



LANGUAGE USE AT HOME AND SCHOOL: A SYNTHESIS OF RESEARCH FOR PACIFIC EDUCATORS

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*Or if I would delight my private hours
With music or with poem, where so soon
As in our native language can I find
That solace?*

John Milton (1608-1674)
Paradise Regained
Book IV Line 331-334

*E ola mau ka 'ōlelo Hawai'i,
E ola mau ka po'e Hawai'i
(The language of Hawai'i will live
and the people of Hawai'i will live)*

Lē'ahi Hall,
as quoted in Harby, 1993

* Dr. Zoe Ann Brown is a Research Specialist, Dr. Ormond Hammond is the Director of Research and Evaluation, and Denise Onikama is an Evaluation Specialist at PREL.

Introduction

Language influences all aspects of daily life.

Language, a complex social as well as cognitive system, enables children to both learn about and influence their environment. The scope of research into language is vast. Entire fields such as psycholinguistics strive to understand how language is learned and how it functions. It is beyond the scope of a brief review to cover such a huge body of research. Instead, this synthesis will focus on selected aspects of home and school language use. The goal is to provide an overview of research findings that relate to the context of education in the Pacific.

Language Use in the Pacific

The Pacific region is indeed a multilingual context.

It has been estimated that there are more than 30 languages in use in the Pacific region (Pacific Region Educational Laboratory [PREL], 1995a). Unlike the mainland United States, in most areas of the Pacific the indigenous language, or vernacular, is not English. For example, in Pohnpei, one of the Federated States of Micronesia, the native languages are Pohnpeian, Kapingamarangi, and Pingelapese. In Yap, the native languages include Yapese, Woleaian, and Ulithian (Summer Institute of Linguistics, 1996). In Hawai'i, many youngsters come to school speaking Hawaiian Creole English, called Pidgin by the local community (Speidel, 1992).

English is the common language.

All of the American-affiliated Pacific entities use English as the official language for most government and commercial activity. English is seen as the language that can provide access to global information, communication, employment opportunities, and mobility. Its use expands the communication network of individuals within societies, between islands, and among peoples who speak different dialects and languages. English usage is believed to be critical in fostering economic development.

Patterns vary across geographical areas.

Patterns of indigenous and English language use vary considerably, depending on societal factors within each entity. Spencer (1992), in her study of literacy in Micronesia, described a continuum of language use and provided profiles of three differing yet typical environments across this continuum:

- ***Outer-island/outer-village areas***—The indigenous language is the predominant language of communication in all social domains.
- ***Capital center settings***—A more balanced oral bilingual environment exists. The first language prevails as the language of oral communication, but most legal and government documents are produced in English.
- ***Guam-Saipan environments***—Indigenous languages struggle to increase prominence after years of decline, similar to certain United States locations such as Hawai'i or the U.S. West Coast. English is the dominant vehicle for oral and written communication.

According to Huebner (1986, 1987), similar language use patterns are found in the American-affiliated Polynesian entities, American Samoa, and Hawai‘i, where language shift to the immigrant language, English, has been accompanied by the partial or near complete loss of indigenous languages.

Changing Cultures, Changing Languages

Traditional cultures and languages are changing rapidly.

The developing cash economy in the Pacific has already made a significant impact on the lifestyle and language of many islanders (Hezel, 1993). Such an economy stands in sharp contrast with the traditional land-based system that was at one time the foundation of Pacific society. Although island leaders may urge their people to preserve traditional ways, this often stands in contradiction to other social trends. For example, economic development leads to such non-traditional enterprises as retail stores, large-scale fishing and fish packing, tourism, and heavy industry. As a result of a developing cash economy, structural changes in the society and culture occur, impacting the language. The traditional vernacular may no longer be needed or appropriate. The language used at home may not correspond with the language needed in the larger community.

Culture and language are interrelated: Loss of one leads to loss of the other.

A dramatic illustration of this relationship in Hawai‘i may be seen in recent history (Hammond, 1988). The Hawaiian culture was inexorably diminished during the 1800s, beginning with the introduction of non-Hawaiian land use policies and religion. Then, in 1893, the Hawaiian monarchy was overthrown, and eventually Hawai‘i became a territory and then a state of the United States. These events culminated in the almost total loss of the Hawaiian language. It is only through community-based efforts, such as the Pūnana Leo Preschools and Hawaiian Language Immersion, that the Hawaiian language has seen a revival in recent years. Even with this recent renaissance in Hawaiian language and culture, history points out the profound effect that culture and language can have on each other.

Human beings have the capacity to acquire language quite readily. They also have the capacity to lose language if it is not used or needed. The loss of language skills occurs through the lack of a linguistically appropriate social environment in which to use them. Studies have shown that the younger the children, the more susceptible they are to social forces that lead them to abandon their first language (González & Maez, 1995). In the United States, once American-born children of immigrant parents learn English, they tend to not maintain or develop the language spoken at home, even if it is the only one their parents know. This abandonment of the vernacular tongue often results in a loss of important links to family and community (Wong-Fillmore, 1991).

Language in Pacific Schools

The number of English language learners in Pacific island schools illustrates the variation in language use. Freese and Woltag (1984) summarized entity reports of the percentage of students (K-12) learning English as a second language. They reported as few as 5 percent in Hawai'i and Guam and up to 99.8 percent in the Republic of the Marshall Islands and Chuuk and Yap States in the Federated States of Micronesia.

This wide variation in language environments leads to educational policies and practices which use a complex array of English and vernacular language:

- English as the sole medium of instruction;
- English as the medium of instruction with vernacular language support to facilitate teaching and learning;
- English as the medium of instruction with supplementary vernacular language classes of 20 to 40 minutes, two to five times per week;
- vernacular language used as the medium of instruction with English taught as a foreign or second language;
- vernacular oral language instruction along with English textbooks;
- vernacular languages in the early elementary grades and English introduced in the third or fourth grade.

