

# **The Influence of Partial English Immersion Programs in Taiwan on Kindergartners' Perceptions of Chinese and English Languages and Cultures**

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## **Bio Data**

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## **Abstract:**

Many Taiwanese scholars and parents raise concerns about the influences of the partial English immersion programs (EIPs), indicating EIPs might lead children to devalue their Chinese language (L1) and Chinese culture (C1), and favor English (L2) and Western culture (C2). This study explores whether a typical partial English immersion program leads children to devalue their L1 and C1. Also, this study shows how linguistic and cultural values are implicitly and explicitly represented in the partial EIP, and how these representations influence children's attitude toward the English language (L2) and Western culture (C2), in addition to their L1 and C1. This study uses both quantitative and qualitative methods to investigate these research concerns. The results show that, overall, the majority of partial EIP children do not devalue their L1 and C1.

**Key words:** language immersion program, EFL, bilingual education, ESL, culture identity, early childhood education

## **Introduction**

In Taiwan, kindergarten partial English immersion programs (EIPs) have become very popular choices for young children to learn English. In partial EIPs, English is the primary language used for communication and instruction. Except for some subjects (e.g., Chinese language class, art, and physical education), all subjects are taught mainly in English. Additionally, English is required as the primary communication language among teachers, students, and staff in the school. The rationale of partial EIPs is based upon the belief that one learns a second language by actually communicating through it. The integration of language instruction with content instruction helps children pick up a second language naturally and unconsciously (Cloud, Genesee & Hamayan, 2000; Genesee, 1994). Therefore, most partial EIPs in Taiwan adopted a so-called “no Chinese-speaking” policy. That is, children cannot speak Chinese in the school unless they get permission. The major goal of this policy is to construct an environment in which children will have motivation to use English in multiple contexts.

The “no Chinese-speaking” policy and its implementation has triggered many concerns about their influences on children’s cultural and language identity. Many Taiwanese scholars and parents raised concerns about the influences of the partial English immersion programs (EIPs), indicating EIPs might lead children to devalue their Chinese language (L1) and Chinese culture (C1), and favor English (L2) and Western culture (C2) (Ruan, 1996; Zhuang, 2003; Chen, 2003). Therefore, the purpose of this study is to investigate whether a typical kindergarten partial EIP leads children to devalue their L1 and C1.

## **Literature Review**

Immersion is defined as a method of foreign language instruction in which the foreign language is the major vehicle for content instruction and communication. The first immersion program was begun in 1965 in the community of St. Lambert, which is near Montreal, Quebec. The St. Lambert immersion program was the product of the joint efforts of parent groups, educational authorities, and researchers who sought to improve French as a second-language teaching method for English-speaking children who live in Quebec (Doyle, 2005). Since then, extensive research has been conducted to study the influence of immersion programs. The research findings consistently demonstrate positive outcomes: students achieve high levels of proficiency in their second language (L2) without long-term cost to their progress in their first language (L1) and other academic subjects (Cummins, 2005; Genesee, 1994; Pagan, 2005; Vanderkelen, 1995). The apparent success of the immersion programs and the dissatisfaction with the traditional second language programs led immersion programs to grow internationally. Various forms of immersion education are operating worldwide and have been well researched. These include examples in Europe (Bel Gaya, 1994; Johnstone, 2001), Australia (Chappell & DeCourcy, 1993), Japan (Bostwick, 1994), and the U. S. (Zehr, 2005). In Taiwan, language immersion programs for young children have existed for more than 10 years. However, because teaching young children English is not suggested in the “Taiwanese kindergarten curriculum guideline”, research studying English immersion programs was not available in Taiwan.

## **Strategies of Dealing with Language and Cultural Confrontations**

If people view language practices in themselves as embodying acts of identity, learning an L2 may engage learners in identity construction and negotiation. When children are in the process of identity negotiation, they may shift their ways of viewing different languages (L1 and L2) and cultures (C1 and C2) and their ways of thinking about themselves in social context. Rudimin (2003) indicated that in the process of identity negotiation, some individuals may adopt three general cultural strategies: assimilation, acculturation, and preservation. In assimilation, children give up their C1 style and values and then adapt to C2. In acculturation, children adapt to the lifestyle and values of the C2, but at the same time maintain their own cultural styles and values. In preservation, children completely reject the styles and values of the C2 and preserve their C1. These categories help one to understand children's possible reactions when they have contact with different languages and cultures.

Meanwhile, a group of researchers suggest that learners' cultural strategies are not "either/or" but instead a matter of coexistence, hybridization, and blending. When children have contact with different cultures and languages, they are working through contradictions and dilemmas among different cultures. They are experiencing, reacting, and trying to move beyond these contradictions. In these processes, children need to project a centered culture where they can negotiate the differences between different cultures and languages. Some researchers refer to this centered culture a third culture (Kramsch, 1993), and some call it hybrid culture (Bhabha, 1994; Gutierrez, 1995; Kanno, 2003; Pieterse, 1994). Basically, these two concepts are very similar. Both concepts indicate that there is a third place to synthesize elements of different cultures and negotiate a mutual understanding of each culture. In other words, the third culture is

a place for learners to negotiate cultural differences and construct their own understanding of the different cultures (Kramersch, 1993). Different from the concept of a third culture, which emphasizes the third place as a synthesis of two cultures, the concept of hybrid culture stresses that the third place is not the combination, accumulation, fusion, or synthesis of various components, but energy filled with different forces within which different cultures encounter and transform each other (Bhabha, 1994; Piller, 2002). Therefore, the concept of "hybridity" emphasizes the dynamism of the way learners deal with input, establish priority, and make decisions. In the EFL context, many researchers suggest that learners are more likely to adopt hybrid cultural strategy (Galindo, 1996; Pavlenko & Blackledge, 2004).

### **Factors Affecting Cultural Strategies**

The elements that determine which strategy EIP children will adopt can be discussed in terms of psychological and social constructs. Tajfel (1982) claimed that a person's cultural identity and values are mainly affected by the psychological construct, which includes a cognitive component (a cognitive awareness of the culture's features), an evaluative component (a positive or negative value connotation attached to the culture) and an affective component (a sense of emotional attachment to the culture). The weight of these three constructs in determining children's cultural identity may vary, but children's attitudes toward culture can be seen as the product of the interplay among these three constructs (Ellemers, Kortekaas & Ouwerkerk, 1999; Mcnamara, 1997). Having a cognitive understanding of L1 and L2 and C1 and C2, children also have evaluative attitudes and affective emotions attached to these different languages and cultures. Although children's cultural strategies are influenced by the interaction of

these three components, affective attachment to the culture seems to play the final determining role in deciding which cultural strategy children will adopt (Phinney, 2000, 2003). Children who evaluate L1 and C1 as having lower status than L2 and C2 may develop a stronger affective commitment to L2 and C2. However, the tendency for children to favor a culture or a language is primarily determined by their commitment to it (Ellemers, Korekas & Ouwerkerk, 1999).

