criticized by proponents of bilingual education on methodological grounds (e.g. criteria for inclusion/exclusion of studies), as well as for misleading and unwarranted conclusions (Campbell and Gray, 1981; Roybal, 1981). Nevertheless, its negative impact has already been considerable as can be seen from the New York Times editorial of October 10, 1981:

"The Department of Education is analyzing new evidence that expensive bilingual education programs don't work... Teaching non-English speaking children in their native language during much of their school day constructs a roadblock on their journey into English. A language is best learned through immersion in it, particularly by children... Neither society nor its children will be well served if bilingualism continues to be used to keep thousands of children from quickly learning the one language needed to succeed in America."

Thus, the initial acceptance of bilingual education as a "pedagogically sound means" to help children learn English has come under increasing pressure during the past five years from the argument that if minority children are deficient in English, then they need instruction in English, not their Ll. Bilingual education appears to imply a counter-intuitive "less equals more" rationale in which less English instruction is assumed to lead to more English achievement.

In summary, the opposing pedagogical assumptions can be clearly stated: on the one hand, the usual transitional bilingual education rationale assumes that children can't learn in a language they don't understand and therefore
children instructed through a second language will inevitably experience academic
difficulties; the opposing argument, on the other hand, assumes that there
is a direct relationship between exposure to English and achievement in
English and therefore the more time devoted to L1 instruction the poorer
the performance in English will be. Both these positions are refuted by
an enormous amount of well-controlled research. A major reason for their
failure to account for the data is the fact that they ignore the socio-
cultural context and focus on language of instruction as the causal or
independent variable (Paulston, 1975).

What Does The Research Say?

Hypothesis 1: Initial L2-Only Instruction Leads to Academic Retardation.
Contrary to the assumption of many bilingual educators, there is no evi-
dence for the belief that a switch between the language of the home and
that of the school, i.e. "linguistic mismatch", is in itself, the cause
of school failure. This conclusion is inescapable because of the large
number of documented cases involving both majority and minority language
students where academic performance did not suffer in spite of the fact
that the language of instruction was different from the language of the
home (see Cummins, 1981a; Paulston, 1976; Swain, 1981; Tucker, 1980 for
reviews). The French immersion studies (e.g. Swain, 1981) demonstrate
this as does the differential performance of minority groups exposed to
the same home-school language switch conditions. For example, Hispanic
and Native groups appear to perform considerably worse than Asian groups
under L2-only instruction (Coleman et al., 1966).
A clear demonstration of the fact that neither "linguistic mismatch" nor socioeconomic status (SES) alone can account for the academic difficulties of minority students comes from two district-wide surveys carried out by the Toronto Board of Education, a board in which more than 50 per cent of the students come from non-English language backgrounds. Both surveys (carried out in 1969 and 1975) showed that language minority students born in Canada were more likely to be in high academic streams (i.e. University preparatory) at the secondary level than students of the same SES from English home backgrounds, in spite of the fact that the minority students' home language was different from that of the school. The one major exception to this trend was the Franco-Ontarian group (i.e. children from French home backgrounds born in the province of Ontario), whose placement was very much below that of students of similar SES from all other language backgrounds (see Cummins, 1979/80, 1981b for reviews of these data).

The reasons for these findings will be considered later. The important points at this stage are that neither "linguistic mismatch" nor SES alone can account for the research findings.

Hypothesis 2: Bilingual Instruction Leads to Retardation in English Academic Skills. Despite its intuitive appeal this assumption fares even worse than the previous one in that it is contradicted by the findings of all immersion programs for majority children and the vast majority of bilingual programs for minority children. If this assumption were valid then children in Spanish or French immersion programs for majority children should perform worse in English (L1) academic skills. Virtually every longitudinal
evaluation of immersion programs (and there have been many - see, for example the bibliography in Swain and Lapkin, 1981) shows that although there is usually an initial lag in English language skills development, this disappears when formal English language arts is introduced and immersion students often end up performing better in English language and cognitive skills by the end of elementary school, at which stage they are fluently bilingual.

