DOCUMENT RESUME

ED 300 978 EC 211 273

AUTHOR Ruiz, Nadeen T.
TITLE The Nature of Bilingualism: Implications for Special Education. Crosscultural Special Education Series, Volume 2.
INSTITUTION California State Dept. of Education, Sacramento. Div. of Special Education.
PUB DATE Jan 88
NOTE 43p.; The document was produced by Resources in Special Education. For volumes 1 and 3 of this series, see EC 211 272-274.
AVAILABLE FROM Resources in Special Education, 650 University Ave., Room 201, Sacramento, CA 05825.
PUB TYPE Guides - Non-Classroom Use (055) -- Information Analyses (070)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Bilingualism; Code Switching (Language); Cognitive Development; *Communication Disorders; Elementary Secondary Education; *Handicap Identification; Interference (Language); Language Acquisition; Language Dominance; *Language Proficiency; Language Skill Attrition; *Limited English Speaking; Models; *Second Language Learning

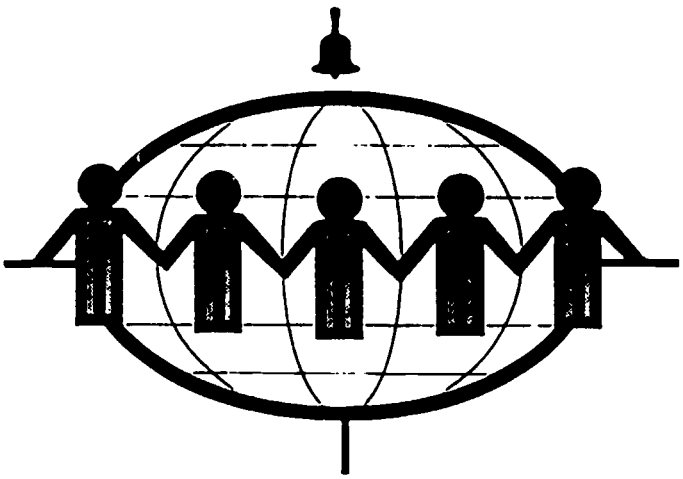
ABSTRACT

This monograph presents language factors related to bilingualism, to assist educators to distinguish normal phenomena due to bilingualism from symptoms of a handicapping condition. The first section, called "The Nature of Bilingualism," discusses the diversity of bilingual students and their dynamic use of two languages, focusing on simultaneous and sequential bilingual children, first language acquisition in bilingual children, language varieties, language loss, codeswitching, and cognitive development in bilingual children. The section entitled "Second Language Development" explores the role of primary language interference; the similarity between the processes of first and second language acquisition; the rate of second language acquisition; and the factors of age, access to peers, cultural group membership, personality and individual strategies, motivation and attitude, and formal instruction in English as a second language. The final section, "Language Proficiency," examines relative language proficiency and language dominance, presents a model of bilingual proficiency, and reviews the problems of comparably limited bilingual children. A list of 64 references is appended. (JDD)

The Nature of Bilingualism:

Implications for Special Education

Crosscultural Special Education Series, Volume 2



Developed by

Nadeen T. Ruiz

Edited by

Patricia Winget

Designed by

Gail Levandowski

Program, Curriculum, and Training Unit
California State Department of Education, Special Education Division
January 1988

This publication was edited and prepared for photo-offset reproduction by Resources in Special Education (RiSE) under the direction of the Program, Curriculum, and Training Unit, Special Education Division, California State Department of Education.

Copies of this publication are available from Resources in Special Education, 650 University Avenue, Room 201, Sacramento, California 95825.

Table of Contents

List of Tables

List of Figures

Introduction

Limited English proficient (LEP) children are a rapidly growing group of students in our public schools. These children have at least two languages in their communicative repertoire: English and another language that they have usually learned in the context of their home and cultural group. One of the most important characteristics of this group is that the schools have found their English skills to be limited with respect to what they need to function solely in English in academic settings.

Due to the unprecedented increase in the numbers of LEP children, educators across the country have been challenged to provide appropriate education services to linguistic minority children. Special educators are no exception. Daily they are called upon to meet the needs of LEP children identified for special education.

The complexity of providing fair and appropriate special education services to LEP children is well-noted (Cummins, 1984; Ortiz and Yates, 1984). One way to begin to deal with the complexity is to become familiar with the normal processes of bilingualism. Once familiar with these processes, the special educator can begin to distinguish normal phenomena due to bilingualism from symptoms of a handicapping condition.

This monograph presents some of the language factors related to bilingualism that a Student Study Team must take into account with every LEP child considered for special education services. It is divided into three principal sections: The Nature of Bilingualism, Second Language Development, and Language Proficiency. It discusses the diversity of bilingual students and their dynamic use of two languages. The second section reviews the research on second language learning. It focuses on factors that affect second language acquisition in childhood. The monograph concludes with a discussion of a model of bilingual language proficiency that is especially relevant to special educators working with bilingual children.

The Nature of Bilingualism

Given the existing demographic trends and the relatively young debate on bilingual education, educators might assume that the study of bilingualism is a relatively recent enterprise. Actually, it dates back to 1913 when Jules Ronjat studied the bilingual language development of his son, and also to the 1930's when Werner Leopold published his classic study of his daughter learning English and German. Since that time, language learning in bilingual individuals has been studied by numerous approaches: case studies, ethnographic fieldwork, and experimental investigations. But any review of such research must begin with the caveat that there is great diversity among bilingual children. Depending on a myriad of factors, bilingualism will manifest itself in different ways in different children. These factors derive equally from the linguistic and cognitive realm as well as from the greater social milieu (Ben Zeev, 1984).

Simultaneous and Sequential Bilingual Children

The first questions special educators must pose about a bilingual child are: How did this child become bilingual? or under what conditions did this child learn two languages? Educators will find that some bilingual children in the public schools have been systematically exposed to two languages before the approximate age of three. These children are called *simultaneous bilinguals* or *early bilinguals* (McLaughlin, 1978). Sometimes this exposure involves clear separation of the two languages as illustrated in a number of diary studies on bilingual children. For example, Louis' father spoke to him in French, his mother in German (Ronjat, 1913). Some researchers have called this type of bilingual input as following the "one person—one language" principle (McLaughlin, 1978). In this situation there is a more or less clear distinction of the two languages along the lines of particular speakers and settings (Ben Zeev, 1984). Other simultaneous bilingual children have mixed input of the two languages. This usually happens when the caretakers are bilingual themselves, switching languages within the same setting, and while talking to the same people. This is more likely to occur in bilingual communities such as those in the Southwest (Huerta-Macias, 1981).

Around the age of three, and sometimes earlier, simultaneous bilinguals learn to separate the two languages (Vihman and McLaughlin, 1982). For example, three-year-old Spanish-English bilingual children address English-speakers in English and Spanish-speakers in Spanish without difficulty (Fantini, 1978). Some research indicates that simultaneous bilingual children may be somewhat delayed in the early stages of language development, especially with regard to acquisition of grammatical structures. Researchers suggest that the delay may be due to the child's difficult task of sorting out two language systems at once (Vihman and McLaughlin, 1982). Other researchers have found that bilingual children with adequate input in both

languages showed no language delay (Padilla and Liebman, 1982). In summary, the question of language delay in simultaneous bilingual children remains an open one, and educators should expect to see both normal and slightly delayed language acquisition among a group of young simultaneous bilinguals.

Many bilingual students in the public schools are *successive* or *sequential* bilinguals. Sequential bilinguals have learned one language first—their *primary language*—and have added or begun to add a second language after the age of three. Sequential bilingual children are a very heterogeneous group, as anyone who has worked extensively with language minority children will agree. One bilingual educator (Cruz, 1982) has developed a guideline for looking at bilingual students for the purpose of explaining why some bilingual children do well in school relatively rapidly, and why others do not. Table 1 is an adaptation of this guideline.

Table 1

Four Types of Sequential Bilingual Children
A Multidimensional Classification

TYPE 1	**Balanced or nearly balanced bilingual child** The ideal; the goal Can read, write, and do math in both languages Some are potentially eligible for the gifted class
TYPE 2	**Monolingual in a language other than English** Have been educated in L1* Can profit from intensive ESL as they make the transition into English
TYPE 3	**Monolingual in a language other than English** Rural background Low income Very little or no schooling Cannot read or write Some math skills Need primary language development (oral language, reading, writing), along with ESL
TYPE 4	**"Comparably limited" child** Limited proficiency in both L1 and English Problems in reading and writing both languages High risk for special education

*L1 = First language.

The first type of bilingual students are those whom many bilingual educators consider the ideal. These children can function in both social and academic situations in either of two languages. Type 1 children illustrate the advantages of bilingualism. Their proficiency in other languages is a national treasure at a time when communication with other nations is at a premium.

The next two groups of children, Type 2 and Type 3, are both monolingual in a language other than English, but they differ in important ways. Two of the most striking differences between the types of bilingual children described in Table 1 are educational experience and sociocultural background. Children from the Type 2 group are literate in their first language, L1, and possess the academic skills necessary for school success. They must only acquire the L2, the second language, to continue their previously established record of school success.

