Psychological Factors within the Language Immersion Program

A Dissertation Submitted to the
University of Tsukuba

in Partial Fulfillment of the Requirements for the Degree
DOCTOR OF PHILOSOPHY (PSYCHOLOGY)

Academic Year 2001

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ABSTRACT

The successes of the language immersion program have been documented in over 40 years of research. While programs involving close language pairs have received considerable attention, there is a lack of data regarding the results of immersion programs involving typologically different languages, such as Japanese and English.

This thesis investigates the psychological factors underlying the language immersion program by looking at two different ethno-linguistic contexts, namely, English immersion in Japan and Japanese immersion in the United States. After examining the sense of Japanese cultural identity for English immersion students in Japan, specifically, the thesis focuses on academic achievement for students in both the English and Japanese immersion programs.

The results show that in addition to positive effects on sense of cultural identity in the Japanese context, for both educational contexts, the immersion program has produced positive academic effects. Moreover, this investigation into the factors responsible for the success of immersion demonstrates a number of significant relationships, which have important implications for the language immersion program.

ACKNOWLEDGEMENTS

I would like to thank my advisor Professor Kazuaki Sugihara, for

introducing me to immersion, and for his firm support throughout the period of the program. In addition, I am indebted to Professor Kunijirou Arai, and Professor Shigeo Sakurai, particularly in my last academic year when they provided indispensable guidance for my thesis.

Dr. R. Michael Bostwick, the bilingual director at Katoh School kindly provided insight into issues within immersion research, and has been a very positive influence during my six years at the University of Tsukuba.

I also wish to thank Sarah Jenkins, of the Anchorage School District for her gracious assistance and hospitality in Anchorage. I am very grateful also to Dr. Ray Fenton and the staff of the Anchorage School District Department of Assessment and Evaluation, and to Janice Gullickson, the World Languages Coordinator.

My senpai, Jun Sato deserves distinction for his limitless energy, friendship and patience while helping me to design my studies, and for pushing me to meet all of my deadlines.

The challenge of completing the program in Japan was made significantly more enjoyable thanks to the friendship and advice of my classmate Terry Joyce. I would also like to thank Junko Honda for her support and technical expertise.

Most importantly, I am indebted to my lovely wife, Kozue who has supported me at every turn of this process.

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Chapter 1. Theoretical background

1.1 Purpose of study

In line with the basic objective of developing bilingualism and biliteracy in majority-language students (Lambert & Tucker, 1972), the immersion approach to school-based foreign language instruction provides at least 50% of the academic curriculum through the medium of a foreign language.

Although over 40 years of research indicates that overall this approach is successful in promoting equivalent academic achievement and what has been termed an additive form of bilingualism-adding a second language without detriment to a primary language (Lambert & Tucker, 1972; Lambert, 1974; Thomas et al., 1993), when programs have not been successful, emphasis has been placed on pedagogical interventions (Cummins, 1998).

In order to identify important factors underlying the successes and failures of immersion, this thesis investigates some of the psychological factors within the language immersion program in two different ethno-linguistic contexts, namely, English immersion in Japan and Japanese immersion in the United States.

1.2 Research questions

The first research question that this thesis examines is a question that has been an important concern for Japanese parents of English immersion students in the first immersion program in Japan (Bostwick, 1999, 2000). When faced with the decision of choosing between the immersion and regular program at Katoh School parents have expressed concerns regarding whether children enrolled in the language immersion program will be able to maintain their sense of Japanese identity. While it is not clear to what extent this might simply be a reflection of prevailing notions concerning Japanese cultural identity in general, the possible relationship between cultural identity and bilingualism may provide some insight into why some programs may be more successful than others. Thus the first research question was, "*What effect does an English language immersion program have on Japanese students' sense of cultural identity? How does this compare with students in regular (non immersion) schools?"*

The second research question focuses on the success of the program, in this case, academic achievement. Academic achievement for students in both the English and Japanese immersion programs was examined, including first language development, mathematics, and a diverse battery of standardized academic tests. The second research question asks, "*What effect does an English immersion program in Japan, and Japanese immersion program in the United States have on students' academic achievement?"*

Having investigated two important questions related to the immersion

program, the third research question turns to ask, *"What factors might be responsible for students' success or failure in the immersion program?"* In seeking an answer to this question, relationships between certain variables found to be significant in the literature were examined. These studies looked at relationships between self-concept and situated identity, students' language networks, attitudes and motivations towards language learning and self-rated language proficiency.

1.3 Organization of the thesis

In Chapter 2 of the thesis, an overview of immersion education will be presented highlighting the core features of immersion, and types of programs.

Chapter 3 then tackles the first research question concerning sense of cultural identity beginning first with a review and then moving on to introduce a new questionnaire constructed in order to measure student's subjective attitudes towards Japan and the West (AJWQ). The AJWQ is then used to compare Japanese students' sense of identity in an English language immersion program to the identity of comparable non-immersion students in regular schools.

Chapter 4 deals with the second research question. Here academic achievement for immersion students in both Japan and the United States is examined, including measures of first language development.

For all of the studies in this chapter, immersion students are compared with students enrolled in comparable traditional programs.

Chapter 5 begins with an introduction of two research models that are significant for understanding the process of second language education, and some possible outcomes of bilingual education. Next, four studies are introduced which investigate some of the psychological factors hypothesized to related to immersion programs, including a review of relevant literature.

1.4 Expected outcomes

Few studies have considered the psychological impact of immersion programs that involve typologically different languages such as Japanese and English. Although this thesis does not completely rule out the possibility of linguistic influences arising from the structural differences between Japanese and English, it is hypothesized that psychological factors such as attitudes and motivations towards language learning are likely to be important in determining whether an immersion program has been successful, in addition to accounting for its failures. This is supported, for example, by previous research that has shown the importance of motivations and attitudes by parents and students towards the language learning process in influencing final academic achievement and second language development (Dweck & Elliot, 1983; Pintrich & De Groot, 1990; Schunk, 1981, 1985; Sung &

Padilla, 1985).

Chapter 2: Overview of immersion education

2.1 Bilingual experience and attitudes towards bilingualism

In North America, where bilingual education has been the topic of many heated debates, bilingual education programs have been geared to answer the need to provide adequate educational opportunities for minority language speakers, and to help mainstream them into all English speaking classrooms. While arguments regarding the effectiveness of such programs in California have resulted in their eventual demise (see Piatt, 1990 for the argument against, and Willig, 1985 for the argument for bilingual education), negative attitudes towards bilingual education in general persist.

Cummins (1981,1984) explains how in the past school systems have been the ones to blame for what has been called the ‘cognitive handicap’ of minority language children. While the child’s academic difficulties have been attributed to their bilinguality, Cummins argues that this handicap is a myth created by the school systems that have forced them to use the majority language in school in order to ‘give them equal opportunities’. In addition, he argues that the covert aim here is rather to assimilate the child, attempting to achieve social cohesion by the elimination of linguistic and cultural diversity.

Early fears resulting from studies that proposed severe disadvantages

for bilingual children were largely dispelled by the landmark Peal and Lambert study (1962) that compared monolingual children to bilingual children on both verbal and nonverbal measures of intelligence and achievement. Their results found no evidence of intellectual deficiency in bilingual children. The study controlled for socioeconomic status and language proficiency, and therefore corrected errors made in studies by their predecessors who found that the acquisition of two languages in childhood negatively affects intellectual development.

While many studies have formed a strong foundation of knowledge lending credibility to the goals of bilingual education, and have made strong arguments for certain advantages for bilingual students (Cummins, 1998; Robinson, 1998), other countries, such as Japan have remained skeptical that bilingual education “safe” for young learners. At the Second Katoh Gakuen (Katoh School) International Symposium on Immersion and Bilingual Education in Japan, Bostwick (1998) commented on commonly held misconceptions surrounding immersion. The first of these is the notion that a child has a limited capacity for language learning and that beginning a second language too early will adversely affect the child's first-language development. The second of these misconceptions is that academic learning through the medium of a second language produces far inferior results than learning through the child’s first language. Regarding the fact that these misunderstandings are often held and promoted by the so-called ‘experts’ in the field, he concluded, “The power of these misconceptions is that to some extent

they are intuitively appealing and have a kind of ‘common sense’ logic to them. This is why they are so hard to extinguish, and why they remain as ‘folk wisdom’ despite overwhelming evidence to the contrary”.

Numerous studies have shown that bilingual education is effective, and that children in well-designed programs acquire first language skills at levels that are at least as high as children in traditional programs (Cummins, 1989; Krashen, 1996; Willig, 1985). Although it is often thought that immersion, or similar bilingual programs are most suited for students with high intelligence, Genesee (1976) indicated that the role of intelligence in successful second language learning is minimal. According to the literature, immersion students generally perform academically at levels that are superior to traditional programs, with early total immersion favored over partial immersion (Genesee, 1987). In addition, other areas of research where immersion students have displayed advantages include divergent thinking, mental flexibility, concept formation, mental abilities, nonverbal problem-solving abilities, nonverbal intelligence, cultural understanding, global awareness, and attitude towards themselves (Robinson, 1998).

However, not all of the research regarding immersion has been positive. Although studies have shown that below-average children in immersion have attained the same proficiency in communication skills as above-average children (Genesee, 1976), others argue that immersion programs may not be suitable for children with learning difficulties

(Trites, 1981). By and large, students end up in immersion as a result of parent's motivations to have their child grow up with certain advantages. As a result, immersion parents may be more involved than parents of children in traditional programs. For this reason, some results of comparative studies have been controversial.

2.2 Immersion programs

In 1965, English-speaking parents in St. Lambert, Quebec worked in conjunction with a team of psychologists from McGill University and lobbied their local school board to begin a new type of language education program; one more suited to prepare their children for life in the predominantly French speaking society. The result was a total French environment in a kindergarten, in which the target language was used as the medium of instruction. A Spanish immersion program later followed at U.C.L.A. in the early 1970's and was based on the successful Canadian program (Cohen, 1974). Although the amount of instruction conducted in the target language varies in immersion programs, essentially the core of the program remains unchanged. The basic premise of immersion is that a second language is best learned as a medium of instruction, not as the object of instruction. There has been a great deal of literature devoted to the immersion approach, including the first program (Lambert & Tucker, 1972), results and challenges (Genesee, 1987; Johnson & Swain, 1997), evaluations of U.S. programs

(Met & Lorenz, 1997), implementation of partial immersion programs in Japanese, Spanish and French in the United States (Thomas et al., 1993), commonly-asked-questions (Met, 1987), and a summary of findings over thirty years of research (Cummins, 1998).

2.1.1 Core features of immersion education

Johnson and Swain (1997) presented eight core features of immersion programs. As they explain, "the prototypical immersion program would be one that, in terms of social context, curriculum, pedagogy, and teachers' and students' characteristics, implements each of these features to its fullest." They are summarized as follows:

1. The L2 is a medium of instruction
2. The immersion curriculum parallels the local L1 curriculum
3. Overt support exists for the L1
4. The program aims for additive bilingualism
5. Exposure to the L2 is largely confined to the classroom
6. Students enter with similar (and limited) levels of L2 proficiency
7. The teachers are bilingual
8. The classroom culture is that of the local L1 community

2.1.2 Models of immersion education

While all types of immersion teach core subjects through the medium of a second language, there are certain differences that distinguish immersion programs. These differences center on the amount of time each day that students are immersed in the target language, and the age in which students begin immersion.

In early immersion, classes begin in either kindergarten or first grade. The most common types are total and partial immersion. In early total immersion (the type developed for the first immersion program in St. Lambert), the entire curriculum is taught in the target language, usually for the first two grades. Students begin language arts in their native language from the third grade. The time spent in the target language then gradually decreases, reaching around fifty percent by the time the child enters junior high school. In early partial immersion, students typically spend half of the day taking subjects (e.g. math, science, social studies) in the second language, and both languages are used throughout the program.

Although most immersion programs begin in kindergarten or first grade, others start in junior or senior high school, and are known as late, or delayed immersion. When immersion begins in high school, for example, as students have already achieved a high level of proficiency in their first language, for the first year immersion classes may occupy as

much as 85 percent of the curriculum, and then drop to 40 percent for the remaining years (Hamers & Blanc, 2000c).

Another popular form of immersion is two-way, or dual immersion. In Spanish two-way immersion classrooms in North America, for example, majority language speakers are paired with minority language speakers (native Spanish speaking), thereby creating a cultural and linguistic bridge where students can help each other during the part of the day in which their language is used (for more about two-way immersion programs, see Christian, 1996).

It is important to note that the decision regarding which subjects are taught in the second language, in addition to the form a new immersion program takes, are determined by the local school district.

2.1.3 Success vs. failure

While there have been repeated claims for the academic successes of immersion (Collier, 1992; Genesee, 1987), there have been relatively few reports of the failures. One of the exceptions to this is Cummins (1998) who discusses the problems of student dropout within the French immersion programs in Canada. In particular, Cummins explains that two problems have stood out in the implementation of these programs. They are the quality of French oral and written skills that students attain, and the relatively high dropout rate in some immersion programs. Cummins suggests that both these problems may be attributed to the type of

pedagogy predominant in the early French immersion programs in Canada, where teacher-centered classrooms have not afforded students the opportunity to use the language for problem solving or creative classroom activities. Cummins (1998) points to research by Keep (1993) who argues that both academic and behavioral difficulties represent reasons why students change to the regular program.

Success may be defined simply as being able to achieve the goals of immersion-to develop bilingualism and biliteracy in majority language students. Moreover, successful programs hope to develop an additive form of bilingualism (Lambert, 1974) where a second language and culture is added without any negative influence on the first language and culture. Conversely, when immersion fails, it does not meet its goals, and in the worst case, might result in subtractive bilingualism, where a student's immersion experience results in a negative effect on first language development and a devalorization of his or her own culture.

Although the importance of classroom pedagogy should not be underestimated, it is also important to understand how psychological factors such as attitudes and motivations towards language learning may support success or failure within the immersion program.

PART 2: CULTURAL IDENTITY

Chapter 3. Cultural identity within immersion (Studies–1 to 2)

Katoh School (Katoh Gakuen), located in Numazu City, Shizuoka prefecture, about 120 kilometers south of Tokyo, has the only English immersion program in Japan. The school is a K-12 private school with an attached college, and currently offers immersion thorough grade 9. An early English language partial immersion program is run in parallel with a regular non-immersion program, and parents may choose to apply for either program at the time of application to the school. In line with the basic immersion objective of developing bilingualism and biliteracy in majority-language students (Lambert & Tucker, 1972), the students in the immersion program at Katoh spend at least half of their academic day learning in English. Essentially, immersion is a communicative approach that uses the medium of the foreign language to teach subject content. While the results of academic and primary language evaluations mirror those achieved in North American immersion programs (Bostwick, 1999, 2000), parents deciding between the immersion and regular program at Katoh School have expressed concerns regarding whether children enrolled in the language immersion program will be able to maintain their sense of Japanese identity. While undoubtedly a very real and emotive issue for the parents faced with choosing between the two programs (Bostwick, in press), this concern for the child's sense of

Japanese identity-although not clearly articulated-raises interesting questions not just about the relation between cultural identity and bilingualism but also about prevailing notions concerning Japanese cultural identity in general.

Noting that the consequences of bilingualism will be influenced by sociocultural dominance of the languages and language groups involved, Lambert (1980) explains that for members of a majority ethno-linguistic group, second language acquisition is likely to lead to an additive form of bilingualism, rather than displacing or diluting the learner's home language or culture. Baker (1996) proposes that a bilingual's exposure to two languages and cultures allows them to successfully hold two or more cultural identities. This is supported by the longitudinal study of Anglo-Canadian children attending immersion programs in Montreal (Lambert & Tucker, 1972) where majority children with bilingual experience identified positively with both cultures. Although these studies suggest that there are no negative effects on identity development as a result of studying through a second language, Genesee (1995) advocates a more balanced view when he summarizes the results from studies of majority language children in immersion programs, noting that although the program produces positive effects on attitudes towards other language groups and no deficit in their feeling towards their own home culture, the influence of society outside the classroom may progressively work against these positive attitudes.

Despite reassurances from the school, it seems that parents are not

willing to apply what has been learned in other immersion programs to the Japanese context. To date, however, there has been no data regarding the state of students' identity in an immersion program in Japan. It is therefore not surprising that the newness of the program has brought many uncertainties. Thus, in these initial stages of the program the parental concerns may be partly due to a lack of data concerning Japanese identity in general. Being the first of its kind in Japan, it is necessary to take a closer look at the program to give us more detail as background to understanding these parental concerns.

This section discusses these questions in an effort to address this parental concern. After looking briefly at cultural identity, and, in particular, the implications for Japanese cultural identity, the chapter turns to examine how cultural identity might be related to bilingualism in general and more specifically to immersion. Finally, a study is presented that investigated how the Katoh immersion students subjectively perceive themselves in relation to Japan and the West. The results of this study suggest that rather than negatively affecting their cultural identity, the immersion program has provided a positive educational environment that has allowed students to develop a strong sense of Japanese cultural identity coupled with a greater appreciation of another culture.

Katoh Gakuen

As Bostwick (1999) explains, similar to the motivations that brought about the St. Lambert program, the immersion program at Katoh School began in 1992, partly because parents at Katoh were dissatisfied with the traditional approach to English language education in Japan. A search was initiated by the school president, Dr. Masahide Katoh, for a new type of English program, one that would not only dramatically improve student's ability to communicate in English, but also allow them to graduate from an accredited Japanese high school and have the choice of taking university entrance exams in Japan or overseas. Accordingly, the primary goal of the program is to provide Japanese students with functional competence in the English language while maintaining high standards in Japanese language and scholastic achievement (Katoh, 1993). While Katoh School has planned for the immersion program to continue on to the senior high school, at the time of this writing, the original pilot class had completed their third year of junior high school, or grade 9. There are now approximately 450 students in the immersion program with 18 full-time foreign staff.

Bostwick (1999; in press) has presented a detailed description of the Japanese educational context and distinguishing features of the immersion program at Katoh School. Knowing some of these features may help us understand where some of the parental worries originate. First, it has somewhat different educational objectives in that it has become the first Japanese school to be both accredited by the Japanese Ministry of Science and Education and authorized by the International

Baccalaureate Organization (IBO). To achieve this accreditation for all students, the immersion program has had to closely follow the Japanese national curriculum guidelines, and as a consequence, all textbooks and guideline materials had to be professionally translated into English. The goal of this integrated curriculum, therefore, is to prepare students so that they will be able to attend university in Japan or abroad. A second significant feature concerns the comparatively high academic goals, and expectations placed on students in the program. Students have to compete with their regular (non-immersion) peers on national tests to enable them one day to have the option of entering prestigious Japanese universities-an essential prerequisite for further career success in Japanese society. This emphasis on test performance has adversely affected classroom pedagogy as teachers try to cover a very challenging curriculum as quickly as possible in order to prepare students for the difficult exams ahead (Bostwick, 1995). A third feature relates to language and communication. Since most of the immersion teachers are not bilingual, communication within the school and with parents has been difficult. To compensate, the teachers work in teams where one of the teachers is a bilingual, and weekly newsletters in Japanese are sent home to keep parents informed. Though we cannot conclude that these factors underlie a parent's decision not to choose immersion, it seems reasonable to assume that they are accentuating parental worries. In the next section, we will look at some specific examples relating to what parents consider the most important reasons

in choosing between immersion and the regular program.

Parent concerns

Katoh School pays careful attention to priorities and educational objectives of the immersion and regular parents, and has surveyed immersion parents regarding their motivations for enrolling their child in the program (Bostwick, 1999). Various questionnaires given throughout the program have shown that parents believe that their children would benefit linguistically, culturally and cognitively from being in the immersion program. However, the results of a 'forced ranking task', in which parents compared eight different program objectives to each other and chose which one was most important, indicated that mastering grade level content, developing critical thinking skills, and learning to cooperate with others were given a higher priority than learning to communicate in English.

According to Bostwick's writings (1999, in press) the issue of whether a student's Japanese cultural identity could be adversely affected by the immersion experience repeatedly comes up and continues to be an area of uncertainty. He presents a number of different reasons that have been given by parents to justify why they did not choose the immersion program. Although all of the these concerns revolve around the issue of whether spending a large part of the day in English may have negative effects, the concerns can be grouped into two categories: academic

concerns, and concerns relating to exposure to foreigners and foreign culture.

Under the first category of academic concerns, the parental concerns focus on whether teaching content through English would result in confusion, whether the program would be detrimental to Japanese language skills, and simply whether their child would be able to ‘cope’ with learning content through a foreign language.

Although not clearly stated by the parents, the second category may be seen as being related to Japanese cultural identity. The comments from parents who opted for the regular program's more ‘familiar’ approach expressed uneasiness with the idea of exposing their children to foreigners and foreign culture in this manner. More directly, other comments speak of a concern that their children's ‘Japaneseness’ or Japanese identity might become confused or they would become more ‘foreign like’ in their way of thinking or ‘acting’. Their concerns have even extended to fears that their children might want to live abroad as a result of graduating from the immersion program.

To the extent, then, that certain unique aspects of the immersion experience may be adding to parent’s concerns, learning of what has been presented in the literature concerning the relationship between cultural identity and bilingualism would equip them to make more informed decisions. To be certain, within the immersion environment, the Katoh School parents are not the only ones who have expressed concern for their children’s cultural identity. In the first immersion

program in St. Lambert, Anglophone parents wanted their children to acquire the French language without becoming 'too French' in the process. While the Lambert and Tucker study (1972) showed that in addition to gaining superior French language proficiency, the students were identifying positively with French Canadians, negative consequences of bilingual experience have so far only been reported in schooling of minority children in Western countries (Hamers & Blanc, 2000b). One example of a personality disorder attributed to bilinguality is anomie-disorientation and an absence of norms and values (McClosky & Schaar, 1965). Anomie has often been associated with feelings of anxiety, a lack of cognitive and affective flexibility and a loss of identity. Although focusing on children of socially disadvantaged backgrounds, Diebold (1968) attributed personality disorders, such as emotional disorders, to an early bilingual experience. Hamers and Blanc (2000a), however, argue that anomie and low-self esteem are not necessary outcomes of bilingual experience, but result from the pattern of sociocultural conditions in which socialization takes place.

Before beginning the school year, Katoh School thoroughly prepares parents for what they should expect from the immersion experience (Bostwick, 1999). Considering that the ambivalence surrounding Japanese cultural identity may be clouding parents' perceptions of immersion, information regarding studies on cultural identity in other immersion programs would be beneficial to the parents when faced with choosing between the two programs.

However, within the body of bilingual education research in general, and immersion research in particular, there have been few studies dealing with students' attitudes towards the target language in relation to perceptions of their own ethno-linguistic group. In fact, most of the studies regarding the cultural and ethnic identity of students in immersion have been conducted in Montreal. Two examples of studies that found no threat to immersion students' sense of cultural identity are Genesee, *et al*. (1978) who asked French immersion students to state preferences for ethnic dolls, and Cziko, *et al*. (1979), who used multidimensional scaling to measure perceived social distance between early immersion students and several reference groups. Similar results were found in Genesee, (1977).