In addition to psychological factors, Scovel (2000) suggested that social distance and psychological distance are two major constructs determining children's cultural attitudes. In Schumann's (1978) definition, social distance means the relationship between the social group to which learners belong to the target-language social group. Psychological distance means the distance between the learner and the target-language community, resulting from psychological factors. Factors affecting social factors include the status and congruence of two cultures, learners' attitudes toward the cultures, and the intended length of residency in the L2 areas. Factors affecting psychological distance include the resolution of language shock, culture shock, culture stress, and motivation. The stress and anxiety of coping with L2 difficulties and dealing with a new culture may result in EIP children's resistance to L2 and C2. When encountering conflicts between L1 and L2 and C1 and C2, EIP learners may feel discomfort, and they may either reject their C1 (to adapt to the new culture) or preserve their C1.

In addition, Baker (2002) indicated that children's understandings of a culture and the values attached to it may largely come from the family and community contexts. Because EIP children's cultural strategies are not only determined by schools but also

by larger social contexts including family and community (Brofenbrenner, 1979), it is necessary to discuss the influential factors of cultural strategies in the family and community contexts. The distinction between notions of additive and subtractive bilingualism is a useful one when considering the influence of families and community. If the native language (L1) is dominant or receives support from family and community, the acquisition of a second language (L2) is not likely to replace the individual's first language. If the native language (L1) has a low status and little support from the family and community, the acquisition of L2 and C2 may replace or undermine an individual's perception of L1 and C1 (Baker, 2000, 2002). Therefore, if the native culture is the mainstream culture and is supported by the family and community, EIP children will not easily assimilate to the new culture.

### **Studies Regarding Immersion Students' Linguistic and Cultural Attitudes**

When young children acquire L2 and C2 in EIPs, will children devalue their L1 and C1? Several studies have been conducted to examine immersion learners' perceptions of L1 and L2 and of C1 and C2. This research studied immersion students' perceptions from a number of perspectives: (1) the participating students' perceptions of themselves, L1 speakers, and L2 speakers; (2) their attitudes toward L1 and L2; (3) their attitudes toward and actual use of L2 and C2.

For example, Genesee & Gandara (1999) summarized research and indicated that studies of immersion students' language and culture attitudes have yielded complex results. In 1972, Lambert & Tucker conducted a longitudinal evaluation of the St. Lambert Experiment immersion programs to evaluate French immersion students'

attitudes toward L1 and L2 and C1 and C2. Students' attitudes were elicited by asking immersion students and non-immersion counterparts to rate themselves, English-Canadians (L1 speakers), French-Canadians (L2 speakers), and European French people (L2 speakers) on 13 bipolar dimensions of different types (e.g., friendly-unfriendly, ugly-good looking, etc.). The results showed that French immersion students' perceptions of themselves are very favorable and show no signs of ambiguity. Immersion students' views of their own ethnolinguistic groups reflect as much pride as do those of English group children. There is no sign that immersion students are socially lost or in search of an identity (Lambert & Tucker, 1972).

Cziko, Lambert, and Gutter (1979) and Genesee (1977), using multidimensional scaling techniques to examine the ethnic identity of immersion students in the different grades, also yielded a similar result. In these studies, the respondents were asked to make global assessments of similarities between different pairs of persons (e.g., English Canadian: myself, English Canadian: bilingual French Canadian, etc.). The findings suggested that immersion students develop positive attitudes towards the English Canadian culture and language (L1 and C1), as do students attending English language programs. At the same time, immersion students have been found to perceive English Canadians in general and themselves in particular as being more similar to French Canadians (L2 speakers) (Cziko, Lambert, Sidoti & Tucker, 1978). More recently, Cazabon, Lambert & Hall (1993) found that by third grade, immersion learners develop friendships in the classroom quite independent of race or ethnicity. In a follow-up study, Lambert & Cazabon (1994) indicated that one aspect of the effectiveness of the Amigos program (a two-way Spanish-English immersion program in the U.S.) is the

immersion students' positive attitudes toward both the program and two languages (L1 and L2). Also, this study found that "a clear preference for having friends from both (Anglo and Hispanic) groups and for mixed ethnic/racial classrooms as opposed to ethnically segregated schoolings. Dowes (2001) investigated Japanese immersion students' attitude towards Japan and West cultures. The attitude towards Japan and the West Questionnaire (AJWQ) was constructed to examine how the English immersion students subjectively perceive themselves in relation to Japan and the West. The results of the subscale comparison indicated that in addition to more flexible cross-cultural attitudes, the immersion students display a stronger sense of Japanese cultural (C1) identity than the comparison group. Other studies that show gain in cross-cultural understanding and in appreciation of the other's culture and language in two-way immersion programs in the U.S. include Christian (1994), Macfarlane & Wesche, (1995), Rolstad (1997), and Cazabon, Nicoladis & Lambert (1998).

In summary, there have been positive social outcomes associated with participation in immersion programs as attested by immersion students' views and attitudes of L1, L2 and C1, C2. Research findings indicated that immersion learners display the same favorable perceptions of their L1 and C1 as their non-immersion counterparts. Learning L2 in immersion programs does not seem to threaten students' valuations and attitudes toward L1 and C1. Further, immersion students tend to view L2, L2 speakers, and C2 more positively than non-immersion students. However, because most of the literature studying immersion students' linguistic and cultural attitudes is produced in Western countries (e.g., Canada, the U.S.), research studying language immersion in different cultural contexts has sometimes yielded different results. For example, Clachar

(1997) found that the increase of students learning English is seen as a real threat to student's Puerto Rican culture and national identity.

In Taiwan, there are some similarities in the way immersion programs are established in Taiwan and in Western countries. For example, in Canada and in Taiwan, the status of L2 (English or French) is high. The L2 is a powerful asset for students in the workforce and is becoming more important with globalization. Language immersion programs fostering children's bilingual abilities help their students in becoming more eligible for future jobs. Also, most immersion programs in these countries are voluntary programs. Because of the high cost, students participating in immersion programs are mainly from middle-class families. In terms of these similarities, research results, derived from the studies conducted in western countries, may be applicable to Taiwan's EIPs. However, the socio-cultural and political conditions are different in Taiwan and in western countries. For example, in Canada, many French-speaking people have strived to maintain their language rights and the availability of French service. Therefore, French language (L2) learners have much access to the language and its culture. However, in Taiwan, English (L2) is only a foreign language, which is seldom used outside the school context. Differences of language condition and the contexts for the acquisition of L2 may result in children's different reactions. Therefore, it is necessary to conduct research studying the influence of EIPs on children's perceptions of L1 and L2 and C1 and C2 in Taiwan's context.

## Methodology

The research site of this study, Northwest school, is one of the most famous private partial EIP networks in Taiwan. One of the main reasons to choose this Northwest school as the research site is its typicality in Taiwan. There are about 10 large-scale EIPs for young children in Peach City (the second biggest city in Northern Taiwan). Most EIPs in Peach City had been created by staff left from a pioneering EIP, which is referred to here by the pseudonym EIP-Gift. These people made use of their experiences and combined their own ideas to create competitive EIPs or to help other people manage new EIPs. The nationwide network of Northwest schools is one of these offshoots. In fact, the nationwide network of Northwest schools can be seen as EIPs that split from the EIP-Gift because all key persons in Northwest schools are previous staff from the EIP-Gift school. Therefore, the training and the ways these persons run EIPs are very similar in many aspects. Because the local Northwest school in this study used the same teaching materials, curriculum planning, and teacher training as those of the nationwide network of Northwest schools, many scenes that happen at this Northwest school also happen in other EIPs. Therefore, the results deriving from this study have plausible applicability to other EIPs in Taiwan.