Such a range of usage represents the scope of the challenge to educators. Fluency in English is seen as crucial to future economic and social success. It is also recognized, however, that the island cultures themselves are intimately connected with their languages and that their loss may ultimately mean loss of cultures.

Language issues are not unique to the Pacific.

These general issues are not unique to the Pacific. According to the 1990 U.S. Census, approximately 14 percent of students in the U.S. live in homes where a language other than English is spoken. Throughout the United States, an increasing number of non-English speaking students enter the public school system each year (Lewelling, 1992; Ong Hing & Lee, 1996). The National Center for Education Statistics predicts that between 1996 and 2006, Hispanic and Asian/Pacific Islanders will be the fastest growing population in public elementary and secondary schools (National Center for Education Statistics [NCES], 1996a).

In such a varied context, many questions arise: Should English be used as the medium of instruction for students who are themselves learning English as a second language? What are the effects of the regional policies and practices on literacy, both in the vernacular and in English? How long, if at all, should vernacular language instruction be used? When should English instruction be introduced?

Language Use and Academic Achievement

Language minority students lag behind others in overall school performance.

The academic achievement of children whose first language is not English has long been a major educational concern. Those who come from cultural and linguistic minority backgrounds have been shown to fall short in school achievement. Measured through grading, retention in grade level, teachers' judgments of student ability, and standardized tests, the academic performance of limited English proficient students generally lags behind other elementary school students (Moss & Puma, 1995).

Many students are not on solid footing in English reading and writing or in mathematics and science by the time they enter high school (National Center for Research on Cultural Diversity). Youth from non-English language backgrounds are 1.5 times (Vaznaugh, 1995) to 4 times (McArthur, 1993) more likely to drop out of high school than those from English language backgrounds.

Pacific island students fare less well academically.

The educational performance of Pacific island students continues to raise concerns. In Guam, nearly half of the students who enter high school drop out before graduation (Cristobal, 1987). In Hawai'i, Koki (1987) reported that students with limited English proficiency were among those who were at risk of educational failure. Many recently immigrated English language learners in Hawai'i have difficulty passing the state's mandated minimal competency graduation test (Peterson, 1997). Results of National Assessment of Educational Progress studies of mathematics and reading continue to document poor performance of students from Hawai'i and Guam (NCES, 1993, 1996b, 1997). American Samoa reported below average student achievement on U.S. normed tests in English, mathematics, and science (American Samoa Department of Education, 1995). In the Commonwealth of the Northern Mariana Islands (CNMI), standardized test scores indicate consistently low levels of English reading, language, and mathematics achievement (Pacific Resources for Education and Learning, 1997). In the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau, Spencer (1992) documented a second-grade level of English literacy at the end of seven years of schooling, "a time near the end of schooling for most of these students" (p. 318).

In both United States and the Pacific, English language learners have difficulties achieving in school. Many of these students come from lower socioeconomic backgrounds, and research has shown a strong relationship between poverty and poor school achievement. Limited English proficiency, however, also plays a role (Moss & Puma, 1995).

Which Language Should Be Used in the Home?

“Insufficient exposure” to English is a myth.

Parental Language Use

Most parents in the Pacific want their children to succeed in the English-speaking global community as well as in their vernacular language and home culture. Some believe that the more children are exposed to English, the better and quicker they will acquire the language. Parents may, therefore, speak to their children in English rather than in the vernacular. These parents may believe that using the vernacular will result in “insufficient exposure” to English. They may believe that exposure to the vernacular language will endanger the development of English and that childhood bilingualism will confuse children, linguistically and cognitively. Both parents and educators often fear that the use of the vernacular language, at home and at school, will have negative educational consequences for children (Odo, 1987).

Parents may overuse English, their weaker language, at home.

Wong-Fillmore (1991) explained what occurs in homes where parents use their weaker language (for example, English) to communicate. Parents are less able to elaborate and extend the language and thinking of their children. They may not be able to communicate complex ideas. Their relatively weaker ability to speak in English may cause them to speak less to their children. Some may avoid interaction entirely. Consequently, children will go to school with inadequate development in both their first language and English.

Most of children’s language learning occurs before they reach school.

The Relevance of First Language Development

Research in monolingual settings has found that children come to school with approximately 3,000-word vocabularies (Boyer, 1991) and with almost complete control of basic syntax (Brown, 1973; Chomsky, 1969). Infants have learned to distinguish the sounds of language by the age of six months (Proceedings of the White House Conference on Early Childhood Development and Learning, 1997). By kindergarten, most children have developed an intricate linguistic system. They progress from discriminating relevant sounds to expressing simple meanings in two-word utterances, to expressing abstract and complex ideas in multi-word sentences. The language is learned primarily through interaction with adult caretakers who elaborate and extend initial one- and two-word utterances until the children’s language approximates that of adults.

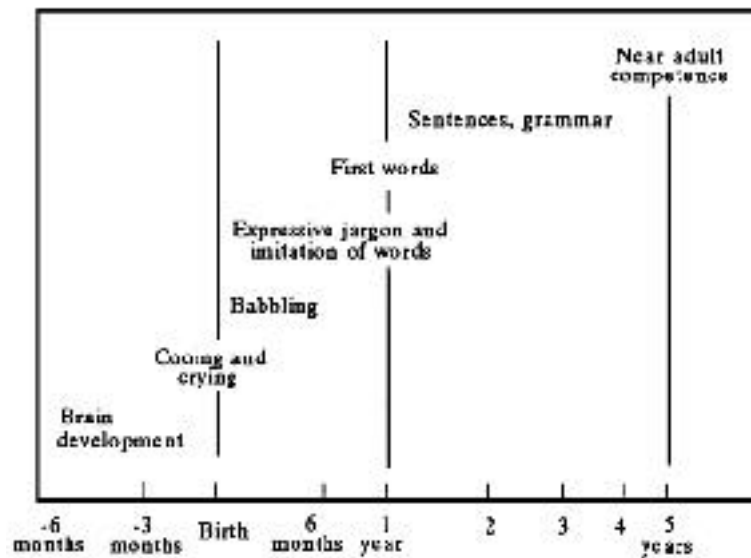


Figure 1. Language Development: The Child's Ability to Think and Talk

Note: From *Ready to Learn: A Mandate for the Nation* (p. 35), by E. Boyer, 1991, Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching. Adapted from *Human Development: From Conception Through Adolescence* (p. 365), by K.W. Fischern and A. Lazerson, 1984, New York: W.H. Freeman and Company. Reprinted with permission.