Children representing the third type of bilingual children, however, have no such academic track record. Learning to participate in American instructional settings and acquiring preacademic and academic skills are added to the tasks confronting these children. In addition, two important sociocultural and socioeconomic variables mentioned in conjunction with Type 3 ("rural background" and "low income") indicate that the children's repertoire of experiences may not overlap with those of mainstream children. Mainstream experiences are assumed by the school for many instructional activities. Consequently, the teacher of Type 3 children must then work on extending the children's store of experiences and related knowledge to encompass those areas to be used in classroom learning. Conversely, the teacher must work on extending the school's repertoire of instructional events to include cultural experiences and ways of using language common to the minority child's background (Heath; 1983, 1986).

Cruz (1982) includes in this typology what he and his colleagues found to be effective instructional techniques. Although more qualitative study is necessary to create the best educational strategies for Type 2 or 3 children, experienced teachers can immediately predict from these general descriptions which children as a group will tend to succeed in their classes.

The fourth type of children is of special importance to special educators. Bilingual children that do poorly on tests in both their languages (L1 and L2) turn up in high numbers on referral lists. We will discuss these children in detail after examining the theoretical framework for research on bilingual school-age children.

Educators must be cautious in using this typology to categorize bilingual students. Obviously, not all bilingual students will fit into any one of these categories. Furthermore, individual differences related to intelligence, motivation, attitude, family support, and language status produce many exceptions to teachers' expectations. For example, some students with the educational and sociocultural characteristics of Type 3 can excel, while their counterparts in Type 2 do poorly. This typology does imply, however, that a

variety of factors beyond bilingualism per se will be related to differential school performance. It should be used by special educators as a first step towards orienting themselves towards the sociocultural and educational variables that will impinge upon the performance of language minority children.

This typology also serves to illustrate the continuum of bilingualism. Being bilingual can mean that students have full proficiency in both languages, as in Type 1, or minimal competency in both languages, as in Type 4 (Kessler, 1984). In short, the labels "bilingual" or "LEP" are not an end in themselves. Rather, they open up a set of questions that relate to bilingual students' past history and current educational needs.

First Language Acquisition in Bilingual Children

Another question educators may pose about LEP children referred for special education concerns their language development and ability. The first step in determining whether LEP children show normal, delayed, or deviant language development is to compare their language along a continuum of normal development in the primary language. For example, a Chinese-speaking child should be compared with the average course of language development in Chinese children from similar linguistic and cultural backgrounds. This kind of comparison can also help identify LEP children with very advanced verbal skills in their primary language—skills that may indicate giftedness. Readers working with Spanish-speaking children are referred to a companion handbook in this series, *Research on Acquisition of Spanish as a First Language* (Merino, 1988). In it, Merino provides a detailed discussion of the continuum of normal language development for Spanish-speaking children in the United States and in Spanish-speaking countries.

The remainder of this section presents other aspects of first language development in bilingual children, such as speaking a nonstandard language variety, losing one's first language with an intensive introduction to the second, and codeswitching. All aspects represent normal bilingual phenomena. Educators working with bilingual students need to know about these phenomena in order to separate characteristics of normal bilingualism from symptoms of a language or learning disability.

Language Varieties

Many LEP children have learned a language variety different from the standard variety of their primary language. Evaluators doing primary language assessment need to recognize the features of the particular variety spoken by the child. If language variety is not taken into account, some of the child's language output may be interpreted as incorrect or symptomatic of a handicapping condition when it is in fact entirely appropriate for a child of that age who has learned a nonstandard variety at home and in the community.

Even when the tester is familiar with the language variety spoken by the child, identification of dialect forms is not straight-forward. For example, the verb regularization found in some varieties of Spanish is also characteristic of a young child or of an older child who is developmentally delayed. Example—"El no ha dicido nada" (standard Spanish: El no ha dicho nada). In nonstandard Spanish the former phrase may be appropriate. The possible confusion over the "source of error" in such a case is common and potentially dangerous for the child. Historically, whenever a person's language or dialect has contained features similar to child language, there is a tendency to attribute below average functioning to that person.

Language Loss

Language loss occurs in bilingual children when there is an interruption of development in the first language, and an intensive and prolonged exposure to the second. School age bilinguals who have been instructed primarily in English and whose language use patterns in the home and community are shifting towards English are especially susceptible to losing their first language. These children tend to lose control over the more complex or later-acquired structures in their native language, producing grammatical errors very like, if not identical to, those of young children (Merino, 1982). Again, when an older child makes an error typical of a much younger child, there immediately arises the suspicion of a developmental delay or disorder.

Language assessment personnel need to recognize language loss as a normal process occurring in many bilingual students who are not given opportunities to continue developing their first language.

Codeswitching

Loosely defined, codeswitching means that persons switch languages, or codes, either from sentence to sentence *(intersentential codeswitching:* "Stay here, Roli. Te quedas aquí,") or within the same sentence *(intrasentential codeswitching*: "I put the tenedores on the table.") (McClure, 1981: 82, 86). Codeswitching is a natural outcome of different language groups in contact. It is important to note that many people not in contact with immigrant groups or who are unfamiliar with the study of bilingualism assume that codeswitching is random language mixing, and that the bilingual individual lacks sufficient command of either code to stick to one language. All the research on codeswitching proves this assumption mistaken. Consistently, researchers have found that children and adults who codeswitch do so systematically according to a set of complex grammatical and social rules (McClure, 1981). In general, a codeswitched utterance shows no evidence of breaking the grammatical rules of either language (Poplack, 1982). For this reason, codeswitching tends to be a highly developed skill that non-codeswitchers have difficulty imitating (Gumperz and Hernandez-Chavez, 1975).

It is true that bilingual children will occasionally insert into a sentence a word for which they do not have an equivalent in one of their languages. For example, a child might say, "Arturo, dame la chalk." (Arturo, give me the chalk.) Here the child may not know the word for "chalk" in Spanish, perhaps because she has encountered this word in the school setting and not learned the Spanish word for "chalk" at home. This influence of *domain*, that is, the particular setting in which bilingual children learn the words of their languages, can often be observed (Fishman, 1972; Ramirez, 1979). On the other hand, the child may know the Spanish equivalent but still uses the English word because the classroom setting promotes her association with the word in English (Huerta-Macias, 1981; Olmedo-Williams, 1981). Still another reason for this switch may be that the child uses her bilingual skill for a stylistic reason, e.g. for emphasis, to get attention, to make a joke, and so on (Zentella, 1981).

The sociolinguistic reasons for codeswitching, usually called *functions*, have been studied in relative depth. A review of the studies of the functions of children's codeswitching reveal the consistencies listed in Table 2.

Table 2

Major Findings of the Research

Children's Codeswitching in Classrooms

Function	Research Findings	Research Studies
Language Proficiency of the Addressee	Children's language choice is affected by their interlocuter's language proficiency	Genishi, 1981 Zentella, 1981
Follow the Leader	Children's language choice is affected by the language in which they were last addressed	Genishi, 1981 Zentella, 1981
Social and Ethnic Identity	Children's language choice is affected by their addressee's social/ethnic identity	McClure, 1981 Greenlee, 1982
Language Preference of the Child	Children's language choice is affected by their own preference for a particular language	McClure, 1981
Topic	Children's language choice is affected by the topic of conversation	Genishi, 1981 Olmedo-Williams, 1981
Stylistic Functions	Children's codeswitching can serve a variety of stylistic functions (e.f., clarification, attention-getting, emphasis, metalinguistic play)	Fantini, 1978 McClure, 1981 Olmedo-Williams, 1981 Greenlee, 1982

Table 3 features some examples of children's codeswitching taken from studies of two bilingual special education classrooms (Ruiz, 1984; 1988). They are listed by functional category. These examples illustrate the variety of functions that codeswitching serves children—even those identified as communicatively handicapped. Greenlee (1981) also found that Hispanic mentally retarded children and adults codeswitched for the same purposes as other members of their ethnic group.

Table 3

Children's Codeswitching in Bilingual Special Education Classrooms

(Ruiz, 1983; 1988)

	Function	Situation	
1.	**Language Proficiency of the Addressee**	Rosemary, a bilingual, switches from English to Spanish when she addresses Spanish-dominant Pilar.	
	Example:		
	Nelly (age 8)	Make the tiendita aquí.	Make the store here.
	Rosemary (age 11)	No, we're just going to make one.	
	Nelly	No, two.	
	Rosemary	One.	
	Pilar (age 8)	Es la misma tienda, oigan. Acá es donde se pagan, okay?	It's the same store, listen. Here is where they pay, okay?
	Rosemary	*Noo. Donde pagan no, porque ya tengo mucho dinero aca . . .*	Nooo, Where they pay, no because I already have a lot of money here. . .
2.	**Follow the Leader**	Jose Miguel, English dominant, follows Omar's lead and uses Spanish to help him narrate a story to his teacher.	
	Example:		
	Omar (age 6)	. . .estaba frio, me pensaya.	It was cold, I was thinking.
	Jose Miguel (age 6)	. . .*mucho air, windy.*	. . .lots of air, windy.