3.1 Cultural identity

3.1.1 Identification process

Identification is a process of dynamic interaction and to understand the concept of identity, identification itself must be clearly defined with reference to its central role in all levels of identity. Hall (1996) proposes that identities are "never unified and, in late modern times, increasingly fragmented and fractured; never singular, but multiply constructed across different, often intersecting and antagonistic, discourses, practices and positions". As we tackle the issue of cultural identity, we will see that identification is a common element to the whole in

understanding what we might expect cultural identity to represent. We will begin with a definition of the most basic level, self-identity.

The first layer, or core of the identity sphere is self-identity. The self-identity process can be well understood from the writings of social psychologist, George Herbert Mead who worked to build a theory of the social origin of human selves. He describes the basic level of the self versus what he calls the generalized other, or society's representation in the individual. According to Mead (1956) an individual can actually align his behavior with society's expectations without actually being in the physical presence of others. A person may then, through internalized conversation, imagine his acts, and how others might perceive them, and adjust his behavior accordingly.

The next layer up is social identity. The nature of social identification assumes that contact with others must occur in order for the identification process to take place. Burkitt (1991) argues that a new theory of the self is needed, one that considers the social nature of the self, and proposes that the whole personality is formed through social relations and activities. Burkitt's social theory of personality, or self-identity formation considers that the personality is flexible, and shifts according to any particular context. Burkitt argues that Mead is incomplete because he does not consider the social reality, and how relationships are mediated, and that the process of identification is rooted in the figuration of relationships that underlie social activity. Stress is placed here on the configurations, the bonds with which humans form

with themselves. In summary, Burkitt's theory of social selves challenges the notions of dichotomies that exist between society and individuality. Rather, he asserts that social life is the source of individuality, and consequently, forms the basis of how we identify with others.

Now that we are approaching the top of the sphere, a distinction between ethnic and cultural identity must be expressed. While the terms seem to be often presented in the literature interchangeably, certain basic characteristics set them apart.

Phinney (1990) defines ethnic identity to be meaningful only in situations in which two or more ethnic groups come into contact; it is the part of an individual's self-concept that concerns how he relates to his own native ethnic group and to other ethnic groups. Ethnic identity is defined by Kim (1991) as "the subjective experiences of an individual in defining his own affiliation to the group that shares common national, cultural and physical attributes". From the viewpoint of social psychologists, Leets, Giles & Clement (1996) define ethnic identity as "a subjective feeling of belonging to a particular ethnic group". Although there is some variance in authors definitions of cultural and ethnic identity, (Hamers & Blanc, 2000a) explain that common features comprise self-perception, a sense of shared values, and feelings of belonging. In addition, the authors believe six-year-olds already possess a concept of ethnic identification, which opposes the self to others, including foreigners and adults.

In summary, we have seen that ethnic identity is a term used to

express the perception of membership in a particular group, which has often been cited as a significant concern for members of multi-ethnolinguistic communities, such as in Canada, or the United States.

3.1.2 Definition of cultural identity

Common to self-identity, social identity, and ethnic identity, cultural identity is a process of identification, which, as Hall (1996) argues, is an on-going process of construction where the individual becomes aware of common characteristics shared with other individuals and groups at various levels. The dynamic nature of this process is evident, for instance, in the social theory of personality, or self-identity formation advocated by Burkitt (1991), which echoing Mead's (1956) notion that self-consciousness is only possible in social interaction, sees this process of identification as being rooted in the figuration of relationships that underlie social activity. Extending this to the cultural level, the integration within the individual's personality of a diversity of features, such as ancestry, territoriality, institutions, values, norms and language that function to distinguish one cultural group from another, will be dependent on the extent to which the individual is aware of the existence and is able to interact with other cultures both within and outside their own society (Hamers & Blanc, 2000a).

According to this conception of cultural identity, the individual's sense of cultural identity is formed through exposure to, or interaction with the

shifting, complex blend of norms, values, etc. that a given culture holds at any one time. Japanese cultural identity would, therefore, be the developing sense through interaction and identification with the diverse aspects of Japanese culture that the individual is Japanese. Casting the assimilation of cultural identity in such simple formula-like terms is not, however, to deny the internal struggles and conflicts involved in cultural identification, for the norms and values held by a culture may often contain contradictory aspects. Certainly, there would appear to be contradictory aspects in the values presented by elements of Japanese society. For instance, the literature genre referred to as *nihonjinron*, which portrays Japan as a unique, homogeneous, and, even superior society, has been criticized as being inadequate in the face of evidence of conflict (Mouer & Sugimoto, 1986). Edwards (1989) also provides insight into how apparent contradictory forces can exist and interact simultaneously. Although the rhetoric of nihonjinron appears to strike a dichotomous chord with the recent calls for internationalization in education, Edwards notes that this 'internationalization' is really 'westernization,' which he argues is fueled by anxiety about being seen as inferior in comparison with the advanced nations of Europe and America, suggesting a deep ambivalence over Japanese cultural identity.

While this kind of ambivalence over Japanese cultural identity might be at the heart of the common failure on the part of the parents at Katoh School to clearly articulate their concerns for their child's sense of

Japanese identity development, the concerns also reflect implicit assumptions about the relation between cultural identity and bilingualism. In the next section, the construction of a questionnaire designed to measure cultural identity is presented.

3.2 Construction of the AJWQ (Study–1)

As the aim of the study was to ascertain whether the immersion program had caused a shift in students' sense of cultural identity, it was important to examine how the student thinks about Japan in relation to his or her attitude towards the West. In order to construct a scale to measure student's sense of identity, a number of methods were considered. While various scales exist that examine 'identity', the purpose of this scale was to assess student's attitudes towards both the target language culture and the home culture. Therefore, questions were made that took into account the two directions that the attitudes might express, in this case, attitude's towards the West, and attitudes towards Japan. The new questionnaire was constructed in Japanese, and questions were based directly and indirectly on standardized scales. Two studies were used as references: Situational shifting of ethnic identity seen among Korean youths in Japan (Taira, *et a*l. 1995), and Gender Identity Scale (Dohi, 1996).

To create this questionnaire, validity was first established by seeking expert opinion from professors at the University of Tsukuba, Institute of

Psychology. As a result, an original set of 80 questions was reduced to 31. While the scale's aim was to assess sense of cultural identity, representative questions included questions that were also considered to characterize sense of self-identity, social identity, and ethnic identity.

3.2.1 Purpose

A pilot study was conducted to test the reliability and validity of the questionnaire. The revised AJWQ was then given to the English immersion students at Katoh School and to comparable students from regular (non-immersion) schools.

Pilot study

To examine validity, the AJWQ was paired with questions created with strong reference to two standardized measures, the Cosmopolitanism Scale (Iwata, 1989), and the National Image Scale (Tanaka, 1983). The original Cosmopolitanism Scale was used as a reference in order to create ten questions concerning sense of internationalism. Ten questions from the original National Image Scale were used as references to create two separate national image scales: Image of America and Image of Japan. The original AJWQ scale was composed of 31 multiple-choice questions to assess students' way of thinking towards Japan and the West. 'The West', as translated from the original Japanese 'seiyou' refers to the industrialized nations of Europe and America including their peoples, languages, the media, and their

ideologies. Therefore, the pilot study questionnaire had 3 sections, the Cosmopolitanism Scale, the AJWQ, and the National Image Scale.

3.2.2 Method

Subjects

The pilot study was carried out with a group of 246 students (5th year = 119, 6th year = 127), (Male = 135, Female = 101, blank = 10) from three elementary schools in the Bunkyo Ward of Tokyo. The instrument was modified based on the results of the study.

Procedure

Participants completed the three-part questionnaire in Japanese at their own speed, in the presence of their homeroom teacher. Responses were confidential and seen only by the participants and researcher. Before the pilot study was administered, the importance of students answering honestly, without thinking too hard about the questions was stressed. The test lasted about 30 minutes. Responses were obtained on a 4-point Likert scale ranging from strongly agree (1) to strongly disagree (4).

3.2.3 Results & Discussion

Reliability

The first stage of data analysis was to test the scale for internal

consistency reliability. First, imbalanced items were removed reducing the items for factor analysis from 31 to 20. Factor analysis was repeated (principal factor extraction with varimax rotation) and items were removed that had eigenvalues greater than 1.0, or very low or very large factor loadings (note that all factor analyses in this thesis included the use of principal factor extraction with varimax rotation). Factor analysis of the scale revealed five factors and they were named as follows: attraction towards Western culture, positive attitude towards English, identity with Japan, awareness of Japanese culture, and attraction towards Westerners (Table 3-1).

This study asks whether spending at least half the academic day studying through a second language results in a child feeling less Japanese. Therefore, to address this question the *attraction towards Western culture* subscale assessed whether students prefer Western

Table 3-1 Factor loadings of the Attitude towards Japan and the West Questionnaire (AJWQ)

	Factor loading					
Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Communality
西洋文化へのあこがれ *(AJWQ1)*						
日本の映画俳優よりも、西洋の映画俳優が好きだ	0.773	0.062	-0.036	-0.052	0.104	0.619
日本の映画よりも、西洋の映画が好きだ	0.727	0.095	-0.147	-0.087	0.155	0.6
日本のアニメのキャラクターよりも、西洋のアニメのキャラクターが好きだ	0.645	0.154	0.006	-0.008	0.104	0.457
西洋の文化は魅力的だと思う	0.505	0.341	-0.201	0.273	0.251	0.593
西洋人の顔や体型にあこがれる	0.497	0.12	-0.21	0.019	0.477	0.617
私の生活のしかたは日本風だ	-0.456	-0.081	0.224	0.346	0.132	0.448
英語への積極的態度 *(AJWQ2)*						
日本語よりも、英語の方が自分の考えを伝えやすい	0.035	0.84	-0.081	0.012	0.077	0.77
日本語で話すときよりも、英語で話すときに本当の自分が出てくる	0.179	0.81	-0.012	0.101	0.061	0.709
日本語より英語の方が好きだ	0.363	0.569	-0.189	-0.179	0.195	0.577
日本以外の国に住むつもりはない	-0.215	-0.414	0.004	0.134	-0.374	0.447
日本への *Identity (AJWQ3)*						
私は日本人に生まれて損をしたと思う	0.114	0.202	-0.752	-0.086	0.132	0.724
日本人として生まれて幸せであると思う	0.007	-0.98	0.751	0.197	-0.062	0.653
もし戦争がおこったら、当然日本の見方をする	-0.225	0.134	0.671	0.043	-0.109	0.61
西洋人よりも、日本人の方が優れていると思う	-0.13	-0.097	0.502	0.065	0.201	0.478
日本文化の意識 *(AJWQ4)*						
国語（日本語）の勉強は好きだ	-0.189	0.064	0.039	0.747	0.024	0.64
日本の文化や伝統をほこりに思っている	-0.094	0.037	0.183	0.717	-0.066	0.66
日本人の性格について、はっきりしたイメージを持っている	0.26	-0.167	0.195	0.501	-0.016	0.461
西洋人へのあこがれ *(AJWQ5)*						
大人になったら、西洋人と結婚したい	0.214	0.198	-0.027	0.059	0.741	0.642
生まれ変われるなら、西洋人に生まれ変わりたい	0.415	0.21	-0.3	-0.028	0.59	0.698
私は日本人と違う考え方を持っている	0.392	0.266	-0.175	0.238	-0.447	0.569
Sum of squares	**5.17**	**2.28**	**1.73**	**1.57**	**1.36**	

things to Japanese things. The six questions in this section asked students about their preferences for Japanese or Western movies, actors, and animation characters as well as whether they are attracted to Western culture, and the face and body shape of Westerners. An

additional question asked whether they thought their lifestyle was Japanese. An alpha coefficient of 0.71 was calculated for this component of the scale.

The *positive attitude towards English* subscale consisted of four questions that asked students about their preference for either Japanese or English, which language they feel most comfortable communicating in, and whether they intend to live outside of Japan in the future. An alpha coefficient of 0.76 was calculated for this section.

The four questions in the *identity with Japan* subscale were somewhat direct in that they asked students whether they were glad to have been born Japanese, who they would choose to fight for in the case of a war with the West, and if they think Japanese people are superior to Western people. An alpha coefficient of 0.66 was calculated for this section.

The *awareness of Japanese culture* subscale included three questions: I like the study of Japanese (Kokugo), I am proud of Japanese culture and traditions, and I have a clear image of the character of a Japanese. However, the alpha coefficient of 0.53 was relatively low for this subscale, which may cast some doubt over its reliability.

Items in the *attraction towards Westerners* subscale asked the extent to which the child is attracted or has been influenced by the West. The three questions in this section were: When I grow up, I would like to

marry a Westerner, If I was to be reborn, I would like to be reborn a Westerner, and I think differently than Japanese people. An alpha coefficient of 0.71 was calculated for this subscale.

Validity

Criterion referenced validity was established through a concurrent validity comparison using the raw scores for each factor. Accordingly, to verify factors of the scale, correlation coefficients were calculated for the AJWQ, The Cosmopolitanism Scale and The National Image Scale (see Table 3-2). Analysis showed significant correlations between a number of subscales for both the Cosmopolitanism Scale and The National Image Scale with the AJWQ. In particular, validity was established by a high correlation shown between identity with Japan, awareness of Japanese culture, the Cosmopolitanism Scale's sense of pride in one's own race, and the image of Japan subscales.

Table 3-2 Correlations between AJWQ, National Image Scale, Cosmopolitanism Scale

		Correlation values									
		Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
	AJWQ	Attraction towards Western culture		Positive attitude towards English		Identity with Japan		Awareness of Japanese Culture		Attraction towards Westerners	
Cosmopolitanism	Pride in one's own race	−.16		.03		.37	**	.31	**	.04	
	Orientation toward different cultures	.38	**	.41	**	−.17	*	.34	**	.41	**
	Sense of the world community	.14	*	.01		.08		.39	**	.08	
	Rejection of Nationalism	.25	**	.11		−.16	*	.02		.14	*
Image of America	Strong	.18	*	.18	**	−.09		.10		.11	
	Active	.05		−.03		−.00		.05		−.09	
	Pleasant	.36	**	.20	**	−.18	**	.06		.29	**
	Diligent	.13		.08		−.01		.23	**	.01	
Image of Japan	Strong	−.22	**	−.09		.24	**	.14	*	−.17	*
	Active	−.03		−.03		.12		.12		−.10	
	Pleasant	−.23	**	−0.1		.43	**	.24	**	−.25	**
	Diligent	−.13		−.03		.32	**	.24	**	−.12	

*p <.01, ** p <.001.

3.3 Japanese cultural identity comparison (Study-2)

3.3.1 Purpose

The AJWQ was constructed in order to examine the Japanese identity of English immersion students. In this study, the AJWQ was given to the English immersion students and to students of regular schools.

3.3.2 Method

Subjects

The immersion students of grades 5, 6 and 7 (105) were compared with students from grades 5 and 6 from T Elementary School (127) and M Elementary School (110), and grade 7 from T Junior High School (167). In total, 509 students were tested.

The selection of the comparison group was influenced by a number of factors. Most important among these was the desire to avoid any possibility of internal repercussions for Katoh School as a result of making a direct comparison with the non-immersion program. An earlier study by the school had aroused parental concerns about underachievement in the non-immersion program following results of an academic achievement assessment that showed that the immersion students had scored higher than the regular students (see Bostwick, 2000).

After considering a list of candidate schools with students from similar

backgrounds around the Tokyo metropolitan area, three public schools were approached to participate in the study. While the immersion program's manner of teaching is unmistakably unique, in line with the Japanese Ministry of Science and Education guidelines, the curriculum is identical. These schools, which are located in the affluent Minato Ward in Tokyo, were closely matched to Katoh School in terms of both academic achievement and parental socioeconomic status.

Procedure

In December 1998, the AJWQ was used to assess both groups' sense of Japanese cultural identity. At Katoh, homeroom teachers administered the questionnaires for grades 6 and 7 and a substitute teacher administered the questionnaires for grade 5. At the public schools, homeroom teachers administered the questionnaires for all of the grade groups. As with the pilot study, responses were classified and seen only by the participants and researcher. Before completing the questionnaire, the importance of answering honestly, without thinking too hard about the questions was stressed. The questionnaire took about 30 minutes to complete. Responses were obtained on a 4-point Likert scale ranging from strongly agree (1) to strongly disagree (4).

3.3.3 Results & Discussion

A two-way ANOVA was carried out on each of the five subscales of the

AJWQ for school (Katoh School and comparison schools) and grade (5th, 6th, and 7th grade). For all analyses there was no significant interaction between school and grade. For subscale 1, there was a significant effect for both grade (F (2, 476) = 8.53, p < .001), and school (F (1, 476) = 6.45, p < .05). For subscale 2 also, there was a significant effect for both school (F (1, 479) = 31.59, p < .001) and grade (F (2, 479) = 3.14, p < .05). However, for subscale 3, only the effect of grade was significant, (F (2, 484) = 7.33, p < .01), and for subscale 4, only the effect of school was significant, (F (1, 485) = 14.02, p < .001).

The results of the subscale comparison indicate that the immersion students have a stronger attraction towards Western culture, a more positive attitude towards English, a stronger identity with Japan, and more awareness of Japanese culture. A possible implication here is that the immersion experience not only promotes positive attitudes toward another culture but also seems to foster a heightened sense of identity towards the child's own culture (see Tables 3-3 to 3-7 and Figures 3-1 to 3-5).

Hamers & Blanc (2000a) state "although there is little known about the processes which bring cultural identity into being, some studies suggest that they start at an early age and that by the age of six children have developed some type of cultural identity". In Figures 3-1 and 3-2, which represent attitudes towards the West, the immersion students' scores were higher than those of the regular students through grade seven. This trend, however, was not seen in Figures 3-3 and 3-4, which

represent the students' sense of cultural identity, as the immersion students' scores dropped after grade 6 (see 3.4 for discussion).

The above analysis was carried out on the five subscales of the AJWQ. However, in order to provide a simpler picture of the results of this comparison, two subscales were created from the five subscales. Accordingly, the total scores from subscales 1, 2 and 5 were combined to represent students' identity with the West, and the total scores from subscales 3 and 4 were combined to represent students' identity with Japan. Alpha coefficients for identity with the West and Identity with Japan (2) were α=.74 and α=.56 respectively.

A 2-way ANOVA was carried out for both identity with the West and identity with Japan (2) for school and grade, and school and sex. For school and grade, there was no interaction for identity with the West subscale. However, there was a significant effect for both school (F (1, 455) = 17.58, p < .001), and grade (F (2, 455) = 7.08, p < .01). Post hoc tests showed significance for grades 5 & 7, and 6 & 7 (p = .05, Mse = 36.44). Results of raw scores showed the immersion students to have a stronger identity with the West from grade 5 through grade 7 (Table 3-8, Figure 3-6). There was interaction for Identity with Japan (2) between school and grade (F (2, 468) = 3.48, p < .05). A significant effect was seen for grade 6 only showing the immersion students to have a higher score for identity with Japan (2) (Table 3-9, Figure 3-7).

There was no interaction for identity with the West subscale for sex. However, there was a significant effect for school (F (1, 450) = 9.45, p < .

01) (see Table 3-10, Figure 3-8). For identity with Japan (2) subscale, there was interaction (F (1, 463) = 7.47, p < .01). First for school, significant effects were seen for Katoh School showing the males with a higher score. There were no significant effects for sex for the public school (see Table 3-11, Figure 3-9). For sex, significant effects were seen for males showing the Katoh school children with a higher score. There were no significant effects for the public school.