Homes can provide a richer environment for language learning.

In many families, children receive richer language development at home than at school. Children simply speak to an adult more often at home. The 25-to-1 student/teacher ratio of the typical classroom provides little opportunity for interaction, elaboration, extension, clarification, or feedback. Teachers have been found to do the great majority of talking in school, with three teacher utterances to every one made by a child. At home, the distribution of language is much more equal; conversations are more frequent, longer, and more equally balanced between adult and child. In these families children answer more adult questions and ask more questions at home than at school (Tizard & Hughes, 1984). "What we have found is that, compared with homes, schools are not providing an environment that fosters language development" (Wells, 1986, p. 87).

Verbal interaction between parents and young children is essential for cognitive development.

Loving verbal interaction between parents and their young children has been found to promote the development of cognitive as well as linguistic skills (Greenspan, 1997).

Many parents have instinctively known all along that the song a father sings to his child in the morning, or a story that a mother reads to her child before bed, help lay the foundation for a child's life. — Hillary Rodham Clinton ("Proceedings," 1997, p.1)

Students who come from homes with frequent adult-child verbal interaction are more successful in school ("Proceedings," 1997; Martínez, 1981). Children show significantly better cognitive, linguistic, social, and emotional development when they are cared for by adults who engage them in frequent, affectionate, responsive

interaction (Blakeslee, 1997; National Institutes of Health, 1997). The same is true of those who come from literacy-rich homes (NCES, 1993, 1996b, 1997; Boyer, 1991). It is this oral and literate home environment that fosters a child's language and thought. In this environment, children learn to make sense of their world; it is the foundation upon which academic success is based. "Children who do not develop adequate speech and language skills early on are up to six times more likely to have difficulties learning to read in school" (Boyer, 1991, p. 34). Perhaps this is because early experiences influence the very structure of the brain (Greenspan, 1997).

Bilingual children are not linguistically or academically handicapped.

Bilingual Language Development

Some people believe that bilingualism in childhood can have negative intellectual effects. Some believe that vernacular languages are primitive, are not technical enough for high-level thought, or that "savage tongues hinder intellectual development" (Binstead, 1931, about the Maori language on the Cook Islands, quoted in Skutnabb-Kangas, 1981, p. 13). Research on the cognitive functioning of bilinguals, however, provides sufficient evidence to the contrary. Research, in the United States and throughout the rest of the world, has shown that young children who live in linguistically supportive and nurturing bilingual environments do not develop linguistic handicaps (García, 1991).

A number of studies have shown that bilinguals outperform monolinguals on a variety of measures of cognitive skill (Reynolds, 1991). Peal and Lambert (1962), while exploring the relationship between bilingualism and intelligence, defined the bilingual child as:

a youngster whose wider experiences in two cultures have given him advantages which a monolingual does not enjoy. Intellectually, his experience with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, a more diversified set of mental abilities. (p. 20)

For individual children exposed to two languages at home, there are no negative consequences of learning two languages (August & Hakuta, 1997, p. 44). Rather, the important factor for a child's language development may be the nature of the language interaction, the extent to which it encourages academic language (Cummins, 1989, 1991). When parents and children speak the language that they know best, they are working at their actual level of cognitive maturity (Collier, 1995).

Parents should communicate in their stronger language.

Research in bilingual homes supports the concept that parents should communicate in their stronger language. Bhatnagar (1980) and Dolson (1985) found that children did better academically when they came from homes that maintained their first language. Cook (1990), in her ethnographic study of the relationship between home language use and acquisition of academic English, found that Hispanic children whose parents were monolingual Spanish speakers did better on school measures of academic English if they maintained their home language. In these studies, oral and written skills developed in the vernacular predicted success in English.

Which Language Should Be Used in School?

Public sentiment affects language use.

Public sentiment toward the use of English and vernacular languages in homes and schools throughout the Pacific affects student language use, proficiency, and school achievement. Laws and policies affecting school language use have led many educators to support these practices. Examples include:

- Hawai'i's 1896 law prohibiting the use of Hawaiian in schools and the subsequent adoption of English standard schools policies (which were later repealed).
- Early no-Chamorro rules in Guam: "Parents who speak English at home give great help to their children...because the children who speak English do best in school" (Guam Department of Education, 1955, as quoted in Underwood, 1987, p. 9).

For decades, a debate has raged on which language to use for the instruction of children who come to school speaking a language other than English, but are living in an environment where English is viewed as the road to adult success. Supporters of bilingual instruction believe that initial instruction in the first language helps develop language and thinking skills that will readily transfer to English. Supporters of English-only instruction believe that earlier and more instruction in English is more effective.

Much current educational research on the instruction of English language learners supports the use of students' vernacular languages in school. This makes sense, as substantiated by Tharp and Gallimore (1988):

If children are not familiar with the language that they are asked to read, if they are unfamiliar with the network of word meanings, if they are unfamiliar with the way that words modify and relate to each other, then learning to decode print in that language will be difficult, and an understanding of what has been decoded will be virtually impossible. Language and literacy are Siamese twins with one heart. (p. 104)

Current research supports use of students' vernacular language in school.