Not all classes in Northwest school participated in this study. I was only allowed to do observations and interviews regularly in four classes. I purposely chose four classes whose students were of different ages and had studied in Northwest for different lengths of time. The backgrounds of the four major participating classes are summarized as follows:

Class 5-6A	Children are about 5 to 6 years old and have studied at
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	Northwest for nearly 2 years.
Class 6-7A	Children are about 6 to 7 years old and have studied at Northwest for almost 3 years.
Class 6-7F	Children are about 6 to 7 years old and have studied at Northwest for nearly 1 year
Class 3-4B	Children are about 3 to 4 years old and have studied at Northwest for 5 months.

Children, teachers, and parents in these four classes were the main participants in this study. My observations at this school were conducted from 9:00 AM to 4:00 PM every school day for about six months. Except for being a substitute teacher when English teachers were absent, I did my observation regularly in different classrooms.

Data-gathering techniques used in this study include: extensive classroom observations, audio-taping, note-keeping, artifact-reviewing, and both structured and open interviews with teachers, parents, and children. I began with some general and important aspects in mind (i.e., language use, activities, interaction). As some important themes and issues emerged, I purposely observed different classrooms during different periods of time to gain more information about specific themes.

Focused and open-ended interviews have been suggested as very informative in investigating individual's feelings toward a language or its culture (Lambert, 1987). Interviews involved both formal, structured interviews, and informal conversation. To triangulate findings derived from observation and informal interviews, I conducted four main structured interviews: In the first and second interview, the language-preference

interview, I asked children about their preferences for different activities conducted in L1 and L2, respectively. In the third and fourth interviews, the culture-preference interview, I asked children to compare their preferences for pictures from C1 and C2. Although some over-arching (“grand tour”) structured questions were used to guide some interviews, interviewees were always allowed flexibility to express their opinions and to talk about topics they liked.

The four structured interviews were mostly conducted in the playground so that children would not feel pressured or anxious. Children would often approach me in the playground, and I would interview them when they did so. Most children approaching me were from classes in which I did my regular observations. To interview children who were underrepresented in my sample, I sometimes purposely approached children. Meanwhile, if several children approached me at the same time, I gave priority to children from classes that were underrepresented in my sample. The number of children interviewed in each class was listed in Appendix A. Because some children did not have the patience to complete the whole interview, the total number of interviewees asked about each language and cultural preference was not the same.

Both quantitative and qualitative techniques were used to do the analysis. Quantitative techniques were mainly used to analyze children’s answers to the four structured interviews, which include: (1) two language-preference interviews, and (2) two culture-preference interviews. The quantitative results were then triangulated with findings derived from the qualitative analysis of other sources of data (e.g., observation of children’s behavior, language use, activities and interviews of parents and teachers

about their perceptions). Except for the structured interview, the rest of the analysis was mainly analyzed qualitatively.

To ensure interpretative validity, I took the data and tentative interpretation (i.e., vignette) back to the people from whom they were derived and asked them about the accuracy and completeness of the statements I made. I did this continuously throughout the study to ensure that I represented the participants' perspectives. Also, I gave each participant (including parents, teachers, and school staff) a sheet of paper describing the private web site in which I published my tentative findings. I encouraged them to visit the web site and to comment on my findings. Moreover, I obtained my data from multiple sources, used multiple methods to check my emerging findings, observed the same phenomena repeatedly, and checked for deviations from patterns to ensure that the conclusions drawn in this study are credible.

## **Results**

Results and discussions of partial EIP children's preference for L1 and L2 and C1 and C2 are described in the following sections:

### **First Interview: Children's Liking for L1 and L2 in Different Activities**

In this interview, I directly asked children how much they liked L1 and L2, respectively in the activities of watching TV, listening to songs, speaking, and listening to stories. Language-related activities in these interviews are closely related to children's daily lives so that young children can construe interview questions easily. Based upon EIP opponents' concerns that partial EIP children would prefer L2 and devalue L1,

children’s responses were calculated in terms of L2-preference scores. The method of calculating the L2-preference score involved the following categories (Appendix B):

“+1”: children preferred L2 to L1.

“0”: children held no preference. They either liked both or disliked both L1 and L2.

“-1”: children preferred L1 to L2.

These three ordinal categories were used to quantify children’s preference for L2 compared to L1. Table A shows the sum of children’s responses for each L2-preference score category.

**Table A**

**Summary of L2-Preference Scores in the Second Interview**

Activity	L2-Preference Scores		
	+1	0	-1
Watching TV	1	27	15
Listening to songs	5	31	7
Speaking	4	28	11
Listening to 1 stories	1	34	7

A statistical test, the Kolmogorov-Smirnov (K-S) test, was used in this study to test partial EIP opponents’ concerns (i.e., Would children prefer L2 and devalue L1?). In this test, I set the null hypothesis as:  $H_0: S(x) \geq F(x)$ , which means that children do not have a tendency to prefer L2 (or C2). The null hypothesis was expressed this way in order to explicitly test partial EIP opponents’ concerns. If the concerns were supported by children’s responses, the null hypothesis would be rejected, thereby yielding the alternative conclusion that children do have a tendency to prefer L2 [ $H_A: S(x) < F(x)$ ].

Table B shows the data pattern from Table A translated into the theorized and observed cumulative proportions required by the K-S test. In Table B,  $F(x)$  represents the hypothesized theoretical distribution; and  $S(x)$  represents the observed distribution. The paired rows of numbers under the heading “ $H_0$ ” in  $F(x)$  and  $S(x)$  are the cumulative proportion of  $F(x)$  and  $S(x)$ , respectively. Results of the K-S test for four activities are listed in Table B.

**Table B**

**K-S Test of Children’s Preference for L2 over L1 in Different Activities**

Activities	$H_0$			$T_+$	N
Watching TV	F-1=0.33	F0=0.67	F1=1	0	43
	S-1=0.35	S0=0.98	S1=1.0		
Listening to songs	F-1=0.33	F0=0.67	F1=1	0	43
	S-1=0.16	S0=0.88	S1=1.0		
Speaking	F-1=0.33	F0=0.67	F1=1	0.08	43
	S-1=0.26	S0=0.91	S1=1		
Listening to stories	F-1=0.33	F0=0.67	F1=1	0	42
	S-1=0.17	S0=0.98	S1=1		

\* $p < .05$ . Note. To reject the  $H_0$ , the value of  $T_+$  needs to be larger than 0.186 (for  $n=43$ ) or larger than 0.188 (for  $n=42$ )<sup>1</sup>.

$$T_+ = \sup [F(x) - S(x)]$$

$H_0$ :  $S(x) \geq F(x)$  against the alternative hypothesis

$H_A$ :  $S(x) < F(x)$  (tendency to prefer L2)

For none of the activities shown in Table B was the K-S test statistically significant. Thus, the results failed to reject  $H_0$  in all activities. In other words, children who preferred L1 or held a neutral preference outnumbered those who preferred L2. Children did not show, as partial EIP opponents have worried, devaluing attitudes toward L1 in the activities of watching TV, listening to songs, speaking, and listening to stories.