Similarly, longitudinal evaluations of bilingual programs for minority students in Canada (see Cummins, 1981a, 1981b for reviews), the United States (reviewed by Baker and De Kanter, 1981; Troike, 1978), Sweden (Hanson, 1979) Ireland (Cummins, 1978), Holland (Appel, 1978), Wales (Wijnstra, 1980) and many other countries report that students taught through a minority language for all or part of the school day perform at least as well in majority language academic skills as equivalent students taught through the majority language for all or most of the school day. In some cases there is a slight initial lag in the development of majority language academic skills but this usually disappears by the middle grades of elementary school and in many cases the bilingual students have shown superior performance by the end of elementary school (see Cummins, 1981a, 1981b, and Troike, 1977, for reviews).

Two evaluations of programs for minority language students will illustrate the pattern of effects. First is the Nestor School Bilingual Program in San Diego which involved both Spanish- and English-background students and used a team teaching approach in which instruction in the early grades was primarily through the child's L1. Gradually the proportion of instruction in L2 was increased until by grade 4 approximately 50 percent of instruction was through each language. The evaluation of
the program (Evaluation Associates, 1978) showed that Spanish-background students gained an additional .36 of a year's growth in English reading for each successive year they spent in the bilingual program. Spanish-background students who had spent five years or more in the bilingual program at the elementary level tended to perform slightly better in English reading than the school average at the junior high school level despite the fact that at least 37 percent of the comparison group were originally native English speakers. In mathematics, the grade 6 Spanish-background children in the Nestor program were over a year ahead of the Spanish speakers in the comparison district and only one month behind grade level. The English-background participants in the Nestor bilingual program also performed at a higher level than the comparison groups on a large majority of measures. It is difficult to reconcile these findings with the assumption that bilingual instruction retards the growth of English academic skills.

Exactly the same pattern of findings is found in well-designed large-scale U.S. evaluations of bilingual programs. For example, Egan and Goldsmith (1981) reported that in about 90% of the 39 Colorado bilingual projects for which data were available, non-English language background students showed a rate of academic progress at least as good as that normally expected for all students. In the evaluations conducted in 1977/78, 1978/79 and 1979/80 at four grade levels (K-3), it was found that in 35 percent of the classrooms studied non-English background children gained at least an additional .33 of a year's growth in academic achievement beyond that expected by national norms (Table 1, p.13). In the 1979/80 data it was
reported that in 64 percent of the K-3 classrooms non-English background students gained at least 14 percent more than would be expected based on national norms (Table 2, p.14). As in the Nestor program English background students were involved in the Colorado bilingual programs and showed similar patterns of gains.

In summary, the hypothesis that bilingual instruction leads to retardation in English academic skills could seriously be held only by somebody who had refused to examine the data. The data show that while bilingual instruction does not always lead to gains in English academic skills, it does so in a substantial number of cases (Baker and de Kanter, 1981; Cummins, 1981b) and virtually all the evidence from both majority and minority programs refutes the assumption that time spent teaching through a minority language will result in lower achievement in the majority language.

A Central Principle of Bilingual Instruction: The Interdependence Hypothesis

The fact that there is little relationship between amount of instructional time through the majority language and academic achievement in that language strongly suggests that L1 and L2 academic skills are interdependent, i.e. manifestations of a common underlying proficiency. The interdependence hypothesis has been stated formally as follows (Cummins, 1981a):

To the extent that instruction in L1 is effective in promoting proficiency in LX, transfer of this proficiency to L2 will occur provided there is adequate exposure to L2 (either in school or environment) and adequate motivation to learn L2.

Apart from the data on bilingual education for majority and minority students,
this hypothesis is also supported by (a) studies relating age to L2 acquisition, (b) investigations of the use of L1 in the home context when L2 is the language of schooling, (c) correlational and factor analytic studies of the relationship between L1 and L2, (d) experimental studies of bilingual information processing (see Cummins, 1981a). We have recently tested the interdependence hypothesis in a study involving Japanese and Vietnamese immigrant students and again found strong supporting evidence (Cummins et al., 1982).

