

Japanese English Bilingual Children in Three Different Educational Environments

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Attitudes toward bilingualism vary among people around the world. People who live in bilingual / multilingual societies might hardly believe that people in other parts of the world have debated pros and cons of bilingualism because, for them, bilingualism is the norm, and speaking only one language means exclusion from a meaningful portion of their lives (Umbel, Pearson, Fernandez & Oiler, 1992). People who are in monolingual countries, but eager to learn another language, might be surprised if they knew some people in the world want to be monolingual even when they have opportunities to be exposed to more than one language.

Japanese people, for example, have longed for “bilingualism”. Although Japan is considered a monolingual nation, and is geographically isolated from the rest of the world, many Japanese people have been overseas to expand their perspectives and acquire foreign languages. The number of Japanese students studying abroad has steadily increased during the last few decades. In the 1995 academic year, Japan led all countries in the world with 45,531 Japanese students enrolled in colleges and universities in the United States (the Chronicle of Higher Education, 1996, p.66). In addition, Japan’s Ministry of Foreign Affairs reported that 18,234 Japanese school children between age 6 and age 15 live in North America and 67.3% of them attend both local schools and Japanese supplemental schools to learn both English and Japanese, while 81.9% of Japanese school children living in Asian countries go to Japanese schools and learn subject matter only in Japanese (Japan Overseas Educational Service, 1997). These figures demonstrate how enthusiastically Japanese people learn English, in a country where it is spoken.

Despite the large number of Japanese schoolchildren in the United States and the popularity of English education in Japan, no empirical research has yet investigated Japanese-English bilingual students’ bilingual proficiencies in two languages, attitudes toward bilingualism, and factors which influence their motivation to develop bilingual abilities. It has not been established how and to what extent the attitudes toward bilingualism and language proficiency of Japanese students in bilingual education programs have been influenced by education programs, their language backgrounds, and their experiences in different cultures. Although a number of researchers have extensively investigated the effectiveness of bilingual education, and the language acquisition of bilingual individuals in North America and Europe, most studies in these fields have focused on immigrant children and their bilingual acquisition of two European languages. The results of those studies, in many cases, cannot be applied in the context of Japanese-English bilingual individuals because of the linguistic dissimilarity between Japanese and English and the status of Japanese people living outside Japan. Therefore, this study was an initial attempt to investigate and compare the attitudes, language use, and language proficiency of Japanese students who are in different types of bilingual education programs in the United States and in Japan. By looking at three different school settings, this study attempted to find some general trends about the relationships among the language attitudes, proficiency, and use of Japanese-English bilingual children. Because there were differences by context, this study also performed comparative analyses in order to illuminate the factors which affect the bilingual development of these schoolchildren in different environments.

1. Research questions

The purpose of this study was to answer the following questions.

1. What are the students’ attitudes toward bilingualism and attitudes toward the Japanese language? What differences exist among programs?

2. What are the students' current patterns of language use and their language learning backgrounds in English and Japanese? What differences exist among programs?
3. What are the students' language proficiencies in English and in Japanese? How do they differ among schools?
4. What relationships exist among language proficiency, language attitudes and language use?

2. Review of literature

The recent literature was reviewed in order to focus on issues related to bilingual individuals' language proficiency, their language use, their attitudes toward bilingualism, and the effectiveness of bilingual education programs with respect to supporting the bilingual development of students. The previous studies reviewed here have several important implications. This section is a summary of my literature review.

First, the research suggests that the bilingual is not two monolinguals in one person, but a unity different from a monolingual and, therefore, monolingual standards are irrelevant points of comparison when assessing the language skills of bilingual individuals (Baker, 1992; Grosjean, 1982, 1985, 1989; Skutnabb-Kangas, 1984). Educators should assess bilingual children's language proficiency and academic achievement with multiple dimensions (Baker and Jones, 1998). A number of researchers point out that various language skills are required to succeed in an academic context. In order to gain academic language proficiency, students need to accomplish a variety of tasks in educational settings (Swain, 1984). Cummins (1979) states that once the students' language proficiency reaches a certain level of competence, they are able to transfer the knowledge and skills acquired in one language to the other.

Second, it has been found that bilingual children's language networks; opportunities to use languages, and their attitudes toward bilingualism and toward their bilingual abilities are crucial factors to develop and maintain bilingual proficiency (Baker, 1992). Bilingual individual's language use and attitudes toward bilingualism are affected by many factors. The ethnolinguistic vitality (EV) which may affect the language use and the attitudes of bilinguals are determined by three factors: the community, family, and school (Landry and Allard, 1992). These factors may negatively affect bilingual children's use of languages and eventually impede the maintenance of bilingual abilities if the environments do not support the bilingual development of children (deGroot and Kroll, 1997; Lee and deVos, 1981). In contrast, bilingual children are motivated to develop bilingual proficiency if they have opportunities to use both languages in secure environments (Mackey, 1972; Romaine, 1995). In sum, previous studies indicate that attitudes toward bilingualism and language attitudes, language use, and language proficiency in both languages are interrelated and affect each other.

Third, the literature relating to different types of bilingual education programs indicate that each bilingual education model has different goals and objectives (Brisk, 1998). The purpose of Transitional Bilingual Education (TBE) is to shift children from a minority language to the majority language. On the other hand, Maintenance Bilingual Education, such as the Immersion Program and the Two-Way Program, aims at teaching children the majority language while continuing to foster their first language, enhancing the children's cultural identities and affirming the cultural diversity of the nation (Christian, 1994; Genesee, 1995). However, Brisk (1998) mentions that there are considerable variations among these bilingual education models and even within the same model. It has been found that the classification of bilingual education programs varies to a great extent and, therefore, it is important for researchers to investigate the goals and objectives of, and the actual educational practices in, each bilingual education program in order to find out how the program helps students foster their bilingual abilities.

Fourth, in the school context, the school atmosphere regarding bilingualism, peer pressure, and the language of power at school and in the society at large affect the bilingual individual's use of languages and attitudes toward bilingualism (McCollum, 1993; Escamilla, 1994). Therefore, it is necessary to explore the environments surrounding bilingual students when the attitudes of bilingual students toward bilingualism and their language use are examined.

Fifth, in order to create effective bilingual education that supports the bilingual / bicultural development of students, the program should have clear goals and objectives, information about every student involved in the program, qualified teachers, and a supportive atmosphere for bilingual students (Escamilla, 1994). All of these factors play important roles in fostering the students' positive attitudes toward bilingualism and their motivation to learn two languages.

Finally, the general attitudes of Japanese people toward English and toward bilingualism are illuminated. The research on the bilingualism of Japanese people reveals that Japanese people generally have favorable attitudes toward bilingualism and are motivated to be bilingual (Hayashi, 1999). Despite these positive attitudes and the high motivation to learn English, some researchers report the difficulty of Japanese people have in becoming English-Japanese bilinguals (Ono, 1994; Matsumoto, 1998). These researchers point out that the linguistic dissimilarity between English and Japanese impedes English-Japanese bilingual development. This language dissimilarity between English and Japanese should be taken into account when assessing bilingual development in English and Japanese. However, other researchers have found that some English-Japanese bilinguals overcome the linguistic dissimilarity between the two languages and successfully develop bilingual proficiency. These authors attribute the success of bilingual development in the Japanese-English bilinguals to the learners' enthusiasm to assimilate a new culture and language and to their efforts to maintain their own culture and language, as well as to an abundance of opportunities to use both languages (White, 1988; Matsumoto, 1998). These studies, about both the successful and unsuccessful cases do not provide empirical data to prove their arguments and, therefore, the relationships among the language dissimilarity between English and Japanese, bilingual proficiency, and the language attitudes of Japanese people remain unclear. Therefore, it is important for this study to investigate empirically how Japanese schoolchildren overcome the linguistic dissimilarity, and develop bilingual abilities in English and Japanese.