Success in English and better school achievement may be fostered through the development of oral and written proficiencies in students' vernacular languages (see August & Hakuta, 1997; Thomas & Collier, 1995; Collier, 1992; Ramírez, Pasta, Yuen, Ramey, & Billings, 1991; Willig, 1985 for reviews). The National Research Council Report (Meyer & Fienberg, 1992) reviewed two longitudinal studies of programs for English language learners in the United States. It concluded that kindergarten and first-grade students who received instruction in their vernacular language had higher achievement in reading than comparable students who received academic instruction in English. Similar results have been found in studies of Spanish/English bilingual preschools and Spanish monolingual pre-kindergarten programs (Paul & Jarvis, 1992; Campos, 1995).

Litteral (1986) reported on a study of an Australian Aboriginal bilingual program where evidence showed significantly better performance in 7 out of 10 academic areas by students in the program over students in an English-only program. The researchers concluded that bilingual students performed better in English communication skills because they first learned in a language they understood. When children are taught academic subjects in their first language, competence in these subjects in the second language (English) is also enhanced.

Willig (1985), in her meta-analysis of studies on the effectiveness of bilingual education, reported that, compared to classrooms and schools in which no special language education program is in place (i.e., no English as a Second Language program), bilingual education works.

Proficiency in two languages is an advantage.

In a study conducted by Lindholm and Aclan (1991), reading and mathematics achievement in both English and Spanish were examined. The results revealed that the more proficient students were in both English and Spanish, the better their achievement scores. The authors concluded that “the bilingual individual must develop full academic language proficiency in both languages in order for the academic advantages to accrue” (Lindholm & Aclan, 1991, p. 112).

Many correlational studies that examine relative proficiencies in the two languages of bilingual children show that home language proficiency is a strong predictor of second language development (Cummins, 1984; Hakuta, 1987). The results, like those of this study, may suggest that class time spent on developing the first language is beneficial because some knowledge and skills learned in the home language transfer to English. However, the results may also suggest that students with high levels of language proficiency in both their home language and English may have higher language aptitude.

There appear to be two types of language proficiency.

Why would bilingual students who have developed literacy skills in the vernacular be more successful in English academic skills than bilingual students whose language development in school has focused on developing oral proficiency in English? To answer this question Cummins (1989, 1991) explained an important linguistic distinction that highlights the relationship between language and achievement. He described two types of language proficiency:

- **BICS** - Basic Interpersonal Communication Skills
- **CALP** - Cognitive Academic Language Proficiency

He distinguished conversational (BICS) from academic language (CALP), describing a continuum of linguistic functions that children progressively acquire throughout their school years.

At the conversational end of the continuum is everyday language (BICS), in which cues such as gestures, facial expressions, and objects help speakers and listeners understand each other. Conversational language, therefore, is highly dependent on context (Cummins, 1981, 1987, 1989).

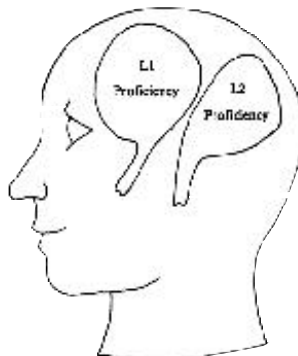
At the academic end of the continuum (CALP), however, there is less support from the context. As situational cues are gradually reduced, understanding must be achieved through devices such as word meaning, grammar, and syntax. This becomes the norm in the upper elementary grades and beyond.

An example of the conversational/academic distinction, from simple to most complex along the proposed continuum, is the following sequence: “face-to-face talk with friends, a telephone conversation between a student and teacher about a homework assignment, reading one’s own essay at a school assembly, and writing a critique of a Shakespearean play” (Pardo & Tinajero, 1993, pp. 30-31).

Some believe there is not room in the brain for more than one language.

Perhaps it is easier to understand the BICS/CALP distinction through a visual representation. The left head in Figure 2 illustrates the common myth that there is room in a child’s head for only one language. It is assumed that if the balloon of L1 gets too big, there will not be enough room for L2. This is based on the Separate Underlying Proficiency (SUP) hypothesis about language learning—that each language is learned separately, independently from skills developed in any other language.

The Separate Underlying Proficiency (SUP) Model of Bilingual Proficiency



The Common Underlying Proficiency Model (CUP) of Bilingual Proficiency

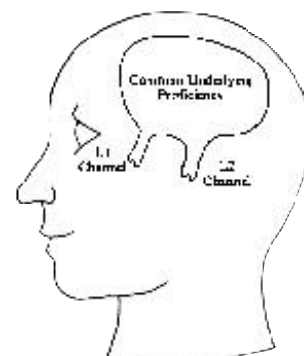


Figure 2. The Separate Underlying Proficiency (SUP) Model and the Common Underlying Proficiency Model (CUP) of Bilingual Proficiency

Note: From “The Role of Primary Language Development in Promoting Educational Success for Language Minority Students,” by J. Cummins, 1981. In *Schooling for Languages for Students: A Theoretical Framework* (pp. 23-24), by the California State Department of Education, Los Angeles: California State University. Reprinted with permission.

CALP developed in any language supports all languages.

Cummins proposed the Common Underlying Proficiency (CUP) hypothesis for explaining how L1 literacy development relates to success in L2 literacy. In the CUP model, CALP developed in any language is the CALP that supports all languages. According to Cummins, once children become competent in their first language, their literacy skills can transfer readily to English. He believes that develop-

ing CALP in one language helps in the development of academic language proficiency in other languages.

To succeed in school, students need CALP. Textbooks, tests, and lectures all require the use of CALP. They present complex academic information without much context. It is difficult for students to learn cognitively complex material if they do not have CALP.

CALP can be developed in the first language and transferred to the second language.