Table 3 continued
Children's Codeswitching in Bilingual Special Education Classrooms
(Ruiz, 1983; 1988)

	Function	Situation	
3.	**Social and Ethnic Identity**	Rosemary switches from Spanish to English when she addresses the researcher, N., an occasional substitute teacher in the classroom.	
	Example:		
	Rosemary	Yo no se donde lo pusiste.	I don't know where you put it.
	Pilar	Ah, lo puse en mi bolsa y ya no lo tengo.	Oh, I put it in my purse and now I don't have it anymore.
	Rosemary	(to the researcher, N.) I had a lot of money, *a lot.*	
	N.	Yeah? What happened to it?	
4.	**Language Preference of the Child**	Most of the discourse preceding Marcy's utterance is in English, but she chooses to use Spanish, most likely based on her dominance and preference for the latter.	
	Example:		
	Alberto (age 6)	I got one. I got a horse.	
	Teacher	Tu tienes un caballo tambien. You have a horse.	You have a horse, too.
	Child	A real horse.	
	Teacher	You have a real horse, huh?	
	Marcy (age 6)	Yo tengo un horse, alla, al rancho.	I have a horse, there, at the ranch.
5.	**Topic**	Cecilio, Spanish dominant, makes his color preference known. In this CH classroom, color names were emphasized in English, and therefore could be considered an English-associated topic.	
	Example:		
	Cecilio (age 5)	Yo pink! Yo pink!	I pink! I pink!

Table 3 continued
Children's Codeswitching in Bilingual Special Education Classrooms
(Ruiz, 1983; 1988)

	Function	Situation	
6.	**Stylistic Functions**	Omar, Spanish dominant, tries to inform his teacher in English about Alberto's infraction of the rules, but is unsuccessful until he switches languages. This codeswitch can be attributed a *clarification* (McClure, 1981) or *repair* (Ruiz, 1987) function.	
	Example:		
	Omar	Teacher	
	Teacher	Que quieres?	What do you want?
	Omar	Albert got a (g), (k).	
	Teacher	A cut?	
	Omar	Un chicle.	Gum.

In summary, children who codeswitch are developing a language skill that, like other linguistic skills, grows in complexity (McClure, 1981). They also use codeswitching as a pragmatic skill, switching languages for many purposes, including the establishment of their ethnic identity. Care must be taken to analyze the child's codeswitching as a language, looking for the developing grammatical sophistication that should occur regardless of language mixing. Just as importantly, codeswitched utterances should be examined to see if they serve common sociolinguistic functions, such as those listed in Tables 2 and 3.

Cognitive Development in Bilingual Children

Teachers and scholars of many disciplines have pondered the relationship between language and thought. Among those who are in contact with bilingual individuals, an intriguing question has been posed. Although the question may take various forms, it usually resembles the following: What are the effects of bilingualism on mental development?

The emphasis in this monograph is on the linguistic aspects of bilingualism and we will not go into detail on this subject. The reader is referred to extensive discussions in McNab (1979), Ben Zeev (1984), Hakuta (1986), and Figueroa (in press). But sooner or later, special educators seeing bilingual students will ask themselves this question as they weigh assessment

results and formulate educational recommendations for these pupils. The following section is intended as an overview of the current thinking on this question and some of its antecedents.

Studies from approximately the first half of this century on large groups of bilingual children tended to support a notion of a "language handicap" associated with bilingualism (Hakuta, 1986; Figueroa, in press). These studies have been discounted on two major grounds: first, the bilinguals participating in the studies were usually from poor, immigrant backgrounds; and second, the researchers did not ascertain whether the children had proficiency in both languages. Most often, the "bilingual children" in these studies simply did not know English well enough to do well on the test protocols. The resulting low scores from the bilingual children were then interpreted as evidence for a handicap attributable to bilingualism.

Studies since these early ones can be grouped into those that have continued to find negative effects, neutral effects, and positive effects (Ben Zeev, 1984). Those associated with negative effects have followed the earlier pattern of studying immigrant children who constitute a minority group in their new country of residence. Their primary language is usually ascribed low status in comparison with the majority language. Furthermore, many of the subjects in these studies are from groups with low socioeconomic status (SES). Lambert (1984) has called learning a second language under these sociopolitical conditions *subtractive bilingualism*.

Under the conditions of subtractive bilingualism, there is not a lot of motivation for children to attain high levels of proficiency in the first or minority language: their primary language has low status, is different from the language of the schools, and is associated with a variety of socioethnic and economic characteristics. This is in direct contrast to *additive bilingualism*; that is, when children proficient in the dominant and prestigious language add a second language at no expense to the first.

A prominent researcher in bilingual special education, Jim Cummins, has attempted to explain the situation of subtractive bilingualism and the associated negative effects on language skill through his Threshold Hypothesis (1981, 1984). He holds that if children do not reach a certain lower threshold level of proficiency in their L1, they will be hindered in their attempt to learn the L2. Little specificity describes the lower threshold level, but generally speaking, Cummins maintains that children need to learn their L1 well enough to meet communicative demands at home, in the community, and at school. What often happens under subtractive circumstances is that the children's L1 proficiency diminishes because of a lack of social payoff, and L2 proficiency is inadequate because they did not reach the lower threshold of proficiency in their native language. The result can be children with comparably low proficiency in both languages (Type 4 in the typology presented earlier).

Another group of bilingual studies has shown neutral and positive effects on cognitive development. Prototypical studies are the immersion studies from Canada. In these studies, language majority children (native English speakers) voluntarily attended schools where they were "immersed" in French. It is important to note, however, that these children were typically allowed to speak their first language among peers and in response to the teacher at first, and were given periodic and systematic instruction in English at different periods throughout their schooling. Obviously, these language majority children who become bilingual are in an additive situation.

Achievement scores of these children consistently show that, once English language arts have been introduced in the curriculum, they are at grade level in English reading and writing skills, although the majority of their schooling was in French (Genesee, 1983). According to Cummin's Threshold Hypothesis, these bilingual children have passed the lower threshold level and, consequently, their bilingualism shows no negative effects in the cognitive or academic realms. Furthermore, when the Canadian students were selected for proficient bilingualism, they did better than control groups in verbal and nonverbal tests that tap mental manipulation and reorganization of patterns (Peal and Lambert, 1962). In terms of the Threshold Hypothesis, these proficient bilingual children passed the higher threshold of bilingualism associated with positive cognitive effects. In the United States, Hispanic bilingual children meeting the criteria of balanced bilingualism have also shown advanced cognitive development (Duncan and DeAvila, 1979).

Another group of studies has looked at bilingual individuals that have been bilingual from an early age (Ianco-Worall, 1972; Ben Zeev, 1977). The results supported the findings mentioned previously that bilinguals have superior analytic skill and cognitive flexibility.

As the preceding discussion would lead us to infer, the subject of bilingualism and cognitive development is still the subject of much debate. At this point, however, we know that bilingualism does not negatively affect cognitive development. Perhaps in the future, more studies will support the findings cited above that relate bilingualism to enhanced cognitive development. Nevertheless, if the future studies favor a neutral effect—that is, neither enhanced nor negatively-affected cognitive development—the benefits of multilingualism will always be apparent in the social, economic, and interpersonal realms. Knowing two, three, or more languages certainly opens many more doors than knowing only one.

Second Language Development

Slow progress in learning English as a second language is one of the principal reasons that bilingual students are referred for special education (Cummins, 1984; Ruiz, 1988). For each LEP child referred, it is imperative to determine whether lack of progress in learning the second language is due to socioeducational factors or to a disability. This section discusses the process of learning a second language. It also presents recent information on factors affecting second language learning in bilingual children. Knowing about these factors may help special educators decide whether a particular LEP child is learning English at a rate commensurate with others possessing similar social, educational, and personality factors, or whether there is a possibility of a learning problem that is slowing the acquisition of English.

Role of L1 Interference

For a while it was believed that children learned their second language through the framework of their first language. Many researchers and teachers expected to find a great amount of interference from the first language to the second. For example, it was expected that a Spanish-speaking child would say, "I have cold," instead of "I am cold," through the influence of "Tengo frio" (literally translated, "I have cold"). The following example from a six-year-old child in a communicatively handicapped class illustrates the influence of his first language on English syntax. He is responding to the teacher's question regarding the construction of a bird feeder:

> Teacher: *You spread the peanut butter on what?*
> Eligio (Age 6): *A paper toilet!*

The Spanish equivalent of Eligio's utterance, something in the order of "papel del bano," calls for the noun to precede the adjectival phrase. Such an error is not common to children learning English as their first language.

Although most children show some influence of their native tongue in English at the beginning stages, such as Eligio in the preceding example, the interference evidenced by second language-speaking children is not the amount that some would expect. A detailed *contrastive analysis*, or comparison, of the two languages is only useful to the extent that it can predict *some* likely errors of young second language learners, but certainly not all (Littlewood, 1984). With adult second language learners, contrastive analysis may prove helpful as older learners tend to rely more heavily on their first language as a learning strategy (Dulay and Burt, 1980).