3. Methodology

This study was conducted in three bilingual education programs: an English Immersion Program in Japan, a Japanese Bilingual Program in California, and a Transitional Bilingual Education Program in Massachusetts.

3.1 The process of program selection

The process of program selection for this study started in September, 1997. The researcher explored the internet to find bilingual education programs which provide bilingual instruction for Japanese-speaking children in Japan and in the United States. According to the Center for Applied Linguistics (CAL) in Washington DC, there was one school, as of 1997, which had a Two-Way bilingual education program for Japanese- and English-speaking children in the United States. The school belongs to the San Francisco Unified School District, which has a large Asian population, in California. Although the program was officially called a two-way bilingual program at that time, the researcher found that it no longer functioned as a two-way bilingual model because instruction was not done in two languages. The program, however, had a large population of Japanese-speaking students, and provided Japanese as a Foreign Language (JFL) class for both English- and Japanese-speaking students every day. This program, thus, was selected as a model of a bilingual program which accommodates a large number of Japanese-speaking students in a bicultural English- medium school.

The Japan Association for Language Teaching Bilingual Special Interest Group (JALT -BSIG) reported that there was only one school which had implemented an English immersion bilingual education program in Japan. The school is located in Numazu City, Shizuoka, which is approximately 80 miles west from Tokyo. The program was reported to have approximately 40 students in each grade from kindergarten to the 7th grade in the 1998 academic year. This program was chosen as a model of the English immersion bilingual education program in Japan.

The third program for this study was selected from among the Transitional Bilingual Education (TBE) programs, which are said to be the most common type of bilingual education program in the United States. The researcher inquired with the Japan Ministry of Education, the American Council on the Teaching of Foreign Language (ACTFL) and the National Association for Bilingual Education

(NABE) to find a Transitional Bilingual Education Program for Japanese students. Despite her efforts, no TBE program with more than twenty Japanese students in both the 4th and 5th grades could be found in the US. The majority of Japanese students are accommodated in local public schools which do not provide bilingual education; however, they provide English as a Second Language (ESL) instruction for language minority students. Some school districts employ Japanese-English bilingual teachers, but most of the teachers go from one school to another in the school districts and give the students instruction in Japanese a few hours a day. Accordingly, although the TBE program selected for this study had a larger Japanese student population than most other TBE programs for Japanese students in the US, the number of students in this program was smaller than in the two other programs selected for this study. This program was included in this study instead of an ESL program which is the prototypical education model for Japanese students in the United States because this study focuses on programs which are categorized as bilingual education models.

After having discussions with authorities at each school, the researcher agreed that schools and participants would not be identified anywhere in the study. Therefore, pseudonyms were used for the schools and participants. Ai School is used for the school which has the English immersion program in Shizuoka, Japan. Bay School is the name given to the school which has the Japanese language program for both Japanese- and English-speaking students in California, and Cook School denotes for the school which has the Transitional Bilingual Education (TBE) program for Japanese students in Massachusetts.

3.2 The process of student selection

This study adapted the Attitudes to Bilingual scale questionnaire, developed by Colin Baker, to investigate the attitudes of the students toward bilingualism and their first language. Baker (1992) recommends that the Attitudes to Bilingualism scale questionnaire be implemented with school children who are 10 years old or older. In addition, the results of a pilot study revealed that some questions in the questionnaire were too difficult for students in the 3rd grade to answer. The oldest students across the three programs are in the 5th grade and, therefore, the oldest possible students across the programs, students in the 4th and 5th grades were selected for this study.

3.3 Participants at Ai school

Thirty students in the 5th grade of the English Immersion Program at Ai School and their classroom teachers participated in this study during observation periods. Due to the different school years in Japan and in the US, the average age of students in the 5th grade in Japan is a half year younger than that of the students in the 5th grade in the US. Therefore, only the 5th graders at Ai School in Japan were chosen for this study in order to match with the students in the two schools in the United States in terms of age and school experience.

3.4 Participants at Bay school

All the Japanese-speaking students in the 4th and 5th grades (N=25), their classroom teachers (N=3), the Japanese language instructors (N=2), and their classmates (N=70) participated in this study during observation periods. All 25 Japanese-speaking students in the 4th and 5th grades in the Japanese Bilingual Program (JBP) answered questionnaires, completed self evaluation forms in both languages, and wrote essays in English and Japanese.

3.5 Participants at Cook school

All the Japanese students in the 4th and 5th grades, their classroom teachers and their classmates, and their Transitional Bilingual Education (TBE) teachers and teaching aides participated in this study during the observation periods.

Eight Japanese students in the 4th and 5th grades-- seven students who have stayed in the United States for more than one year and one student who attended private English institute for 1 year in Japan prior to coming to the US-- answered questionnaires, completed self evaluation forms in both

languages, wrote essays in English and Japanese, and underwent individual interviews. Among the eight students, two students who had been in Cook School since kindergarten, have already exited the TBE program and been mainstreamed.

For consistency, the term ‘participants’ is used to describe Japanese and/or Japanese-speaking students from the 3 schools who participated in the questionnaires, self-evaluations and writing assignments. Table 1 presents a summary of each program.

Table 1: The Summary of Programs

	Programs		
	Ai (Japan)	Bay (California)	Cook (Massachusetts)
Goals	Bilingualism	Bilingualism and fostering bicultural perspectives	English Language Development
Objectives	To nurture multi-cultural perspectives To achieve functional proficiency in English while maintaining skills in Japanese	To provide Japanese language and cultural instruction to native English and Japanese speaking students. To provide curriculum stressing academic excellence in English.	To assist Japanese students to adjust new environments. To help students achieve academic achievement in the mainstream classes.
Curriculum (Instruction)	70% English 30% Japanese (K-3) 50% English 50% Japanese (4-6) Divided by subjects	English in all subjects with Japanese language class (30 min. a day)	All subjects in English with tutoring in Japanese
Language Literacy Development	English/Japanese	English partially Japanese	English
Program Population	99% Japanese-speaking	30% Japanese-speaking 70% English-speaking	100% Japanese (TBE) 10-15% Japanese in the mainstream classes in the 4th/ 5th grades
Students’ stay in program	Stable	Stable	Temporary
Student Selection	Entrance Examination at kindergarten	Lottery basis at kindergarten	Any time throughout the year if space is available

3.6 Instruments

Four different instruments-- questionnaires, interviews, observations, and writing assignments in both languages-- were implemented in order to answer the research questions.