### **Second Interview: Children’s Preference for L1 or L2 in Different Activities**

To provide more evidence to consolidate the above findings, I conducted another interview in which I explicitly asked children to express their preference for L1 or L2 in the same activities. Despite efforts to force a comparison, some children stated that they had no preference. Because of responses like that, the L2-preference score defined in Table L1 (Appendix B) was applicable here, too. The results of this interview were also summarized in terms of the L2-preference scores. The numbers of children whose responses can be described with each L2-preference score are shown in Table C.

**Table C**

#### **Summary of the L2-Preference Scores in the Third Interview**

Activity	L2-Preference Scores		
	+1	0	-1
Watching TV	5	17	19
Listening to songs	8	24	9
Speaking	6	24	11
Listening to	7	19	15

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stories

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Table D shows the data pattern from Table C translated into the theoretical and observed cumulative proportions required by the K-S test. Results of the K-S test for four activities are listed in Table D.

**Table D**

**K-S Test for Language Preference in Different Activities**

Activities	H <sub>0</sub>			T+	N
Watching TV	F-1=0.33	F0=0.67	F1=1	0	41
	S-1=0.44	S0=0.88	S1=1.0		
Listening to songs	F-1=0.33	F0=0.67	F1=1	0.113	41
	S-1=0.22	S0=0.81	S1=1.0		
Speaking	F-1=0.33	F0=0.67	F1=1	0.065	41
	S-1=0.27	S0=0.85	S1=1		
Listening to stories	F-1=0.33	F0=0.67	F1=1	0	41
	S-1=0.37	S0=0.83	S1=1		

\*p <.05.

Note: To reject H<sub>0</sub>, the value of T+ needs to be larger than 0.1905 for n=41

$$T+ = \sup [F(x) - S(x)]$$

H<sub>0</sub>: S(x) ≥ F(x) against the alternative hypothesis

H<sub>A</sub>: S(x) < F(x) (tendency to prefer L2)

For none of the activities shown in Table D was the K-S test statistically significant.

Thus, in the second interview, the results again failed to reject H<sub>0</sub> in all activities.

Children do not show a tendency to prefer L2 to L1 in the activities of watching TV, listening to songs, speaking, and listening to stories. In other words, children did not show, as partial EIP opponents have feared, devaluing attitudes toward L1 in these activities.

To consolidate the activity-specific findings from the above interviews, I created a composite L2-preference score, which aggregates across all activities the information provided above. Three aggregations were formed. The first sums children's L2-preference scores across the four activities, utilizing children's responses in the first interview. The second does the same but utilizes children's responses in the second interview. The third, conceived as a grand aggregate, sums eight responses (first-interview responses to the four activities and second-interview responses to the four activities). For these three composites, an aggregate L2-preference score less than zero indicates that children preferred their first language in more activities than its second language. Table E summarizes these aggregate L2-preference scores across the 41 children interviewed, and it reports a statistical test addressed to the question of whether children in the population prefer L2 activities.

**Table E**

**Wilcoxon Signed Rank Test for the Aggregate L2-Preference Scores**

**in the Second and Third Interviews**

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Measurement sources	N	N	for Observed	Walsh	average T
			Wilcoxon Median	of Estimate	of the
			test	the	sample population

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			data	median	
Sum of the second interview	41	24	0	-0.50	64.5*
Sum of the third interview	40	28	-0.5	-0.50	113*
Sum of the second and third interviews	39	31	-1.00	-1.00	134*

Note.  $H_0: \text{Mdn}=0$  \* $p < .05$ .

T is the Wilcoxon statistic. The Walsh average, which is utilized in the Wilcoxon test, is even more resistant to outliers than the sample data median. As is evident in Table E, all estimates of population medians were negative (signifying a tendency to prefer the first language). In each of the three Wilcoxon tests presented in Table E, the null hypothesis is that the population's median equals zero was rejected as statistically untenable; in other words, the median differed significantly from zero (in the negative direction for the second interview, the third interview, and these two interviews combined). Because it would be improbable for such a pattern to occur in a sample drawn from a population whose median was zero or above, no support is given to the conclusion that, in the larger population, children prefer L2 activities. On the contrary, this finding is consistent with, but not proof of, a claim that children prefer L1 activities.

In addition to the data derived from the interviews with children, I also interviewed parents to get their perceptions of their children's preferences for L1 and L2. In the interviews, many parents (speaking in Mandarin) told me that their children did not like

watching English TV or listening to English tapes after school. The following are examples of parents' comments:

M4-7F: "At the beginning, I will try to ask them to read English books, listen to English tapes, and watch English cartoons. However, they seem not to like it. Now, I do not do that anymore."

M3-7F: "Chinese books are more attractive to him."

M1-7F: "When they watch TV...I switch to 'English caption,' and they will say, 'Why is it in English?' Then they will ask me to switch back to Chinese captions and sounds. I switch to English caption purposely. Before they went to kindergarten, they did not react to it. Now that they are older, they object to it. They prefer to listen to Chinese...(laughter)...regarding this point...they are in Taiwan, not in a foreign country."

M1-6A: "I don't feel specifically that he likes [L2] or [C2]. But, I think he likes to watch [L1] programs."

In addition, Mandarin teachers also indicated that, compared to children in traditional kindergartens, children in this school tended to have more interest in Mandarin language classes. As the teacher of Mandarin explained (speaking in Mandarin):

"I feel that children here have more interest in learning Mandarin. In the traditional kindergarten, every class is conducted in Mandarin. So, they may feel it is nothing special. But, here, most classes use English, and children finally catch a chance to speak Mandarin in Mandarin class. Compared to children in traditional kindergartens, children are more willing to speak and participate in activities in Mandarin class."

I observed several scenes, which also demonstrated children's preference for Mandarin:

The Mandarin teacher gives children's homework to them. She calls children by their English names.

"But I want to be called in Chinese names" a child says.

"But, I don't know your Chinese name. It is not on the homework...Oh! Yes, it is here." Then the Mandarin teacher calls the child by his Chinese name.

According to Northwest parents, children tended to prefer L1 to L2 when they did activities at home. According to Mandarin teachers, children showed strong interest in

learning Mandarin. In my observations, children did not want to be called by their English names in Chinese classes. Children often showed a strong interest in learning Chinese materials and speaking Chinese in Mandarin class. All these cases showed that partial EIP children do not devalue their L1.

### **Third Interview: Children's Cultural Preference**

Another concern commonly raised by Taiwanese scholars is that partial EIP children will devalue their own culture. This section is mainly devoted to a discussion of this concern. Because children might not clearly understand the meaning of Chinese culture and Western culture, the method I used to discover children's cultural preference was to show children a set of pictures from C1 and C2, each pair of pictures representing a particular aspect of culture. I asked each child the following question: "Do you prefer Chinese (pointing to the C1 picture) or Western (pointing to the C2 picture)?" When I asked children their preference for a culture, I always pointed to pictures to help them understand my question. Then, I asked each child to explain his or her reasons by asking: "Why do you prefer this one?" Responses to this interview were calculated in terms of the C2-preference score. The way of calculating and categorizing this C2-preference score is in Table L2 (Appendix B). I attempted in the wording of my questions to elicit from children an unambiguous preference between pictures from C1 and C2. Despite my attempts, many children stated that they liked (or disliked) both pictures from C1 and C2. Therefore, the category of "0" (no preference) in C2-preference score was still applicable in this interview. The numbers of children whose responses could be categorized with each C2-preference score are shown in Table F.