When learners reach the necessary threshold in CALP in their first language (L1), they can become successful in the second language (L2). Research shows that extensive cognitive and academic development in students' L1 predicts academic success in the L2. (Ramírez et al., 1991; Skutnabb-Kangas & Toukomaa, 1976; Lambert & Tucker, 1972; Swain, 1978). Across large data sets at many different research sites, Thomas and Collier (1995) found that the most significant student background variable in relation to achievement in the second language was the amount of formal schooling students had received in their first language.

Research shows us that students can learn more than one language and be academically successful. Therefore, the question facing educational leaders is, *How can students be helped to become proficient bilinguals?*

What Instructional Models Use Students' First Language and English in Schools?

There are many models for teaching English language learners. They vary from submersion programs in which students are placed in all-English classes, with little linguistic or educational support for their emerging English skills, to *structured immersion*, *transitional bilingual*, *bilingual immersion*, and *two-way bilingual programs*.

***Structured immersion* emphasizes one but uses both languages.**

Structured Immersion

In locales where all students who come to school to learn English are monolingual speakers of the vernacular, *structured immersion* is a promising program. In this approach, instruction is in the language being learned (i.e., English), but the teacher is fluent in both English and the students' vernacular languages.

The English used in these programs, sheltered English, is always geared to the children's language proficiency level at each stage so that it is comprehensible. The native tongue is used only in the rare instances when the students cannot complete a task without it. The student therefore learns the second language and subject matter content simultaneously (August & Hakuta, 1997, footnote p. 147).

Characteristics of Teacher Talk that Works as Input

Clear separation of languages—no alternation or mixing

Comprehension emphasized—focus is on communication:

- Use of demonstration, enactment to convey meaning
- New information presented in context of known information
- Heavy message redundancy

Language used is entirely grammatical—appropriate to activity:

- Simpler structures used, avoidance of complex structures
- Repeated use of same sentence patterns or routines
- Repetitiveness, use of paraphrases for variation

Tailoring of elicitation questions to allow for different levels of participation from students.

Richness of language use, going beyond books, playfulness.

(Wong-Fillmore, 1985, as cited in Speidel, 1992)

A form of *structured immersion* has been developed by the Kamehameha Early Education Program for Pidgin-speaking Hawaiian children. The teacher's use of instructing, modeling, questioning, cognitive structuring, linguistic feedback, cloze techniques, and contingency management were successful in developing English language skills during small-group reading instruction (Speidel, 1993). During these lessons, the teacher only spoke standard English, while the children could speak Pidgin.

Structured immersion is promising but unproven.

The recently adapted version of the highly effective Success For All (SFA) program may classify it as a *structured immersion* program. In this schoolwide restructuring program that focuses on prevention of reading failure through early intervention, an English as a Second Language (ESL) component has been provided to integrate ESL staff and services into regular classroom programs, "focusing ESL instruction on the skills needed for success in the English reading program" (Slavin & Yampolsky, 1992, p. 4). Data from first-graders in three SFA schools were analyzed by Dianda and Flaherty (1995). They compared Spanish-speaking, English-speaking, and other language students who were enrolled in L1 and sheltered English SFA programs with control group students (non-SFA). As indicated in Figure 3, Success for All students scored substantially better than control students, with the L1 SFA program showing the greatest effect size (ES= 1.03). The sheltered English SFA group scored about two months below grade level, but were still four months ahead of their controls.

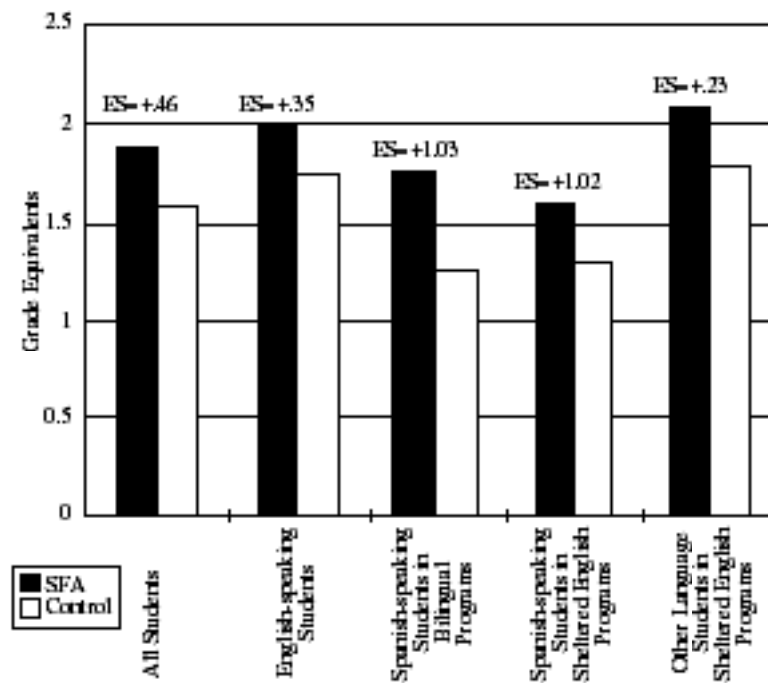


Figure 3. Achievement of Success for All and Control Students by Language Group - Riverside and Modesto, California.

Note: From *Success for All/Roots and Wing: Summary of Research on Achievement Outcomes* (p. 24), by R. Slavin, N. Madden, and B. Wasik, 1996, Baltimore, MD: Center for Research on the Education of Students Placed At Risk, Johns Hopkins University. Reprinted with permission.

Success for All results are certainly promising, and there appear to be benefits to *structured immersion* programs (Baker & de Kanter, 1981; Rossell & Ross, 1986); however, quantitative research across a variety of sheltered English, *structured immersion* programs is not yet available.

Transitional bilingual programs emphasize a gradual move from L1 into English.