3.7 Questionnaires

3.7.1 *The bilingual attitudes survey*

The first questionnaire which was used in this study was originally developed by Baker to investigate the attitudes of Welsh students toward bilingualism and toward the Welsh language (Baker 1992). The questionnaire was pilot-tested with 797 youngsters in Wales and the reliability of the measurements was tested with the alpha reliability coefficient of the latent variables scales. The Bilingual Attitudes Scale was of acceptable reliability with an alpha coefficient of .85 level. Baker (1992) states that language attitude surveys often attempt to find out a person's language preference between two languages rather than examine attitudes toward bilingualism, and consequently, a comparison of two languages often appears in a negative way in question items. In contrast, the Bilingual Attitudes Scale includes items which represent a holistic view of bilingualism in order to measure attitudes toward bilingualism. Baker's Bilingual Attitude Questionnaire was selected for this study because of its reliability and useful detailed explications in the results of previous studies. The questionnaire consists of two parts. The first part of the questionnaire includes 20 items asking about participants' attitudes toward Japanese, and the second part includes 25 items asking about their attitudes toward bilingualism. It uses the 5-point Likert scale. It was translated into Japanese, and three Japanese native speakers examined and verified the accuracy of the translation. A pilot study was conducted with fifty Japanese students in the 9th grade in order to examine the reliability and validity of the instrument.

3.7.2 *The language background survey*

The second questionnaire asked about the language use of the participant in and outside the school. This questionnaire was also developed by Baker in 1992. The purpose of the Language Background Survey in this study was to profile how often bilingual students use their two languages with different people such as family members, friends, teachers, and neighbors, as well as to find out which language is used by these people when they talk to bilingual individuals (Baker 1992). The results of the bilingual language background survey were converted into a percentage measuring the language use of English; to do this, the scores were summed up and divided by the number of items (family members, friends, teachers, and neighbors).

The limitation of this questionnaire scale is its failure to find out how often bilingual individuals use the two languages with the different people. For example, one student might rarely see his father who works away from home, and another student might talk with her siblings much more often than with her friends outside the classroom. However, in all cases, the results were equally divided to get an individual score. Classroom activities and interviews were used in order to obtain a more accurate rating of the language use of the participants. The results of the language background survey were reported back to the participants individually in class activities or individual interviews. The individual scores were adjusted only when any student claimed that his / her individual score did not reflect his/her real life language use.

3.7.3 *Self evaluation of language proficiency in English and Japanese*

The third questionnaire consisted of a self evaluation of the participants' language proficiency in both English and Japanese. The self-assessment of oral language, listening / speaking, and reading ability developed by O' Malley and Valdez-Pierce (1995) was used for English proficiency, and a similar format for the self-assessment of language proficiency, developed by the researcher, which covers the criteria of the national educational guidelines of the Japan Ministry of Education, was used for Japanese proficiency. The self-evaluation measurement investigated students' perceptions of their language abilities in four skills: speaking, listening, reading, and writing in both languages.

3.8 Observations

3.8.1 The Bilingual Language Assessment Record

The Bilingual Language Assessment Record (BLAR) developed by Haworth and Joyce in 1994 was used to assess the oral skills of the participants. Haworth and Joyce (1996) recommend using a variety of assessment procedures for language minority students and state that observation is a useful method of performance assessment if it is carefully planned and implemented with systematic record keeping. In order to plan classroom observations for assessment, Genesee and Hamayan suggest that researchers should identify what to observe, how to observe, who to observe, and choose a method of recording. The Bilingual Language Assessment Record (BLAR) was used in this study because of its simple format and its inclusion of appropriate criteria to evaluate bilingual students in the classroom.

Haworth and Joyce (1996) proposed the Bilingual Language Assessment Record (BLAR) for the purposes of assessing the Basic Interpersonal Communicative Skills (BICS) and the Cognitive-Academic Language Proficiency (CALP) of bilingual children set out by Cummins. In Cummins' theoretical framework, BICS and CALP require students to master different tasks. Basic Interpersonal Communicative Skills (BICS) are involved tasks which are cognitively undemanding and embedded in contexts, such as talking to other students about stories students read, while Cognitive-Academic Language Proficiency (CALP) requires the accomplishment tasks which are cognitively demanding and in reduced contexts, such as discussing the information students gain from a text (Cummins, 1985).

Thus, the Bilingual Language Assessment Record (BLAR) is designed to assess language skills in two languages, in both context-embedded and context-reduced tasks. The results of pilot studies which implemented the BLAR, conducted by Haworth and Joyce, indicate that the record can be used to assess the holistic language proficiency of bilingual students, to monitor the individual and group progress of students, and to review curriculum delivery (Haworth and Joyce, 1996). Haworth and Joyce mention that the BLAR should be combined with other measurements when assessing the language ability of bilingual students because the BLAR only focuses on the oral proficiency of learners. This study adapted the Bilingual Language Assessment Record (BLAR) in order to assess each student's holistic oral skills. The BLAR has 40 items. Each item has the same 3-point-scale and the total score of the 40 items serves as the oral proficiency score for each student.

3.8.2 Writing samples

In order to assess the language proficiency of the participants, writing samples in both Japanese and English were collected. All participants were asked to write a one-page essay in both languages. The same topics-- "the most exciting experience in my life" for the essay in Japanese and "what I enjoyed recently" for the essay in English-- were assigned to all participants across the programs so that evaluators could more accurately compare the quality of the essays. Ten items adapted from the Analytic Scoring Rubric for Writing developed by O' Malley and Valdez-Pierce (1995) were used for evaluating the writing samples in English. The criteria for the English writing samples are based on writing samples by English as a Second Language (ESL) learners (O' Malley and Valdez-Pierce, 1995). A similar format for the scoring rubric for writing, adapted from the elementary school teachers manual by the Japan Ministry of Education, which covers the criteria of the national educational guidelines of the Japan Ministry of Education, was used for evaluating the writing samples in Japanese. The criteria for the Japanese writing samples were, thus, determined on the basis of Japanese native speakers.

3.9 Procedures

3.9.1 Data collection

The researcher stayed for two months at each school (program) and observations were conducted for 34 days in the Japanese Bilingual Program at Bay School, 25 days in the English Immersion Program at Ai School, and 8 days in the Transitional Bilingual Program at Cook School.

The researcher stayed the entire school day with students, and she recorded their conversations in the classrooms, in gym, in the cafeteria, and on the playground. Interactions with peers and teachers in different contexts were carefully observed, and notes were taken. In addition, in order to observe the participants outside the school, the researcher participated in field trips, and visited Japanese Saturday

Schools and students' homes. The assessment of oral language skills was done in these natural settings. During the first two weeks at Ai School and Bay School, the researcher was a passive observer; she sat in the classroom and observed all students in the classroom. Classroom activities were video-recorded two days at Ai School and three days at Bay School. In the third week of observation at Ai and Bay Schools, the researcher started to score each participant's oral proficiency in both languages based on the Bilingual Language Assessment Record (Haworth and Joyce, 1994) while she was observing students in and outside the classroom, and the record was reviewed and confirmed, using all the data obtained for each student, at the end of the observation. The researcher occasionally implemented group activities at Bay School and Ai School to obtain data about the students' language proficiency. These activities included a baseball game and American history project at Ai School and a baseball game, the making of riddles at Bay School were video-recorded. The Japanese students at Cook School were scattered among 4 mainstream classrooms and, therefore, the researcher was never able to observe all the participants together in a classroom at one time. This situation made it impossible for the researcher to implement classroom activities the way she did in the two other programs. Therefore, the oral proficiency of the students at Cook School was assessed based on the individual interviews in English and Japanese. The researcher gave each student various tasks, requiring role playing, in the interviews. The oral proficiency of the students at Cook School in Japanese was assessed during the class periods in the Japanese Saturday School. During the observations, three questionnaires-- the attitudes survey, the language use survey, and the self evaluation of language proficiency-- and writing assignment in English and Japanese were given in the classroom.