Thus, predictions derived from the interdependence of L1 and L2 provide a partial basis for planning instructional approaches for language minority students. The data show clearly that, other things being equal, minority students will not lose out in English as a result of bilingual instruction.

The interdependence hypothesis, however, does not by itself provide a rationale for incorporating minority students' L1 into the curriculum; nor does it predict that bilingual approaches will necessarily be more effective than English-only approaches in promoting English academic skills. However, an examination of the characteristics of those minority students that tend to fail under L2-only conditions and of the effects of bilingual approaches for these students shows a clear pattern which allows us to specify some of the conditions under which bilingual approaches are likely to be more appropriate than L2-only approaches.
The Societal Roots of Educational Failure

Consider some research findings related to the achievement of language minority students:

1. Not all language minority students perform poorly at school. In the United States, Native and Hispanic groups tend to perform considerably worse than some other groups (e.g., Asian students). In Canada, Franco-Ontarian students show very poor performance in L2-only programs whereas most Canadian-born children of recent immigrant groups have tended to perform as well or better than equivalent SES Anglo-students (Cummins, 1981b).

2. The societal context radically alters the effects of variables such as length of residence (i.e., exposure to L2) and age of arrival on the academic achievement of immigrant students in L2-only programs. For example, immigrant students who arrived in Canada before age six were found to achieve grade norms in L2 academic skills (Cummins, 1981c) whereas Finnish students who immigrated to Sweden at an early age or who were born in Sweden attained only a low level in Swedish academic skills (Skutnabb-Kangas and Toukomaa, 1976). This latter pattern also appears to characterize Hispanic students who immigrate at a young age or who are born in the United States (see Cummins, 1981a).

3. Bilingual education programs have shown considerable potential in improving the academic performance of language minority students who tend to fail in L2-only programs. The Rock Point program for Navajo students (Rosier and Holm, 1980) and the Sodertalje program for Finnish students in Sweden (Hanson, 1979) as well as a considerable number of
programs for Hispanic students (Baker and de Kanter, 1981; Cummins, 1981a) illustrate the dramatic impact that well-implemented and community-supported bilingual programs have made.

As outlined earlier, neither socio-economic status nor language and cultural differences between home and school, by themselves, can account for the pattern of differential achievement by minority groups in different contexts. Acculturation, or the degree to which minority students adopt the language and cultural values of the majority, likewise fails to account for the data. If acculturation were the major factor at work we would expect those minority students who used only English at home to perform better academically than those who maintained the use of LI at home. In fact, as the studies by Chesarek (1981) and Bhatnagar (1980) demonstrate, such "acculturated" students often (but not necessarily always) show lower levels of English academic achievement than students who continue to use their LI at home and maintain their allegiance to the home culture as they are learning L2.

How then can the apparent contradictions in the data be resolved? I have suggested (Cummins, 1979, 1981a) that a pattern of ambivalence or hostility towards the majority cultural group and insecurity or even shame about one's own language and culture is found to a greater or lesser extent in minority groups that have tended to perform poorly in school (e.g. Hispanic and Native groups, Franco-Ontarians, Finns in Sweden etc.). This "bicultural ambivalence" is usually the result of a historical pattern of discrimination and often overt violence against the minority group as a whole and school-aged children in particular (see Skutnabb-Kangas, 1980, 1981). The recent Tyler decision in Texas (U.S. v. Texas, 1981),
for example, documented the "pervasive, intentional discrimination throughout most of this century" against Mexican-American students (a charge that was not contested by the State of Texas in the trial) and noted that:

"the long history of prejudice and deprivation remains a significant obstacle to equal educational opportunity for these children. The deep sense of inferiority, cultural isolation, and acceptance of failure, instilled in a people by generations of subjugation, cannot be eradicated merely by integrating the schools and repealing the 'No Spanish' statutes" (p.14).