Table 3-3 Mean Scores for Attraction towards Western Culture as a function of School and Grade

Grade	School				Diff.
	Immersion		Regular		
	M	*SD*	*M*	*SD*	
5	14.15	3.63	12.30	3.09	1.85
6	14.82	3.55	13.44	4.07	1.38
7	15.27	2.81	15.36	3.78	-0.09

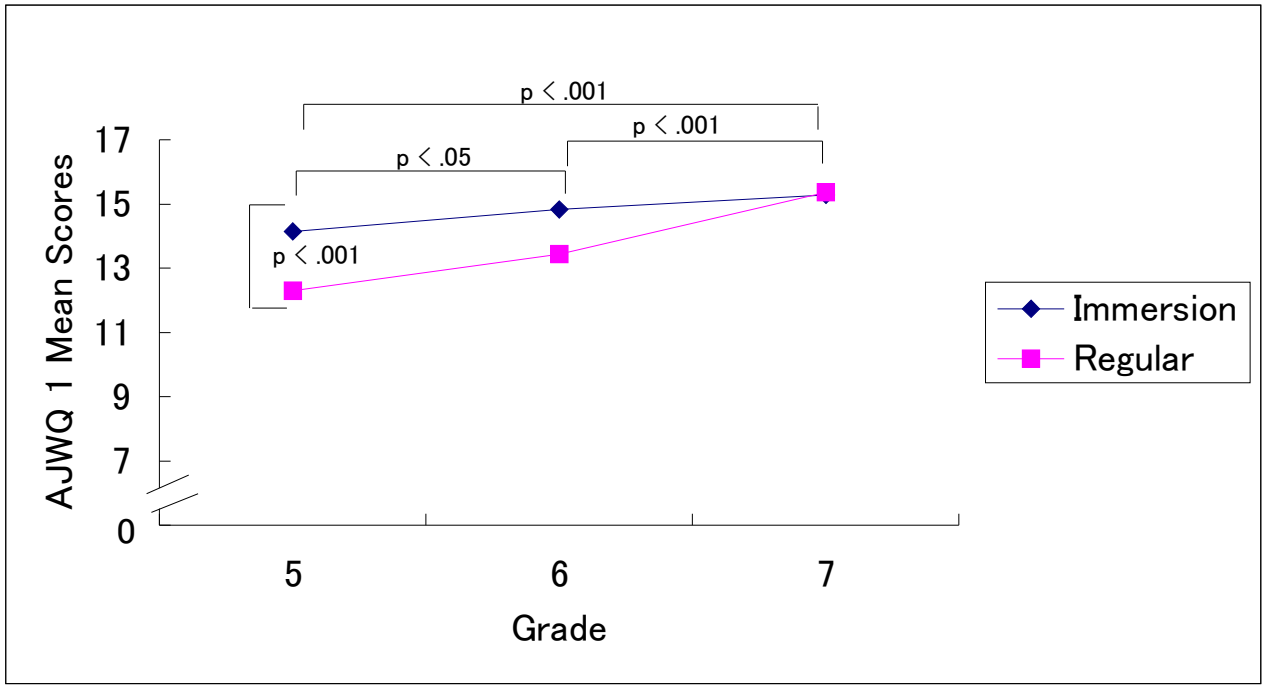


Figure 3-1. Mean Scores for AJWQ 1: Attraction towards Western Culture

Table 3-4 Mean Scores for Positive Attitude towards English as a function of School and Grade

Grade	School				Diff.
	Immersion		Regular		
	M	*SD*	*M*	*SD*	
5	8.71	2.72	6.63	2.54	2.08
6	8.34	2.38	7.03	2.50	1.31
7	9.19	2.15	7.74	2.58	1.45

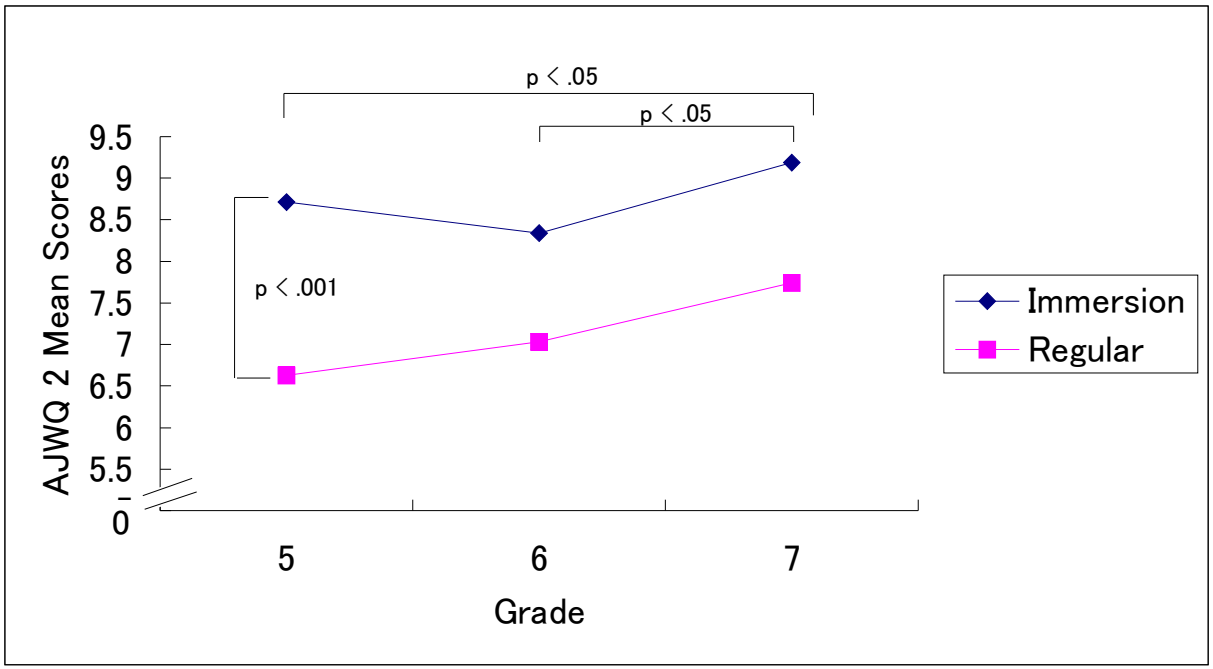


Figure 3-2. Mean Scores for AJWQ 2: Positive Attitude towards English

Table 3-5 Mean Scores for Identity with Japan as a function of School and Grade

Grade	School				
	Immersion		Regular		Diff.
	M	*SD*	*M*	*SD*	
5	12.95	2.31	12.89	2.32	0.06
6	13.30	2.55	12.30	2.46	1.00
7	11.33	2.33	12.03	2.50	-0.70

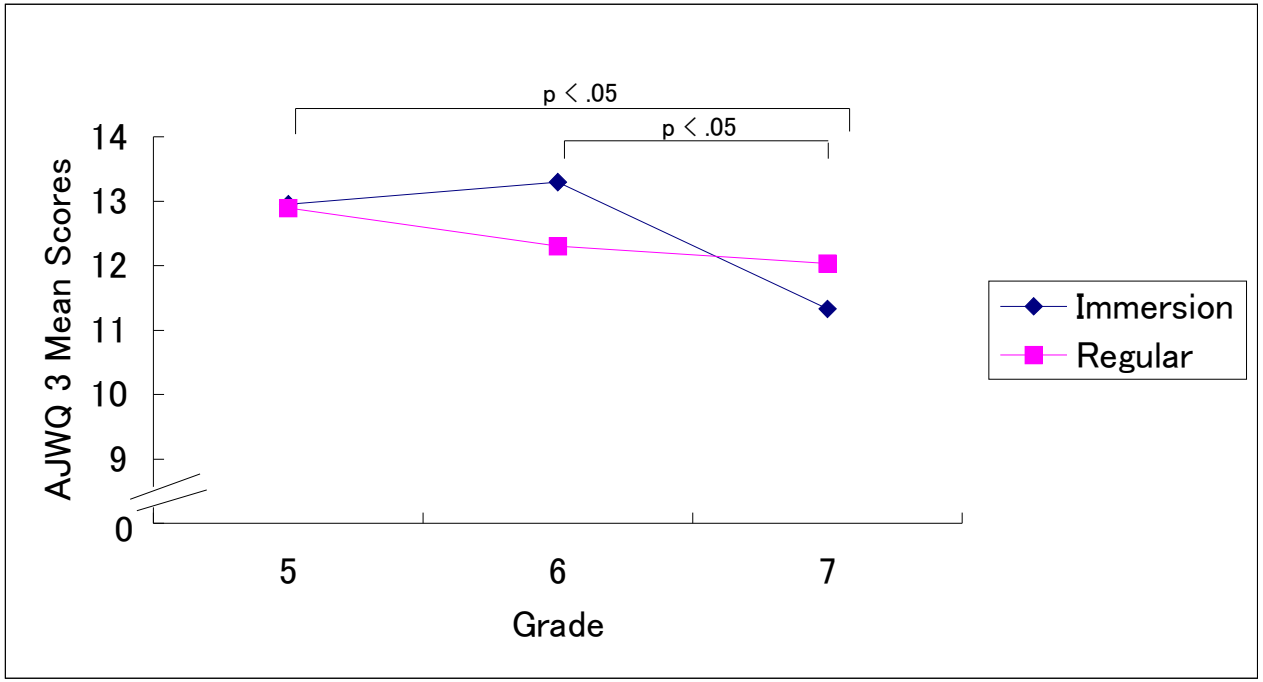


Figure 3-3. Mean Scores for AJWQ 3: Identity with Japan

Table 3-6 Mean Scores for Awareness of Japanese Culture as a function of School and Grade

Grade	School				Diff.
	Immersion		Regular		
	M	*SD*	*M*	*SD*	
5	8.86	1.92	8.11	1.86	0.75
6	9.27	1.50	8.01	1.89	1.26
7	8.58	1.88	8.29	1.77	0.29

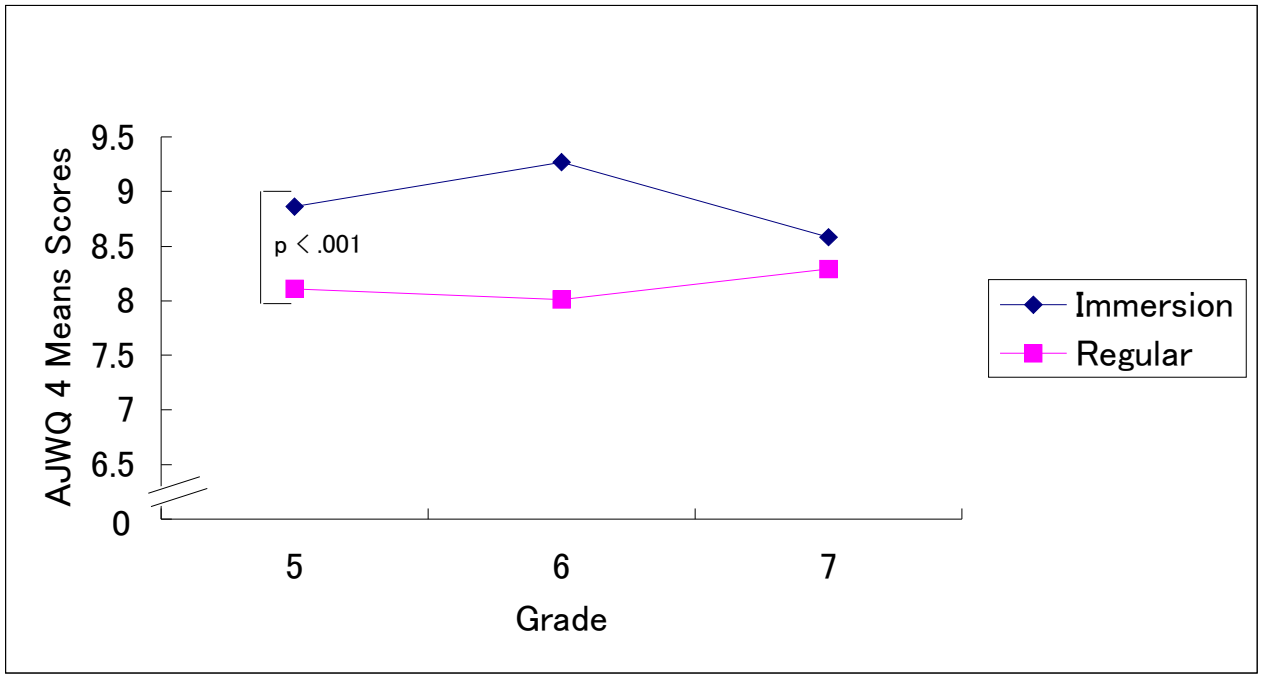


Figure 3-4. Mean Scores for AJWQ 4: Awareness of Japanese Culture

Table 3-7 Mean Scores for Attraction towards Westerners as a function of School and Grade

	School				
Grade	Immersion		Regular		Diff.
	M	*SD*	*M*	*SD*	
5	6.50	1.50	6.40	1.47	0.10
6	6.70	1.39	6.36	1.82	0.34
7	6.88	1.46	6.65	1.58	0.23

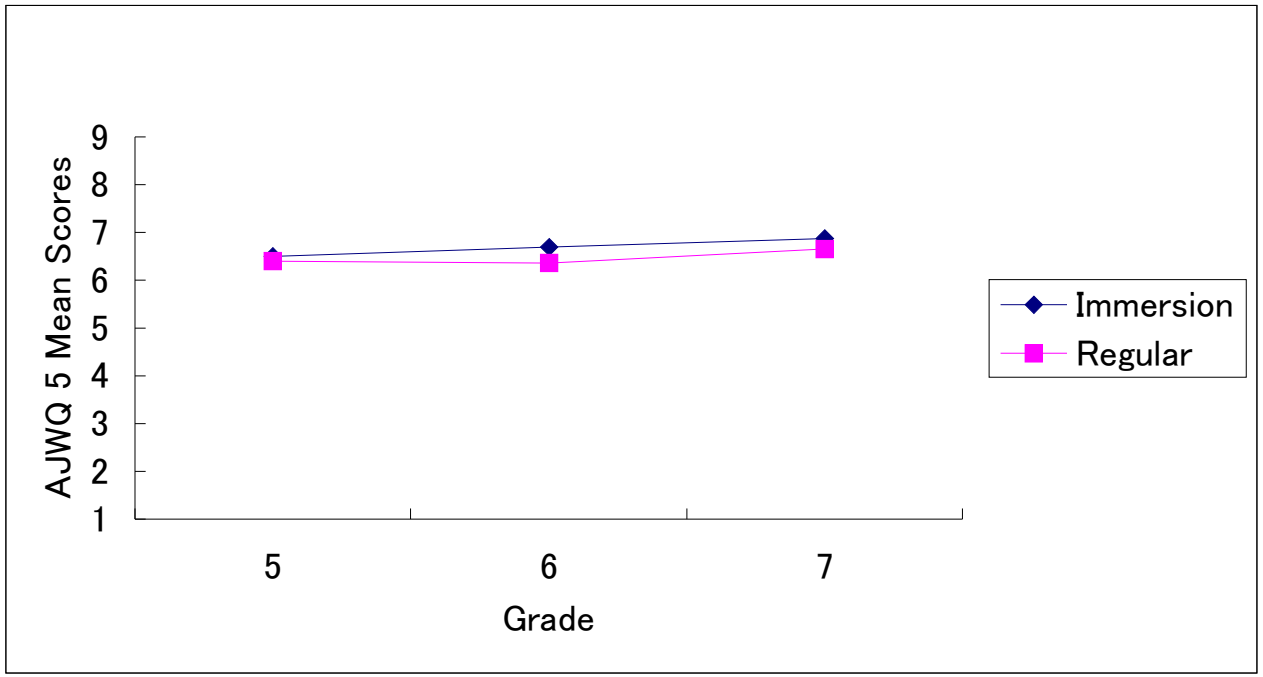


Figure 3-5. Mean Scores for AJWQ 5: Attraction towards Westerners

Table 3-8 Mean Scores for Identity with the West as a function of School and Grade

Grade	School				Diff.
	Immersion		Regular		
	M	*SD*	*M*	*SD*	
5	29.42	5.44	25.30	5.62	4.12
6	30.00	5.87	26.66	6.93	3.34
7	31.28	5.07	29.86	6.05	1.42

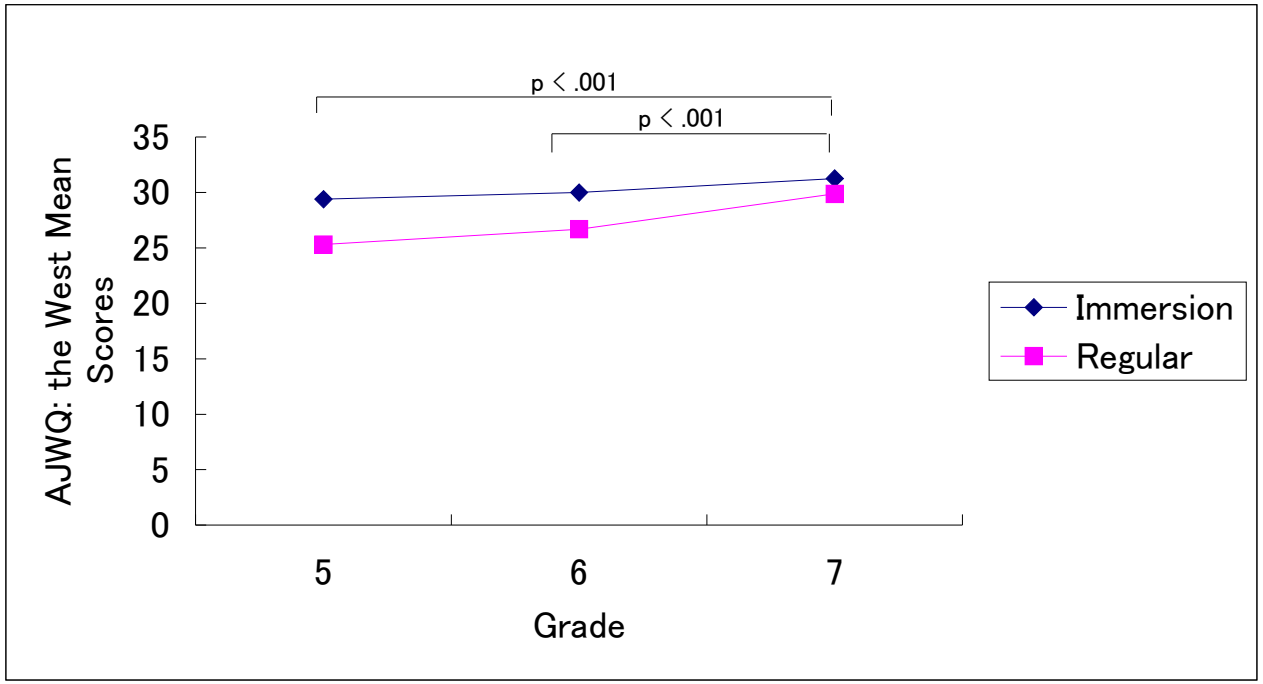


Figure 3-6. AJWQ: Mean Scores for Identity with the West

Table 3-9 Mean Scores for Identity with Japan (2) as a function of School and Grade

Grade	School				
	Immersion		Regular		Diff.
	M	*SD*	*M*	*SD*	
5	21.73	3.36	20.99	3.26	0.74
6	22.57	3.30	20.43	3.52	2.14
7	19.88	3.63	20.29	3.31	-0.41

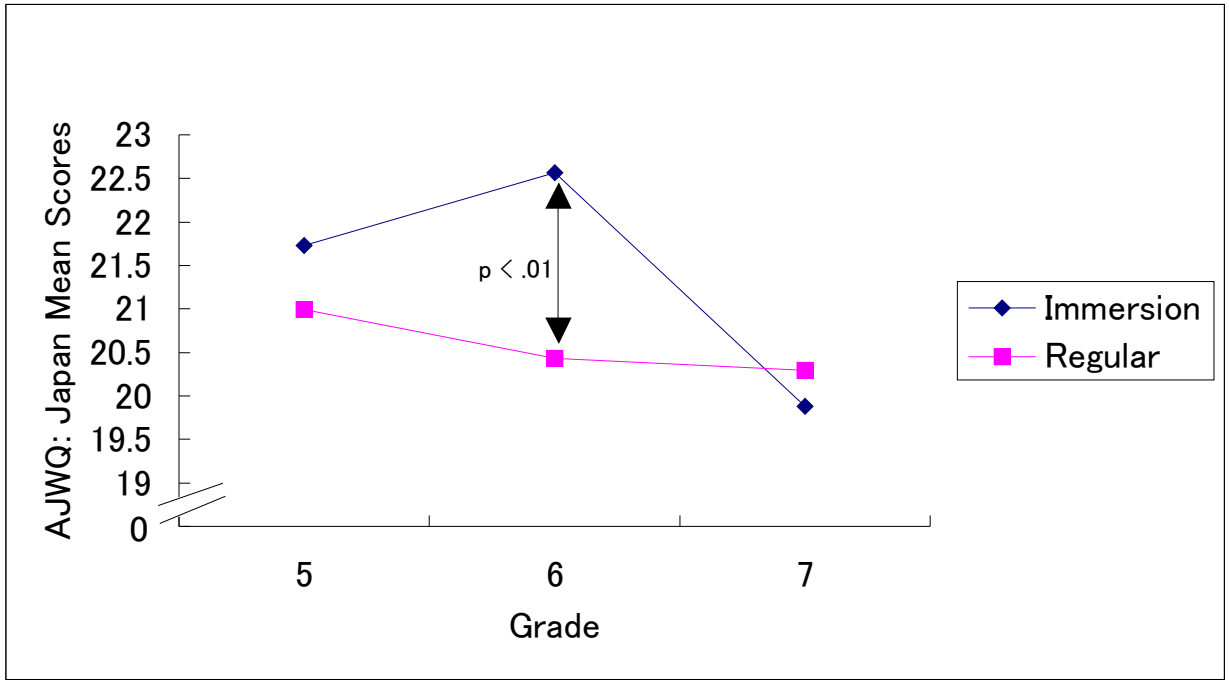


Figure 3-7. Mean Scores for AJWQ: Identity with Japan (2)

Table 3-10 Mean Scores for AJWQ: Identity with the West as a function of School and Sex

	School			
Sex	Immersion		Regular	
	M	*SD*	*M*	*SD*
Male	29.15	4.75	27.04	6.40
Female	30.58	5.97	28.13	6.50

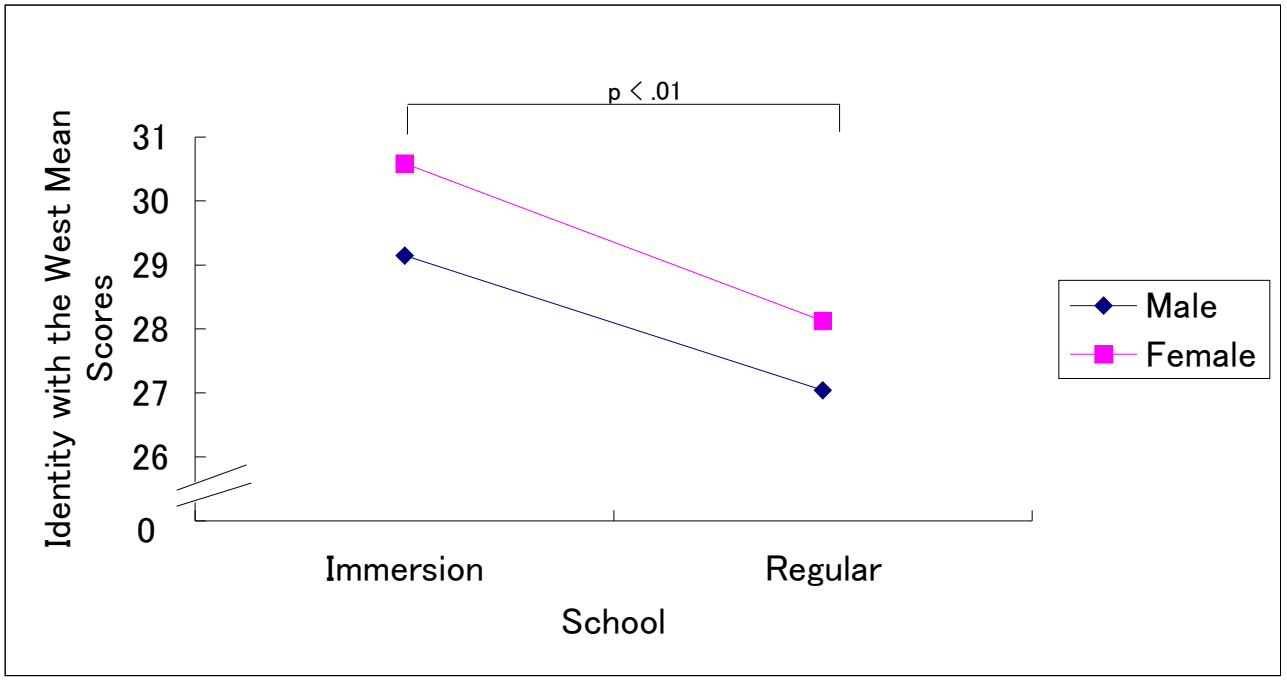


Figure 3-8. Mean Scores for AJWQ: Identity with the West

Table 3-11 Mean Scores for AJWQ: Identity with Japan (2) as a function of School and Sex

	School			
Sex	Immersion		Regular	
	M	*SD*	*M*	*SD*
Male	22.90	3.62	20.70	3.39
Female	20.53	3.11	20.42	3.23

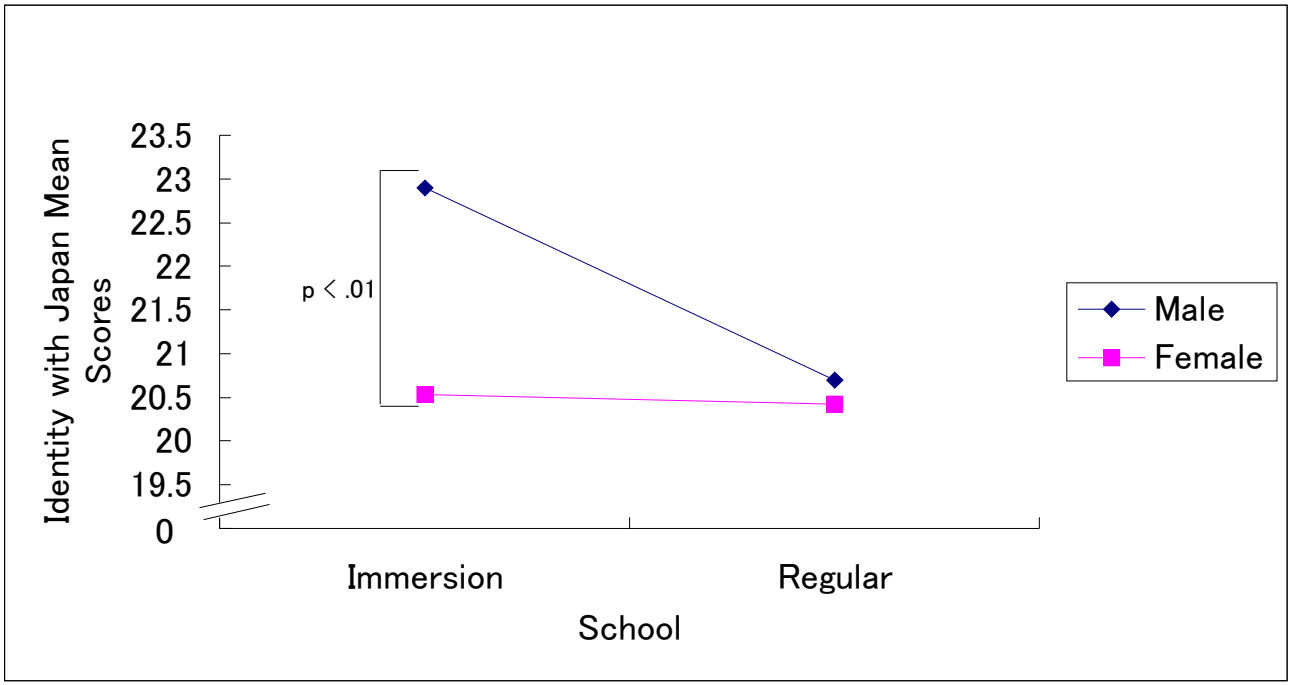


Figure 3-9. Mean Scores for AJWQ: Identity with Japan (2)

3.4 Conclusions from the cultural identity study

In general, the immersion students' scores for sense of Japanese cultural identity dropped after grade 6. Although in a cross-sectional study of this size, it is difficult to single out any particular factor to account for this change in attitude, one explanation for the shift could be the composition of the seventh grade immersion class. Since the class had more returnees (Japanese who have lived and studied overseas) than grades 5 and 6, pre-existing attitudes towards the West and Japan may have been a significant factor. The fact that the pilot scale was undertaken with students from grades 5 and 6 may also have reduced the validity of the scale for use with students from grade 7.