Transitional Bilingual Education

Transitional bilingual education, another model for program development, is based on the belief that the transition between L1 and English should be gradual and that L1 instruction should be used throughout the student's entire elementary schooling. There appear to be two types of *transitional bilingual* programs—those in which students are only instructed for two to three years in the L1 (early-exit) and those in which students are instructed in their L1 through elementary school (late-exit). In both types of transitional programs literacy is developed in the student's first language while oral English is gradually introduced. When students demonstrate adequate literacy skills in the L1 they then transition to literacy in English.

Research by Ramirez et al. (1991), Thomas and Collier (1995), and Gersten and Woodward (1995) suggest that *transitional bilingual* education can provide students with skills needed to succeed in schools. There is some support for the superiority of

late-exit over early-exit transitional programs. Ramirez et al. state in their executive summary:

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

Bilingual immersion allows early instruction of English, with L1 support.

Bilingual Immersion

Bilingual immersion combines features from both bilingual and immersion programs. It involves accelerating the introduction of English while maintaining the students' L1 as a basis for conceptual development, clarification, and cultural identity. The early instruction in English language arts and reading is believed to foster rapid acquisition of the English language at both the conversational and conceptual levels (Gersten & Woodward, 1995).

Bilingual immersion focuses on integrating English language instruction with content area materials, in order to systematically introduce English through academic instruction in the early grades.

Support from and for the students' home language is provided through a four-year first language program which helps students maintain their facility in L1. The program, starting with 90 minutes in first grade and gradually diminishing to 30 minutes in fourth grade, helps students develop concepts, literacy, cognition, and critical thinking skills in the L1. During the first language component of the program, instruction and student-teacher interaction are entirely in the L1.

Bilingual immersion allows communities with few bilingual teachers a viable educational alternative. Using a team teaching model, the bilingual teacher could teach the L1 component for three to five classes.

Results of comparisons of *bilingual immersion* with *transitional bilingual* education show initial superior English achievement in all academic areas by fourth or fifth grade by students in *bilingual immersion*. However, these differences disappear by seventh grade. Gersten and Woodward (1995) conclude that *bilingual immersion* and *transitional bilingual* education are equally viable options.

The lack of significant difference between the two programs in seventh-grade achievement supports increased choice and experimentation by teachers and administrators, based on their experiences, the types of communities their schools serve, and the preference of community members. (p. 237)

Two-Way Bilingual Education

Exploratory work by Thomas and Collier (1995) suggests other effective instructional models for teaching language-minority children in the United States. Their current research, with the support of the national Center for Research on Education,

Diversity, and Excellence (CREDE), could substantiate initial claims of program effectiveness. Their earlier research pointed to the success of two-way bilingual education at the elementary school level. They provide the following graphic model (Figure 4) to illustrate this program's effectiveness.

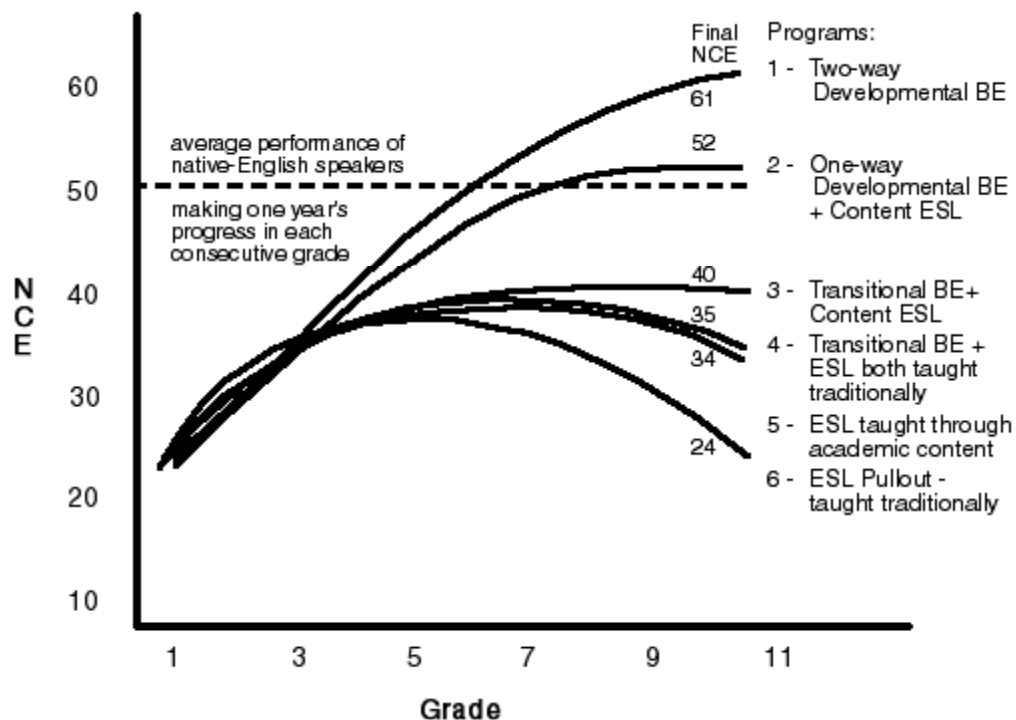


Figure 4. Patterns of K-12 English learners' long-term achievement in NCEs on standardized tests in English reading compared across six program models (Data aggregated from series of 3-7 year longitudinal studies from well-implemented, mature programs in five school districts)

Note: From *School Effectiveness for Language Minority Students* by W. P. Thomas and V. P. Collier, 1997, Washington, DC: National Clearinghouse for Bilingual Education. Copyright 1997 by W. P. Thomas and V. P. Collier. Reprinted with permission.

In two-way bilingual instruction, equal value is given the two languages.

In *two-way bilingual* instructional settings, students develop proficiency in two languages by receiving instruction in English and another language in a classroom that is comprised of native speakers of English and native speakers of another language. Students maintain grade-level skills in their first language through at least sixth grade and reach the 50th percentile in their second language after four to five years of schooling in both languages. Of the five program models compared, only *two-way bilingual* instruction has fostered achievement at or above the norm for native speakers of the target language.