**Table F****Frequencies of C2-Preference Scores**

Cultural Aspects	C2-Preference Score		
	+1	0	-1
Words	26	9	13
Flags	16	8	24
Religion	25	8	13
Food	31	10	6
People (Children)	11	9	26
Architecture	21	7	19
People (Adult)	16	9	21
Art	27	8	10

Table G shows the data pattern from Table F translated into the theoretical and observed cumulative proportions required by the K-S test. Results of the K-S test for children's culture preference for eight cultural aspects [word, flag, religion, food, people (children), architecture, people (adult), and art] are also shown in Table G.

**Table G****K-S Test for Cultural Preferences in the Fourth Interview**

Cultural Aspects	H <sub>0</sub>			T+	N
Word	F-1=0.33	F0=0.67	F1=1	0.21*	48
	S-1=0.27	S0=0.46	S1=1		

Flag	F-1=0.33	F0=0.67	F1=1	0	48
	S-1=0.50	S0=0.67	S1=1		
Religion	F-1=0.33	F0=0.67	F1=1	0.21*	46
	S-1=0.28	S0=0.46	S1=1.0		
Food	F-1=0.33	F0=0.67	F1=1	0.33*	47
	S-1=0.13	S0=0.34	S1=1.0		
People (Children)	F-1=0.33	F0=0.67	F1=1	0	46
	S-1=0.57	S0=0.76	S1=1.0		
Architecture	F-1=0.33	F0=0.67	F1=1	0.11	47
	S-1=0.40	S0=0.55	S1=1.0		
People (Adult)	F-1=0.33	F0=0.67	F1=1	0.01	46
	S-1=0.46	S0=0.65	S1=1.0		
Art	F-1=0.33	F0=0.67	F1=1	0.27*	45
	S-1=0.22	S0=0.4	S1=1.0		

\*p <.05.

Note.  $T+ = \sup [F(x) - S(x)]$

$H_0$ :  $S(x) \geq F(x)$  against the alternative hypothesis

$H_A$ :  $S(x) < F(x)$  (tendency to prefer C2)

With regard to word, religion, food, and art as cultural aspects, the null hypothesis ( $H_0$ ) is rejected. That is, children have a tendency to prefer C2 to C1 in the aspects of word, religion, food, and art. In terms of these cultural aspects, children might devalue their C1 due to their preference for C2. To further investigate children's overall preferences for pictures from C1 and C2, I created a composite C2-preference score, which aggregates across all cultural aspects the information provided above. I summed

children's C2-preference scores across all eight aspects, utilizing children's responses in the interview. For this composite, an aggregate C2-preference score less than zero indicates that a child preferred pictures from C1 in more cultural aspects than those from C2. Table H summarizes the aggregate C2-preference score.

**Table H**

**Wilcoxon Signed Rank Test for the Sum of the C2-Preference**

**Score in the Fourth Interview**

Measurement source	N	N for Wilcoxon test	Observed of the data	median Walsh average of the sample estimate of population Median	T
Sum of the fourth interview	47	30	0	1.00	333.5*

Note.  $H_0: \text{Mdn}=0$  \* $p < .05$ .

T is the Wilcoxon statistic

As is evident in Table H, an estimate of the population median was positive (signifying a tendency to prefer the pictures from C2). The median differed significantly from zero. Because it would be improbable for such a pattern to occur in a sample drawn from a population whose median was zero or below, support is given to the conclusion that, in the larger population, children prefer C2 in these cultural aspects.

However, these results should be viewed with caution. The pictures used in this cultural preference interview involved many variables that are confounded with culture (e.g., color, facial expression, gender, etc.). Children might prefer one picture to the other simply because they like the color, image, or shape of the picture. Thus, to understand children's reasons for preferring one picture, I also asked children to state their reasons for their preference. In their answers, some non-cultural reasons sometimes appeared in their answers (e.g., I like the American flag because it has more colors). Nevertheless, some children did reveal their unfamiliarity or negative perception toward C1 (e.g., I don't like Chinese lion dance because it is ugly; I don't like Chinese calligraphy because it is ugly). Some children showed their positive feeling toward L2 and C2 (e.g., I prefer American people to Chinese people because American people can speak English; I prefer American people to Taiwan people because American people are smarter). If non-cultural reasons were the major basis for children to prefer one culture over the other, the result might not completely represent children's cultural preference. In other words, to conclude that children prefer C2 to C1 in this interview is not completely realistic; more interviews and observations regarding children's cultural preference need to be done to triangulate the finding.

#### **Fourth Interview: Children's C1-Evaluations in Pictures from C1**

In the above interview, because my questions were designed to force a comparison between C1 and C2, some children might choose pictures from C2 because they preferred them. Because the selection of a preference was forced, the choice of a picture from C2 did not necessarily indicate dislike of the corresponding picture from C1. Children's appreciation of C2 (or even a preference for it) might not diminish their

liking for C1. To have a clearer idea of children’s perceptions of C1, I conducted another interview in which I directly asked children whether they liked the pictures from C1. Children’s responses on this interview were summarized in terms of a C1-devaluation score. The method of calculating and categorizing C1-devaluation score is similar in conception to the C2-preference score previously used in Table L3 (Appendix B). The numbers of children whose responses could be described with each C1-devaluation score are shown in Table I.

**Table I**

**Summary of C1-Devaluation Scores in the Fifth (C1-Evaluating) Interview**

Cultural aspects	-1 (Like C1)	+1 (Dislike C1)
Words	29	19
Flag	35	13
Religion	21	27
Food	25	23
People (Children)	24	24
Architecture	32	16
Art	28	20
Toys	44	4
People (Adults)	26	22

Table J shows the data pattern from Table I translated into the theoretical and observed cumulative proportions required by the K-S test. Results of the K-S test for

children's culture preference for nine cultural aspects [words, flags, religion, food, people (children), architecture, art, toys, people (adults)] are also in Table J.

**Table J**

**K-S Test in the C1-Evaluating Interview**

Cultural Aspects	H <sub>0</sub> :	T+	N
Words	F-1=0.5	F1=1.0	0
	S-1=0.60	S1=1.0	
Flag	F-1=0.5	F1=1.0	0
	S-1=0.73	S1=1.0	
Religion	F-1=0.5	F1=1.0	0.06
	S-1=0.44	S1=1.0	
Food	F-1=0.5	F1=1.0	0
	S-1=0.52	S1=1.0	
Children	F-1=0.5	F1=1.0	0
	S-1=0.5	S1=1.0	
Architecture	F-1=0.5	F1=1.0	0
	S-1=0.67	S1=1.0	
Art	F-1=0.5	F1=1.0	0
	S-1=0.58	S1=1.0	
Toys	F-1=0.5	F1=1.0	0
	S-1=0.92	S1=1.0	
Adults	F-1=0.5	F1=1.0	0
	S-1=0.54	S1=1.0	

\*p < .05

Note. To reject  $H_0$ , the value of  $T_+$  needs to be larger than 0.176092 for  $n=48$

$$T_+ = \sup [F(x) - S(x)]$$

$H_0$ :  $S(x) \geq F(x)$  against the alternative hypothesis

$H_A$ :  $S(x) < F(x)$  (tendency to prefer C2)

For none of the cultural aspects shown in Table J was the K-S test statistically significant. Thus, the results failed in all the cultural aspects to reject  $H_0$ . In terms of this interview, it means that children liking pictures from C1 outnumber those disliking them. Even though the result of the fourth interview showed that children preferred pictures from C2 in some aspects, children are not found devaluing C1 overall. Therefore, children's appreciation of C2 does not diminish their appreciation of C1.