Attitudes may also be reinforced or passed on by family, and members of the majority language community. Evidence for this shift is exemplified in a longitudinal study of the St. Lambert immersion program (Lambert & Tucker, 1972) where the attitudes of immersion students in the early grades of elementary school were more positive towards French Canadians than non-immersion students, but later, in the upper grades, these same students' attitudes changed and came to more closely resemble attitudes of their non-immersion peers. Genesee (1984a) argues that this change in attitude may come about because of an absence of real social contact with French Canadians. Without this contact, he concludes that positive attitudes are difficult to maintain for an extended period of time.

While Lambert's (1974) assertion that the environment in which language is learned strongly influences the make up of one's identity would seem to argue for a direct relation between immersion and cultural identity development, we must remember that for the bilingual, the interaction between bilinguality, language choice and cultural identity is very complex and influenced by multiple factors (Hamers & Blanc, 2000a).

We have looked at cultural identity, and proposed a definition, emphasizing its dynamic social aspects, which allows us to say that developing Japanese identity is learning to identity oneself as an individual Japanese. We have also looked at how this process of cultural identity might be related to bilingualism, discovering that the relation is not a direct one, but is rather influenced by many factors. In line with this notion, this study investigated the sense of Japanese cultural identity of children enrolled in the English immersion program at Katoh School, and found that their exposure to English and Western culture has provided a positive educational environment.

Although parents have been concerned that the immersion experience would somehow leave their children feeling ‘less Japanese’, the results indicate that immersion does not seem to be promoting any negative feelings toward the native language or culture. Hamers and Blanc (2000a) conclude that cultural identity is an important aspect of personality, yet contrary to received opinion that bilinguality leads to a maladjusted personality, they stress that anomie and psychological

distress are not necessary outcomes of bilinguality but develop only when the individual has no possibility of resolving conflicts arising from his or her dual membership. It is important to note here that the aim of immersion is not membership in the target language community, and that a child's sense of identity remains firmly rooted within the L1 culture and community (Swain & Johnson, 1997).

Echoing Edwards (1989), the call for internationalism in education continues, and there are plans to implement some form of English language program in all Japanese elementary schools by 2002. Although improvements for the English language education system are firmly established on the political agenda, educators are still debating about the form these improvements might take (Downes & Sugihara, 2000). Those who wish to reform the present system that largely focuses on reading and translation assert that unless schools conduct classes that allow students more opportunities for output, there will not be a great deal of improvement in students' practical communication skills (Takahashi, 2000). Moreover, as Edwards asserts, questions regarding Japanese cultural identity will likely continue. In order to help resolve the issue, Japan may need to consider the contradiction in their values reflected in *nihonjinron* on the one hand and educational internationalization on the other.

The results of this study suggest that participation in the English immersion program results in more flexible attitudes. Robins (1996) asserts that while change may provoke feelings of fear and anxiety in the

collectivity, if dynamism and openness in culture is inhibited, then what results is rigidity and closure. Perhaps then, in the case of the Japanese, a reconstruction of their identity could be considered advantageous, as with the inclusion of two cultures, children will be more open to others. In this sense, the immersion program in Japan could be a seed that could lead to the opening up of Japanese youth to a more flexible sense of cultural identity, one that includes not only a strong sense of being Japanese, but also a greater appreciation of other cultures.

One of the most attractive outcomes of the immersion experience is that, under conditions favorable to immersion, benefits can go beyond additive bilingualism to include cognitive, cultural and psychological advantages (Genesee, 1987; Swain & Lapkin, 1982), and not only open children's minds to other ethnic groups, but also encourage students to develop a strong appreciation for their own ethnicity (see Lambert and Tucker, 1972; Lambert, 1984). The AJWQ was constructed to investigate whether a shift in cultural identity had taken place in the English immersion students. The outcome revealed there were significant differences in favor of the English immersion students' more positive attitudes towards another culture and heightened sense of their own cultural identity. While such a measure cannot possibly assess all of the factors that make up a persons sense of cultural identity, the present study seems to have reasonably demonstrated that, similar to immersion students in North America, the English immersion students at Katoh Gakuen have been able to maintain their sense of Japanese cultural

identity, despite the fact that they spend a great deal of their school day learning through English (Downes, 2001).

Although the maintenance of the immersion students' identity may be called a 'success' of the program, questions regarding the success of the program usually revolve around academic achievement. In the next section, the academic achievement of immersion students is examined in both Japanese and American contexts.

PART 3: ACADEMIC ACHIEVEMENT

Chapter 4. Achievement in the immersion environment (Studies–3 to 5)

4.1 First language development and academic achievement in immersion

One misconception associated with the immersion approach-spending 50% or more of the day studying through a foreign language-is that it may lead to deficits in mother tongue development. However, research on immersion education has shown that it has allowed students to remain academically competitive with their non-immersion peers while maintaining normal first language development. Moreover, evaluations of majority and minority students in bilingual programs have shown that they experience no long-term academic retardation in the majority language (Cummins & Swain, 1986; Krashen & Biber, 1988).

The linguistic interdependence principal (Cummins, 1981) may be one way to explain this phenomenon where academic and cognitive literacy-related skills are said to transfer across languages. As Jim Cummins (1998) explains, "The fact that there is little relationship between amount of instructional time through the majority language and academic achievement in that language suggests that first-and second-language academic skills are interdependent, i.e., manifestations of a common underlying proficiency". For a more detailed profile of evaluations of bilingual programs for both majority and minority students in relation to the interdependence principle see Cummins (1984) and Ramirez (1992).

In immersion programs most parents consider academic achievement to be more important than language ability. One of the more important features of immersion to understand is that positive effects are not immediate. Although individual programs differ in their results, research shows that usually four to five years are needed before students start doing well academically. Studies in both the United States and Canada show that students do so well in fact, that they perform at least at the same level as their non-immersion peers, and often outperform them (Genesee, 1987). Holobow et al. (1987) and Swain & Lapkin (1991) showed that immersion students consistently do as well as, and may even surpass, comparable non-immersion students on measures of verbal and mathematics skills. Generally, a consistent pattern has been seen in the development of student's oral and literacy skills. Although students reach native-like levels in listening and reading skills in the second language, they rarely reach that level in speaking and writing (Collier, 1992). Internal studies at Katoh School have determined that students' achievement patterns have been comparable to regular students' achievement (Bostwick, in press), yet parents and educators still express fears concerning whether so much time spent learning through a second language could be detrimental to achievement.

In Anchorage, Alaska, Japanese immersion students perform at a level comparable to students in regular programs (Anchorage School District, 2000). While it has been said that parents in the immersion schools tend to be more motivated than parents of children in regular

programs, the effect of the linguistic distance between Japanese and English on student's achievement has not been clearly articulated. Further studies into this question would provide interesting new insights into modes of second language acquisition, particularly within language immersion programs with very different language pairs.

4.2. Academic achievement in primary language, math, science and social studies (Study–3)

The first investigation into academic achievement in the immersion environment involves Japanese immersion students enrolled in public schools in the Anchorage School District, Alaska.

The Anchorage School District is very large (over 49,000 students) and has a number of distinguishing characteristics. While the majority ethnic background of the total population is White, other groups represented 36 % in 1999-2000 (Anchorage School District, 2000). The District also reports that student mobility rates are comparably high with one in five students entering or leaving the District (19% compared to national mobility indicator of 16.1%), and reports more than 44% of the students served were new to their school building (Anchorage School District, 2000).

The Anchorage School District offers immersion programs in two languages, Spanish (two-way immersion) and English (partial immersion). While the schools follow the regular Anchorage School

District adopted curriculum, classes are taught in the second language for at least half of the day. During the immersion part of the day, students primarily learn math, science, social studies, and health.

4.2.1 Purpose

The immersion program itself presents many challenges to the teaching of a district's curriculum. While Spanish immersion has been successful in the Anchorage School District with a two-way immersion program**,** which has similar language pairs, a question may be raised as to whether a program involving languages as different as Japanese and English could still produce comparable results with students in regular programs. Using a standardized battery that measures skills in first language, math, and the sciences, the Japanese immersion students were compared to public school students.

4.2.2 Method

Instrument

The primary indicator of academic achievement used in 1999-2000 was the California Achievement Tests (CAT), a norm-referenced measure of basic skills (Anchorage School District, 2000). The CAT assesses basic skills in reading, language, spelling, mathematics, study skills, science, and social studies. Each section contains 20 items.

The 1995 edition of the California Achievement Tests (CAT/5) was

administered to over 30,000 students in grades 3-10 in April 2000. However, the State of Alaska has reduced the required CAT testing to grades 4 and 7 for 2000-2001 (the two required state grade levels) and will be considering a change to another norm-referenced test for 2001-2002 (in the USA, the school year begins in September).

According to the Anchorage School District, scores reported to students are generally percentile ranks (PR) scores, while the scores used for analysis and comparisons are Normal Curve Equivalent (NCE) scores. The NCE score has a range of 1 to 99, a mean of 50, and a standard deviation of 21.06, a type of standard score. While the tests have different and more complex questions at each grade level, they are designed to measure the same general traits, the ability to read, the ability to solve math problems, and knowledge of the conventions of language. The CAT is designed to be consistent enough in the areas measured to allow generalizations about the growth of groups of students from time to time.

Subjects

The Japanese immersion students of grades 4 and 7 (54) were compared with regular students from grades 4 and 7 (525) from regular schools. In total, 579 students were tested.

The Immersion and regular school groups have different approaches

to teaching the curriculum, however as both schools follow the same curriculum and academic objectives set out by the District, comparison schools were chosen along a comparison of three demographic variables: socio-economic status (number of children from low-income families) ethnicity and mobility (number of students who move in or move out of the school). (See Tables 4-1 to 4-3). The comparability of the two groups was tested statistically using chi-squared tests, which showed some significant differences.

For family income, although there were no differences between the immersion and regular elementary schools,χ^2 (1) = .26. p > .05, there was a significant difference between the middle schools,χ^2 (1) = 5.54 p < .05. For ethnicity, there were no differences between the immersion and regular middle schools,χ^2 (1) = 2.88. p > .05, however, was a significant difference between the elementary schools,χ^2 (1) = 14.03 p < .001. For mobility, there were no significant differences between the elementary,χ^2 (1) = 1.07. p > .05, or the middle schools,χ^2 (1) = .16. p > .05.

While the demographic characteristics are intended to demonstrate the comparability of the two groups (immersion, non-immersion), particularly socio-economic status, there may be a number of other variables that could result in significant differences. This study, for example has not taken into account possible differences in the academic ability of students in the two groups (e.g. IQ tests), or differences in the amount of participation of the parents of the students. While immersion

students may face a heavier academic burden having to learn subjects through a foreign language, they may also be benefiting from parents who are more involved. These possible differences should be considered before making any conclusions from the results.

Table 4-1A CAT Demographics Comparison: Income				
School	Low income	Higher income	Total	
Immersion Elementary	65	515	580	NS
Regular Elementary	65	468	533	
Immersion Middle	131	820	951	*
Regular Middle	161	746	907	
Total	422	2549	2971	

Table 4-1B CAT Demographics Comparison: Ethnicity				
School	White	Minority	Total	
Immersion Elementary	407	173	580	**
Regular Elementary	426	107	533	
Immersion Middle	661	290	951	NS
Regular Middle	597	310	907	
Total	2091	880	2971	

Table 4-1C CAT Demographics Comparison: Mobility				
School	Mobility	Stablility	Total	
Immersion Elementary	91	489	580	NS
Regular Elementary	96	437	533	
Immersion Middle	220	731	951	NS
Regular Middle	217	690	907	
Total	624	2347	2971	

4.2.3 Results & Discussion

A one-way ANOVA was carried out on all the subsections of the CAT. Significant effects were seen for reading vocabulary (F (1, 577) = 9.94, p < .01), total reading (F (1, 577) = 5.77, p < .05), language mechanics (F (1, 577) = 4.58, p < .05), language expression (F (1, 577) = 12.61, p < .001), total language (F (1, 577) = 9.17, p < .01), math computation (F (1,

577) = 68.52, $p < .001$), math computation and application (F (1, 577) = 44.07, $p < .001$), total math (F (1, 577) = 61.32, $p < .001$), science (F (1, 577) = 11.34, $p < .01$), social studies (F (1, 577) = 6.13, $p < .05$) and total battery (F (1, 577) = 21.34, $p < .001$). (see Tables 4-2 to 4-13, Figures 4-1 to 4-12). Although twelve sections of the CAT were compared, the total battery score is the sum of total reading, total language and total math.

The results of the standardized test comparison have shown significant differences in favor of the immersion students. While this thesis does not consider the linguistic differences between Japanese and English in relation to achievement, the fact that the immersion students have attained this level of academic achievement despite the fact that they spend at least half of their day learning through the medium of Japanese is certainly testament to the success of the immersion program in reaching its academic objectives. In general, this study supports other studies in North America showing that immersion students attain comparable levels of academic achievement as students in regular programs (Johnson & Swain, 1997).

While there may be some debate as to the effect of parental involvement, the students are doing exceptionally well in the program while gaining a second language and culture. In this study, Lambert's (1974) contention that additive bilingualism is achievable within the immersion environment has been supported.

Table 4-2 Mean Scores for the CAT: Reading Vocabulary			
	M	SD	
Immersion	61.83	23.85	
Regular	51.70	22.35	

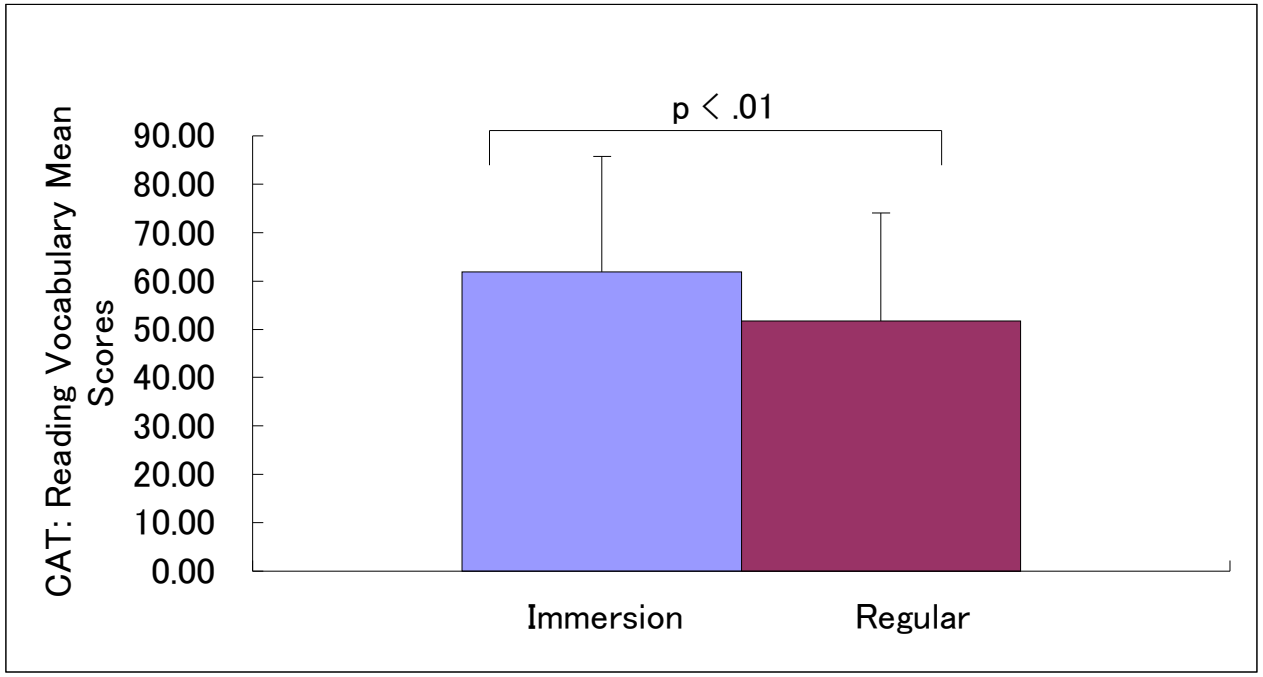


Figure 4-1. Mean Scores for California Achievement Tests: Reading Vocabulary

Table 4-3 Mean Scores for the CAT: Reading Comprehension			
	M	SD	
Immersion	62.20	23.56	
Regular	56.95	22.56	

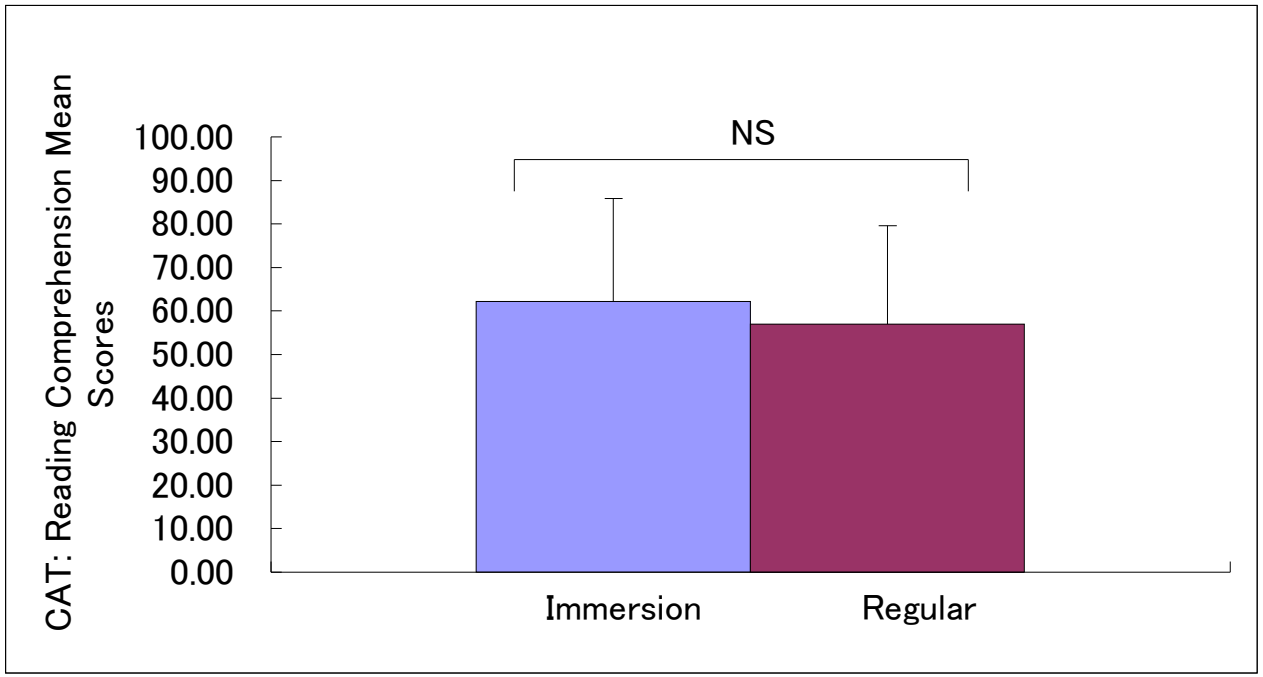


Figure 4-2. Mean Scores for California Achievement Tests: Reading Comprehension

Table 4-4 Mean Scores for the CAT: Total Reading			
	M	SD	
Immersion	63.09	23.60	
Regular	55.24	22.80	