It is not accurate to view the first language as simply interference since it is often responsible for positive transfer to English, and serves as a base to the students while they gradually attain second language skills. An equally

strong argument in favor of viewing the first language positively comes from the field: it is the widespread experience of bilingual and English as a Second Language (ESL) teachers that the more skilled children are in their native language, the easier they learn English. Skill in the native language should be viewed as a positive predictor for later success in English. Errors that result from the first language are entirely normal and transitory. More than anything else, errors are an indication that students need more opportunities to develop proficiency in their second language.

Similarity to L1 Acquisition

Many researchers point out the similarity between the processes of first and second language acquisition (McLaughlin, 1978; Kessler, 1984). Although the processes are not identical, it is safe to say that the young child exposed to the second language in natural situations follows an acquisitional progression similar in some ways to children learning English as their first language (Ravem, 1974; Adams, 1978). More specifically, it appears that second language learners follow a similar creative process (hypothesis-testing or creative construction) in learning their second language (Dulay and Burt, 1980).

One aspect of the creative approach results in many similar over-generalizations and other errors that young English monolinguals make (Kessler, 1984). Here again, these errors are evidence that the children are progressively making sense of their newly acquired language system, English.

Table 4 presents data from a study by Dulay and Burt (1980). These researchers qualitatively examined the errors made in English by two ethnic groups–Hispanic and Chinese–while learning English as a second language. Dulay and Burt compared those results to errors made by very young monolingual English-speakers. The results of this study clearly illustrate that certain aspects of second language acquisition appear similar to first language acquisition. The study also presents direct evidence that learning a second language involves something other than direct transfer of the first language.

Table 4

	L1 Examples	L2 Examples
	Omission	
the	— book drop.	— cat go there.
-s	More cookie—.	It's got some flower—.
-es	I have two necklace—.	Those two house—.
do, is/are	Man — no go in there.	I — no have it.
is, am	This man — not brother.	I — sick.
-ing	I'm play— with it.	A father is come—.
-ed	Book drop—.	He close— it.
fell, came, ate	Good beech fall down.	I fall down the water.
3rd person singular	He don't fit in here.	He don't swim.
Infinitive "to"	I like — do it.	He don't like — eat.
	Double Marking	
Indicative	J. doesn't likes it.	B. doesn't like it carrot.
Regular past	I didn't spilled it.	Why didn't you came to school?
Direct object	We took it away the hat.	Put it down card.
	Regularization	
Reflexive pronoun	He's licking hisself.	Hisself
Regular past	Falled	Falled
3rd person singular	Gots	He gots a flower.
	Alternations	
does/is	What does he putting on the top?	He don't looking.
at/to; on/in	Daddy took me at the train.	In the feet.
he/she	Mom was so mad so he spanked Blacky.	—he (she) was not looking.
she's/her; him's/his	She's	That's she's house.
no/not	Man no go in there.	I no have it.
Quantifiers	Put a gas in.	A water (some) two milk (some)
	Word Order	
Questions	What that is?	What this is?
Embedded question	I know what is that.	I know what is that.
Adverbs	I eat sometimes candy.	Is here happy.
		Is there not happy.

Age

It is generally accepted, perhaps too much so (McLaughlin, 1978), that children before the age of puberty have some advantage in learning a second language. Some scholars attribute this advantage to the fact that young children learn the second language in a manner similar to the strategy they use for learning their first language: they do a lot of listening in the beginning stages and a lot of communicating in the "here and now" (Krashen, 1981a).

In contrast, older students typically learn a language via a more formal process. Emphasis is on conscious rule-learning, perhaps because of their capacity for abstract thinking. The older students' self-consciousness can make them monitor their speech too closely and thereby inhibit output in the second language (Krashen, 1981b). Yet, many studies suggest that older second language learners acquire the second language faster (Fathman, 1975; Snow and Hoefnagel-Hohle, 1978).

Perhaps what seems to be a better second language learning ability on the part of young children can be explained in large part by outside factors, such as the typically simplified input they receive in the second language, the lower expectations held for children in comparison with adults, or the more frequent opportunities they may have for contact and communicative exchange with English-speaking peers, such as on the school playground. The latter condition—frequent communicative exchange with English-speakers—probably plays heavily in explaining that although adults and older learners are initially faster at learning the L2, children eventually surpass them if given enough time (typically five years) and enough input in the second language (Snow, 1983; Genesee, 1983; Hakuta, 1986).

Regardless of who has the advantage in second language learning, the discussion of age-related factors in second language learning has provided the teacher with useful guidelines in working with ESL learners (Krashen, 1981b). Lessons that provide natural, meaningful opportunities for communication (as in childhood) probably foster better progress. Providing simplified input to the learner plus the opportunity to listen for a long time without being forced to speak is a good idea. Older students should learn English in a nonthreatening environment, i.e., one that discourages overmonitoring and extreme self consciousness. Finally, because of older learner's capacity for abstract thinking, rule teaching can be effective if in moderation (Littlewood, 1984).

The one area in which young children most clearly have an advantage is the area of phonology, or pronunciation. Given adequate exposure, young children usually learn to speak the second language with native-like pronunciation. Older learners rarely acquire it accent-free.

In general, special educators should keep in mind that learning a second language well is a complex task requiring time, exposure, and cognitive work. Neither children nor adults are "linguistic sponges," acquiring the L2 instantaneously and without effort (Hakuta, 1986). Certain conditions,

however, have been linked to better second language learning. The following sections discuss conditions that research has shown to affect second language learning.

Access to Peers

Access to peers that speak the second language is one of the most important factors that influences second language learning (Politzer, 1980). Children who do not have ample opportunity to interact with English speaking classmates will not progress as rapidly as would be expected. An important first step for special educators reviewing the case of a slow L2 learner is to establish whether the child was afforded the opportunity to interact with peers in the classroom or in less formal situations such as recess or after-school play in the community. In schools or communities that are heavily impacted with language minority groups, or in rural areas isolated from large English speaking groups, that opportunity cannot be assumed.

Recent research comparing different cultural groups learning English indicates that the peer interaction factor may be more important for certain cultural groups. The following subsection elaborates on this research.

Cultural Group Membership

Wong-Fillmore (1986) reported on studies of second language learners in 17 classrooms. One of the most interesting findings was that the factors associated with effective L2 learning differed for the Hispanic and Chinese students. For Hispanic children, opportunities to interact with peers was the most important variable for language learning. This study lends further support for the importance of the peer factor to the largest language minority group in California. For the Chinese students, however, close interactions with the teacher and opportunities to practice English in instructional activities emerged as the most important variable.

While this study awaits crossvalidation from other investigations, it suggests that cultural group membership affects the interaction between types of instructional opportunities offered second language learners and the progress they make in becoming English speakers. Of course, the caveat here must be to refrain from cultural stereotyping. Whereas cultural patterns may emerge in comparative studies, individual variation within groups is equally likely. Once again, equipped with the knowledge of general cultural patterns, special educators must then look directly at the child and decide on a case-by-case basis wnether the patterns apply to the particular child.

Personality and Individual Strategies

The personality of the child can influence acquisition of English as a second language (Wong-Fillmore, 1976). Socially outgoing children sometimes progress faster in learning English. These children seek out people with whom to talk and strive to continue the conversation through various strategies.

One of these means involves the use of *formulaic phrases*—phrases that are memorized as a whole. Formulaic phrases serve the social function of insuring that talk continues and that the child participates in the exchange. For example, a young Chinese-speaking child used a formulaic phrase "It's time to eat and drink" during the same period that he was producing utterances like, "Paper this" (Huang and Hatch, 1978, p. 122). These types of phrases are often the hallmark of active second language acquisition in sequential bilinguals (Vihman and McLaughlin, 1982).

The two utterances quoted above differ greatly in their grammatical complexity. Someone unaware of the formulaic phrase strategy might interpret this language as highly inconsistent and perhaps suggestive of a language disorder. To the contrary, the use of a memorized phrase such as "It's time to eat and drink" often leads to more communicative interaction and, consequently, better proficiency. An additional and equally important function of formulaic phrases is that children begin to "break down" the longer phrases into movable parts and incorporate the parts into more creative speech (Hakuta, 1974). This strategy greatly enhances their initial grammatical development in the second language (Wong-Fillmore, 1976). Thus, the use of formulaic phrases should be viewed as a positive indicator that LEP children are making progress in the formidable task of learning English.

Other children approach learning a second language in a much different manner. These children remain extremely quiet, almost silent, for a long period of time while learning the second language. These second language learners are vulnerable to being labeled "nonverbal" (Ruiz, 1988). It is important to keep in mind that the period of silence is a normal reaction of the child confronted with the task of learning to speak a new language and getting along in a new culture (Dulay and Burt, 1980; Kessler, 1984). As most of the highly-praised ESL teaching techniques encourage listening and discourage talking at the beginning stages (Winitz, 1981), it is possible this period of silence might be an effective strategy on the part of LEP children; i.e., by not speaking too early, they develop receptive competence in the new language and avoid forced errors.

In any event, personality factors help explain individual differences in the rate of learning a second language (Hakuta, 1986). These factors need to be considered with each LEP child viewed as acquiring the second language too slowly.