To consolidate the various findings from the above interview, I created a composite C2-preference score, which aggregates across all cultural aspects the information provided above. I summed children's C2-preference score across nine cultural aspects, utilizing children's responses in the interview. For this composite, an aggregate C2-preference score less than zero indicates that a child liked its C1 in more cultural aspects than C2. Table K summarizes this aggregate C2-preference score.

### Table K

#### Wilcoxon Signed Rank Test for the Sum of the C2-Preference

#### Score in the Fifth Interview

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Measurement	N	N	for Observed	median Walsh	average T
source		Wilcoxon of	the	sample estimate	of the

---

	test	data	population median
Sum of the fifth 48 48 interview		0	-2.00 300.5*

Note.  $H_0: \text{Mdn}=0$  \* $p < .05$ . \*\* $p < .01$ . T is the Wilcoxon statistic.

As is evident in Table K, the estimate of the population median was negative (signifying a tendency to like pictures from C1). The median differed significantly from zero. Because it would be improbable for such a pattern to occur in a sample drawn from a population whose median was zero or above, no support is given to the conclusion that, in the larger population, children dislike C1 in these cultural aspects.

In summary, in terms of children’s perceptions of C1 and C2, the results of my cultural preference interviews showed that even though children prefer C2 in some cultural aspects, they do not devalue their C1. However, because some children answered these interviews based upon non-cultural factors in pictures, these findings need to be triangulated with other sources of data.

According to my interviews with Northwest parents, most parents did not perceive their children as devaluing L1 and C1. The following opinions of two parents resemble most interviewed Northwest parents’ opinions (speaking in Mandarin):

F1-7A: “I can definitely say that the influence on their perception of L1 and C1 is almost zero. They can clearly divide the cultures into two--Chinese is Chinese, and English is English...after learning English for these years. My two children give me an impression. That is, Northwest is Northwest and home is home. The two are different. When they are at Northwest, they are at Northwest.”

M1-4B: “Basically, children are very interested in everything...they will not divide them into Chinese or English. For them, if you can tell them a story, they will have an

interest in the story no matter if it is in English or in Chinese. What attracts them is not due to the language or culture but due to the content...I do not think my children's attitudes toward L1 and C1 changed much.”

Most Northwest parents thought that their children either divided domains clearly into L1 and C1 and L2 and C2 or that they were mainly interested in content regardless of the language and culture. No matter what the reason is, almost all Northwest parents told me that they did not perceive obvious devaluation in their children's attitudes toward L1 and C1. In short, the results have shown that, overall, partial EIP children do not devalue their L1 and C1.

## **Discussion**

This investigation has failed to find evidence that partial EIP children devalue their L1 and C1. On the contrary, this study found that EIP children have a tendency to prefer L1 to L2. In terms of children's attitudes toward C1 and C2, this study found that EIP children sometimes show more favorable attitude toward C2. However, their appreciation for C2 does not diminish their liking for C1. In other words, teaching English in partial EIPs is not a threat to children's valuation and perception of L1 and C1. Nevertheless, this study revealed that some L1 and C1 devaluing messages were transmitted implicitly and explicitly through the no-Chinese-speaking policy and its implementation in the partial EIP. As to the question why partial EIP children do not devalue their L1 and C1, the following discussion offers an explanation in the Northwest school context.

In the partial EIP, many scenes suggested that children with good L2 abilities were highly valued, but children whose strengths were primarily in L1 abilities did not get the same attention and reward. Because of the no-Chinese-speaking policy, many teachers set up rules to reward children who often speak English and to punish children who speak Chinese at inappropriate times. As a result, speaking Chinese was often related to punishment, warnings, teasing, embarrassment, and shame. Children with good English abilities often gained power, high status, rewards, and respect. These different kinds of feedback and treatment could have given children a cognitive understanding that the status and value of Chinese and its culture are lower than those of English and its culture in partial EIP. Nevertheless, except for a few individual cases, a majority of the EIP children did not devalue their L1 and C1. The critical factors in discussing why Northwest children did not devalue their L1 and C1 are included below.

### **Psychological Distance of L2**

The first reason that explains why partial EIP children do not devalue L1 and C1 might be due to children's psychological distance to the L2. That is, children's incapability, stress, and anxiety in using English. Several Northwest mothers told me that their children did not like to watch English videotapes or read English books because they could not understand them. In my observation, many cases showed that children had difficulty using English to express their feelings and opinions. The difficulty of comprehending and speaking English seemed to create psychological distance between Northwest children and L2 (or C2), and further prevent any preference for L2. In other words, in the structured language-preference interviews, children's preference for L1

might be due to their confidence in and capability of using L1 rather than their preference for the language itself.

### **Affective Component of Language and Culture**

Compared to children's resistance and irritation regarding L2, children's affective feelings to L1 are mostly positive. In partial EIPs, children's use of English was often not voluntary in the school. Children used English simply to avoid punishment or warnings from their peers or teachers. In my observations, several scenes showed that children were punished, teased, or ignored simply because they could not use English to express their feelings. Hence, many children, who were incapable of English, sometimes showed anxiety when they were required to speak English. In this study, I found that some individual children, especially those who were incapable of speaking English and have studied at Northwest for a long time, revealed obvious resistance and irritation regarding L2 and things related to L2. These children often showed extreme devaluing attitudes toward L2 and things related to it. They liked everything regarding L1 and disliked everything regarding L2. This result echoed the findings of some previous immersion studies, which revealed that immersion students' attitudes toward L2 and C2 become less favorable after a long period of L2 intensive learning (Gardner & Lysynchuck, 1990).

Also, because of the no-Chinese-speaking policy, children were not allowed to speak Chinese in most situations. However, children were better able to use Chinese to

articulate their opinion and to express their feelings. Thus, when children really wanted to say something but did not know how to say it in English, they would find intimate friends and converse with them in Chinese privately. Therefore, in terms of the affective feeling, Northwest children tended to prefer L1 because it was a language to which they had full access and a language that symbolized trust and intimacy.

### **Lack of Cognitive Understanding of L2 and C2**

Because most Taiwanese partial EIP children study English for utilitarian reasons - to develop English communication ability for future academic and career success, English instruction in partial EIPs mainly focused on daily vocabulary and sentence patterns, which seldom touched the in-depth issue of culture. Also, Northwest is a partial English immersion program; many courses (e.g., art, physical education, Mandarin, music, etc.) were conducted in Mandarin. Children still had many chances to speak and to learn L1 and C1 (e.g., in Mandarin course). Without significant contact with L2 and C2 in multiple contexts, school experience itself might not be sufficient for partial EIP children to understand L2 and C2, and further to prefer L2 and C2.