The writing samples collected from the three programs were sent to three Japanese language teachers and three ESL teachers, who scored them based on the Analytic Scoring Rubric for Writing. All the Japanese evaluators are Japanese native speakers who had attended the same Japanese language pedagogy workshop at Columbia University and had learned how to evaluate the writing skills of learners of Japanese as a Second Language (JSL).

3.9.2 Data analysis

The data obtained from the questionnaires, the scores of the Bilingual Language Assessment Record (BLAR) and of the writing samples in English and Japanese, and the scored of the self evaluation of language proficiency in each language were analyzed statistically.

3.9.3 Attitudes toward bilingualism and toward Japanese

The qualitative data obtained from interviews and observations were analyzed to clarify the attitudes of the participants and of other people, who were considered to have an effect on the participants' perceptions. The attitudes of the participants toward bilingualism and toward the Japanese language were analyzed with five classifications derived from Baker's 1992 study--1) the importance of bilingual development; 2) instrumental attitudes; 3) the challenge of being bilingual; 4) the importance of the Japanese language in Japan; and 5) the importance of the Japanese language for themselves.

The Attitude to Bilingualism scale questionnaire inquired about the participants' attitudes toward bilingualism and toward the Japanese language. Negatively stated were reverse scored, then combined with the scores of positively stated items to yield the total score of positive attitudes toward bilingualism and toward Japanese. The analysis of variance (ANOVA) was used in order to compare the differences in attitudes among the three groups of participants.

3.9.4 Language use

The observation data about the language use of the participants in and outside the school were codified into situations and language, and the characteristics of usage depending on context in each language were analyzed.

The results of the bilingual language background survey, asking about the participants' everyday language use, were converted into a percentage measuring the language use of Japanese and English,

by summing up the scores and dividing by the number of items. The ratio of the usage of languages was used as the scores of language use in Japanese and in English. The analysis of variance (ANOVA) was used to compare the groups.

3.9.5 Language proficiency

Qualitative data obtained from observations and interviews were used in order to support the quantitative results. The qualitative data were classified into oral skills and written skills in each language and were analyzed separately.

Observation and interview data were scored for each participant's oral language skills in each language on the basis of the Bilingual Language Assessment Record (BLAR). Writing samples were scored based on the writing scoring rubrics by three evaluators in each language, and the total scores of the evaluators served as the writing scores for each student. Six one-way analyses of variance were used to compare school differences in each of three pairs of language proficiency measurements as follows: oral and written language skills in English and Japanese constituted a total of four measures; and the students' self evaluation of language proficiency in each language served as the final two of the six language proficiency measures.

3.9.6 The correlation among variables

The correlations among language proficiency, language use, and attitudes toward bilingualism of each student were examined using the Pearson correlation coefficient. Multiple regression analyses were used to examine the relative contributions of the factors to English and to Japanese oral language proficiencies.

3.9.7 Summary of the methodology

The results of nine different measurements were statistically analyzed and compared among the three programs. The data obtained from interviews and observations were analyzed qualitatively. The procedures for the data collection and for the analysis of data are summarized in table 2.

Table 2: Data Collection and Data Analysis Matrix

Variable	Data Source	Data Analysis
Type of program	Interviews with teachers and administrators	Qualitative Analysis using Mackey's and Escamilla's Frameworks
Attitudes Toward Bilingualism	Interviews Questionnaire	Qualitative Quantitative ANOVA to compare programs
Language Proficiency	Researcher Observation Self-Evaluation Writing Sample ANOVA to compare programs	Qualitative/Quantitative Quantitative Quantitative
Language Use	Observation Interview Questionnaire	Qualitative / Quantitative Qualitative Quantitative ANOVA to compare programs

4. Findings

This section demonstrates the answers of the research questions.

4.1 Comparison of attitudes of the students in the three programs

Q 1. What are the students' attitudes toward bilingualism and attitudes toward the Japanese language? What differences exist among programs?

The data obtained from observation demonstrate that the students in all three programs generally have favorable attitudes toward bilingualism and toward the Japanese language. The second question is expanded to ask whether there are any differences among the attitudes toward bilingualism of the students in the different bilingual education programs in order to examine school impact on the attitudes of the students. The differences among the group means of each program on the Attitude to Bilingualism Scale Questionnaire were tested by a one-way analysis of variance (see table 3). As reported in table 3, no statistically significant difference was found among the three programs. In other words, students in the Two-Way and Immersion programs, which have the goal of fostering the bilingualism of the students, have no more favorable attitudes than do students in the Transitional Bilingual Education (TBE) program, where the goal is not bilingualism. These results are supported by the results of the individual interviews. The students in all three programs mentioned that they appreciate the opportunities to learn both languages, and said that their bilingual abilities will be to their advantage in the future.

The three programs use the Japanese language for instruction in different ways--the Two-Way program at Bay school teaches Japanese as a Second Language (JSL) to both English- and Japanese-speaking students, the English Immersion program at Ai School uses 50 % Japanese to teach content, and the Transitional Bilingual Education (TBE) program at Cook School uses Japanese for tutoring--so that the students have different opportunities to learn Japanese and/or learning in Japanese. Therefore, it was hypothesized that the students in the different programs might have different attitudes toward the Japanese language. An analysis of variance (ANOVA) was used in order to investigate the differences among the group means of students in the three programs in attitudes toward the Japanese language (see table 3).

Table 3: The Results of ANOVA on Attitudes

		School / Program			MS	F(df=2)
		Ai (n=30)	Bay (n=25)	Cook (n=8)		
Attitudes Toward Bilingualism	Mean	89.83	91.56	84.38	422.00	4.81
	SD	13.63	8.71	10.17		
Attitudes Toward Japanese	Mean	68.60	70.32	64.25	293.63	7.62*
	SD	8.45	6.63	3.62		

*p<.01

The results given in table 3 indicate that there was a significant difference among the three programs in attitudes toward the Japanese language at p<.01. It was found that the students at Ai and Bay Schools, which provide the Japanese language instruction at school have more favorable attitudes toward the Japanese language than the students at Cook School, which does not provide instruction in the Japanese language.

4.2 Comparison of language use of the students in the three programs

Q 2. What are the students' current language use and their language learning backgrounds in English and Japanese? What differences exist among programs?

The questionnaire asking about the language use of the participants in and outside the school was used to investigate their daily language use. The results of the questionnaire were converted into percentages measuring the language use of Japanese and of English. The ratio of the usage of the languages, then, was determined by dividing the two percentages.

A one-way analysis of variance was used to analyze the differences in language use of the students in the three programs measured by the data from the questionnaire. The results given in table 4 reveal that there were significant differences among the three programs.