This model may be the most promising program model for the long-term academic success of students learning English at school. In this two-way instruction, the same value is placed on the learner's vernacular language as is placed on English.

Christian (1994) concluded that *two-way bilingual* programs benefit education in three important ways. They:

1. Provide an effective approach to educating a growing number of English language learners in an environment that promotes both English language development and academic progress.
2. Expand a nation's language resources.
3. Enhance cross-cultural understanding and appreciation.

Schools need special language programs.

The research on instruction of students from non-English language backgrounds indicates the need for special language programs in schools. Each of the models presented above has been shown to be more effective than submersion in all-English classes with little linguistic or educational support for students' emerging English skills. The key to effective instruction for these students is to focus on making the content of schooling comprehensible.

Beyond Language

Language denotes culture and is also the vehicle for student learning. When teachers and students come from different cultures or use different languages or dialects, as in the Pacific, teachers may be unaware that their own understanding and their students' understanding may differ, or that expectations for behavior may differ from students' intentions.

Similarly, parents may not understand their role in fostering academic success in their children. Effective instructional programs build on the skills developed by children through interaction with caretakers. These interactions include language experiences such as verbal play, reading together, and exposure to literacy, all of which contribute to students' acquisition of reading and academic language.

Help children learn new rules of communication in school.

Classroom interaction presents children with the challenge of learning new rules for communication. The use of formal language, teacher control of verbal exchanges, question-and-answer formats, and references to increasingly abstract ideas characterize the classroom environment. When these new rules overlap with those that children have already learned, classroom communication is made easier. But children whose past experience with language is not congruent with the language rules of the classroom will have to learn ways to make meaning before they can learn from the language used in the classroom (Bowman, 1991).

Bring the family and home culture into school.

Nissani (1994) noted that programs designed for language minority children must incorporate the family and home culture by including the parents as part of the program. Although geared toward children with special needs, the Optimal Learning Environment (OLE) Curriculum suggests effective ways of teaching bilingual stu-

dents. OLE addresses the demands of this population by combining the student's sociocultural background, learning handicaps, developmental processes, personal experiences, and parental involvement with meaningful context and appropriate literature (Ruiz, 1991).

Look at students and families as "funds of knowledge."

Students from linguistically and culturally different backgrounds are frequently viewed as "disadvantaged," with perceived deficits in family environment or ability (Díaz, Moll, & Mehan, 1986). To counteract this view, Moll (1992) proposed that educators consider the students as "funds of knowledge." These funds represent essential cultural practices and bodies of knowledge and information that households use to survive, to get ahead, or to flourish. To develop and use "funds of knowledge," teachers need to gather information about students, parents, and community strengths, documenting the environment surrounding the students. Parents and other community members can contribute to the development of lessons. Gradually, these funds become a regular part of classroom instruction.

Rather than viewing linguistically and culturally diverse students as disadvantaged, this model focuses on students' strengths. The "funds of knowledge" the students bring to school let teachers capitalize on the knowledge developed at home. Instructing children in their home language allows students to demonstrate their knowledge and enables teachers to build on past experiences. The students' languages and cultures are viewed as resources.

Look for ways to integrate school and community.

Curricula in the Pacific reflect American mainland traditions and instructional practices (i.e., the use of English basal readers) although students come from linguistically and culturally different home backgrounds. It is important for teachers to recognize and acknowledge these differences and use them in their instruction. Tharp (cited in Viadero, 1996) believes that schools need to place learning in the context of values and experiences of the students. He asserted, "You can't run a school like it's a spaceship from another planet that just landed in town." For many Pacific island communities this might mean teaching science, for example, through hands-on lessons and discussions of local fishing practices and navigational techniques. Instructional conversations (Goldenberg & Gallimore, 1991), a form of discussion-based teaching in which teachers build upon students' verbal contributions and experiences, can help to make the classroom culture and traditional American curriculum more relevant to Pacific learners.

Cultural differences affect education. However, teachers should not feel intimidated or threatened by these differences. Rather, they should accept them and use them to bridge the differences between home and school.

Conclusions: Where Do We Go From Here?

In this synthesis, the authors have looked at research on home and school language use as it might apply to the multilingual contexts of the American-affiliated Pacific entities. This review permits the following conclusions to be drawn:

1. The language used at home is an important determiner of students' overall academic success. Fluency in the vernacular language does not impede academic success. It may, in fact, contribute to it.
2. Parents who speak the language they know best at home can foster increased cognitive and linguistic development in their children. Cognitive development can occur at home through activities that are easiest, cheapest, and most fun to do with children: singing, playing games, reading, telling stories, asking questions, solving problems together, building or fixing something, cooking together, and talking about life experiences.
3. Once students become academically literate in their first language, they can transfer these skills to another language.
4. *Structured immersion, transitional bilingual, bilingual immersion, and two-way bilingual* programs appear to be successful models for the development of academic skills among English language learners on the U.S. mainland. Research in Pacific contexts that describes the variety of instructional settings, community language use patterns, language attitudes, and instructional opportunities should shed light on the models that might best serve Pacific children.
5. Cultures are closely connected with their languages. Loss in one area leads to loss in the other.
6. Educators can play a key role in ensuring the survival of languages and cultures by seeking and adopting instructional methods which enhance communication across the home-school gap.

There is a need for research in Pacific educational contexts.

The great majority of research supporting bilingual instruction comes from contexts that vary considerably from those found in the American-affiliated Pacific. On the U.S. mainland, English is the dominant language of society, and non-English language background students who are learning English are referred to as language minority students.

Some of the Pacific entities appear socio-culturally similar to the mainland: The dominant language is English, with vernacular languages spoken in a minority of contexts. Elsewhere, the vernacular is the dominant language, with English used in a minority of contexts. Additional instructional factors—availability of first language and English-speaking teachers, vernacular and English materials, content coverage, time, and opportunity may also impact instruction.