In a European context, Skutnabb-Kangas (1979, 1980, 1981) has similarly analysed how dominant groups have "reproduced the caste of assembly-line workers" by denying adequate educational opportunities to minority students, alienating them from their own cultural group and making them internalize guilt and shame at their own academic failure.

According to this interpretation, a major reason why bilingual education is successful in helping to reverse minority students' pattern of academic failure is that by validating the cultural identity of the students (as well as the community), it reduces their ambivalence towards the majority language and culture. In this respect, the presence of Anglo students learning Spanish in the Colorado and Nestor programs discussed earlier probably contributed to this validation process and helped promote positive outcomes for the Hispanic students. This analysis does not imply that language and cultural differences between home and school are unimportant, just that they are not the most fundamental causes of minority students' academic failure. When minority students are not characterized by "bicultural ambivalence" the difficulties of learning a second language and adapting to a new culture can often be overcome. However, when students' ambivalence is reinforced by the linguistic and cultural message conveyed by the school it is not surprising that students
fulfil their preordained role in the system and "mentally withdraw" (Carter, 1970) from academic tasks. The hypothesis of "bicultural ambivalence" can help explain why Mexican-American and Finnish immigrant students who immigrate after several years of schooling in the home country appear to have better academic prospects than minority children born in the U.S. or Sweden, despite much less exposure to English (Carter, 1970; Cummins, 1981a; Skutnabb-Kangas & Toukomaa, 1976). The better-developed L1 academic skills of the older children together with the fact that they have not internalized the majority group's perception of them as inferior can account for their superior long-term academic performance in comparison to students born into a minority setting. In other words, both the interdependence and bicultural ambivalence hypotheses are useful in accounting for the data.

The notion of bicultural ambivalence is consistent with the more comprehensive analysis of minority student academic failure provided by John Ogbu (1978). Although Ogbu's analysis is not directly concerned with linguistic minorities or bilingual education, the patterns of minority school performance he identifies show clearly the futility of looking only at linguistic or school program variables for explanations of the effects of bilingual programs.

Ogbu first distinguishes between three types of minority groups, namely, autonomous, caste and immigrant minorities. Autonomous groups possess a distinct racial, ethnic, religious, linguistic or cultural identity and are generally not subordinated economically or politically to the dominant group. Jews and Mormons are current examples of autonomous groups in the United States.
Caste minorities, on the other hand, are usually regarded by the dominant group as inherently inferior in most respects. Their post-educational opportunities are restricted to the least desirable social and occupational roles and their failure to ascend the socioeconomic ladder is attributed to inherent characteristics of the group (e.g. "innate intelligence", "cultural deprivation", "bilingualism" etc.). Ogbu identifies Black, Indian and Hispanic groups in the United States as caste minorities and attributes their school failure to inferior education combined with the perception by the group of post-school economic barriers ("job ceiling") which limit the rewards to be gained from formal education. The perception of powerlessness or lack of mastery over their own fate may influence the patterns of parent-child interaction and the consequent cognitive, linguistic and motivational styles parents transmit to their children. Ogbu points out that

"caste minority children naturally acquire the linguistic, cognitive, motivational, and other skills or personal attributes adaptive to their adult roles. These skills may promote their failure in the dominant group's type of school success, but in that very way schooling improves their adaptability to the menial social and occupational roles they will play as adults" (1978, p.41).

Ogbu's analysis of the reproduction of inequality among caste minorities in the United States is strongly supported by the identification of similar patterns among caste groups in Britain (West Indians), New Zealand (Maoris), India (the scheduled castes), Japan (Buraku outcastes), and Israel (Oriental Jews).