Table 4: The Results of ANOVA on the Use of English

	School / Program			MS	F(df=2)
	Ai (n=30)	Bay (n=25)	Cook (n=8)		
Mean	15.92	63.93	32.56	17830.11	117.40***
SD	10.71	15.21	19.71		

**** p<.0001

The pair-wise comparisons were tested in order to determine which pairs of means differed significantly from one another. The results of Tukey tests reveal that the difference in the rate of English use between Ai School and Bay School was statistically significant at p<.01. The differences between the Ai School and the Cook School, and between Bay School and Cook School were significant at p<.05.

These results can be interpreted to mean that language environments in and outside the school affect the language use of children to a great extent. The students in Bay and Cook Schools, in the United States where English is the language used in the society, use English much more frequently than do the students at Ai School in Japan. In addition, the students in Bay and Cook Schools have many opportunities for contact with English native speakers in and outside the school, while the students at Ai School have very few opportunities to communicate with English native speakers other than their English classroom teachers. Although both the students in Bay and Cook Schools have opportunities to use English, the mean score of the students in Bay School was much higher than that of the students in Cook School because most students in Cook School are from Japanese monolingual families and, therefore they have rare opportunities to use English at home.

4.3 Comparison of language proficiency of the students in the three programs

Q 3. What are the students' language proficiencies in English and in Japanese? How do they differ among schools?

In order to investigate the degree of language proficiency of the students in the three programs, observations, interviews, and writing assignments in each language were implemented. Observation and interview data were scored for each participant's oral language skills on the basis of the Bilingual Language Assessment Record (BLAR) in each language. Writing samples were scored based on writing scoring rubrics by three evaluators in each language, and the total scores of the evaluators served as the writing scores of each student. Six one-way analyses of variance were used to compare school differences in each of three pairs of language proficiency measurements-- oral and written

language skills both in English and in Japanese, and the students' self evaluation of language proficiency in each language (see table 5).

Table 5: The Results of ANOVA on Language Proficiency Measures

		School / Program			MS	F(df=2)
		Ai	Bay	Cook		
		(n=30)	(n=25)	(n=8)		
The Results of ANOVA on English Proficiency						
Oral Proficiency	Mean	64.57	99.00	81.63	8892.66	54.94****
	SD	14.32	15.62	16.60		
Written Proficiency	Mean	79.74	106.72	100.63	6137.84	32.82****
	SD	14.38	16.47	14.32		
Self Evaluation	Mean	54.40	62.36	56.25	520.58	5.19
	SD	11.38	12.64	12.74		
The Results of ANOVA on Japanese Proficiency						
Oral Proficiency	Mean	116.60	100.72	115.5	2359.16	78.82****
	SD	1.07	9.80	1.77		
Written Proficiency	Mean	126.23	107.96	126.88	3460.52	25.75****
	SD	7.67	17.73	17.00		
Self Evaluation	Mean	62.60	55.84	62.75	467.34	5.53
	SD	8.68	13.32	6.80		

**** p<.0001

4.4 English proficiency

The students' oral proficiency was evaluated on the basis of the Bilingual Language Assessment Record. Table 5 presents the results of a one-way analysis of variance on the BLAR in English. There was a significant overall difference among the three groups in English oral proficiency. A Tukey test of multiple comparisons was used in order to investigate which pairs of group means differed significantly. The results of the Tukey tests indicate that the difference between Ai School and Bay School was significant at p<.01. The differences between Bay School and Cook School, and between Ai School and Cook School, were significant at p<.05.

A possible explanation for these results might be that the students at Ai School do not use English in their daily lives, so that they feel more much pressure when they are required to speak English. Although the assessment was done in natural settings during the observations, the students at Ai School seemed to be more nervous and cautious when they spoke English than when they spoke Japanese, because speaking English is a notable occasion for them. As a result, the students at Ai School tried to avoid taking risks, and making mistakes in English, and they produced simple and less complicated sentences. In addition, the students at Ai School are used to asking for help from their Japanese-speaking classroom teachers whenever they have trouble in real life situations and, therefore, they have few opportunities to develop the skills of explaining complicated issues and solving

problems in English. The students at Bay and Cook Schools, on the other hand, have numerous occasions to use English to communicate with a variety of people, such as teachers, classmates, family members, and neighbors, in and outside the school. Under these circumstances, it can be speculated that they have developed a variety of English oral skills both in and outside the school.

The results of analysis of variance on written skills in English correspond with those on English oral skills; significant differences were found among the three schools. The differences can be explained by the different English language learning experiences of each student group. That is, the students at Bay School learn academic content, including language arts, in English and the students at Cook School have learned academic content in English with their English-speaking peers, as well as receive English as a Second Language (ESL) instruction, while the students at Ai School learn several academic subjects in English. Although the students at Ai School learn to write essays in English, the teachers in the English Immersion Program (EIP) at Ai School do not explicitly teach English grammar because it is a program policy that the instructor not correct developmental errors, such as grammar, during language acquisition activities. It was found that the students at Ai School make the same kinds of mistakes, and some of these could be attributed to the influence of their first language, Japanese. In addition, it was observed that the students at Ai School have far fewer opportunities to write in English than do the students in Bay and Cook Schools, in which the students write short essays and journal entries daily.

The students in each program scored their English proficiency on a self evaluation sheet. The results of a one-way analysis of variance reveal that there were no statistically significant differences among the three groups on the self evaluation of English proficiency. The students at Bay School evaluated their English skills slightly higher than did students at the two other schools. It can be speculated that the students at Bay School learn with their English-speaking peers all day and have gained confidence in their English abilities through keeping up with English-speaking counterparts.

4.5 Japanese language proficiency

The students' Japanese language proficiency was tested with the same instruments used for English language proficiency. Statistically significant differences among the three schools were found in oral proficiency in Japanese (see table 5). Tukey tests were used to investigate the differences between the groups. Results indicated that the difference between Ai School and Bay School was statistically significant at $p < .001$, while the differences between Ai School and Cook School, and between Bay School and Cook School, were not significant.

The students across the three schools did not show any difficulties communicating with Japanese-speaking people in Japanese in daily situations. However, it was found that the students at Bay School were not fully proficient at describing academic content and at supporting their viewpoints with relevant reasons while the students at Ai and Cook Schools were quite proficient at explaining complicated issues in various contexts. These differences are reflected in the scores on the Bilingual Language Assessment Record. It is important to note, though, that there were variations within groups.

Similar results were obtained for the measures of writing skills in Japanese (see table 5). The results of the Tukey test reveal that the differences between Ai School and Bay School, and between Bay School and Cook School, were statistically significant at $p < .001$, while the difference between Ai School and Cook School was not significant.

As shown in table 5, the scores of the students at Cook School are higher than those of the students at Bay School on measures of oral proficiency (Bilingual Language Assessment Record) and on the writing samples, even though the students at Cook School have not gotten language / literacy instruction in Japanese at school. One possible explanation for this result is that the students in the TBE program are in the program temporarily, and will go back to Japan in the near future. Therefore, they place importance on maintaining their Japanese language skills. Even more plausible as an explanation for this result is that the students in the TBE program are originally from Japan, and have been educated in Japanese schools, so that they may have developed high language skills prior to coming to the US and kept those skills during their US stay.

The students in each program scored their Japanese proficiency on a self evaluation sheet. The results of a one-way analysis of variance indicate that there are no statistically significant differences among the three groups on the self evaluation of Japanese proficiency.