Motivation and Attitude

Motivation and positive attitude have been shown to have a positive relationship with successful acquisition of a second language (Gardner and Lambert, 1973). Other factors, such as a feeling of social distance between the individual and mainstream society, can inhibit acquisition of English especially by adults and adolescents (Schumann, 1976). Special educators need to ask questions of these older students regarding their attitude toward learning English and the social or economic pay-off that they envision. Their answers may indicate whether slow or relatively rapid progress may be expected in learning the second language.

Formal ESL Instruction

Whereas students' records may indicate that they have had ESL instruction for a few years, educators should not assume that these classes alone guarantee English proficiency. Until recent years, some ESL classes consisted of mechanical drills and language disassociated from communicative purpose. Some of these practices continue, despite the fact that meaningful communication with peers and teachers is a more effective teaching strategy. Furthermore, the amount of time spent in ESL instruction is extremely variable for each child: for some it may be an hour a day, for others, 30 minutes twice a week. Educators will need to investigate the quality and quantity of ESL instruction provided to each child before they decide whether English language acquisition is delayed.

Rate of Second Language Acquisition

The previous discussion has emphasized the variability in the rate of L2 learning. Studies have shown that factors such as age, peer contact, instructional time with the teacher, cultural group membership, personality, and attitude all affect this rate. But even with this substantial body of research, the belief persists that all immigrant children should be proficient in the second language within two to three years. Recent large-scale studies in Canada show that this assumption is misguided. The results suggest that it may take as long as five to seven years for children to attain the English language proficiency needed for academic tests such as achievement, vocabulary and IQ tests (Cummins, 1981). Other research in the United States has shown that it may be approximately five years before some children are able to function well in an all-English classroom without the benefit of special help (Wong-Fillmore, 1983).

This longer time span again suggests that learning the second language is not the automatic occurrence that many assume it is for children. Social, educational, cultural, and psychological factors all intervene to either enhance or detract from the process of learning a second language. It is up to

educators to first weigh the influence of such factors and then to begin to adapt instruction to promote second language learning.

Exceptionality

Many questions regarding English acquisition in exceptional children remain unanswered. There is no doubt, however, that a handicapping condition associated with language and cognitive processing will affect a bilingual child's language development, just as it affects a monolingual child's development. Initial studies have shown that bilingual children with communication problems in their first language also demonstrate problems in their second (Langdon, 1977). Unfortunately, the field must await many more case histories and other research for indications of what to expect from disabled second language learners. In the meantime, educators may work at adapting the best ESL techniques to work with handicapped LEP children. Cummins (1984) specifically warns that teaching isolated grammatical features and vocabulary of English in a drill format will prove inefficient with special education children deficient in memory skills and auditory processing.

Language Proficiency

Crucial to providing appropriate services to LEP children being considered for special education is an understanding of the construct of language proficiency. Data on language proficiency plays a part in answering many important questions:

- What language should be used to carry out achievement and intelligence assessment?
- To what extent can deficient skills in English as a second language explain a child's poor academic achievement?
- What are linguistically appropriate goals and objectives for an LEP child's IEP?

The answer to these questions and many more will rely heavily on an accurate assessment of language proficiency. However, language assessment of bilingual children is a complex task with many considerations, as proposed in this section.

Relative Language Proficiency and Language Dominance

Language proficiency refers to a person's competence in using a specific language. Two important features of language proficiency are *linguistic* and *communicative* competence (Politzer, Shohamy, and McGroarty, 1983).

Linguistic competence refers to the ability to manage the formal aspects of language, such as grammar and spelling. Communicative competence refers to a set of abilities necessary for communication in meaningful contexts. Communicatively competent students make use of their shared knowledge with the particular language community, and appropriately control a variety of styles when speaking. One aspect of communicative competence is associated with the ability to communicate new information such as that exchanged in day-to-day conversation. For example, a student shows communicative competence when he can politely give directions to an elderly man to a nearby gas station. Although language proficiency tests should assess both linguistic and communicative competence, the latter is often neglected.

Tests which measure bilingual children's language proficiency in both languages give a measure of *relative proficiency*; i.e., how well children speak both languages in relationship to each other. They indicate the degree to which students are proficient in their primary language and in English. The measures provided by these tests also indicate the children's *language dominance*, that is, the language over which they have more control.

The extent to which language proficiency tests measure linguistic and communicative competence is extremely variable. Language proficiency tests have also been criticized on psychometric and linguistic grounds (Merino and Spencer, 1983) and with good reason. However, the tests are often underused in special education given the useful information they can provide on relative language proficiency (Figueroa, 1986).

This general consideration of relative language proficiency and related tests sets the stage for considering bilingual children's proficiency in depth and its relationship to special education (Merino, 1988, discusses language proficiency in greater detail). The next section presents a theoretical model of bilingual language proficiency and relates it to children of special concern to bilingual and special educators alike: the comparably limited (Type 4) child.

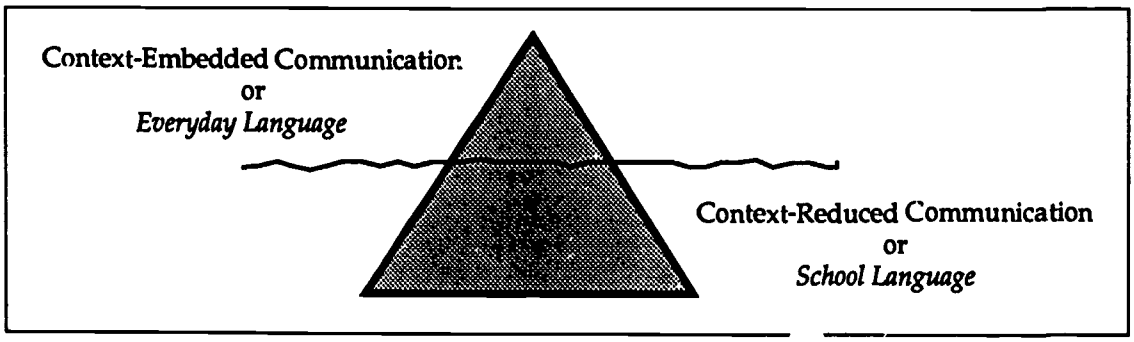
A Model of Bilingual Proficiency

Earlier in this monograph we examined a general typology of school-age bilingual children. This typology predicted a wide range of language abilities in bilingual children. Explaining this range is a difficult task, but it has been helped along substantially by Cummins and his theoretical model of language proficiency in bilinguals.

Cummins' model suggests that educators must concern themselves with more than one type of language ability. Figure 1 depicts these different languages abilities. The surface features of a language (the "tip of the iceberg") are those used in face-to-face communication. They involve the phonology, vocabulary, and grammar that are used automatically in informal conversation. Such language need not be very specific as speakers and their listeners share a common frame of reference. They depend heavily on the context of the situation to construct meaning from the conversation. Sometimes this face-to-face type of language proficiency is referred to as *context-embedded communication* (Cummins, 1981). Other times it is simply referred to as *everyday language* (Silliman, 1984).

Figure 1

Levels of Language Proficiency
(adapted from Cummins, 1984)

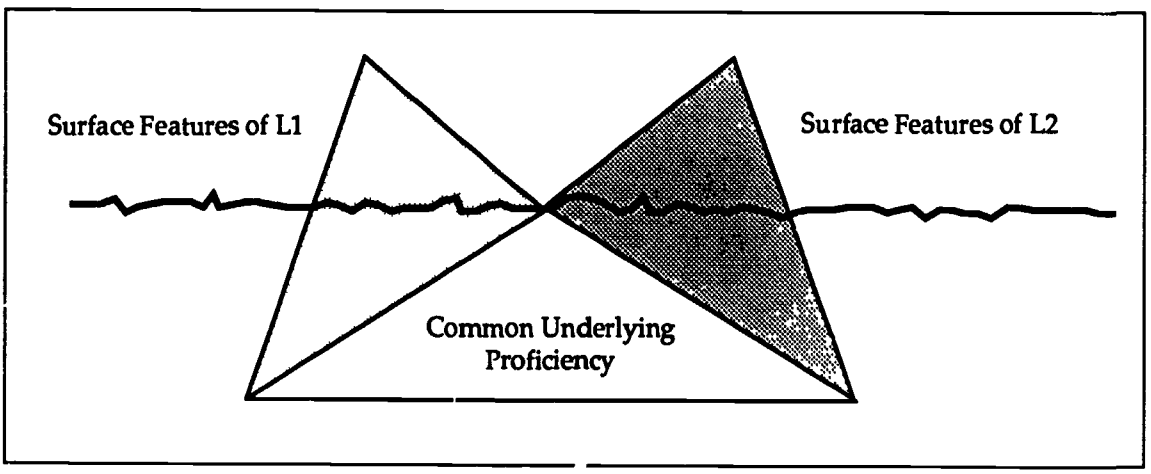


Forming the base of the iceberg is language that is needed in contextually-reduced and more cognitively demanding tasks. These tasks are typical of formal academic situations. An example of this type of language proficiency is that which is necessary to score well on a school achievement test or a verbal IQ test. It is literacy-related language and involves conceptual knowledge, reading strategies, higher order thinking skills, and written composition skills among others (Cummins, 1984). Another example of this academic type of language is the very explicit oral language called for in school, such as giving an oral book report or responding to a teacher's request ("Describe what you see on the page, Sonia.") Sometimes this type of language proficiency is referred to as *context-reduced communication* or as *academic language.*

Figure 2 illustrates the interdependence of a bilingual individual's two languages. There is substantial evidence supporting the interdependence theory of bilingual language proficiency. One example is that children who know their primary language well have fewer academic problems and show less difficulty in acquiring their second language (Cummins, 1981). They arrive at school with a good base developed in the more cognitive aspects of their native language proficiency. These children have only to acquire the basic face-to-face skills in the second language.