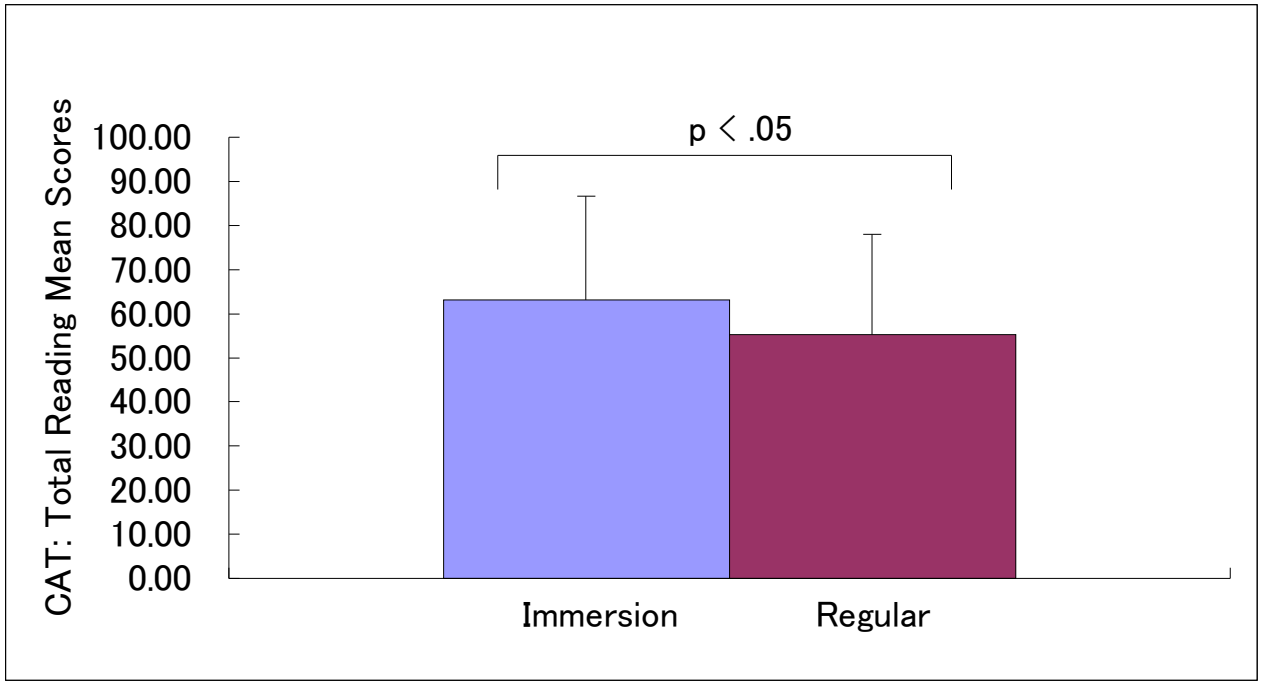


Figure 4-3. Mean Scores for California Achievement Tests: Total Reading

Table 4-5 Mean Scores for the CAT: Language Mechanics			
	M	SD	
Immersion	64.33	23.31	
Regular	57.31	22.93	

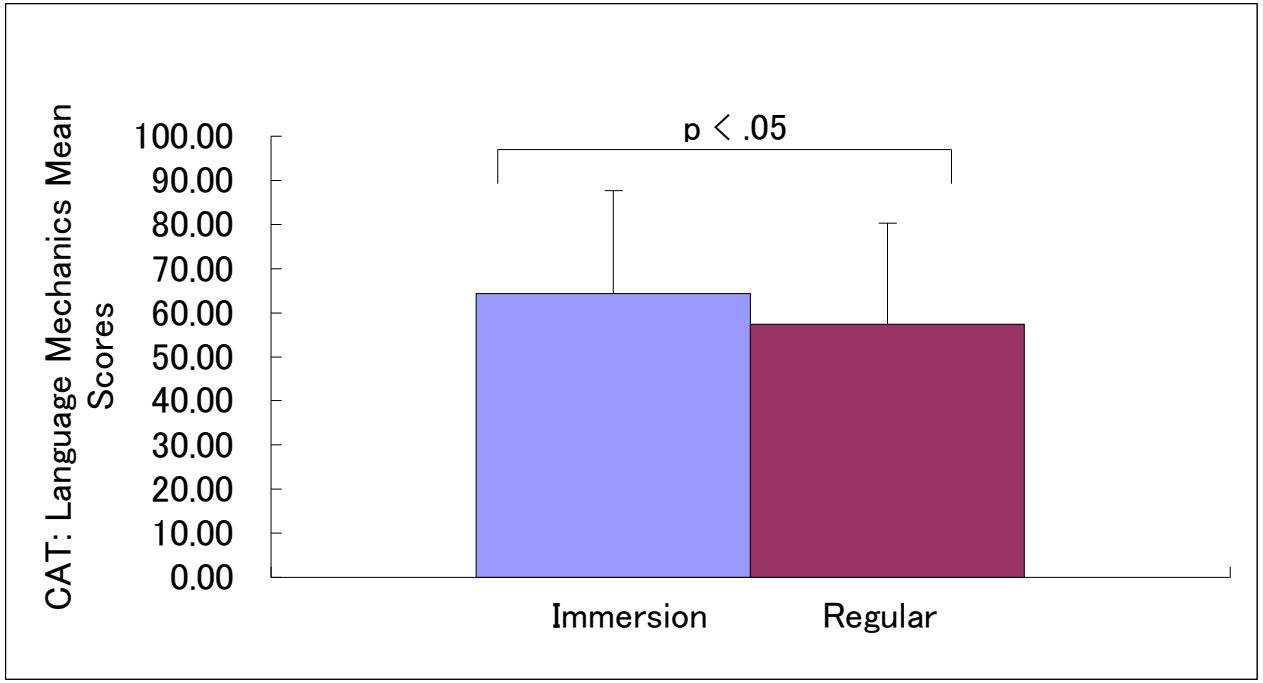


Figure 4-4. Mean Scores for California Achievement Tests: Language Mechanics

Table 4-6 Mean Scores for the CAT: Language Expression			
	M	SD	
Immersion	64.94	24.90	
Regular	52.31	24.89	

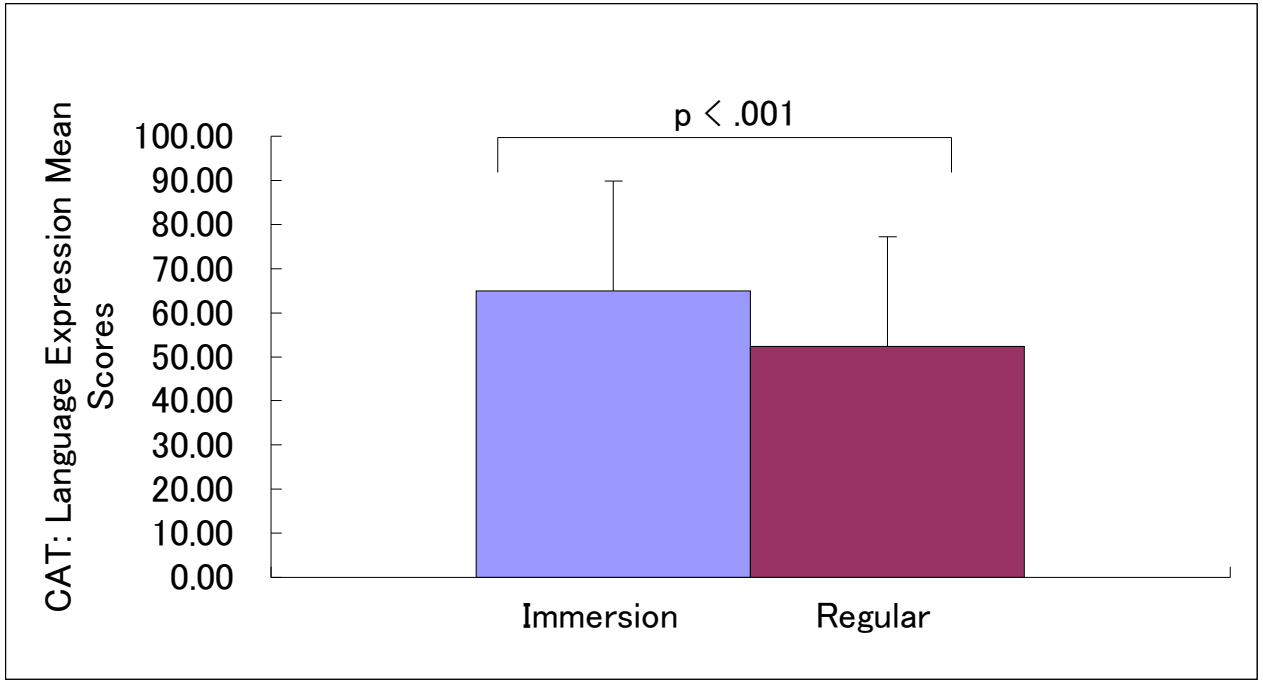


Figure 4-5. Mean Scores for California Achievement Tests: Language Expression

Table 4-7 Mean Scores for the CAT: Total Language			
	M	SD	
Immersion	65.94	23.79	
Regular	55.43	24.33	

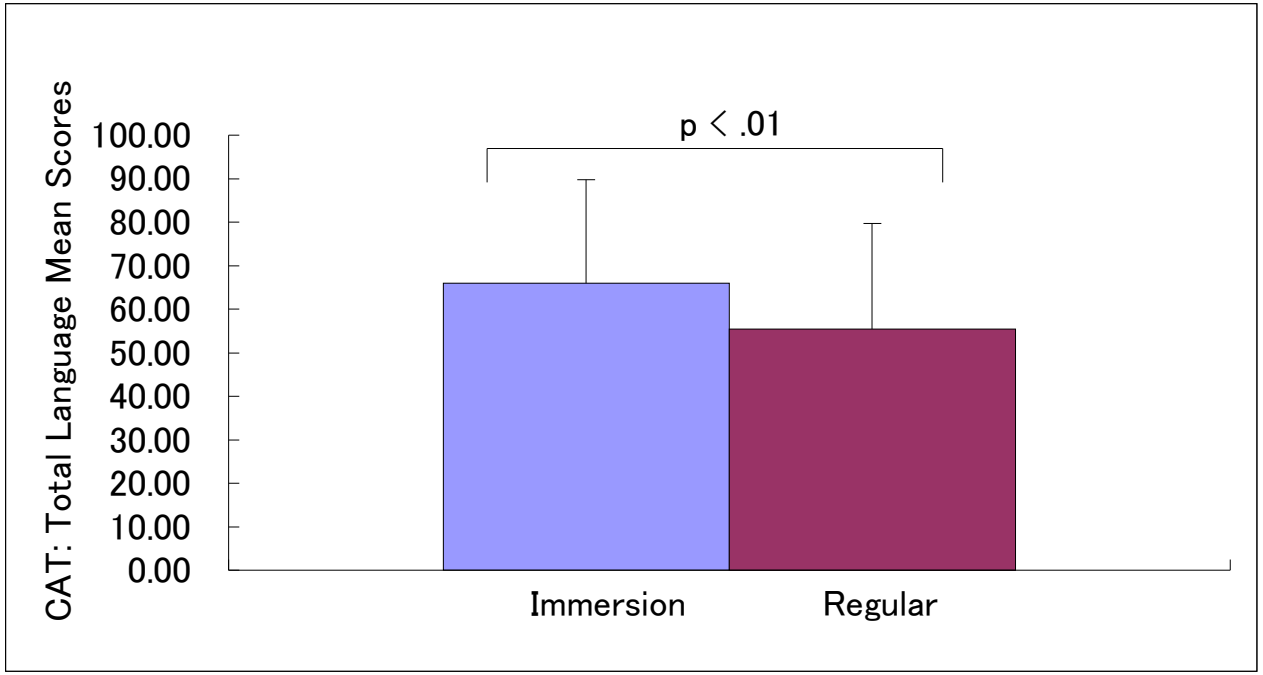


Figure 4-6. Mean Scores for California Achievement Tests: Total Language

Table 4-8 Mean Scores for the CAT: Math Computation			
	M	SD	
Immersion	81.69	15.51	
Regular	55.39	22.79	

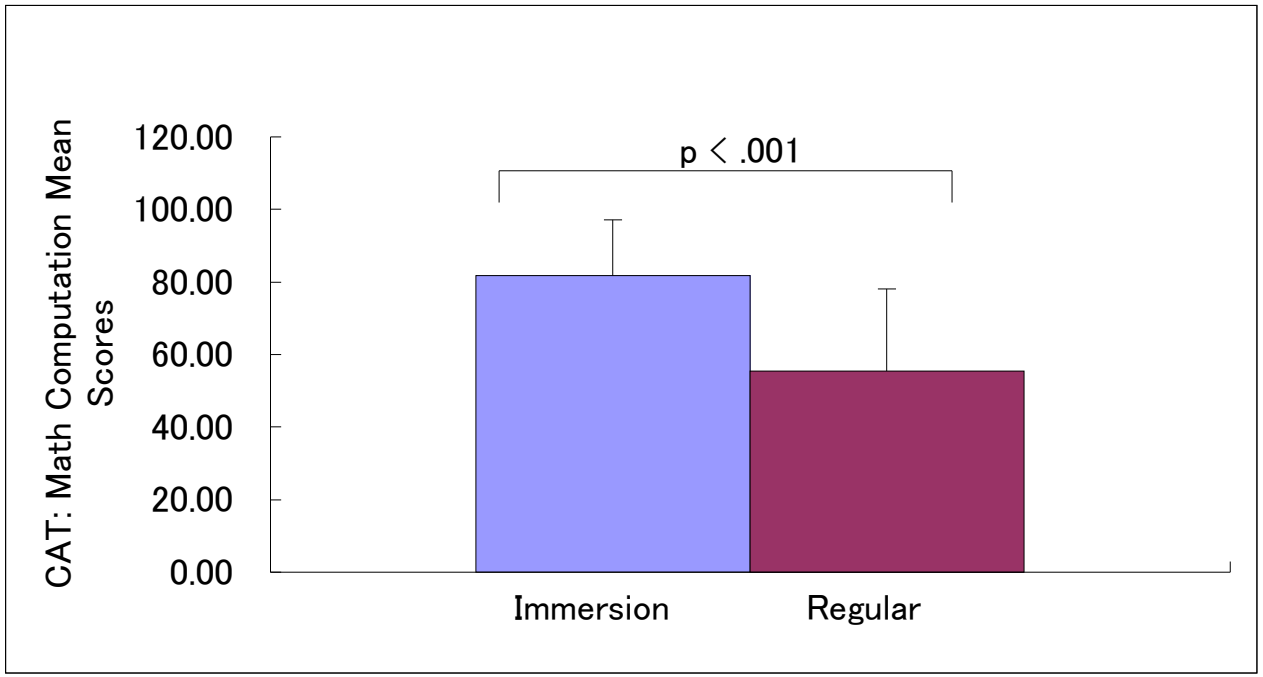


Figure 4-7. Mean Scores for California Achievement Tests: Math Computation

Table 4-9 Mean Scores for the CAT: Math Computation and Application			
	M	SD	
Immersion	77.33	19.77	
Regular	53.96	25.07	

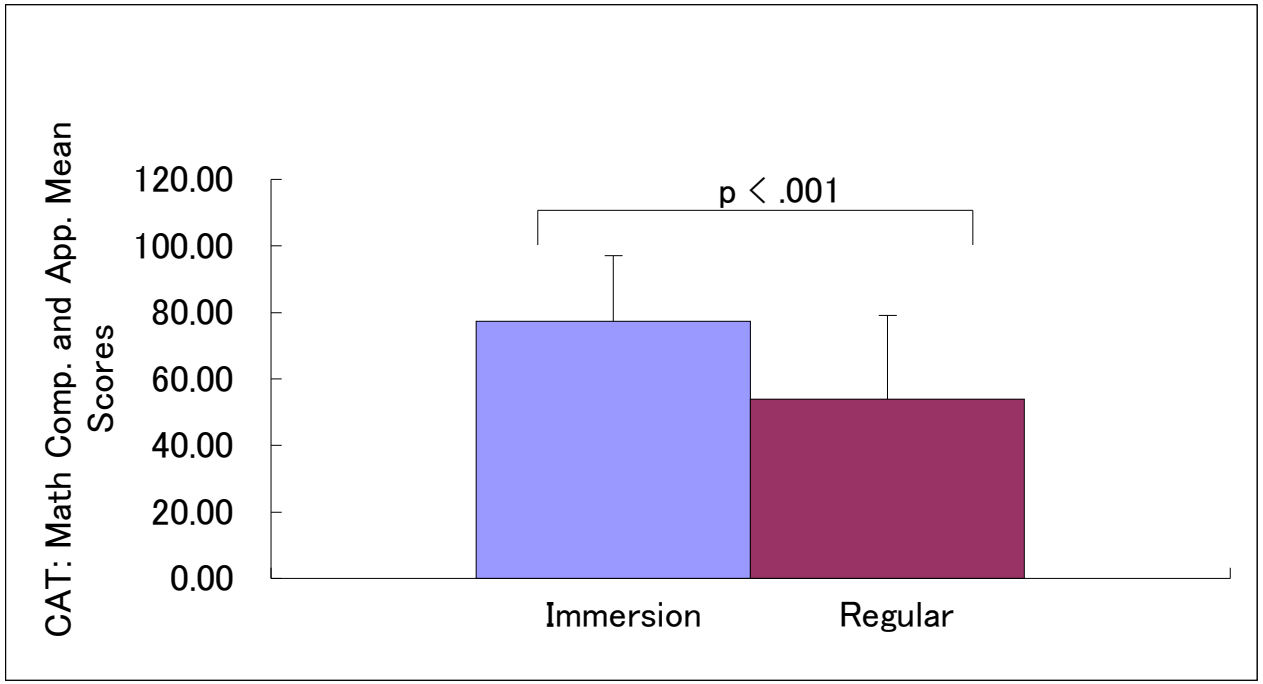


Figure 4-8. Mean Scores for California Achievement Tests: Math Computation and Application

Table 4-10 Mean Scores for the CAT: Total Math			
	M	SD	
Immersion	81.60	17.30	
Regular	55.30	24.10	

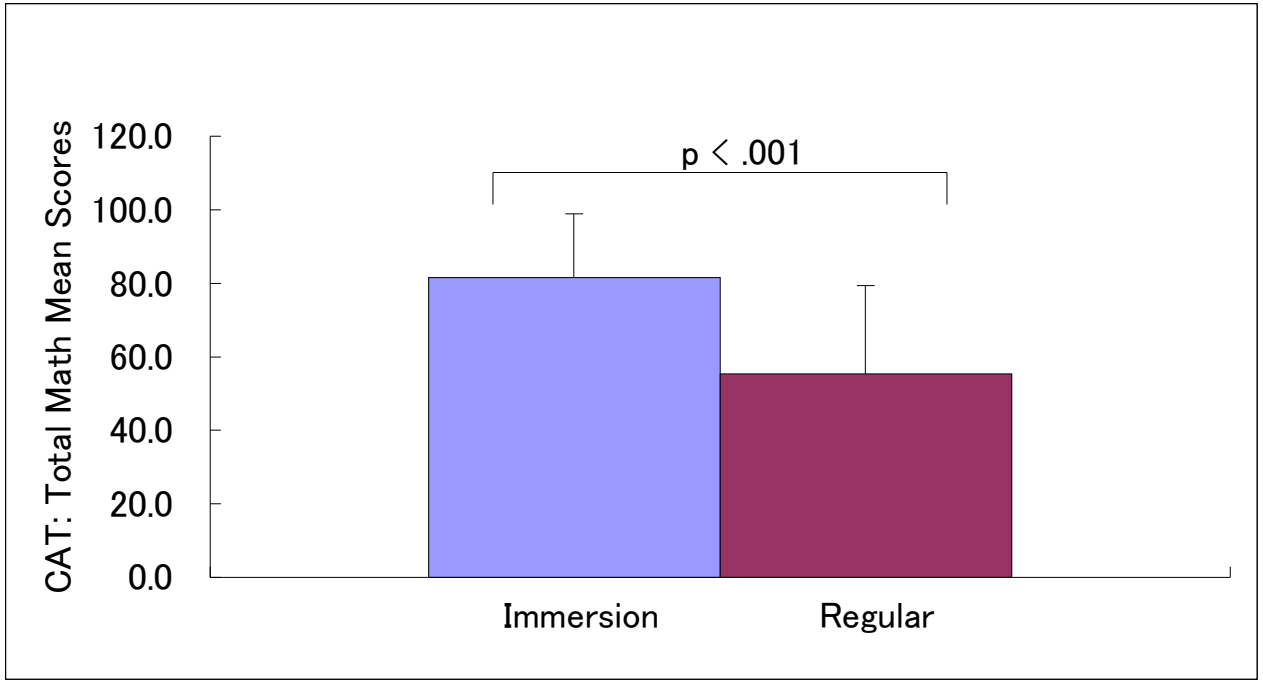


Figure 4-9. Mean Scores for California Achievement Tests: Total Math

Table 4-11 Mean Scores for the CAT: Science			
	M	SD	
Immersion	67.46	21.29	
Regular	56.87	22.09	

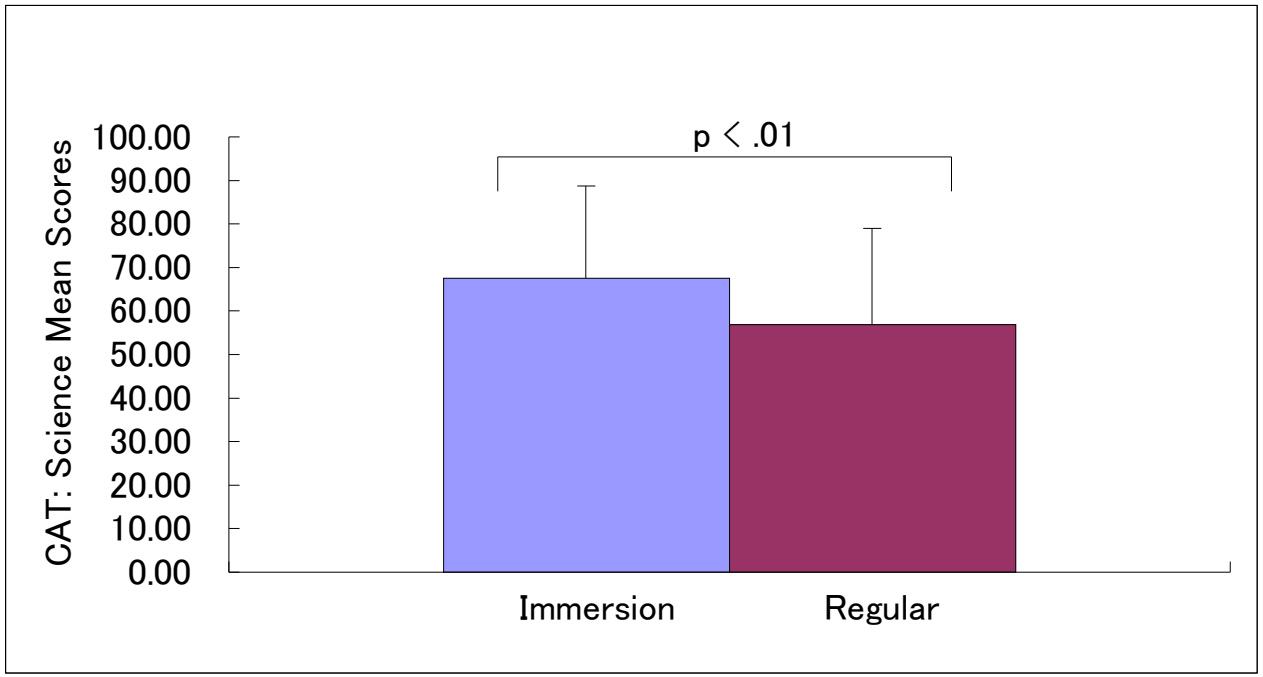


Figure 4-10. Mean Scores for California Achievement Tests: Science

Table 4-12 Mean Scores for the CAT: Social Studies			
	M	SD	
Immersion	63.85	17.42	
Regular	55.97	22.71	