4.6 Correlation among attitudes, language proficiency, and use

The Pearson product-moment correlation coefficient was used in order to determine the correlations among all attitude variables, language proficiency measures, and the rate of language use in each language. Table 6 presents the correlations among attitudes (toward bilingualism and toward the Japanese language), language proficiency (oral skills, writing skills, self evaluation in each language), and language use in English and Japanese.

The results indicate that language use and language proficiency in each language are highly correlated, while attitudes toward bilingualism and toward the Japanese language are not correlated with language use and language proficiency. Within language proficiency, three variables-- self evaluation, oral proficiency, and writing skills-- are strongly correlated with each other in each language. Among them, oral skills and language use in each language are more significantly correlated than are writing skills and language use in each language. Interestingly, language proficiencies between Japanese and English were negatively correlated for both oral and written abilities.

Table 6: Correlation among Attitudes, Language Proficiency, and Use

(n=63)	2	3	4	5	6	7	8	9	10
1. Attitudes toward Japanese language	.54**	-.007	.12	-.03	-.08	-.09	-.01	.13	-.13
2. Attitudes toward Bilingualism		.26*	-.03	.03	-.09	.06	-.09	.04	-.04
3. Self Evaluation English			.14	.60**	-.34**	.52**	-.42**	.42**	-.42**
4. Self Evaluation Japanese				-.31	.55**	-.16	.49**	-.34**	.34
5. Oral English					-.70**	.72**	-.62**	.86**	-.86**
6. Oral Japanese						-.52**	.76**	-.82**	.82**
7. Writing English							-.39**	.59**	-.59**
8. Writing Japanese								-.70**	.70**
9. English Use									-1.0**
10. Japanese Use									

** p<.01 *p<.05

Two multiple regression analyses were used to determine which variables affected oral proficiencies in English and Japanese most significantly. Each oral proficiency score in English and Japanese was used as the criterion variable in each regression model and all other variables-- attitudes toward bilingualism and toward the Japanese language, self evaluations in both languages, oral proficiency in the other language, language use, and writing scores in both languages-- were entered as predictor variables. The results of the first straight regression analysis reveal that the use of English, and the self evaluation of English proficiency, are significant predictors of the oral proficiency score of English at $p < .0001$, and writing skills are also a significant predictor at $p < .001$ (see table 7). The results of the second multiple regression analysis indicate that the use of Japanese is the single most significant predictor of the oral proficiency score of Japanese at $p < .001$. Two other predictors, the score of the self evaluation in Japanese and the score of the writing samples in Japanese, of the oral proficiency score of Japanese are significant at $p < .05$ (see table 8). Two analyses of variance of regression were used to examine the overall effectiveness of the model in the predicting criterion in each language: English and Japanese. The results of ANOVA of regression indicate a significant prediction accuracy: $F(7, 62) = 46.82, p < .0001$ on English oral proficiency and $F(7, 62) = 29.21, p < .0001$ on Japanese oral proficiency.

Table 7 : Stepwise Multiple Regression on Oral Proficiency in English

Variables	β	SE β	t	p	R	R ²	ΔR^2
Step 1							
Use (English/ Japanese)	.59	.08	7.03	<.0001	.86	.74	
Step 2							
Self evaluation English	.52	.12	4.21	<.0001	.90	.81	.07
Step 3							
writing skills English	.22	.08	2.79	<.01	.91	.83	.02
Step 4							
Self evaluation Japanese	.38	.15	2.53	<.05	.92	.85	.02
Step 5							
Oral proficiency Japanese	.30	.24	2.79	NS	.92	.85	NS
Step 6							
Attitudes toward Bilingualism	.11	.13	.85	NS	.93	.86	NS
Step 7							
Writing skills Japanese	.09	.12	.78	NS	.93	.86	NS
Step 8							
Attitudes toward Japanese language	.12	.20	.61	NS	.93	.86	NS

Table 8 : Multiple Regression on Oral Proficiency in Japanese

Variables	β	SE β	t	p	R	R ²	ΔR^2
Step 1							
Use (Japanese/ English)	.23	.06	4.11	<.0001	.82	.67	
Step 2							
Self evaluation Japanese	.26	.08	3.30	<.002	.87	.76	.09
Step 3							
writing skills Japanese	.14	.64	2.24	<.05	.88	.77	.01
Step 4							
writing skills English	.07	.05	1.43	NS	.89	.79	.02
Step 5							
Oral Proficiency English	.09	.07	1.26	NS	.89	.79	NS
Step 6							
Self evaluation English	.07	.08	.86	NS	.89	.79	NS
Step 7							
Attitudes toward Bilingualism	.06	.11	.57	NS	.89	.79	NS
Step 8							
Attitudes toward Japanese language	.02	.07	.57	NS	.89	.79	NS

4.7 Summary of findings

This study has attempted to compare the three different bilingual education programs in order to answer the research questions. A brief summary of these comparative analyses are presented in table 8. The results of the Pearson product-moment correlations coefficient and the multiple straight regression analyses demonstrate that the use of the language, self confidence in language skills, and writing skills in the language can be strong predictors of language proficiency. The factors affecting the oral proficiencies in each language are summarized as follows:

4.8 Factors affecting English oral proficiency

Frequency of the use of English
Self evaluation of English proficiency
Writing skills in English

4.9 Factors affecting Japanese oral proficiency

Frequency of the use of Japanese
Self evaluation of Japanese proficiency
Writing skills in Japanese

Table 9: Summary of the Comparative Analyses

	Programs			Difference
	Ai (EIP) (Japan)	Bay () (California)	Cook (TBE) (Massachusetts)	
Attitudes toward Bilingualism	positive	positive	positive	NS
Attitudes toward Japanese language	positive	positive (highest)	positive	p<.01
Use of English	low	high	moderate	p<.0001 (A<C<B)
Use of Japanese	high	moderate	moderate	p<.0001 (B<C<A)
Self Evaluation of English skills	moderate	moderate	moderate	NS
Self Evaluation of Japanese skills	moderate	moderate	moderate	NS
Oral Proficiency in English	low	high	moderate	p<.0001 (A<C<B)
Oral Proficiency in Japanese	high	moderate	high	p<.0001 (B<A, C)
Written Proficiency in English	low	high	moderate	p<.0001 (A<C<B)
Written Proficiency in Japanese	high	moderate	high	significant (B<C, A)

5. Discussions

This study illuminates the differences and similarities of the students in the three different types of bilingual education programs with respect to their attitudes, language use, and language proficiency and the bilingual environments created by the three schools. In this section, the major findings of this study are related to the review of literature. The discussion centers around language proficiency, language use, and attitudes of the students. The influence of the family, community, and school, is then discussed in relation to these three central issues.

5.1 Language proficiency

The results of this study indicate that the students in this study have developed their bilingual proficiencies in and outside the school. That is, the students at Bay School and Cook School, in the US, learn academic content in English at school while they learn similar content in Japanese at Japanese Saturday Schools. The students at Bay School and Cook School use English and Japanese as the medium of communication at school and at home. As a result, they have developed bilingual proficiency. The students at Ai School in Japan are taught 50 % of their academic subjects in English

at school, and most of them attend *juku* [a private tutoring institute] to develop academic language proficiency in Japanese. Although the students at Ai School have fewer opportunities to be exposed to English than do children in English-speaking countries, they develop language proficiency in English as well as in Japanese. These results suggest the importance of educational support outside school in the fostering of bilingual abilities.