### **Supports of L1 and C1 in Family and Community**

Personnel in partial EIPs might convey the message that L2 and C2 had a higher status than L1 and C1. However, this kind of valuing could be enhanced or diluted if the family and community were to provide similar or different messages. In my interviews, partial EIP parents told me that they viewed English (L2) as important, but they also viewed Mandarin (L1) as important. They thought that the advantage of Taiwanese children was not only in their proficiency in English but also in their proficiency in

Chinese languages (e.g., Mandarin and Minna). They sent children to Northwest simply because they thought their children did not have many chances to learn and to practice English outside the school. They thought that they were able to teach their children Chinese languages but were incapable of teaching them English. Furthermore, most parents believed that learning L2 had a critical period. Therefore, they sent their children to partial EIP to “catch up” the critical time.

With respect to attitudes toward C1 and C2, Northwest parents did not show obvious valuing or devaluing attitudes because they did not think teaching cultural knowledge was essential at school. They thought cultural knowledge could be gained outside the school context - both C1 and C2. They thought that although partial EIP children tended to have more time and occasions for learning C2 through English songs, stories, rhymes, and materials in the school, children could gain more understanding of C1 from the family and community<sup>2</sup> contexts. For example, they provided abundant opportunities for their children to gain an understanding of C1 through celebrating Chinese festivals, viewing Chinese films, socializing with Chinese friends, and reading Chinese storybooks. Hence, Northwest parents thought that the amount of contact with C1 and C2 for their children was comparable. In other words, most partial EIP parents viewed L1 and C1 as important as L2 and C2; they valued and provided children with abundant L1 and C1 knowledge at home or community context. So, in terms of an ecological view, the devaluing messages regarding C1 and L1 transmitted in the Northwest were not supported in children’s family and community contexts. So, the negative influence on children’s preference for L1 and C1 became diluted.

## **Hybrid Culture**

Finally, the most salient reason that partial EIP children did not devalue their L1 and C1 appears to stem from the hybrid nature of culture and language in the partial EIPs. This study found that the culture and language with which Northwest children had contact on a daily basis was not a pure form of a single culture or language but a hybrid form, which included components of L1 and L2 and C1 and C2, and meshing among them. In children's and teachers' use of language, code mixing (CM) and code switching (CS) among English, Chinese, and dialects (Minna or Hakka) were everywhere in both their oral and written texts. Also, the culture of Northwest involved the meshing features of C2 and C1. In Northwest, English names, English tags, English learning materials, and foreign teachers could be seen everywhere.

Nevertheless, because the majority of people at Northwest were Taiwanese, the culture constructed by these Taiwanese people was full of the features of Chinese culture - eating Chinese food, wearing Chinese-style clothing, celebrating Chinese festivals, and talking Chinese-community topics. In addition, because not all partial EIP people were capable of using English to communicate with each other completely, L1 was still commonly heard and spoken privately and publicly at Northwest. Therefore, in the partial EIP, the cultures and languages with which the partial EIP children had contact were not clearly separated ones but a hybrid form created through negotiation and transformation of components of L1 and C1 components of L2 and C2. Therefore, one explanation for partial EIP children to not devalue their L1 and C1 might be due to their difficulty in distinguishing components of L1 and C1 from components of L2 and C2. As one Northwest parent said:

“ I don’t think that my children can distinguish L1 and C1 from L2 and C2 clearly... as long as the activity is interesting..attractive...they will like it no matter what the language or culture is.”

### **Implications and Limitations**

Although this study showed that most partial EIP children do not devalue their L1 and C1, it would be too optimistic to conclude that partial EIPs in Taiwan have no negative influences on children’s valuation of their L1 and C1. In this study, children studying in partial EIPs were mostly from middle- and upper-middle-class families. The applicability of these results to children from lower socioeconomic backgrounds needs further research. Also, in this study, most children’s home language and culture were valued by their families and community members and were consequently resistant to devaluation. It cannot be assumed that the findings in this study would apply to children whose language is not strongly supported in their family and community contexts. Because staff members in this partial EIP used much Chinese for communication and instruction on some occasions, it is not as pure a dose of EIP as some programs may provide. Therefore, the results of this study may not be applicable to a full-English immersion program, in which Chinese is mainly forbidden. Moreover, the target group of this study was kindergarteners. Children in this age range probably were less capable than older children of discerning differences between cultures and languages, making evaluation of them, and developing preference for them. As children proceed in their journey in the partial EIP, they continuously construct and re-construct their values, which may result in changing perceptions toward L1 and C1.

Therefore, it is necessary to conduct a longitudinal study focusing on older children to gain deeper understanding of the longer-term influence of partial EIPs on children's perceptions of their L1 and C1. Finally, the focus of this study was on children's valuation of L1 and C1, and other aspects such as academic, linguistic, developmental, and social influences were not investigated. To give an in-depth and overall examination of partial EIPs in Taiwan, research regarding these aspects should be conducted.

## References

- Baker, C. (2000). *The care and education of young bilinguals*. Clevedon: Multilingual Matters.
- Baker, C. (2002). Bilingual education. In R. Kaplan. (Ed.), *The Oxford handbook of applied linguistics* (pp. 229-244). Oxford: Oxford University Press.
- Bel Gaya, A. (1994). Evaluating immersion programmes: The Catalan case. In: C. Laurén (Ed). *Evaluating European immersion programmes. From Catalonia to Finland. Vaasa (Finland)* (pp. 27-46). University of Vaasa.
- Bhabha, H. (1994). *The location of culture*. London: Routledge.
- Bostwick, R. M. (1995). *After 30 Years: The immersion experiment arrives in Japan*. *The Language Teacher*, 19 (5).
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Cabazon, M. E., Nicoladis, E., & Lambert, W. E. (1998). Becoming bilingual in the Amigos two-way immersion program. *Research Report 3*. Washington, DC: Center for Applied Linguistics.

- Calchar, A. (1997). Students' reflections on the social, political, and ideological role of English in Puerto Rico. *Hispanic Journal of Behavioral Sciences*, 19(4), 461-479.
- Cazabon, M., Lambert, W., & Hall, G. (1993). *Two-way bilingual education: A progress report on the Amigos program* (Research Rep. No. 7).
- Chappell, E. R., & DeCourcy, M. C. (1993). Using immersion to train primary school teachers of French in Australia. *Canadian Modern Language Review*, 49 (2 ), 316-37.
- Chen, S. (2003). Cong quan yu yan jiao xue tan tao you er ying yu jiao xue [Discussion of English teaching in kindergartens from the perspective of whole language]. *You Er Jiao Yu Nian Kan*, 15, 55-68.
- Christian, D. (1994). Two-way bilingual education: Students learning through two languages. *Educational Practice Report 12*. Washington, DC: Center for Applied Linguistics.
- Cloud, N., Genesee, F., & Hamayan, E. (2000). *Dual language instruction: A handbook for enriched education*. Boston: Heinle & Heinle.
- Cummins, J., (2005). *Immersion Education for the Millennium: What We Have Learned from 30 Years of Research on Second Language Immersion*. Retrieved October 18, 2005 from: <http://www.iteachilearn.com/cummins/immersion2000.html>
- Cziko, G. A., Lambert, W. E., Sidoti, N., & Tucker, G. R. (1978). *Graduates of early immersion: Retrospective views of grade 11 students and their parents*. Montreal, Quebec: McGill University.
- Cziko, G. A., Lambert, W. E. & Gutter, R. (1979). French immersion programs and students' social attitudes: A multidimensional investigation. *Working Papers on Bilingualism*, 19, 13-28.