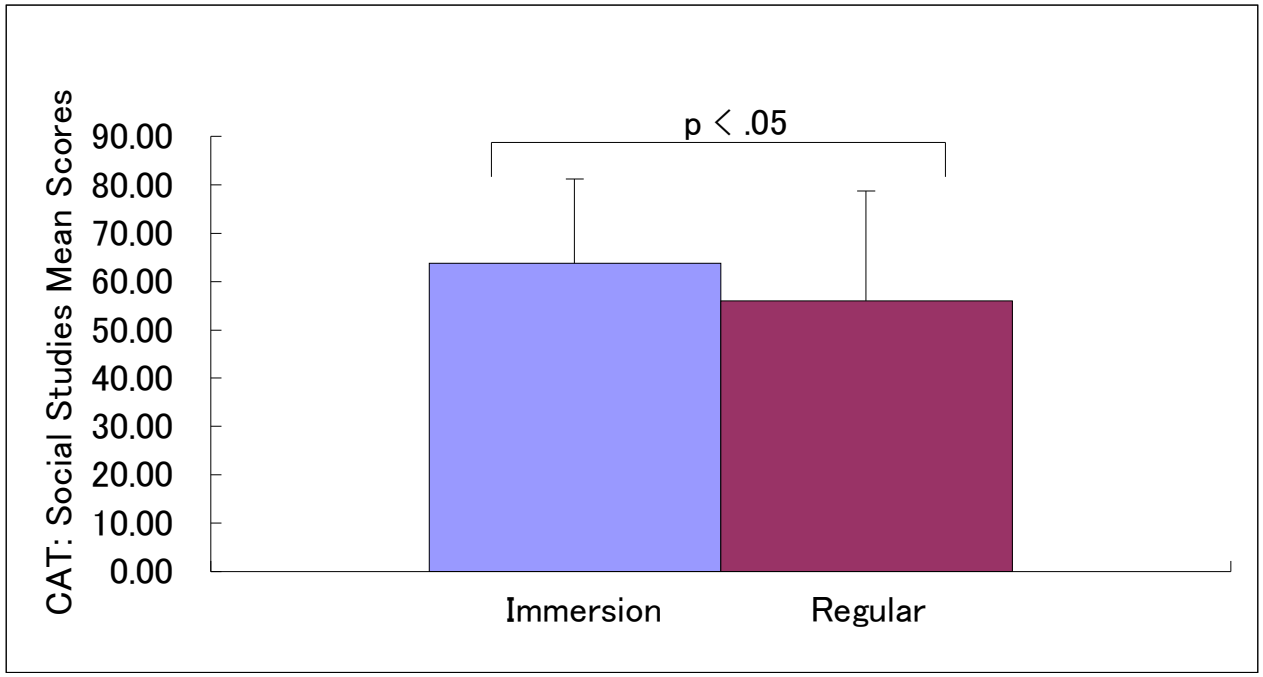


Figure 4-11. Mean Scores for California Achievement Tests: Social Studies

Table 4-13 Mean Scores for the CAT: Total Battery			
	M	SD	
Immersion	70.17	25.82	
Regular	52.80	26.35	

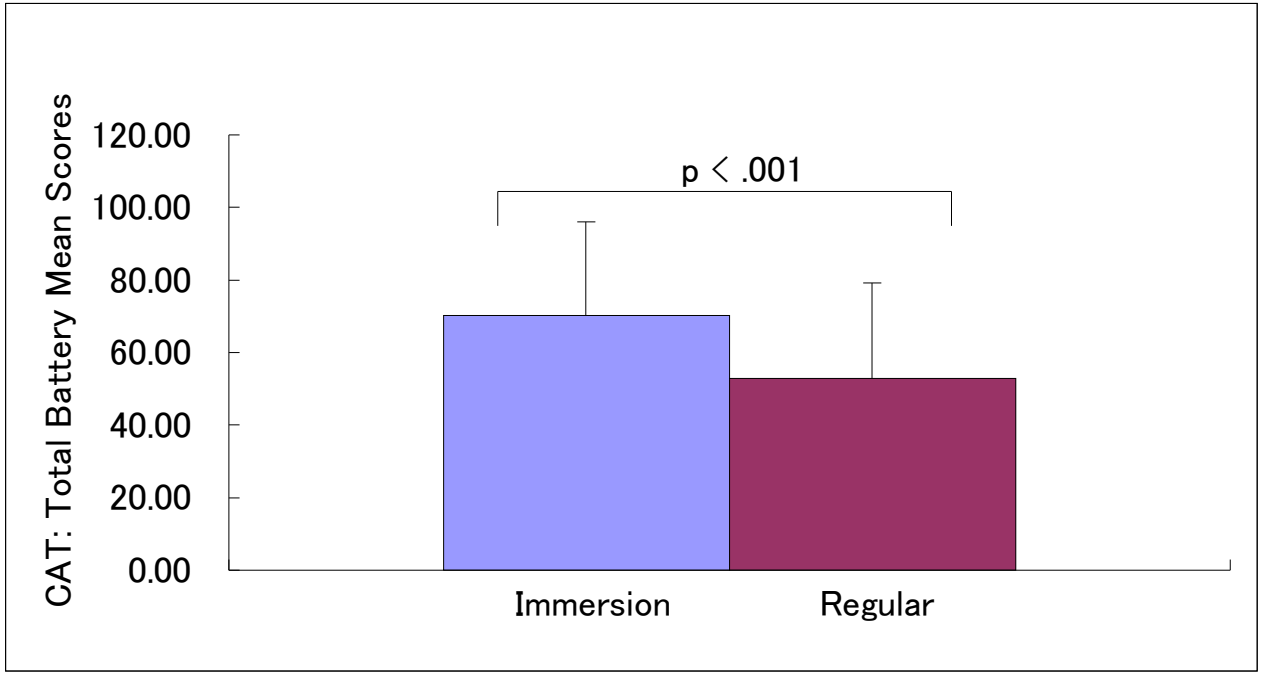


Figure 4-12. Mean Scores for California Achievement Tests: Total Battery

4.3 Academic achievement in math and Japanese (Study-4)

4.3.1 Purpose

The question investigated in this study was the level of academic achievement in Japanese and mathematics for sixth graders in both the immersion and non-immersion programs at Katoh School in Japan. While numerous studies in the United States and Canada have documented the success of immersion students in mathematics and first language achievement, the first English immersion program to be implemented in Japan had to make its own investigations to satisfy educators and parents who were concerned about whether students could keep up with their non-immersion peers. As a result, internal testing at Katoh School (Bostwick, 1999, 2000, in press) has mirrored results obtained from studies conducted in Canada and the United States, (see Cummins, 1998; Johnson & Swain, 1997) namely that the immersion students scored at least as well as non-immersion students on measures of academic achievement. In order to re-examine the academic achievement of the students, results of a measure of mathematics and Japanese (Kokugo) is reported in this study.

4.3.2 Method

Instrument and Subjects

A comparison was made using junior high school entrance

examination scores on standardized tests for mathematics and Japanese (Kokugo). English immersion students in grade 6 (36) were compared with grade 6 (30) students from the regular program at Katoh School.

4.3.3 Results & Discussion

T-test analysis showed no significant differences between the two groups for both Japanese (t (64) = -.87, *NS*) and math (t (64) = 1.03, *NS*). The student's IQ was measured and found to be comparable see Bostwick (1999). (Tables 4-14 and 4-15, Figures 4-13 and 4-14).

This study did not reveal any significant differences between the two groups. While some of the studies at Katoh have shown differences between the regular and immersion students-all in favor of the immersion students, differences are not stressed (Bostwick, 2000). However eager the school may be to avoid accentuations of differences between the two programs, the results of this study and others within Katoh undoubtedly provide evidence of the successes of the program.

Standardized testing, in this case, national entrance examinations, are limiting in their scope in that they do not take into account reasons for failure or success. While results may be attributed to teachers and the school itself, the lack of information regarding supporting factors for the students, including parental attitude toward the learning process may make it difficult for educators to comprehend the reasons underlying

successes or failures within immersion. Although in this thesis, certain relationships between variables within immersion are revealed, further investigation is needed to determine how these factors relate to achievement.

Table 4-14 Junior High School Entrance Test: Math

	M	SD	
Immersion	60.36	15.87	
Regular	56.23	16.77	

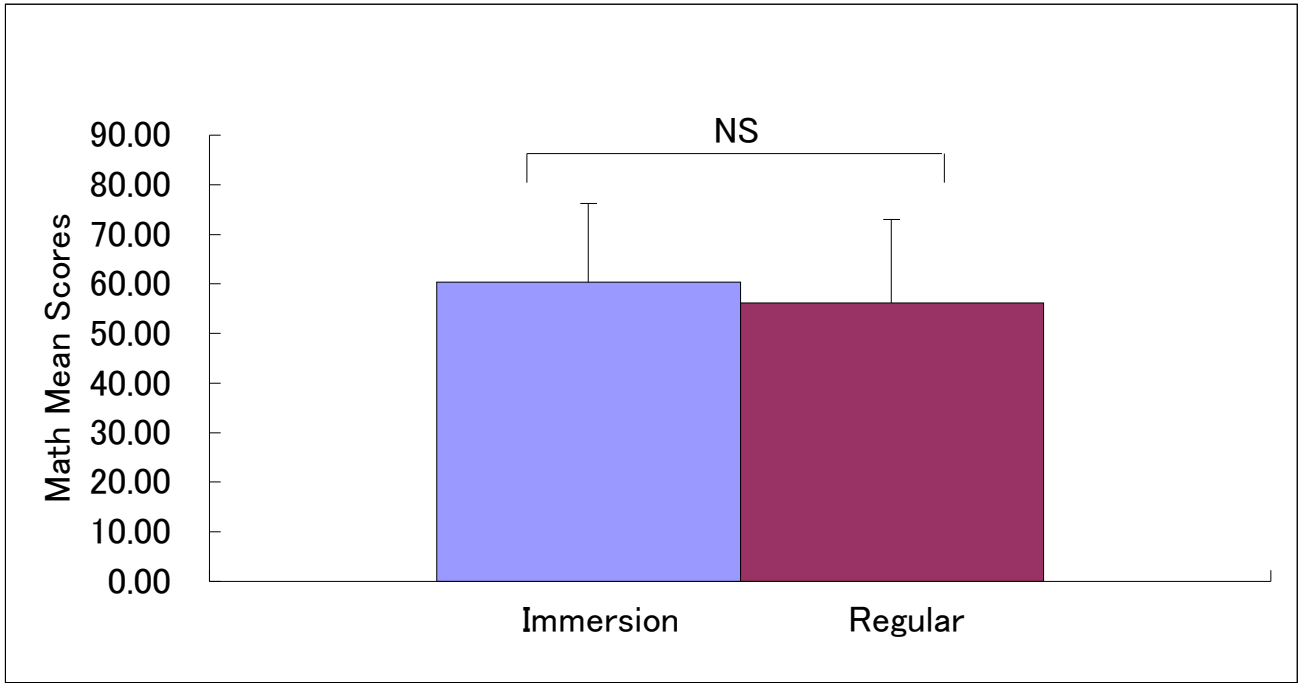


Figure 4-13. Mean Scores for Junior High School Entrance Test: Math

Table 4-15 Junior High School Entrance Test: Japanese			
	M	SD	
Immersion	57.44	12.23	
Regular	59.83	9.55	

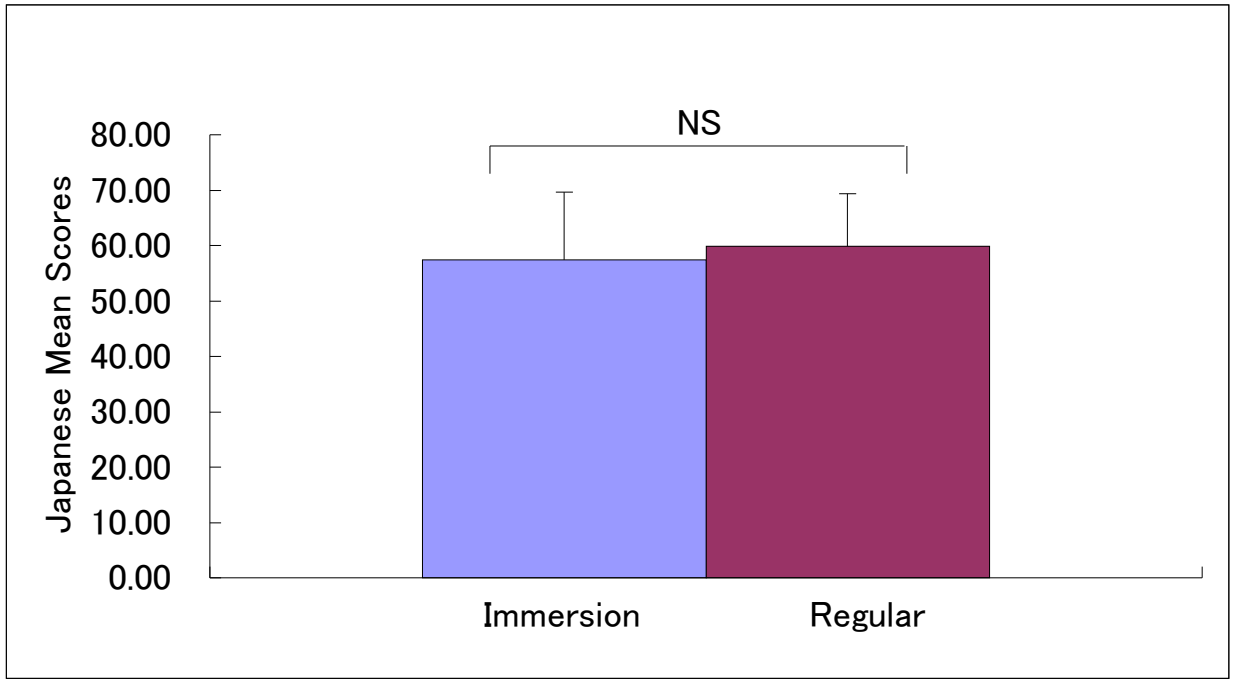


Figure 4-14. Mean Scores for Junior High School Entrance Test: Japanese

4.4 Knowledge of Japanese vocabulary (Study-5)

4.4.1 Purpose

Knowledge gained form the testing of students in the immersion program at Katoh Schools has shown that the distance between English and Japanese has had no negative effect on first language development (Bostwick, in press). Specifically, Bostwick (1999, in press) has investigated Japanese immersion students' first language skills through national 'Kokugo' examinations, and has reported that students consistently score at least as well as the national average. In this respect, the Katoh School has provided the first evidence that additive bilingualism is attainable in Japan.

The structure of the Japanese language is, however, fundamentally different from English. Therefore it may not be surprising to learn that concerns persist over whether spending a great deal of each academic day in English could result in students falling behind their peers in Japanese language development. Although previous internal evaluations have demonstrated that the immersion students perform at least as well as Katoh School's non-immersion students on national Japanese (Kokugo) tests, new parents deciding between immersion and the regular program remain unconvinced (R. M. Bostwick, personal communication, March 15, 1998). Therefore, it was determined that an external study, using a different measure of language proficiency, would contribute to the task of ascertaining whether the students' Japanese

language development has been held back as a result of immersion. To this aim, a new index of the student's Japanese language development was administered, and in order to provide a reference, the test was also given to students from three regular schools.

4.4.2 Method

Subjects

Immersion students from the English immersion program at Katoh Elementary School represented grades 5, 6 and 7 (105). The reference group students were from three public schools in the Minato ward of Tokyo: grades 5 and 6 from T Elementary School (127) and M Elementary School (110), and grade 7 from T Junior High School (167).

Instrument

The Japanese Vocabulary Test (Hattori, 1989, 1990, 1997) is a standardized test for use with elementary and junior high school students in Japan. The test consists of a series of multiple-choice questions asking the student to choose the meaning of a word, word combination or expression. From the original 150 test questions, 50 questions were quasi-randomly selected from each level of difficulty. Classroom teachers administered the test in December 1998. No special instructions were given.

4.4.3 Results & Discussion

There may be some question as to the comparability of the immersion and regular school groups. In order to make a fair comparison, the two groups should have enough key similarities that would rule out any conclusion that they are incomparable. If the groups are comparable, then a two-way ANOVA would be appropriate, if there are major distinguishing differences, then a one-way ANOVA may be more appropriate, where a second group serves simply as a reference to the first group's results. This study presents both statistical comparisons.

A one-way ANOVA analysis of the mean scores of the Japanese Vocabulary Test was carried out for both the immersion students and the students from the regular schools. The main effect for grade for the immersion students was significant (F (2,102) = 15.53, p < .001). A post hoc test revealed significant differences between grades five and six, grades five and seven, and grades six and seven (*Mse* = 16.05). (Table 4-16, Figure 4-15). The main effect for grade for the regular students was also significant (F (2,400) = 18.47, p < .001). A post hoc test revealed significant differences between grades five and six and grades five and seven (*Mse* = 77.52). (Table 4-17, Figure 4-16).

These results show that the scores for both the immersion and regular students increased with grade, extending previous studies by Bostwick (1999, 2000) in which the English immersion students demonstrated high levels of competence in Japanese language development.

Table 4-16 Mean Scores for the Japanese Vocabulary Test: Regular			
	M	SD	
5	25.72	7.77	
6	30.50	9.76	
7	31.84	8.92	

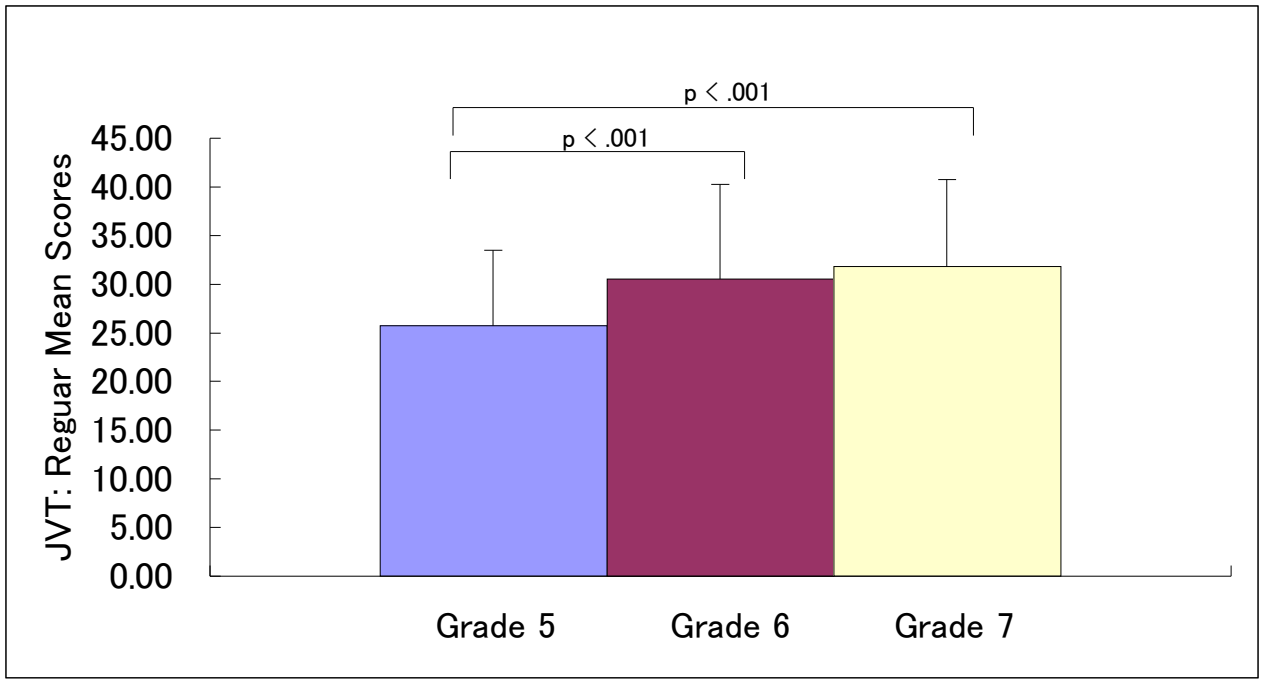


Figure 4-15. Mean Scores for the Japanese Vocabulary Test: Regular Schools

Table 4-17 Mean Scores for the Japanese Vocabulary Test: Immersion			
	M	SD	
5	27.12	8.32	
6	32.59	7.47	
7	37.65	7.16	

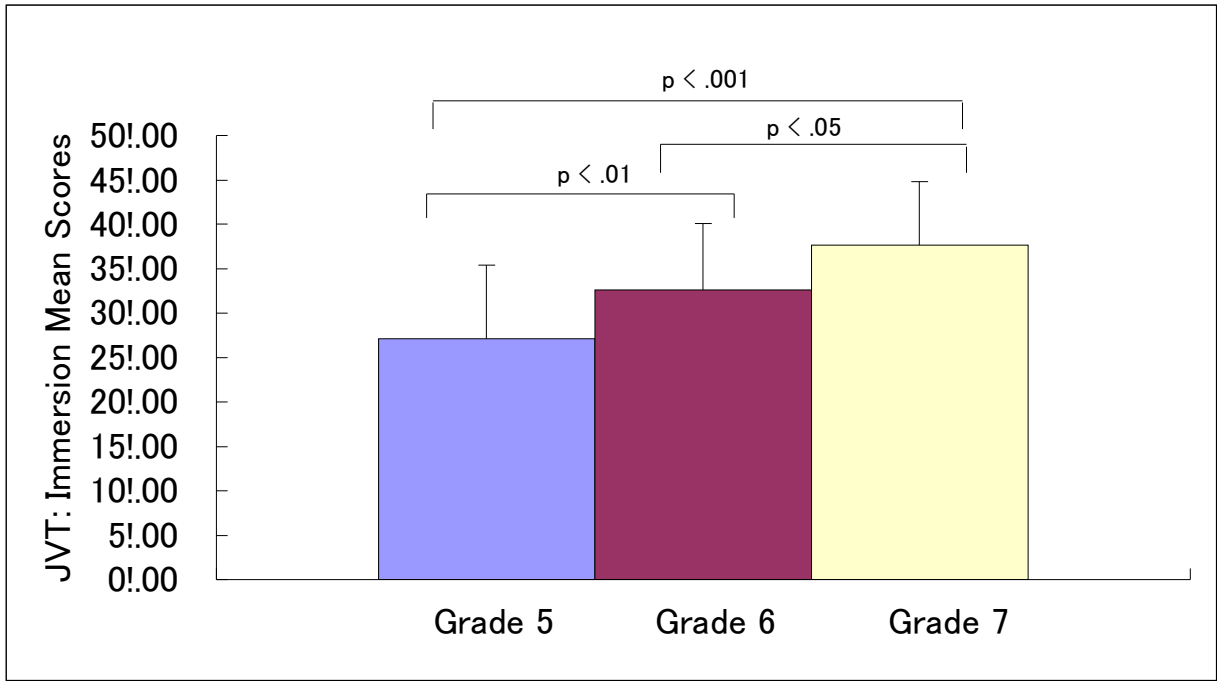


Figure 4-16. Mean Scores for the Japanese Vocabulary Test: Immersion

The results of a two-way ANOVA are shown in Table 4-18 and Figure 4-17. Although there was no interaction between school and grade, main effects were seen for grade (F (2,502) = 26.04, p < .001) and school (F (1,502) = 10.41, p < .01). Post hoc tests for grade showed significant differences between grades 5 and 6 and grades 5 and 7 in favor of the immersion students.