Figure 2

Interdependence Model of Bilingual Language Proficiency
(adapted from Cummins, 1984)

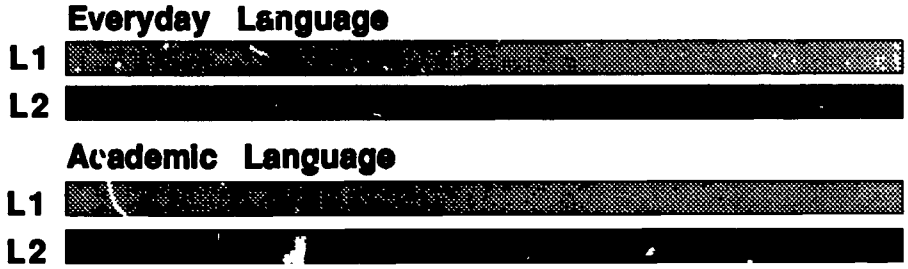
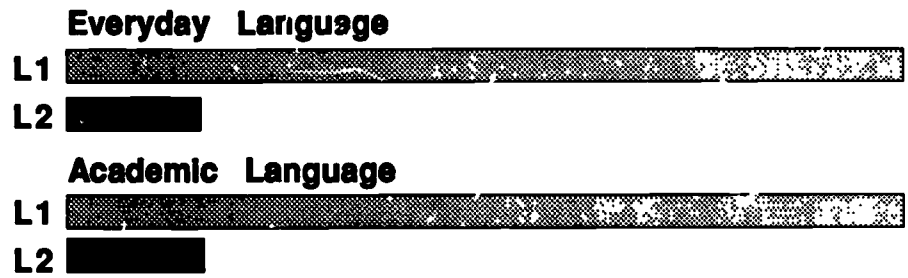
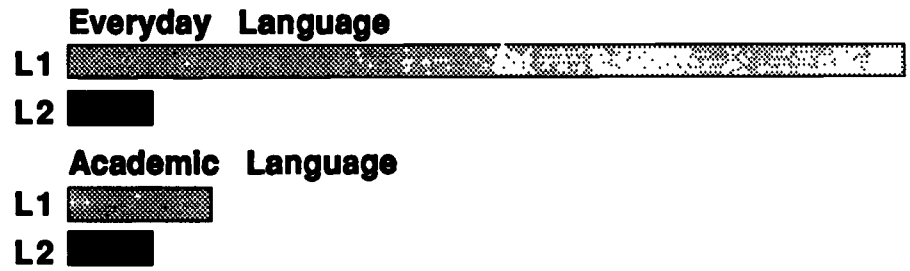
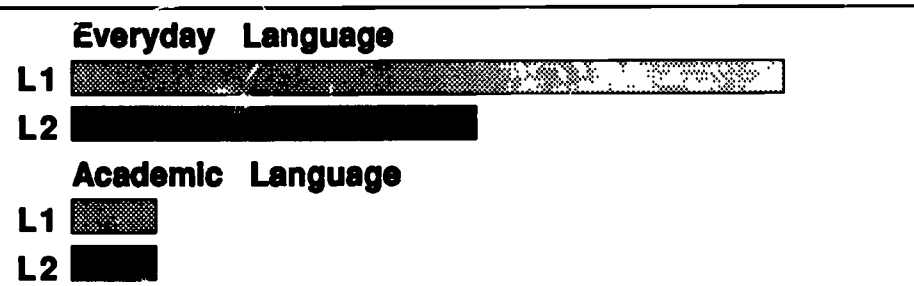


More work is needed to develop this model (Ben Zeev, 1984). However, even in its current state, it can explain much of the complex phenomena regarding bilingual children that have been observed and documented. For example, the model explains why many bilingual programs use native language instruction but show equivalent or better gains in English achievement than those using only English (see Cummins, 1984 and Troike, 1978 for a review of these studies). It explains why on English academic achievement tests, children from homes that continue to use Spanish outperform children whose families have switched to English (Dolson, 1985). The children in these studies were given the opportunity to develop academic proficiency in their native language. The Interdependence Model of bilingual proficiency accurately predicts the transfer of academic skills in the native language to English.

In addition, this theoretical model can help characterize the language abilities of the four types of bilingual children described earlier (Table 1) and focus on the areas that will deserve instructional attention (Figure 3). As Figure 3 indicates, the Type 4 children—those that show comparably limited proficiency in both languages—constitute the biggest challenge to educators. With good reason these children deserve a special discussion.

Figure 3

Areas of Educational Concern in Sequential Bilingual Children

Proficiency:	Not Proficient ➡ Somewhat Proficient ➡ Proficient
Type 1	 Balanced bilingual child; Well-developed everyday and academic language skill in both native language and English.
Type 2	 Monolingual in a language other than English; Well-developed everyday and academic language skills in native language. Needs to develop proficiency in English.
Type 3	 Monolingual in a language other than English; Well-developed everyday language skills, but inadequate academic language skills. Little or no proficiency in English.
Type 4	 "Comparably Limited"; Well-developed everyday language skills in native language but not in English. Inadequate academic language skills in either langage.

(adapted from Cummins, 1984)

Comparably Limited Bilingual Children

Estimates vary considerably on the number of bilingual children in the United States who have limited proficiency in both languages. Regardless of their number, these children are extremely vulnerable to placement in special education classes. Some children demonstrate a definite need for special education: their language deficits are due to a cognitive or language disability. Others are unjustly burdened with the label: their language problems are related to external factors, socio-educational and -economic in nature, which have slowed their bilingual language development. The first step for educators working with children suspected as comparably limited is to examine the reasons other than a handicapping condition that may be responsible for low proficiency in both primary and second languages.

Low scores on tests using the first and second languages of students are usually assumed to be the major indices of comparably limited bilingualism. But as most educators know, these scores are sensitive to many factors other than limited language ability. For example, when students are very different from the norming group of the test, they can appear to be deficient in their native language. If the language of the test—usually the standard variety—is very different from the language variety of the student, poor performance on primary language tests can also be expected. When students tested are undergoing primary language loss, they may look handicapped compared to the normative group. If the test taps primarily school concepts in the first language and students have not received formal instruction in that language, they compare unfavorably with the norming group, usually a population exclusively schooled in the particular language (Figueroa, Delgado, and Ruiz, 1984). Finally, students unfamiliar with the typically decontextualized, artificial language of tests may perform poorly (Labov, 1970). The presence of any one or combination of these factors should warn educators that the tests, not the child, may be responsible for the appearance of limited bilingualism.

Another obvious, but often overlooked, reason that bilingual children appear to be comparably limited concerns their socioeconomic status. Most of the comparably limited students are from low socioeconomic backgrounds. Low SES has been historically associated with substandard test performance and school achievement (Mercer, 1973).

Cultural group differences in language use is another particularly important contributor to the appearance of comparably depressed bilingualism. Children learn to use language in ways that conform to their particular community and cultural group. (See Heath, 1986, for a discussion on language socialization practices of Hispanics, Chinese, and Vietnamese families.) When minority children have not learned the patterns of language use typical of schools, they may be perceived as unwilling to participate, slow, unable to understand simple questions, and low-achieving. (Phillips, 1983; Heath, 1983; Au and Jordan, 1981: Ruiz, 1988). These perceptions may lead educators to suspect language processing problems on the part of the students.

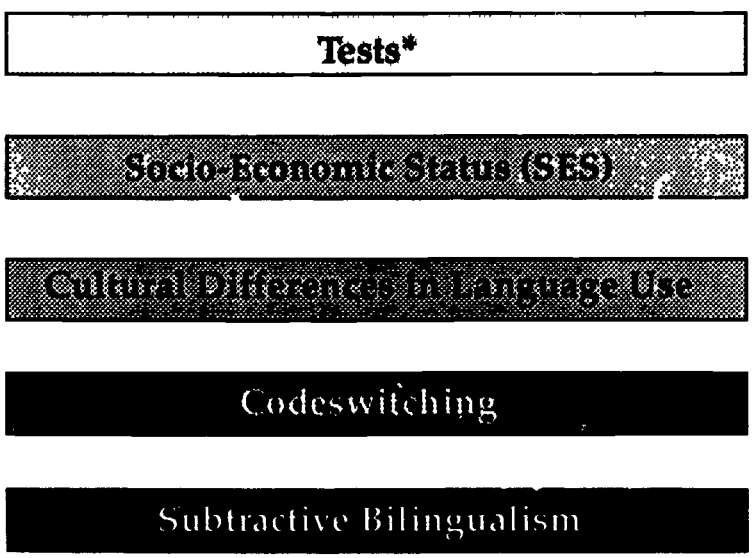
Codeswitching or "language mixing" is sometimes raised in conjunction with making a case for limited bilingualism. Educators who have not studied the topic of codeswitching often assume that codeswitching students are unable to differentiate between the two languages. They assume bilingual children do not have sufficient control over either language. An earlier section of this monograph shows these assumptions to be wrong.