5.2 The amount of time exposed to each language in and outside the school

As demonstrated in the previous section, language proficiency and language use are highly correlated. It is interpreted that language proficiency is enhanced by use of the language. Previous studies which investigated different types of bilingual programs have suggested that the amount of instruction in each language at school affects the language development of students in bilingual education (Christian et al., 1997; Ramirez et al., 1991; Thomas & Collier, 1997; Genesee, 1995). In this study, however, the amount of use of each language for instruction at school does not correlate with the students' language use and proficiency in both languages.

Christian et al. (1997) state that the ratio between L1 and L2 for instruction is important in fostering language proficiency in both languages in Two-Way bilingual education programs. At Bay School, where both English- and Japanese-speaking students learn together, the Japanese language is taught only 30 minutes a day. However, Japanese-speaking students in this program maintain a high proficiency in Japanese. The students' proficiency in Japanese can be attributed to their attending Japanese Saturday Schools. All but one participant at Bay School attend a Japanese Saturday School to maintain their Japanese language skills. Students at Cook School also demonstrate a high proficiency in Japanese even though they do not learn Japanese at school. Again, they attend Japanese Saturday School to maintain their Japanese language skills gained from education in Japan. For Japanese students in the US, attending Japanese school seems to be an important factor in maintaining language proficiency and academic skills in Japanese.

In the Canadian immersion programs, students gained native or near native fluency in both languages, and academic skills of their grade level, at the end of the 5th grade (Lambert & Tucker, 1972). In contrast, the students in the 5th grade in the English Immersion Program (EIP) at Ai School have not yet acquired native or near native fluency in English. It is speculated that the delay in English language development of the students in the EIP is due to the lack of time for instruction in English in school and most especially to the small amount of time students are exposed to English outside school. In addition, the amount of time exposed to the target culture can be another factor affecting the language proficiency of the students at Ai School.

5.3 Dissimilarity between English and Japanese

Recent research suggests that dissimilarity between two languages should be taken into account when discussing the language proficiency of bilingual individuals (Omaggio, 1993; Brisk, 1998). Japanese and English have a number of differences in phonology, syntax, and pragmatics, but students in this study have overcome these dissimilarities. However, most students mentioned that learning two different writing systems is a big challenge for them. It was observed that printed language they see in their daily lives seemed to affect the students' literacy development. The students in the US were weak at *Kanji*, and the students in Japan were weak at spelling English words in general. It is important to note that the students spell words which they see in daily life more accurately, regardless of the length and the complexity of the words, than they do words which they rarely see. These results suggest the importance of environmental print in developing the biliteracy of children.

5.4 The relationship between two languages

Many researchers have found that literacy-related abilities are interdependent across languages and, therefore knowledge and skills acquired in one language are potentially transferred to the other (Goldman, 1985; Cummins and Nakajima 1987; Canale, Frenette, Belanger, 1988; Verhoeven, 1991). The results of this study indicate that there was no positive relationship between the language abilities of the students in Japanese and those in English. Moreover, their language abilities in the two

languages were negatively correlated. That is, students who scored high in English tended to score low in Japanese and vice versa. Although it was frequently observed that the students across the three programs transferred their academic knowledge acquired in one language to the other, their language skills did not seem to transfer the same way. A possible explanation for that might be the balance of their language abilities between the two languages. The majority of Japanese-English bilingual students at Ai and Cook School have a dominant language (Japanese), and they are still developing their second language (English) skills. At this stage, as Cummins (1979) suggests, students might not be able to transfer language skills because their bilingual proficiency has not reached a certain level of competence which enables them to use language skills in both languages. Another possible explanation is that the three programs in this study do not provide educational intervention to reinforce the weak language of the students. Therefore, the students tend to use the stronger language in any context and, consequently, they lose the balance between the skills of the two languages.

5.5 Language use

Previous studies reveal that bilingual children's language use is affected by the attitudes toward both languages of people around the children. In other words, numerous factors, such as parents' expectations, peer pressure, and a general preference for one language above the other in the society at large, affect the language use of bilingual children (Landry & Allard, 1992; Saunders, 1983; Romaine, 1995; McCollum, 1998). Landry and Allard (1992) nicely summarized the influence of people around the children on the children's bilingual development. In their ethnolinguistic vitality theory and counter-balanced theory, Landry and Allard (1992) stress the importance of a balanced use of two languages to develop bilingual abilities. The results of this study support this idea.

5.6 Balanced use of English and Japanese

In the English Immersion Program (EIP) at Ai School, scarce opportunities for contact with English native speakers besides the English immersion teachers, and peer pressure, hinder the students from using English at school. Although the students have positive attitudes toward bilingualism and want to be bilingual, they do not want to stand out from others. Some students mentioned that they believe that speaking good English means showing off their abilities, and Japanese culture frowns on this. In addition, the community does not create an environment in which bilingual students can use both languages even though community members have favorable attitudes toward the English abilities of the students in the EIP. In other words, the EIP students' ethnolinguistic vitality as English-Japanese bilinguals is not strong in the community. Recent literature suggests that Japanese people in general have a preference for English over Japanese and, therefore, Japanese people like to use English words; however, this was not observed in this study. Students in the EIP at Ai School did not use English words in Japanese, nor did they use English language to communicate with each other.

In the Japanese Bilingual Program (JBP) at Bay School, parents of the students have positive attitudes toward bilingualism and, therefore, they decided to enroll their children in the Japanese bilingual program. The school creates a supportive atmosphere for Japanese-speaking students and the students can use both languages with no peer pressure at school. They use whichever language they like in any situation. As a result, their English and Japanese use is well balanced. One of the characteristics of the language use of the Japanese-speaking students at Bay School is the students' frequent code-switching. Some of the students have language proficiencies in English and Japanese of almost the same level so that the students seemed to be comfortable speaking either language. In addition, the people around the students, such as parents, siblings, classroom teachers, and Japanese sensei, are all bilingual to some degree so that the students can use both languages when communicating with those people. Bilingual children are likely to develop bilingual abilities at Bay School, in which ethnolinguistic vitality is strong.

The students at Cook School usually changed from one language to the other depending on the addressee. Since most people around the Japanese students at Cook School are either English or Japanese monolinguals, the students choose the one language which the addressee understands. As a result, they separate the languages, based on the person to whom they speak. These situations provide the Japanese students with a bilingual environment in which they use both languages in a well-balanced manner. However, children's bilingualism is not supported by the school and family

members. That is, the school has an English-only orientation and parents place more importance on Japanese than on English.

5.7 Attitudes toward bilingualism

This study adapted attitudes to bilingualism survey questionnaires used in Baker's 1992 study. There are three points in which the results of this study differ from those of Baker's study.

5.8 Baker's study on attitudes toward bilingualism

Baker (1992) found that language background (language use), the type of school, contact with youth culture in the first language, and language abilities in both languages significantly affected the attitudes of Welsh students toward bilingualism and toward the Welsh language. Among these variables, Baker states that the student's language background, which refers to language use on a daily basis in Baker's study, is the single most important effect on attitudes toward bilingualism.