Strong support is necessary in order to make an informed decision regarding comparability. Unfortunately, information regarding IQ, or socio-economic status of the parents was not taken in this study. Therefore, other, more secondary factors are discussed.

In general, schools in the Tokyo region are considered to have a higher level of education. For this reason, many children of families in the suburban, or more rural areas either move or commute to Tokyo. Katoh School is located in Numazu City, Shizuoka prefecture, and while the city of Numazu may not hold as high academic standards as the Minato ward of Tokyo, its status as a private school, where academic standards are often higher than those of public schools, could be one equalizing factor.

If a direct statistical comparison of the Japanese vocabulary ability scores for the immersion students and regular students is judged inappropriate given the fundamental differences between the two types of schools, the similarity in the pattern of scores might suggest that participating in the English language immersion program has not been detrimental to the immersion student's knowledge of Japanese

vocabulary. If, however, we consider that a reasonable level of comparability has been established, we may then point to the results showing that the immersion experience has resulted in positive effects on first language development (see Figure 4-17).

Before we can dismiss the claim that immersion is detrimental to the student's knowledge Japanese vocabulary completely, there is one other aspect that needs to be addressed. It is possible that the detrimental effects of the immersion program are being negated by several supplemental classes a week in Japanese that are added in order to help prepare students to perform on state or national tests. Although it is impossible to gauge the influence of these extra classes on the students' Japanese vocabulary ability, one thing does seem apparent, the combination of the immersion approach plus the supplemental classes has resulted in a similar pattern of progress as that of the regular school students in the academic grades considered in this study (Downes & Arai, in press).

Table 4-18 Mean Scores for The Japanese Vocabulary Test as a function of School and Grade

Grade	School				Diff.
	Immersion		Regular		
	M	*SD*	*M*	*SD*	
5	27.12	8.32	25.72	7.77	1.40
6	32.59	7.47	30.50	9.76	2.09
7	37.65	7.16	31.84	8.92	5.81

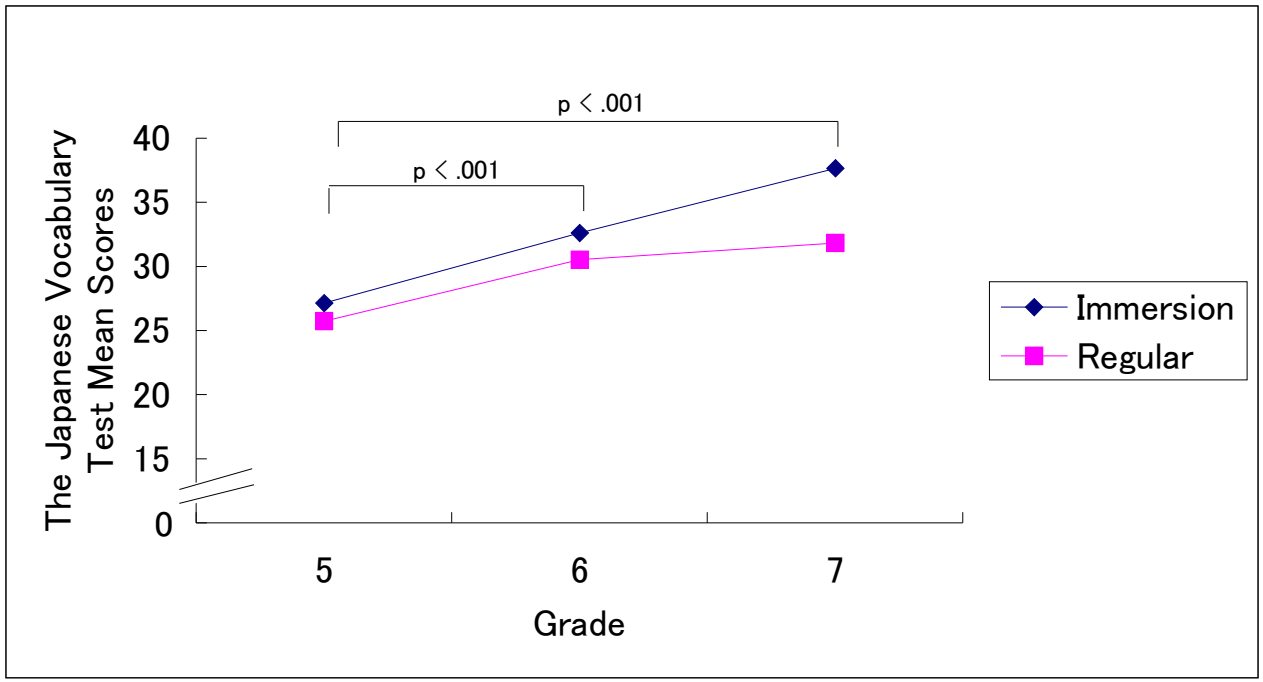


Figure 4-17. Mean scores for the Japanese Vocabulary Test

4.5 Conclusions from the achievement studies

The achievement studies were undertaken to provide an indication of the success of the immersion students in two ethno-linguistic environments.

In the Japanese immersion program in Anchorage, Alaska, achievement was assessed with the California Achievement Tests. For English immersion students at Katoh School, achievement was measured with math and Kokugo entrance examinations, in addition to an alternative method for assessing first language development, the Japanese Vocabulary Test. To summarize the findings, results from both immersion programs show that students do not appear to be receiving negative effects as a result of spending at least half of their school day studying core subjects such as math and science through a second language. These results support Lambert's (1974) theory of additive bilingualism.

PART 4: FACTORS RELATED TO SUCCESS

Chapter 5: Studies of the factors related to success (Studies 6 to 9)

In this thesis, the first examination of what may be considered a 'success' of the immersion program was the study concerning the Japanese cultural identity of the English immersion students at Katoh School, the first immersion program in Japan. While maintenance, or promotion of cultural identity may not seem to be traditional indicator of success, the conclusion emerging from the study suggests that English immersion for Japanese students has not produced any negative effects on identity, but rather seems to encourage a stronger awareness and pride in the student's home culture while promoting positive attitudes towards the target language and culture.

Second, as a more concrete measure of success, academic achievement was measured in two different immersion contexts. Both programs, which share the same language pairs, showed similar results. Significant differences for both the English immersion program in Japan, and the Japanese immersion program in Alaska were shown in comparisons of academic achievement with students in regular programs. The implication here is that the structural differences that exist between Japanese and English have not negatively affected the students' scholastic achievement.

Since the introduction of the Japanese immersion program to

Anchorage in 1989, it continues to be popular among students and parents, so popular, in fact, that new students are chosen through a lottery system. Whether its popularity makes it a 'successful' program is debatable, yet academically, the immersion students performance has been comparable to that of regular students (Anchorage School District, 2000). This thesis hypothesizes that in order to determine some of the reasons for success or failure within immersion, rather than looking only at the immersion program itself, or, the significance of language distance, other supporting psychological factors may present a more revealing picture of what enables the students to perform in immersion. After a brief review of significant research that has produced some insight into supporting factors, studies will be presented that attempt to further identify important psychological relationships within immersion.

5.1 Previous research

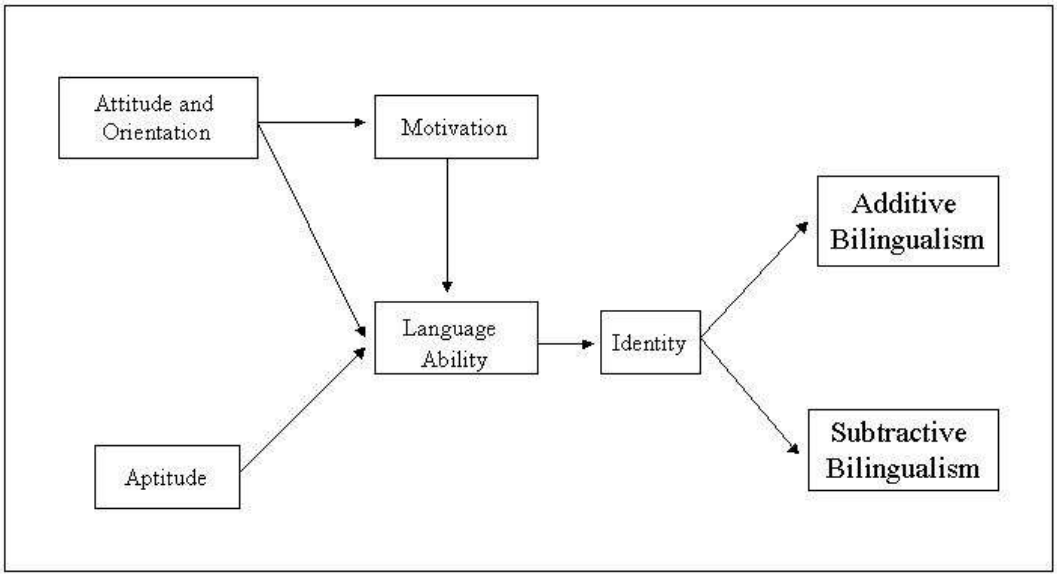
Since the first program, and its spread to other countries, many studies, over various categories have documented the effects of immersion. After looking for research that would have the greatest bearing on the present study, particularly in order to determine relevant factors, the literature pointed to Lambert and Gardner, who have each presented related research but with different points of focus. While both present research models that attempt to explain the process and result

of second language acquisition, Lambert (1974) focuses on potential positive or negative outcomes of bilingualism, while Gardner (1984) focuses on the activating processes in second language acquisition.

The model presented by Lambert (1974) contrasts the potential effect that second language acquisition may have on bilingualism for majority and minority group members. The model argues that the surrounding environment, including student's attitudes and motivations strongly influences the bilingual experience (Fig 5-1). Lambert argues that certain environments will result in either a positive or negative bilingual experience. Thus, he predicts that in bilingual education, or in a bilingual environment, if the native language remains the dominant language, identity is positively affected and this leads to additive bilingualism (i.e., a second language is added at no cost to the development of the first language), however, when the majority language is slowly replaced by the minority language, identity is negatively affected, consequently leading to subtractive bilingualism. Lambert's model shows the importance of considering other factors within bilingual education.

Figure 5-1. Lambert's Model of Additive vs. Subtractive Bilingualism

Next we will turn to a discussion of a model that illustrates how learning in a school setting relates to second language proficiency. Gardner (1979, 1983, 1985) proposed in his socio-educational model that attitudes influence motivation, which, in turn, influences second



Lambert's Model

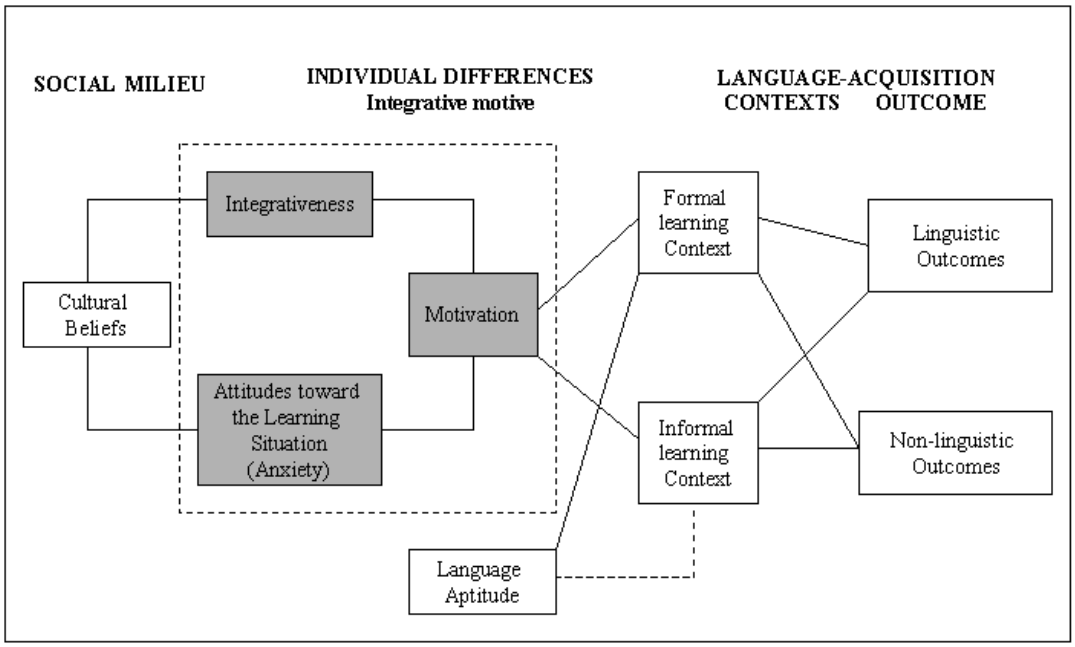
(Lambert 1974, Bourhis 1991)

language acquisition. According to Gardner (1979), because students in second language classes in school are acquiring symbolic elements of a

different ethnolinguistic community, and not of their own language, the learning of a second, or foreign language in the school is not an education phenomenon, but rather a socio-psychological phenomenon. Gardener therefore places his emphasis on four socio-psychological variables: social milieu, individual differences, and language acquisition context and outcomes. Arguing that that there is a link between cultural beliefs and second language acquisition, Gardner (1983) urges support for his model by referring to Lambert's (1974) analysis of additive and subtractive bilingualism. Here we see a common link between the two models. It is interesting to note that Lambert has placed identity near the end of his model close to additive and subtractive bilingualism, while Gardner has placed cultural beliefs at the left side of his model, where the social milieu, or outside environment is said to play a central role.

An investigation of the socio-educational model using Lisrel causal modeling (Gardner, 1983) revealed clear causal paths leading from the cultural milieu as reflected in cultural beliefs, to the outcomes expressed in the model, in addition to other paths leading from the outcomes back to other components at the beginning of the model (see also LaLonde & Gardner, 1985). The model has a circular movement in that the language outcomes return to have effects on other components of the model such as attitudes and motivation. In summary, links were found between cultural beliefs, attitudes, motivation, situational anxiety, and prior achievement to proficiency in a second language.

Gardner's model predicts that second language takes place in a particular context, and also that second language acquisition is influenced by attitudes and beliefs of the community concerning language learning, individual differences, and expectations about the nature of language skill development. For example, the sociocultural context is expected to produce two relevant attitudes, integrativeness and attitudes towards the learning situation (Hamers & Blanc, 2000a) (Figure 5-2).



Gardner's Socio-educational Model

(Gardner, 1985)

Figure 5-2. Gardner's Socio-educational Model

We have looked at two models that present two different pictures of the language learning experience. The first model by Lambert (1974) focuses on the possible outcomes a bilingual program may have on ethnic identity. In this case the student's environment outside of school is emphasized, and claimed to be a key factor in the determination of whether bilingualism, or contact with the target language community, results in either a positive or negative sense of ethnic identity for the child. As Gardner (1983) explains, although majority group members have no reason to fear loss of first language proficiency or ethnic identity if they develop competence in a second language, (additive bilingualism), ethnic minority members risk losing their skill in their own native language and their own sense of ethnic identity (subtractive bilingualism). Lambert's model proposes that supporting factors such as attitudes and motivations may be significant within the process of bilingual education.

The second model by Gardner (1985) examines the relationships that certain variables may share in the process of language learning within the classroom. The model makes the prediction that starting with the learner's social milieu, i.e. their surrounding environment including the school and home, second language acquisition will be influenced first by attitudes which will influence motivation, which, in turn, influences second language acquisition.

The focus of this third section was to determine the relevant factors

present within the immersion program that may lead to the successes or failures of the students. Therefore, based on what factors have been shown to be relevant by these two models, factors emerging from research concerning second language education are presented, and examined for their relevance to the immersion program. The following studies (Study 6-9) were undertaken with participants from Japanese immersion programs in the Anchorage School District in September 2000.

5.2 Language networks, parent and student attitudes towards language learning (Study-6)

In this first study that attempts to identity psychological factors underlying immersion, Japanese immersion students and parents in Anchorage were given questionnaires to determine the significance of family support, and attitudes towards the language learning process. The first questionnaire concerned the student's individual networks of language contacts (INLC). Specifically, the INLC questionnaire (Landry and Allard, 1994) asked students the frequency in which they use Japanese to communicate with family and friends. Next, the Attitude towards Language Learning Scales (Sung & Padilla, 1998) asked both parents and students to answer questions regarding their attitudes towards language learning.

5.2.1 Purpose

This study examines grade and sex differences in addition to looking at correlations between language networks and attitudes toward language learning. In order to determine what psychological factors may be most relevant to the immersion program, a number of areas were investigated in the literature. Before introducing the study, the two areas in this study are discussed in an attempt to present their significance.

At the sociopsychological level of their model of additive and subtractive bilingualism, Landry and Allard (1994) present the notion of individual networks of language contacts (INLC). The roots of INLC can be traced back to ethnolinguistic vitality (EV) Giles et al. (1977). EV is defined as "that which makes a group likely to behave as a distinctive and active collective entity in intergroup situations." By knowing the extent of a group's ethnolinguistic vitality, one may also gauge the likelihood that the ethnolinguistic group will survive, or thrive as a distinctive entity, or eventually disappear. Giles et al. (1977) have proposed that group member's perceptions of their group's EV may be related to their skills and motivation to learn a second language, and to intergroup attitudes. Landry and Allard (1994) also contend that the eventual degree of bilingualism in addition to his/her degree of ethnolinguistic assimilation and acculturation can be affected by experiences within the INLC, including interpersonal and media-based contacts i.e., experiences within the family, or school.

The importance of the INLC lies with the prediction it makes that individuals' experiences within their ethnolinguistic networks will determine their linguistic competence and cognitive affective disposition towards the ethnolinguistic groups to which they come into contact with. Two types of linguistic competencies are described: cognitive-academic competencies, defined as the ability to use the language in context-reduced activities, and communicational competencies (Cummins, 1979). In the present study, the INLC is used to measure the frequency that students use Japanese with family members, friends and other linguistic contacts.

Interest in the attitudes and motivation of students towards foreign language learning has grown as a result of a sharp increase in student enrollment in schools in Asian languages, particularly Chinese, Japanese, Korean, and Vietnamese (Sung & Padilla, 1998). Although future career potential (see Jorden & Lambert, 1991) or heritage language may account for some of the enrollment in Asian language courses, studies involving the influence of parent’s and student’s motivation towards foreign language study have been few. As motivation has been shown to play an important role in achieving proficiency in second language, (Baker, 1992; Gardner, 1985) the factors leading to that motivation must also be investigated.

Parents and children share a relationship that may result in attitudes that will be influential in second language acquisition. Since Coleman et

al. (1966) introduced the idea that family background and social contact are the primary influences in determining children's achievement, other studies have shown a connection between the home and school (Hess & Holloway, 1985). For other studies that have related specific attributes of parent style or behavior to child achievement and adjustment in school, see Stevenson & Baker, (1987). Although there may be many factors responsible for students' L2 development, studies have demonstrated that for younger learners especially, parents' involvement in and attitudes toward language learning can be important or essential factors in L2 development (Gardner, 1985; Kim, 1992; Choy, 1993). Recently, when elementary and secondary-level students' motivation for learning Asian languages in school, and parents attitudes towards foreign language learning and involvement in their child's language learning was investigated, Sung & Padilla (1998) found that elementary school students were more motivated towards Asian language study. In addition, confirming elementary school student’s perceptions, the study revealed that elementary school parents also had more positive attitudes towards foreign language learning and were more involved than parents of high school students. The authors also point to interesting research by Samimy and Tabuse (1992) and Yagi (1991) who compared students in Japanese classes to students in European language classes and found that the Japanese students not only had greater integrative motivation towards their classes but also to foreign language learning in general.

To summarize, the process by which we form our social relationships, and our methods of interaction may help define a groups' vitality or identity. In addition, the strong connection, or influence that parents have over children has been investigated and there seems to be a relationship between parental influence and school performance. It is therefore hypothesized that parent and student attitudes towards learning foreign languages, and the form in which students communicate with others will in some way influence the success or failure of the immersion program.

5.2.2 Method

Subjects

Participants were composed of 11 (6 male, 5 female) elementary school students from grade 6, 12 (4 male, 8 female) junior high school students from grade 8, and 17 (5 male, 12 female) high school students from grades 9 & 11. In all, a total of 40 students (15 male, 25 female) participated in the survey.

Students in the final year of Japanese immersion, or grade 12 had the smallest number of students. While the subject groups represent students from the elementary, middle and high school, it should be noted that the third group of grades 9 & 11 has rather large age differences. Although the intention in forming this group was to encompass as much of the high school years as possible, the differences in age are grounds

to be cautious in the interpretation of the results.

Instrument

(1) The INLC (Individual Network of Language Contacts) (Allard & Landry,

1994). In order to assess participants' manner of communication, or linguistic networks existing between those in close proximity in everyday life, the scale asks the extent to which communication in Japanese takes place with various linguistic contacts. Using principal factor extraction with varimax rotation, factor analysis resulted one scale with 8 questions. The alpha coefficient was α= .87. Responses were obtained on a 4-point Likert scale ranging from Always (4) to Never (1). (Table 5-1).