Finally, as we previously discussed, learning a second language under subtractive conditions—when the first language is replaced by a more prestigious and dominant language—may result in poor development of both languages (Cummins, 1984). This sociological condition and the associated linguistic result should not be used for making a case for comparably limited bilingualism based on language and cognitive processing factors.

If school personnel suspect that an LEP child has limited proficiency in both languages, one must gauge the impact of the factors discussed in Table 5 and above. If students appear limited in both languages and this is not due to the fallibility of the tests, to SES, to cultural differences in language use, or to misinterpretation of codeswitching, then the students may be comparably limited due to a disability. By investigating all these factors on a case-by-case basis, educators will have a clearer picture of students' language abilities and needs.

Table 5

Contributing Factors in the Appearance of Comparably Limited Bilingualism



*Norming Group, Standard Language variety; School Domain, Artificial, Decontextualized Language

Conclusions and Implications

This monograph has discussed various aspects of bilingualism that should become familiar to all educators working with LEP children identified for special education. It is an overview and should serve as a starting point for those interested in developing further competencies within the area of bilingual special education. While it may be difficult for personnel to develop extensive knowledge in all the areas touched on here, certainly no one would deny that the information is needed in reviewing each child's case. One obvious approach is to bring together personnel from a variety of service areas—bilingual education, migrant education and ESL—to work together with special educators in serving LEP children. As the number of LEP students continues to grow in California public schools, their educational needs should be everyone's concern.

The information presented in this monograph focuses on language factors related to bilingual special education. Obviously, many other factors intervene while working with LEP children. However, some major implications of the factors discussed are:

1) Low proficiency in one's first language in not necessarily a sign of a disability. Certain socioeducational, economic, and cultural conditions may be responsible for depressed proficiency. Regardless of the source of the difficulty, external or within the child, these children are of special concern to educators because of their complex instructional needs.

2) Codeswitching is one of a number of bilingual phenomena that may be confused with symptoms of a language disability. Research reveals that codeswitching is systematic and rule-governed. Educators must be familiar with the research so as to separate normal codeswitching from abnormal codeswitching. (The latter remains undefined by the literature.)

3) Before referring LEP children to special education for slow progress in English, educators should consider the variety of factors other than a disability that could impede progress, e.g., limited access to English-speaking peers, ineffective formal ESL lessons, little motivation, etc. Many of these factors can be addressed instructionally.

4) L2 learners cannot be diagnosed as language disabled on the basis of their performance in the second language. A hard and fast order for acquiring the second language simply does not exist. Individual variation is the rule.

5) For children with language and learning disabilities, it is especially important that ESL instruction be communication-based and that students be motivated to understand and produce real messages.

6) Many factors contribute to the appearance of comparably limited bilingualism. Test scores should not be accepted at face value, rather they should initiate further investigation into the linguistic, cultural, and educational background of bilingual students suspected of having difficulties in both their languages.

Careful consideration of these implications and the research surrounding them should prove helpful in providing fair and appropriate educational services to language minority children.

This monograph ends where it began the discussion of the nature of bilingualism: with an emphasis on the diversity of LEP children who find themselves within the special education process. Bilingualism is at once robust, persisting throughout most of the world, and fragile, susceptible to many social influences. In the individual child, its path cannot be predicted easily without knowledge of these social influences and the unique pattern of personality and abilities that is the child. Those of us challenged with meeting the educational needs of handicapped bilingual students urge continued research on normal and handicapped bilingual children in the home and school setting.

References

Adams, M. A. "Methodology for Examining Second Language Aquisition." *Second Language Acquisition,* Evelyn Hatch (Ed.). Rowley, MA: Newbury House, 1978.

Au, Katherine H. and Cathie Jordan. "Teaching Reading to Hawaiian Children: Finding a Culturally Appropriate Solution." *Culture and the Bilingual Classroom: Studies in Classroom Ethnography,* H. Trueba, G.P. Gutherie, and K. H. Au (Eds.). Rowley, MA: Newbury House, 1981.

Baca, Leonard M. and Hermes T. Cervantes. *The Bilingual Special Education Interface.* St. Louis, MO: Times Mirror/Mosby College Publishing, 1984.

Ben Zeev, Sandra. "The Influence of Bilingualism on Cognitive Strategy and Cognitive Development." *Child Development,* 48, 1977, 1009-1018.

Ben Zeev, Sandra. "Bilingualism and Cognitive Development." *Bilingualism and Language Disability,* Nikl.s Miller (Ed.). San Diego, CA: College-Hill Press, 1984.

Cruz, B. Roberto. *Four Types of Bilingual Children.* Address given before SE SABE III, Summer Foreign Language Training Institute, Guadalajara, Mexico, July 5, 1982.

Cummins, Jim. "The Role of Primary Language Development in Promoting Educational Success for Language Minority Students." *Schooling and Language Minority Students: A Theoretical Framework.* Developed by the Office of Bilingual Bicultural Education of the California State Department of Education. Los Angeles, CA: Evaluation, Dissemination, and Assessment Center, California State University, Los Angeles, 1981.

Cummins, Jim. *Bilingualism and Special Education: Issues in Assessment and Pedagogy.* San Diego, CA: College-Hill Press, 1984.

Dolson, David P. "The Effects of Spanish Home Language Use on the Scholastic Performance of Hispanic Pupils." *Journal of Multilingual and Multicultural Development,* 6(2), 1985, 135-155.

Dulay, Heidi, and Marina Burt. "Second Language Acquisition." *Testing and Teaching Communicatively Handicapped Hispanic Children,* H. Dulay, M. Burt, and D. McKeon (Eds.). San Francisco, CA: Bloomsbury West, 1980.

Duncan, S.E. and Edward DeAvila. "Bilingualism and Cognition: Some Recent Findings." *NABE Journal,* 4, 1979, 15-50.

Fantini, Alvino E. "Bilingual Behavior and Social Cues: Case Studies of Two Bilingual Children." *Aspects of Bilingualism.*, Michel Paradis (Ed.). Columbia, SC: Hornbeam Press, Inc., 1978.

Fatham, Ann. "The Relationship Between Age and Second Language Productive Ability." *Language Learning,* 25(2), 1975, 245-254.

Figueroa, Richard A. "Diana Revisited: Psychological Testing Policies and Practices with Hispanic Children in Five Selected California School Districts." *Bilingual Education Paper Series 7(7).* Los Angeles, CA: Evaluation, Dissemination, and Assessment Center, California State University, 1986.

Figueroa, Richard A. "Psychological Assessment of Hispanic Children." Los Angeles, CA: Tomas River Center, *In Press.*

Figueroa, Richard A., Gilbert Delgado, and Nadeen T. Ruiz. "Assessment of Hispanic Hearing Impaired Children." *Hispanic Hearing Impaired Children.* Washington, DC: Gallaudet College Press, 1984.

Fishman, Joshua A. *The Sociology of Language.* Rowley, MA: Newbury House, 1972.

Gardener, Roger C. and Wallace E. Lambert. *Attitudes and Motivation in Second Language Learning.* Rowley, Mass: Newbury House, 1973.

Genesse, Fred. "Bilingual Education of Majority Language Children: The Immersion Experiments in Review." *Applied Psycholinguistics,* 4, 1983.

Genishi, Celia. "Codeswitching in Chicano Six Year-Olds." *Latino Language and Communicative Behavior.* Richard P. Duran (Ed.). Norwood, NJ: ABLEX, 1981.

Greenlee, Mel. "Communicative Competence in Spanish/English Developmentally Disabled Persons." Presented at Stanford Child Language Research Forum, Stanford University, Stanford, CA, April 24, 1982.

Gumperz, John and Eduardo Hernandez-Chavez. "Cognitive Aspects of Bilingual Communication." *El Lenguaje de los Chicanos.* Eduardo Hernandez-Chavez (Ed.). Arlington, VA: Center for Applied Linguistics, 1975.

Hakuta, Kenji, *Mirror of Language.* New York: Basic Books, Inc., 1986.

Heath, Shirley Brice. *Ways with Words.* Cambridge: Cambridge University Press, 1983.

Heath, Shirley Brice. "Sociocultural Contexts of Language Development." *Beyond Language*. Developed by California Bilingual Education Office. Los Angeles, CA: Evaluation, Dissemination and Assessment Center, 1986.

Huang, Joseph and Evelyn Hatch. "A Chinese Child's Acquisition of English." *Second Language Acquisition*. Rowley, Mass.: Newbury House, 1978.

Huerta-Macias, Ana. "Codeswitching: All in the Family." *Latino Language and Communicative Behavior*. Richard P. Duran (Ed.). Norwood, New Jersey: ABLEX.