5.9 Language use

The results of this study show that students' language use strongly influences their language proficiency. However, language use and attitudes toward bilingualism are not significantly correlated with each other in this study.

5.10 Language proficiency

Baker (1992) reports, in his study of 797 students in Wales, that the students' language abilities and attitudes toward bilingualism were correlated. However, Baker used students' self ratings as a measure of language ability. Therefore, in his study, the students' self confidence in the languages, rather than their language abilities, were shown to be correlated with their attitudes toward bilingualism. Although there is no significant correlation between the language abilities and attitudes toward bilingualism of the students in this study, the correlation between the self evaluation in English and attitudes toward bilingualism is stronger than the relationship between oral / written skills and attitudes toward bilingualism. It can be speculated that the students' perception of their language skills affects their attitudes toward their own bilinguality.

5.11 Type of school

In contrast with Baker's 1992 study which indicates that schoolchildren's attitudes toward bilingualism are affected by the type of school they attend, the results of this study do not clearly demonstrate the influence of the type of school on the attitudes of students toward bilingualism. The students in each program demonstrate similar attitudes toward bilingualism and toward the Japanese language. That is, they have positive attitudes toward bilingualism and, therefore, want to maintain language proficiency in both languages. Students at the three schools seem to consider the Japanese language their mother tongue, and they believe that learning Japanese is important for them. None of them commented that English is more valuable than Japanese.

5.12 Youth culture

Although the three factors suggested by Baker--language background, language abilities, and type of schools-- did not significantly affect the attitudes of the students in this study toward bilingualism and toward their first language, the influence of youth culture was found in the Japanese Bilingual Program (JBP) at Bay School. The Japanese-speaking students in the JBP like to watch Japanese TV programs and collect Japanese goods, and also some of the students mentioned that they like Japanese pop music. The students at the JBP participate in various events held in Japan Town, San Francisco. However, since all the participants at Bay School have a similar degree of contact with Japanese youth culture, and also because there is a lack of quantitative data about cultural contact, the results of this

study cannot detect the causal relationship between youth culture and the attitudes toward the Japanese language.

An interesting finding of this study is the influence of mass media on the attitudes of the Japanese students toward the Japanese language. A number of students at Bay School mentioned that they appreciate their bilingual abilities because they can watch a popular TV program, POKEMON, in both languages. This result implies that youth culture created by the mass media can play an important role in fostering positive attitudes toward different cultures and motivating children to learn a new language.

5.13 Additive bilingualism

Children develop good attitudes toward bilingualism if they think bilingualism is an advantage for them (Lambert, 1977; Romaine, 1995). The students at Bay School demonstrated an additive view of bilingualism. Since their academic skills are as good as those of their English-speaking classmates, they believe that learning Japanese does not hinder their academic development in English. In addition, their Japanese abilities are much higher than those of the English-speaking students and, therefore, the students gain self-esteem when learning Japanese at school. In their interviews, they said they appreciate their bilingual abilities. The students at Cook School did not mention bilingualism as an advantage in their current situation. However, they said their bilingual abilities will be useful in the future. The students at Ai School also mentioned that bilingualism will be an advantage for them in the future. The majority of students at Ai School said that they appreciated their bilingual abilities when they participated in the US trip. Some students said that being bilingual is useful because they can use a language which the people around them do not understand when they want to say something they do not want other people to know. Thus, authentic situations that make use of bilingual abilities enhance the positive attitudes toward bilingualism of the students.

5.14 The reasons to be bilingual

The necessity of being bilingual motivates students to keep learning two languages (Brisk, 1998; Irujo, 1998). In the case of the students at Bay School, keeping good relationships with their relatives in Japan is one of the main reasons to maintain Japanese proficiency. On the other hand, the students at Cook School maintain language skills in Japanese because they will go back to Japan soon. Although their main reasons for maintaining their Japanese abilities differ, students at Bay and Cook School are motivated to learn Japanese while they learn in English-medium schools. The students at Ai School have a different reason to develop their bilingual abilities. Their experiences of the trip to the US and other countries have motivated them to learn English. In addition, some students mentioned that they would like to live in a foreign country in the future. However, in daily life, they did not seem to feel the necessity to develop bilingual abilities.

The results of this study indicate that children's motivation to learn two languages, and their attitudes toward the languages, are likely to be determined by dramatic experiences, such as traveling and living abroad, as well as by daily environments. The favorable attitudes of the students in the three programs toward bilingualism can be attributed to their exposure to languages and culture different than their own. In addition, their learning experiences in bilingual education programs can be an important factor in shaping their attitudes.

6. Conclusions

For the conclusion of this study, the model of the relationships among language proficiency, language use, and language attitudes is proposed. Although the literature suggests that the attitudes and language use of bilingual students affect their bilingual proficiency, this study indicates that the attitudes toward bilingualism do not directly affect bilingual proficiency. Instead, this study demonstrates the importance of a balanced use of the two languages on bilingual development. Family, school, and community support is crucial in order to maintain that balanced use of the two languages. Figure 1 illustrates that if the school, community, and family creates positive attitudes in the students, then the students have more opportunities to use two languages, which lead to higher bilingual

proficiency. There will be more opportunities to use the languages for two reasons: 1) the students will be looking more for chances to use the languages, and 2) the school, community, and family will work harder to create bilingual environments. It is important to clarify that family, school, and community should cooperate with each other to create these environments, which will then lead to the bilingual proficiency of the students.

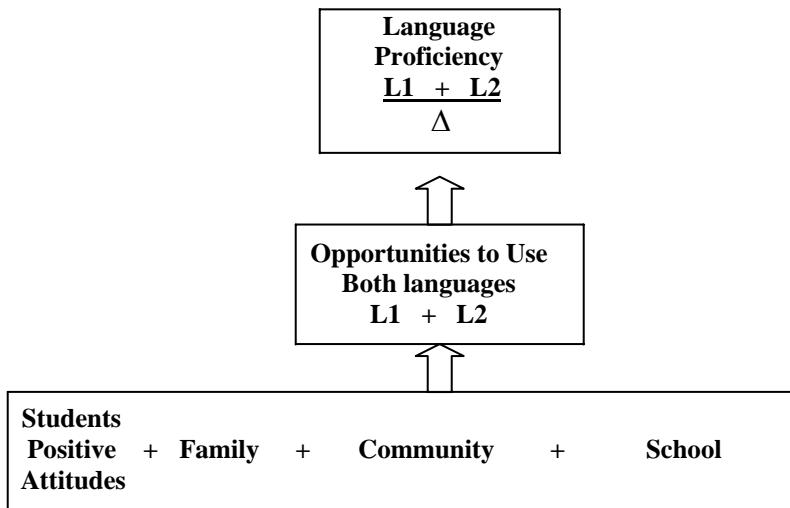


Figure 1: Relationships among Attitudes, Use and Proficiency

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ISB4: Proceedings of the 4th International Symposium on Bilingualism

edited by James Cohen, Kara T. McAlister,
Kellie Rolstad, and Jeff MacSwan

Cascadilla Press Somerville, MA 2005

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ISBN 978-1-57473-210-8 CD-ROM
ISBN 978-1-57473-107-1 library binding (5-volume set)

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