- Downes, S. (2001). Sense of Japanese cultural identity within an English partial Immersion programme: Should parents worry? *International Journal of Bilingual Education and Bilingualism*, 4(3), 165–180.
- Doyle, G.. (2005). *French Immersion in Canada*. Retrieved October 18, 2005 from <http://www.ucs.mun.ca/~z06gkd/Immersion.htm>
- Ellemers, N., Kortekaas, P. & Ouwerkerk, J.W. (1999). Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, 29, 371-389.
- Galindo, D.L. (1996). Language use and language of attitudes: A study of border women. *Bilingual Review Revista-Bilingual*, 21(1), 5-17.
- Gardner, R.C. & Lysynchuck, L.M. (1990). The role of aptitude, attitudes, motivation, and language use on second-language acquisition and retention. *Canadian Journal of Behavioral Science*, 22(3), 254-270.
- Genesee, F. & Gandara, P. (1999, winter). Bilingual education programs: A cross-national perspective. *Journal of Social Issues*. Retrieved December 12, 2005 from:  
[http://www.24hourscholar.com/p/articles/mi\\_m0341/is\\_4\\_55/ai\\_62521562/pg\\_4?pi=scl](http://www.24hourscholar.com/p/articles/mi_m0341/is_4_55/ai_62521562/pg_4?pi=scl)
- Genesee, F. (1977). *French immersion and students' perceptions of themselves and others: An ethnographic perspective*. Montreal, Quebec: Protestant school board of Greater Montreal.
- Genesee, F. (1994). *Integrating language and content: Lesson from immersion*. National center for research on cultural diversity and second language learning.

- Gutierrez, K. D. (1995). Unpacking academic discourse. *Discourse Processes*, 19, 21-37.
- Johnstone, R. (2001). *Immersion in a second or additional Language at school: evidence from international research*. Report for the Scottish Executive Education Department.
- Kanno, Y. (2003). *Negotiating bilingual and bicultural identities: Japanese returnees betwixt two worlds*. N.J.: Lawrence Erlbaum Associates.
- Kramsch, C. (1993). *Context and culture in language teaching*. Oxford: Oxford University Press.
- Lambert, W.E. (1987). The effects of bilingual and bicultural experiences on children's attitudes and social perspectives. In P. Homel, M. Palij & D. Aaronson. *Childhood bilingualism: Aspects of linguistic cognitive and social development*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Lambert, W.E. & Cazabon, M. (1994). Students' views of the Amigos program. *Research Report 11*. Washington, DC: Center for Applied Linguistics.
- Lambert, W.E. & Tucker, G.E. (1972). *Bilingual education of children: The St. Lambert experiment (pp.197-223)*. Rolety, MA: Newbury House.
- Macfarlane, A. & Wesche, M.B. (1995). Immersion outcomes: Beyond language proficiency. *Canadian Modern Language Review*, 51(2), 250-274.
- McNamara, T. (1997). Theorizing social identity: What do we mean by social identity? Competing frameworks, competing discourses. *TESOL Quarterly*, 31(3), 561-579.
- Pagan, C. (2005). *English learners' academic achievement in a two-way versus a structured English immersion program*. Unpublished paper: Columbia University Teachers College.

- Pavlenko, A. & Blackledge, A. (2004) (Eds.). *Negotiation of identities in multilingual contexts*. Clevedon: Multilingual Matters.
- Phinney, J. (2000). Ethnic identity. In A. Kazdin (Ed.), *Encyclopedia of Psychology*, volume 3 (pp. 254-259). New York: Oxford University Press.
- Phinney, J. (2003). Ethnic identity and acculturation. In K. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp.63- 81). Washington, DC: American Psychological Association.
- Pierce, M. S. (2000). *Native/non-native speaker collaboration in a two-way bilingual education class*. Unpublished doctoral dissertation, Boston University, Boston, MA.
- Piller, I. (2002). *Bilingual couples talk: The discursive construction of hybridity*. Amsterdam: John Benjamins.
- Rolstad, K. (1997). Effects of two-way immersion on the ethnic identification of third language students: An exploratory study. *Bilingual Research Journal*, 21(1), 20-30.
- Ruan, B. (1996). You er ying yu ban sheng xing di sheng si [Reflection on the popularity of English classes for young children], *Guo Jiao Zhi You*, 48, 11-13.
- Rudmin, F. (2003). Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Review of General Psychology*, 7( 1), 3-37
- Schumann, J. (1978). *The pidginization process: A model for second language acquisition*. Rowley, MA: Newbury House.
- Scovel, T. (2000). *Learning new languages: A guide to second language acquisition*. Boston: Heinle & Heinle.
- Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge: Cambridge University Press.

Vander keilen, M. (1995). Use of French, attitudes, and motivations of French Immersion students. *Canadian Modern Language Review*, 51(2), 287-304.

Zehr, M. A. (2005). Two-way language immersion grows in popularity. *Education Week*, 24, 8-23

Zhang, X. (2003). wo hai zi bu hui shui zhong wen [*My child cannot speak Chinese-Reflections and suggestions for children's English immersion programs*] Taipei: Novice Parents.

### Appendix A: The Number of Children Interviewed in Each Class

The Number of Children Interviewed in Each Class

Class	Number of Children Interviewed
3-4B	2
5-6A	12
6-7A	10
6-7F	10
Others	9

### Appendix B: Analyses of Children's Language and Cultural Preference

#### Language-, and culture--preference interviews

Table L1: L2-Preference Scores of Responses on Two Language-Preference Interviews

Child's Response	Score Given to L2	Score Given to L1	L2-Preference Score (L2-L1)
Prefer (or like) L2	1	0	1-0=+1
Prefer (or like) L1	0	1	0-1=-1
Like both L1 and L2	1	1	1-1=0
Dislike both L1 and L2	0	0	0-0=0

Table L2: C2-Preference Scores of Responses on the Culture-Preference Interview

Child's Response	Score Given to C2	Score Given to C1	C2-Preference Score
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		(C2-C1)	
Prefer (or like) C2	1	0	$1-0=+1$
Prefer (or like) C1	0	1	$0-1=-1$
Like both C1 and C2	1	1	$1-1=0$
Dislike both C1 and C2	0	0	$0-0=0$

Table L3: C1-Devaluation Scores of Responses on the C1-Evaluating Interview

Child's Response	Score Given to C2	Score Given to C1	C1-Devaluation Score (C2-C1)
Dislike C1	1	0	$1-0=+1$
Like C1	0	1	$0-1=-1$
No liking or disliking for C1	1	1	$1-1=0$

<sup>1</sup> Adapted from Table I of Miller (1956). In W. J. Conover (1999). *Practical nonparametric statistics*, (pp. 547) New York: Wiley. [used by Conover with permission of the American Statistical Association].

<sup>2</sup> A few partial EIP parents used English to talk with their children at home. Some parents mainly bought books written in English for their children.