The third type of minority group, immigrant minorities, differ from most caste minorities in that they have moved into a host society more or less
voluntarily and tend to have instrumental attitudes towards the host society and its institutions. They tend to be less affected by the ideology of dominant group superiority than are caste minorities and often their lot appears very good compared by that of their reference group in the homeland. Ogbu gives Chinese and Japanese as examples of immigrant groups in the United States. He also points out that the status of minority groups may change. For example, immigrant minorities may develop into autonomous or caste minorities. The fact that recent Finnish immigrants to Sweden and Mexican immigrant workers in the United States manifest the characteristics of caste minorities is clearly a function of historically determined patterns of relationships between the two cultures. For example, Finnish immigrants to Australia are regarded as a high status group and perform well academically (Troike, 1978) thereby fitting the description of "immigrant" rather than "caste" groups, in contrast to their counterparts in Sweden.

Ogbu's distinctions between different types of minority groups and his structural analysis of the causes of school failure among caste minorities help explain research findings which appear contradictory when subjected only to linguistic or instructionally-based analyses. His analysis is clearly compatible with the "bicultural ambivalence" notion but has the advantage of being at a higher level of generality. While not denying that factors associated with SES and language/cultural differences do represent real impediments to academic and economic success, Ogbu's analysis allows us to account for the fact that some minority groups overcome these difficulties whereas others are locked into a caste system in which schools use language and cultural differences as tools to reproduce and justify the existing order. This process is amply documented and admitted by the State of Texas in the recent Tyler decision (U.S. v. Texas, 1981).
Conclusions

The present debate about the pedagogical effectiveness of bilingual education is characterized by claims and counterclaims about the extent to which research supports two opposing but apparently equally plausible positions. The case for bilingual education rests on the assumption that because children cannot learn in a language they don't understand, they will fall behind academically in L2-only programs. Against bilingual education is the argument that if you provide children with less instruction in English, they will achieve less in English academic skills. To policymakers what comes across is that there exists little sound research and what there is does not clearly support either position.

In fact, we have an enormous amount of methodologically sound research on bilingual education which refutes both positions. On the one hand, under some conditions both minority and majority students make good academic progress in L2-only programs, while, on the other hand, the vast majority of bilingual program evaluations show no relationship between time spent through the majority language and achievement in that language. At a linguistic/instructional level these findings can be accounted for by the interdependence hypothesis.

But the policy question remains: "Is bilingual education effective in improving minority children's English academic skills?" The answer suggested by the Baker and de Kanter review is that in many cases bilingual education does improve children's English performance but this is not invariably the case. However, this answer conceals much more than it reveals. In order to really answer the question of whether "bilingual education" is or is not effective, we must first ask another question:
"Why should we expect bilingual education to be effective?" The usual rationales trotted out and the one which underlies most of the programs currently in existence essentially represents a self-contradictory compromise between the two opposing assumptions presented above (Cummins, 1979) as well as a concession to the fears of fragmentation and divisiveness expressed by many commentators. The result is a program which provides LI instruction in order to help minority children learn English and then "exits" them from LI instruction in case they won't continue to learn English; a program which ostensibly tries to validate minority children's cultural identity and self-concept while at the same time "Americanizing" them as rapidly as possible. In short, many so-called bilingual programs treat the languages and cultures of minority communities as diseases against which children must be inoculated with initial small doses in order to be rid of them forever.

Although there are many bilingual programs in the U.S. which do not conform to this caricature, the majority unfortunately do. There is little reason to expect programs with such a confused rationale to be particularly effective.

What kinds of bilingual programs would we expect to be effective in promoting English academic skills? Since one of the major causes of minority children's school failures lies in a historically-engendered caste system, any educational intervention which is to be effective must change the patterns of relationships between majority and minority groups. Language and cultural factors have been used as powerful tools in the past to induce minority groups to internalize the inferior status...
which the majority group attributes to them; by the same token, language and cultural factors can be used as tools to help break this destructive cycle.

There are several obvious ways in which effective bilingual programs use children's language and cultural backgrounds to achieve their goals. First, they encourage active community participation in the program as a means of involving the community in shaping their own future and eliminating the sense of powerlessness which characterizes caste minorities (e.g. Hanson, 1979; Modiano, 1966; Rosier & Holm, 1980); second, they strongly promote the development of L1 skills in order both to provide a strong foundation for transferring academic skills to English and to help children experience initial academic success, so important for the growth of a healthy academic self-concept (e.g. Egan & Goldsmith, 1981); third, they continue to promote L1 academic skills throughout school in order to help children experience the subtle academic and cognitive advantages which result from proficient bilingualism (e.g. Cummins, 1981a; DeAvila & Duncan, 1979).