Acquisition and maintenance of language depend not only on instructional factors but also on cultural factors relating to the status and purposes of the language in a certain society (Reilly, 1989). The range of language use patterns found in Pacific communities will affect educational program design, implementation, and effectiveness. Research on effective instructional models must be interpreted with caution, particularly in the outer-island/outer-village contexts.

Studies of risk factors among high school students in the Pacific region (PREL, 1995b-f) provide examples of how societal language use relates to educational achievement in the region. One of the risk factors studied was home language. Results varied, depending on the language use patterns of the entity. In entities where the dominant societal language is English (e.g., Commonwealth of the Northern Mariana Islands and American Samoa), the language used at home appeared to be related to a student's at-risk status: Students not at risk reported speaking English, or English and the vernacular, at home whereas their at-risk peers were more likely to report speaking only in the vernacular (PREL, 1995b, 1995d). This relationship did not hold true in the entities in which the vernacular is the dominant language (e.g., Chuuk and Kosrae).

The Research and Development Cadre at Pacific Resources for Education and Learning (PREL) has made it a priority to assist educators in understanding the language use patterns and instructional approaches that lead to academic success in Pacific region schools. They have developed a major research agenda to collect and analyze data on home and school language use throughout the region. The study will attempt to provide answers to the following questions:

- What languages are spoken in students' homes and in schools, by whom, and for what purposes?
- What languages are used for instruction in school, by whom, for how long, and for what purposes?
- Is there a relationship between language usage at home, usage at school, and student achievement?

In the years ahead, PREL hopes to contribute to on-going efforts to improve academic achievement in Pacific island schools. Questions concerning language use will guide much of PREL's applied research efforts. Other syntheses of research, policy briefs, and articles of practical use to teachers will follow this review. Evaluations of programs that bridge the home-school gap and that use language in creative ways will also be undertaken.

The Pacific can lead the way into a multicultural 21st century.

Although different in many ways from the mainland United States, the Pacific region will face many of the same educational challenges in the next century. The region can play a pivotal role in informing the rest of the country about what does and does not work in language use and education. Applying the results of sound research to educational practice can promote a multilingual, multicultural, educated, and informed Pacific population, leading the region and the world into a rich future for all.

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Resources

The following organizations can provide useful information concerning the use of first and second languages in school. These organizations can help parents, teachers, program planners, researchers, and policy makers with practical suggestions, research-based materials, legal and funding requirements, and up-to-date research on language in education.

Center for Applied Linguistics (CAL)

1118 22nd Street, N.W.
Washington, DC 20037-1214
Tel: 202-429-9292
<http://www.cal.org>

Center for Research on Education, Diversity, and Excellence (CREDE)

University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064
Tel: 408-459-3500
<http://www.cal.org/cal/html/crede.htm>

Center for Research on the Education of Students Placed At Risk (CRESPAR)

Johns Hopkins University
Center for Social Organization of Schools
3505 N. Charles Street
Baltimore, MD 21218
Tel: 410-516-8800
<http://scov.csos.jhu.edu/crespar/CRESPAR.html>

Comprehensive Regional Assistance Centers (CCs)

U.S. Department of Education
Office of Elementary and Secondary Education
600 Independence Ave. S.W.
Washington, D.C. 20202-6140
Tel: 202-260-1816
<http://www.ed.gov/EdRes/EdFed/EdTechCtrs.html>

National Clearinghouse for Bilingual Education (NCBE)

1118 22nd Street N.W.
Washington, DC 20037
Tel: 800-321-NCBE
<http://www.ncbe.gwu.edu>

Office of Bilingual Education and Minority Languages Affairs (OBEMLA)

U.S. Department of Education
600 Independence Ave., S.W.
Washington, DC 20202-6510
Tel: 202-205-5463
<http://www.ed.gov/offices/OBEMLA>

Regional Educational Laboratories Specializing in Language and Cultural Diversity

Northeast and Islands Regional Educational Laboratory (LAB) at Brown University

222 Richmond Street, Suite 300
Providence, RI 02903-4226
Tel: 800-521-9550
<http://www.lab.brown.edu>

Pacific Resources for Education and Learning (PREL)

828 Fort Street Mall, Suite 500
Honolulu, HI 96813-4321
Tel: 808-533-6000
<http://www.prel.hawaii.edu>

Southwest Educational Development Laboratory (SEDL)

211 East 7th Street
Austin, TX 78701-3281
Tel: 512-476-6861
<http://www.sedl.org>

Teachers of English to Speakers of Other Languages, Inc. (TESOL)

1600 Cameron Street, Suite 300
Alexandria, VA, 22314-2751 USA
Tel: 703-836-0774
<http://www.tesol.edu>



PACIFIC RESOURCES FOR EDUCATION AND LEARNING

828 Fort Street Mall ♦ Suite 500
Honolulu, Hawai'i 96813-4321
Tel: (808) 533-6000 ♦ FAX: (808) 533-7599
e-mail: askprel@prel.hawaii.edu
WEBSITE: <http://www.prel.hawaii.edu>

American Samoa
P.O. Box 186
Pago Pago, AS 96799

Saipan, Commonwealth of the Northern Mariana Islands
Suite 203, Bank of Hawai'i Building
Marina Heights Business Park
PPP 145 ♦ Box 10000
Puerto Rico, Saipan, MP 96950
Tel: (670) 323-6000/1/2/3/4 ♦ FAX: (670) 323-7735
e-mail: prelwest@prel.hawaii.edu

Yap, Federated States of Micronesia
P.O. Box 985
Colonia, Yap FM 96943
Tel: (691) 350-4382 ♦ FAX: (691) 350-4380
e-mail: yap@prel.hawaii.edu