Ianco-Worall, A.P. "Bilingualism and Cognitive Development." *Child Development*, 1972, 43, 1390-1400.

Kessler, Carolyn. "Language Acquisition in Bilingual Children." Bilingualism and Language Disability. Niklas Miller (Ed.) San Diego, CA: College-Hill Press, 1984.

Krashen, Stephen D. *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon Press, 1981.

Krashen, Stephen D. "Bilingual Education and Second Language Acquisition Theory." *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the Office of Bilingual Bicultural Education of the California State Department of Education. Los Angeles, CA: Evaluation, Dissemination, and Assessment Center, California State University, Los Angeles, 1981.

Labov, William. "The Logic of Non-Standard English." *Language and Poverty: Perspectives on a Theme*. Chicago: Markham, 1970.

Lambert, Wallace E. "An Overview of Issues in Immersion Education." *Studies on Immersion Education*. Developed by the Office of Bilingual Bicultural Education. Sacramento, CA: California State Department of Education, 1984.

Langdon, Henriette W. *Determining a Language Disorder in a Bilingual Spanish-English Population*. Unpublished doctoral dissertation. Boston University, 1977.

Littlewood, William. *Foreign and Second Language Learning*. Cambridge, MA: Cambridge University Press, 1984.

MacNab, G.L. "Cognition and Bilingualism: A Reanalysis of Studies." *Linguistics*, 1979, 17, 231-255.

McClure, Erica. "Formal and Functional Aspects of the Codeswitching Discourse of Bilingual Children." *Latino Language and Communicative*

Behavior. Richard P. Duran (Ed.). Norwood, NJ: ABLEX Publishing Corporation, 1981.

McLaughlin, Barry. *Second Language Acquisition in Childhood.* Hillsdale, NJ: Lawrence Erlbaum Associates, 1978.

Mercer, Jane. *Labeling the Mentally Retarded.* Berkeley, CA: University of California Press, 1973.

Merino, Barbara J. "Order and Pace in the Syntactic Development of Bilingual Children." *Bilingual Education for Hispanic Students in the United States.* Joshua A. Fishman and Gary D. Keller (Ed.). New York: Teachers College Press, 1982.

Ortiz, Alba A. and James R. Yates. "Staffing and the development of Individualized Educational Programs for Bilingual Exceptional Students." *The Bilingual Special Education Interface.* Leonard M. Baca and Hermes T. Cervantes (Eds.). St. Louis, Missouri: Times Mirror/Mosby, 1984.

Padilla, Amado and Ellen Liebman. "Language Acquisition in the Bilingual Child." *Bilingual Education for Hispanic Students in the United States.* J.A. Fishman and G.D. Keller (Eds.). New York: Teachers College Press, 1982.

Peal, E. and Wallace E. Lambert. *The Relation of Bilingualism to Intelligence.* Psychological Monographs, 76 (27), 1962.

Philips, Susan U. *The Invisible Culture.* New York: Longman, 1983.

Politzer, Robert L. "Foreign Language Teaching and Bilingual Education: Research Implications." *Foreign Language Annals,* 1980, 13 (4), 291-297.

Politzer, Robert L., Elana Shoamy and Mary McGroarty. *Second Language Acquisition Studies.* K.M. Bailey, Michael H. Long, and Sabrina Peck (Eds.). Rowley, Mass: Newbury House Publishers, 1983.

Poplack, Shana. "Sometimes I'll Start a Sentence in Spanish y Termino en Espanol: Toward a Typology of Codeswitching." *Spanish in the United States.* Jon Amastae and Lucia Elias-Olivares (Eds.). Cambridge, MA: Cambridge University Press, 1982.

Ramirez, Arnulfo. "Language Dominance and Pedagogical Considerations." *Language Development in a Bilingual Setting.* Los Angeles, CA: National Dissemination and Assessment Center, California State University, 1979.

Ravem, R. "The Development of Wh-Questions in First and Second Language Learners." *Error Analysis: Perspectives on Second Language Acquisition.* London: Longmans, 1974.

Romero de Ortiz, Migdalia. "Acquisition of Spanish as a Native Language." *Testing and Teaching Communicatively Handicapped Hispanic Children.* H. Dulay, M. Burt, and D. McKeon (Eds.). San Francisco, CA: Bloomsbury West, 1980.

Ronjat, Jules. *Le Development du Langage Observe chez un Enfant Bilingue.* Paris: Champion, 1913.

Ruiz, Nadeen T. *Teacher Conversational Style in a Bilingual Special Education Classroom.* Paper presented at the California Association for Bilingual Education Conference. San Francisco, CA, 1984.

Ruiz, Nadeen T. *Language for Learning in a Bilingual Special Education Classroom.* Unpublished doctoral dissertation. Stanford University, 1988.

Schumann, John J. "Social Distance as a Factor in Second Language Acquisition." *Language Learning,* 1976, 26, 135-143.

Silliman, Elaine. "The Role of Teaching Discourse in Classroom." *Language Learning Disabilities in School-Age Children.* G.P. Wallach and K.G. Butler (Eds.). Baltimore, MD: Williams and Wilkins, 1984.

Snow, Catherine E. "Age Differences in Second Language Acquisition: Research Findings and Folk Psychology." *Second Language Acquisiton Studies.* K.M. Bailey, Michael H. Long, and Sabrina Peck (Eds.). Rowley, Mass: Newbury House Publishers, 1983.

Snow, Catherine E. and Marion Hoefnagel-Hohle. "Age Difference in Second Language Acquistion." *Second Language Acquisition.* Evelyn Hatch (Ed.) Rowley, Mass.: Newbury House, 1978.

Troike, Rudof. *Research Evidence for the Effectiveness of Bilingual Education.* Rosslyn, BA: National Clearinghouse for Bilingual Education, 1978

Vihman, Marilyn M. and Barry McLaughlin. "Bilingualism and Second Language Acquisition in Preschool Children." *Verbal Processing in Children.* Charles J. Brainerd and Michael Pressley (Ed.). New York: Springer-Verlag, 1982.

Winitz, Harris. *The Comprehension Approach to Foreign Language Instruction.* Rowley, MA: Newbury House, 1981.

Wong-Fillmore, Lilly. *The Second Time Around: Cognitive and Social Strategies in Second Language Acquisiton.* Unpublished doctoral dissertation. Stanford University, 1976.

Wong-Fillmore, Lilly. "The Language Learner as an Individual: Implications of Research on Individual Differences of the ESL Teacher."

Pacific Perspectives on Language Learning and Teaching. Washington, D.C.: Teachers of English to Speakers of Other Languages, 1983.

Wong-Fillmore, Lilly. "Research Currents: Equity or Excellence?" *Language Arts* 1986, 63 (5), 474-481.

Zentella, Ana C. "Ta Bien, You Could Answer Me en Cualiquier Idioma: Puerto Rican Codeswitching in Bilingual Classrooms." *Latino Language and Communicative Behavior.* R.P. Duran (Ed.). Norwood, NJ: ABLEX Publishing Corporation, 1981.

RISE
Resources in Special Education
650 University Ave., Room 201
Sacramento, CA 95825
916/921-0521

Publications Available

Prices Effective May 1, 1988

New! Assessment of Chinese Speaking Limited English Proficient Students With Special Needs, by Marion Tinloy, Amy Tan, and Brian Leung, 1987, 330 pp.	$ 25.00
New! Bilingual and Special Education: Procedural Manual for Program Administrators, 1987, 74 pp.	$ 10.00
Cooperative Activities for the Home: Parents Working with Teachers to Support Cooperative Learning by Audray Holm, Denise Schultz, Patricia Winget, and Linda Wurzback, 1987, 60 pp.	$ 5.00
Educators and Parents Working together to Develop Special Education Parent Support Groups, by Mary Ann Duganne, Marilyn Ferrara, and Tom Justice, 1986, 43 pp.	$ 8.50
Inservice on Inservice, by SERN 7, 1979, 80 pp.	$15.00
Integrating the Core Curriculum Through Cooperative Learning: Lesson Plans for Teachers, edited by Patricia Winget, 1987, 212 pp.	$22.50
Microcomputers: Critical Consumers and Users Guide, by Mary Britt Vasques and Steve Johnson, 1986, 158 pp.	$15.00
Self-Esteem: A Resource Notebook, by Dianna Zapata and Joanne Cohr., 1986, 130 pp.	$10.00
New! Software Programs and the Learning Disabled Student: The Second Report, by Anne Graves Bruce Ostertag, 1988, 17 pp.	$ 4.00
Special Education Parent Resources Guide, by Lynn Carlisle and Beverly Doyle, 1987, 195 pp.	$15.00
Revised Student Study Teams: A Resource Manual for Trainers and Implementors by Marcie Radius and Pat Lesniak, 1987, 297 pp.	shrink-wrapped: $20.00 with binder: $22.50
Student Study Team Banners, English or Spanish.	$12.00
Tutoring Your Child, by Joanne Cohn, n.d., 22 pp.	$ 5.50
Working With Adults With Exceptional Needs, by Lynn Carlisle and Trudy Connelly, 1985, 43 pp.	$ 5.50