Such programs will undoubtedly increase minority students' future economic prospects because of the greater range of job opportunities available to bilinguals. Concerns about American vulnerability in trade and defense as a result of lack of proficient bilinguals are being increasingly voiced (e.g. President's Commission, 1979). Effective bilingual programs of the type described above can help resolve these problems as well as increase minority students' prospects of educational and economic viability. Such programs have a theoretical and empirical basis which
has been elaborated in detail (e.g., California State Department of Education, 1981). Monolingual English programs, by contrast, have neither empirical nor theoretical support. In addition, they squander national linguistic resources, perpetuate the "job ceiling" for minorities by eliminating their potential bilingual advantage and are tainted by the education failure which they have induced in generations of minority students.
Footnotes

1. This account is focused on the debate regarding the pedagogical rationale for bilingual education and sociopolitical aspects are not considered in any detail.

2. French immersion programs involve teaching English-speaking children through French for a major part of the school day in order to promote the development of bilingualism. English (L1) language arts are usually introduced in grade 2 and the time devoted to L1 is increased during the elementary grades to about 50 percent by grade 6. Thus immersion programs constitute one type of bilingual program (see Tucker 1980 for a discussion of the implications of immersion programs for U.S. bilingual education).

3. Baker and de Kanter (1981) have rejected the Colorado results on two grounds: first, they argue that the gains reflect only the statistical artifact known as "regression to the mean" and second that the use of the norm-referenced model is inappropriate since the nature of the learning-curve for language minority children is not known. The first objection ignores the fact that continued gains across grade levels (K-3) cannot be explained by regression to the mean. In other words regression to the mean could account for gains made between K and grade 1 but could not then account for subsequent gains made between grade 1 and grade 2, and grade 2 and grade 3. Baker and de Kanter's second objection is bizarre insofar as they themselves report nationally representative data over a three-year time period showing similar learning curves for language-minority and mono-
lingual English-speaking groups! They also report data by Carsrud and Curtis (1980) which showed that Mexican-Americans' academic performance declined about 15 percentile points (i.e., from above the mean to under the 40th percentile) over the course of elementary school. The implications for minority students' typical learning curves are that if students start low they will stay low (Baker and de Kanter, 1981, p.13) or if they start high, they will decline (Carsrud and Curtis, 1980; Carter, 1970). If the typical learning curve were such that language minority students would be expected to make greater gains than the norm group in each grade from grades K-3, as Baker and de Kanter seem to argue, one might wonder how language minority students manage to show such poor achievement and why bilingual programs were instituted in the first place.

In short, the Baker and de Kanter objections to the Colorado study are self-contradictory in attempting to explain away the gains made by language minority students. They also fail to explain the excellent progress made by the English-background group which refutes their theoretical assumption that less instruction in English will lead to less English achievement.

The notion of "bicultural ambivalence" does not imply any type of "sociocultural deficit". Rather, it appears to be a characteristic of minority groups who have been discriminated against economically, politically, culturally, and educationally. Any attempt to identify "causes" of minority children's school failure must assign a fundamental role to these violations perpetuated by dominant groups on minority groups. This, of course, does not mean that linguistic factors are unimportant; on the contrary, they represent extremely powerful intervening variables, in both the scientific and educational sense of the term.


O'Malley, J.M. *Review of the evaluation of the impact of ESEA Title VII Spanish/English bilingual education program.* *Bilingual Resources,* 1978, 1, 6-10.


Roybal, E. Rebuttal to Congressman Statten's statement regarding: Reduce funding for ESEA Title VII. Washington, D.C., mimeographed, October, 1981.


Swain, M. Bilingual education for majority and minority language children. Studia Linguistica, in press.