(2) The Parent and Student Attitude towards Language Learning Scales

(Sung & Padilla, 1998). These scales assess students and parents about various factors regarding interest and motivation towards language learning. Factor analysis resulted in two parent scales (parent involvement in foreign language study: 5 items, α =.81, and parent attitude towards foreign language study : 7 items, α=.86), and four student scales (school-related motivation: 3 items, α= .70, personal interest related motivation: 4 items, α= .68, students' perception of parents' involvement in foreign language learning: 9 items, α= .80, and integrative/instrumental motivation for studying Japanese: 8 items, α= .

85). Responses were obtained on a 4-point Likert scale ranging from Strongly agree (4) to Strongly disagree (1) (Tables 5-2 and 5-3).

5.2.3 Results & Discussion

(1) Grade and sex differences

Two-way ANOVAs for grade and sex were undertaken for the INLC, and the Parent and Student Attitude towards Language Learning Scales. For grade and sex, significant effects were seen only for the INLC (Table 5-4, Figure 5-3). First, looking at grade and sex for the INLC, statistical interaction was observed (F (2, 29) = 5.80, p < .01). Looking at each school, sex differences were observed for the middle school and there were significant differences in favor of the male students. Therefore, male students at the middle school were shown to use Japanese to communicate more than female students. There were no sex differences for the elementary school or high school.

Next, looking at each sex, there were grade differences for male students. Middle school students had significantly higher scores on the INLC, indicating that they used Japanese to communicate more than female students in the elementary and high school. There were no school differences for female students. There were also no effects for grade or sex for the Student Attitude towards Learning Scale.

(2) Correlations

The original version of the INLC asks respondents two questions, how often they are with the language contact, and how often they use one of two languages to speak with that person. However, in this study, only the latter section was used, asking the frequency of communication in Japanese with linguistic contacts. Positive correlations were observed between the INLC and other variables. First, there was a positive relation between the INLC and parent's involvement, and the INLC and student's perception of their parent's involvement. Parental involvement was positively related to two variables, parental attitude towards language learning, and student's perception of parent's involvement in their Japanese language learning.

Next, centering on how the child perceives his or her parent's involvement in their language learning, positive correlations were observed between student's personal reasons, or motivations for learning Japanese, and their instrumental, or practical motivations towards the language. Lastly, we see that personal motivation for learning Japanese is related to motivations towards school (Table 5-5).

While recognizing the need for further investigation, a summary of these findings would point to what appears to be a relationship between parent's involvement in the student's language learning process and the way the students choose to communicate. Support for this finding is presented by Hamers and Blanc (2000b), who argue that the importance

of family networks lies in findings that propose that interactions with parents will determine the linguistic forms used by the child.

Table 5-1 Factor loadings of the Individual Network of language Contacts Scale (INLC)

	Item	*Mean*	*SD*	*I-T*	α
INLC_1	How often do you speak to your father or male guardian in Japanese?	1.49	0.61	0.63	
INLC_2	How often do you speak to your mother or female guardian in Japanese?	1.60	0.69	0.78	
INLC_3	How often do you speak to your brother(s) and/or sister(s) in Japanese?	1.77	0.77	0.63	
INLC_4	How often do you speak to participants of group, social or culural organizations (e.g., sports and leisure) in Japanese?	1.54	0.66	0.54	0.87
INLC_5	How often do talk to your friends and acquaintances in school in Japanese?	2.00	0.77	0.75	
INLC_6	How often do talk to your friends and acquaintances away from school in Japanese?	1.80	0.68	0.69	
INLC_7	How often do the participants at social gatherings (e.g. parties) talk to you in Japanese?	1.46	0.61	0.44	
INLC_8	Excluding homework, when I read comics or books, they are written in Japanese	1.43	0.61	0.52	

Table 5-2 Factor loadings of Parent and Student Attitude towards Language Learning Scale (parent)					
	Item	*Mean*	*SD*	*I-T*	α
	PARENT INVOLVEMENT IN FOREIGN LANGUAGE STUDY				
	"As a parent I..."				
PALL_4	Show considerable interest in things related to the language	3.45	0.55	0.57	0.81
PALL_5	Really encourage study of the language	3.45	0.55	0.84	
PALL_6	Stress importance of the language after graduation	3.40	0.59	0.81	
PALL_7	Think more time should be devoted to language study	2.98	0.73	0.39	
PALL_8	Try to help with language homework	2.80	0.61	0.46	
	ATTITUDE TOWARDS FOREIGN LANGUAGE LEARNING				
	"It is important to study foreign languages because..."				
PALL_18	I wish to read newspapers/magazines in Japanese	2.54	0.66	0.54	0.86
PALL_19	I want to read literature in the original language, not in a translation	2.63	0.69	0.69	
PALL_20	I wish to learn many foreign languages	2.86	0.77	0.76	
PALL_21	I enjoy meeting and listening to speakers of other languages	3.26	0.61	0.61	
PALL_22	Studying a foreign language is an enjoyable experience	3.20	0.63	0.64	
PALL_25	If a stay in another country, I can use the language	3.43	0.56	0.65	
PALL_23	I wish I could speak another language perfectly	3.26	0.61	0.56	

	Table 5-3 Factor loadings of Parent and Student Attitude towards Language Learning Scale (student)				
	Item	*Mean*	*SD*	*I-T*	α
	SCHOOL RELATED MOTIVATION				
	"I chose Japanese immersion because…"				
SALL_61	I heard that language classes at my school were good	2.50	0.98	0.52	0.70
SALL_62	I heard that language teachers at my school were good	2.32	0.84	0.70	
SALL_63	I have friends who decided to study the language	2.76	0.88	0.36	
	PERSONAL INTEREST RELATED MOTIVATION				
	"I chose Japanese immersion because…"				
SALL_64	I want to study in a foreign country as a "study abroad" student	2.62	0.83	0.49	0.68
SALL_65	I want to travel to countries where the language is spoken	3.16	0.76	0.50	
SALL_66	I thought that studying the language would be interesting	3.24	0.55	0.67	
SALL_67	I thought that it would be more interesting than studying other languages	2.65	0.86	0.28	
	STUDENTS' PERCEPTION OF PARENTS INVOLVEMENT IN FOREIGN LANGUAGE STUDY				
	"My parents …"				
SALL_68	Encourage practicing the language as much as possible	3.05	0.65	0.57	0.80
SALL_69	Believe language should be learned as much as possible	3.05	0.65	0.67	
SALL_70	Encourage continuing study of the language	3.33	0.53	0.53	
SALL_71	Show considerable interest in things related to the language	2.82	0.72	0.45	
SALL_72	Really encourage study of the language	3.18	0.68	0.60	
SALL_73	Stress importance of the language after graduation	2.85	0.74	0.56	
SALL_74	Think more time should be devoted to language study	2.41	0.59	0.51	
SALL_75	Try to help with language homework	2.13	0.80	0.23	
SALL_76	Urge getting help from the teacher if I have problems with the language class	3.03	0.74	0.35	
	INTEGRATIVE/INSTRUMENTAL MOTIVATION FOR STUDYING JAPANESE				
	"Studying Japanese is important because…"				
SALL_77	I will be able to participate in cultural activities of the language group	2.82	0.76	0.71	0.85
SALL_78	I will be able to meet and converse with more people	3.23	0.58	0.54	
SALL_79	It will help me to better understand and appreciate art and literature of the culture	3.05	0.65	0.53	
SALL_80	I will feel more comfortable with native speakers of the language	3.08	0.84	0.71	
SALL_81	It will make me a more knowledgeable person	3.26	0.68	0.58	
SALL_82	I will need the language for my future career	2.56	0.79	0.50	
SALL_83	It will be useful someday to get a job	3.15	0.78	0.64	
SALL_84	It will get respect from others if I know a foreign language	2.74	0.94	0.58	

Table 5-4 Mean Scores for the INLC as a function of Sex and Grade

	Grade					
Sex	6		8		9, 11	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	1.68	0.36	2.16	0.28	1.30	0.19
Female	2.13	0.68	1.40	0.41	1.53	0.44

Table 5-5 Correlations for INLC, Attitudes towards Language Learning Scales

	St. Sch. Rel. Motiv.		St. Per. Int. Rel. Motiv.		St. Percep. of Parents' Involv.		Integ./Inst. Motivation		Parent Invol.		Parent Att.		INLC	
St. Sch. Rel. Motiv.	-		.38	*	.09		.28		-.16		-.02		-.05	
St. Per. Int. Rel. Motiv.	.38	*	-		.39	*	.60	**	.21		-.10		.33	
St. Percep. of Parents' Involv.	.09		.39	*	-		.36	*	.39	*	.29		.44	**
Integ./Inst. Motivation	.28		.60	**	.36	*	-		.09		.05		.13	
Parent Invol.	-.16		.21		.39	*	.09		-		.39	*	.46	**
Parent Att.	-.02		-.10		.29		.05		.39	*	-		.14	
INLC	-.05		.33		.44	*	.13		.46	**	.14		-	

* $p < .05$, ** $p < .01$

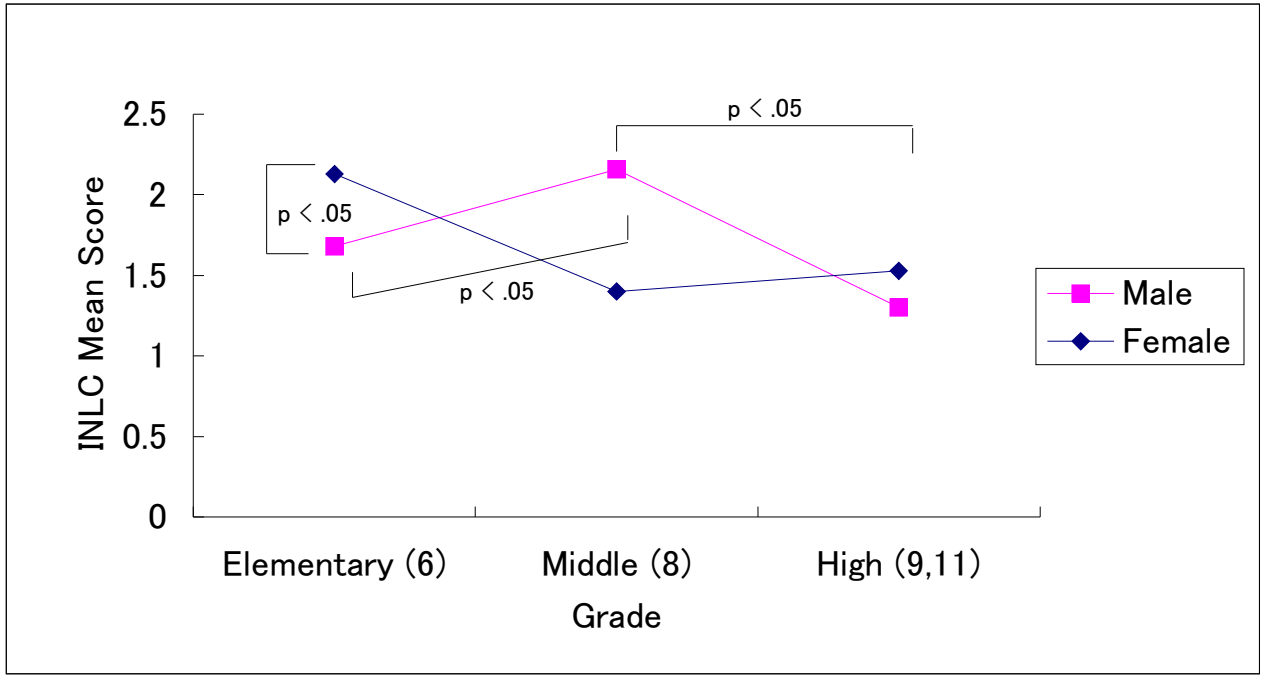


Figure 5-3. Mean Scores for Interpersonal Network of Language Contacts (INLC)

5.3 Self-concept and situated identity (Study-7)

The next investigation into factors related to the success or failure of immersion concentrated on the student, specifically with respect to the way a students thinks about his or herself in both academic and nonacademic situations. For this investigation, two questionnaires were considered to have strong relevance, The Self-Description Questionnaire (Marsh, 1988), and the Situated Identity Questionnaire (Clement & Noels, 1992).

5.3.1 Purpose

The goal of this study was to examine sex and grade differences for self-concept and situated identity in the Japanese immersion program, and to consider what relationships exist between the two scales for the students.

Although self-concept has long been considered an important indicator of problematic behavior, and that improvements in self-concept can lead to improvements in a wide range of other areas, e.g. academic performance, for a long time, a consensus had not been reached regarding its theoretical basis or an appropriate method to measure it (see Burns, 1979; Shavelson, Hubner & Stanton, 1976; Wells & Marwell, 1976; Wylie, 1974, 1979). Answering this need for a coherent model, Shavelson et al. proposed a multifaceted, hierarchical model of self-concept. This model later served as the basis for the Self-Description

Questionnaire (Marsh, 1988, 1990). Numerous studies have confirmed the reliability and validity of the SDQ, and the instrument continues to be an often-used standardized measure of self-concept in school-age children. As the study of self-concept is not aligned with any particular discipline, and because self-concept is a hypothetical construct, its usefulness must be demonstrated by investigations into its construct validity (Marsh, 1990, 1992). While Marsh has developed three versions of the SDQ, The SDQ II (Marsh, 1992) was considered to be most appropriate for this study. Although the instruments can be modified to suit various ages of children, the SDQ II, based on the model from Shavelson et al., was designed to measure three areas of academic self-concept (reading, mathematics, and general school), and four areas of nonacademic self-concept (physical abilities, physical appearance, peer relations, and parent relations) (Marsh, 1992).

Clement and Noels (1992) investigated ethnolinguistic identity through the concept of situated identity. Based on situated identity theory, the Situated Identity Questionnaire presents a series of short descriptions of everyday situations in which respondents must answer with regard to feelings of ethnic orientation.

In the Japanese immersion program, as with other immersion programs, students spend a large part of the day in a different linguistic context (e.g. classes, activities). While the students' ethnolinguistic vitality is not a question in this study, a comparison between grades and sex was carried out for situated identity, in addition to a look at what

relationships may be present between self-concept and situated identity for students enrolled in Japanese immersion.

5.3.2 Method

Subjects

Participants were 27 elementary school students from grade 4 (17 male, 10 female), 21 junior high school students from grade 7 (9 male, 12 female), and 18 high school students from grade 11 (6 male, 12 female). In all, there were a total of 66 students (32 male, 34 female).

Instrument

(1) Situated Identity Questionnaire (Clement & Noels, 1992) : For the purpose of this study, the scale was revised in order to have each item ask respondents about whether they feel either American or Japanese in various everyday situations. This resulted in a final scale of 26 items (Table 5-6).

(2) The Self-Concept Questionnaire (SDQ II): Part of the questionnaire first developed by Marsh (1992) was used to assess student academic self-concept (general, math, and verbal subscales) and nonacademic self-concept (general and parent subscales). This resulted in a final scale of 25 items for the academic self-concept scale (general = 8, math = 9, verbal = 8), and 34 items for the nonacademic self-concept scale

(general = 6, parent = 7). (Tables 5-7 and 5-8).

5.3.3 Results & Discussion

(1) Examination of reliability

Alpha coefficients were computed for The Situated Identity Scale as feelings towards Japan α=.94, and feelings towards America α=.94. For the SDQ's nonacademic self-concept scale, the general scale was α=.78, and the parental scale was α=.90. For the academic self-concept scale, the general scale was α=.77, the mathematics scale was α=.90, and the language a scale was α=.80. These results demonstrated a reasonable level of internal consistency for the subscales of both questionnaires.

(2) Grade and sex differences

Two-way ANOVAs for grade and sex were carried out for the SDQ, and the Situated Identity Scale. A significant effect was observed for the Situated Identity Scale (feelings towards Japan) only. Although there was no interaction between grade and sex, there was a significant effect for grade (F (2, 45) = 6.60, p < .01). The differences were between grades 4 and 7, and grades 4 and 10 (p = .05, Mse = 72.98). Here, total scores on the questionnaire showed that the elementary school students felt the

most Japanese in various situations (Table 5-9, Figure 5-4).

(3) Correlations

Next , correlation coefficients were calculated for subscales of the Situated Identity Scale and the Self Description Questionnaire.

Table 5-6 Factor loadings for the Situated Identity Scale

	Item	Mean	SD	I-T	α
	Feelings towards Japan				
CID_56	When I have contacts with other students in class, I feel Japanese	2.00	0.88	0.65	0.94
CID_58	When I listen to music, I feel Japanese	1.79	1.00	0.60	
CID_60	When talking with teachers, I feel Japanese	2.13	1.02	0.69	
CID_62	When I think about where I would want to live in the future, I feel Japanese	1.85	0.97	0.76	
CID_64	When I am playing with my classmates, I feel Japanese	1.75	0.98	0.76	
CID_66	When I read Japanese comic books, I feel Japanese	2.58	1.15	0.54	
CID_68	When I think about what I want to become in life, I feel Japanese	1.79	0.95	0.76	
CID_70	When I participate in cultural activities (New Year's Day, etc.), I feel Japanese	1.72	0.93	0.77	
CID_72	When I prepare food, I feel Japanese	1.68	0.89	0.65	
CID_76	When I write something, I feel Japanese	2.02	1.08	0.83	
CID_78	When I watch sports, singing shows or anime on television, I feel Japanese	1.81	0.96	0.79	
CID_80	When I am at home, I feel Japanese	1.66	0.90	0.75	
CID_82	When I travel I feel Japanese	1.74	1.02	0.78	
	Feelings towards America				
CID_57	When I have contacts with other students in class, I feel American	3.52	0.67	0.68	0.94
CID_59	When I listen to music, I feel American	3.67	0.64	0.59	
CID_61	When talking with teachers, I feel American	3.43	0.72	0.83	
CID_63	When I think about where I would want to live in the future, I feel American	3.67	0.67	0.81	
CID_65	When I am playing with my classmates, I feel American	3.72	0.60	0.77	
CID_67	When I read Japanese comic books, I feel American	3.02	1.02	0.50	
CID_69	When I think about what I want to become in life, I feel American	3.63	0.76	0.79	
CID_71	When I participate in cultural activities (New Year's Day, etc.), I feel American	3.78	0.57	0.73	
CID_73	When I prepare food, I feel American	3.46	0.82	0.82	
CID_77	When I write something, I feel American	3.56	0.66	0.76	
CID_79	When I watch sports, singing shows or anime on television, I feel American	3.74	0.56	0.82	
CID_81	When I am at home, I feel American	3.74	0.65	0.80	
CID_83	When I travel I feel American	3.61	0.71	0.82	

First , looking at correlates for the Situated Identity Scale, (feelings towards Japan/America), there were three positive correlations for the feelings towards America subscale. These were with the nonacademic self-concept scale's general, and parent subscales, and with the academic self-concept's math subscale.

Positive correlations were also observed between the self-concept subscales. The academic self-concept scale's general subscale was related to the nonacademic self-concept scale's general, and parent subscales. The academic self-concept scale's verbal subscale was related to the nonacademic self-concept scale's general subscale (Table 5-10).

The findings of this study point to a connection between the immersion students' relationships with parents, their self-concept both in and out of school, and their ethnic orientation. The existence of these relationships within the Japanese immersion program suggests the need to consider their importance. Although this study has not accounted for academic achievement in relation to these variables, when academic difficulties do occur, in addition to considering pedagogical interventions, success or failure of the students may also be supported by consideration of these psychological factors.

Table 5-7 Factor loadings of the Self-Description Questionnaire (Non-Academic Self-Concept)

	Item	*Mean*	*SD*	*I-T*	α
	Non-Academic Self-Concept (General)				
NASC_38	Overall, I have a lot to be proud of	3.48	0.65	0.54	0.78
NASC_42	Most things I do, I do well	3.19	0.60	0.45	
NASC_44	Nothing I do ever seems to turn out right	3.42	0.62	0.58	
NASC_46	Overall, most things I do turn out well	3.26	0.63	0.67	
NASC_50	I can do things as well as most people	3.26	0.68	0.50	
NASC_54	If I really try I can do almost anything I want to	3.52	0.72	0.49	
	Non-Academic Self-Concept (Parents)				
NASC_39	My parents are usually unhappy or disappointed with what I do	3.39	0.80	0.67	0.90
NASC_41	I get along well with my parents	3.28	0.80	0.71	
NASC_43	It is difficult for me to talk with my parents	3.14	0.77	0.70	
NASC_45	My parents treat me fairly	3.44	0.80	0.62	
NASC_47	I have a lot of arguments with my parents	3.23	0.80	0.81	
NASC_49	My parents understand me	3.79	0.78	0.73	
NASC_53	My parents really love me a lot	2.51	0.59	0.65	

	Table 5-8 Factor loadings of the Self-Description Questionnaire (Academic Self-Concept)					
	Item	*Mean*	*SD*	*I-T*	α	
	Academic Self-Concept (General)					
ASC_40	People come to me for help in most school subjects	2.49	0.87	0.29	0.77	
ASC_46	If I work really hard I could be one of the best students in my school year	3.35	0.67	0.44		
ASC_49	I get bad grades in most school subjects	3.65	0.51	0.61		
ASC_52	I learn things quickly in most school subjects	3.23	0.52	0.41		
ASC_58	I do well on tests in most school subjects	3.28	0.57	0.66		
ASC_61	I have trouble with most school subjects	3.49	0.66	0.43		
ASC_64	I am good at most school subjects	3.40	0.52	0.64		
ASC_67	Most school subjects are just too hard for me	3.63	0.55	0.50		
	Academic Self-Concept (Math)					
ASC_38	Mathematics is one of my best subjects	3.08	1.00	0.55	0.90	
ASC_41	I often need help in mathematics	3.03	0.85	0.59		
ASC_44	I look forward to mathematics classes	3.25	0.80	0.75		
ASC_47	I have trouble understanding anything with mathematics in it	3.34	0.76	0.49		
ASC_50	I enjoy studying for mathematics	3.08	0.84	0.66		
ASC_53	I do badly in tests of mathematics	3.36	0.74	0.73		
ASC_56	I get good grades in mathematics	3.42	0.62	0.75		
ASC_62	I have always done well in mathematics	3.17	0.81	0.79		
ASC_65	I hate mathematics	3.54	0.75	0.71		
	Academic Self-Concept (Verbal)					
ASC_42	I look forward to my English class	3.02	0.91	0.31	0.80	
ASC_45	I do badly on tests that need a lot of reading ability in English	3.43	0.73	0.66		
ASC_48	Work in my English class is easy for me	3.16	0.77	0.49		
ASC_51	I am not very good at reading in English	3.56	0.71	0.56		
ASC_54	English is one of my best subjects	3.25	0.76	0.71		
ASC_57	I hate reading in English	3.54	0.71	0.58		
ASC_60	I get good grades in English	3.43	0.67	0.57		
ASC_63	I have trouble expressing myself when I try to write something in English	3.27	0.83	0.26		

Table 5-10 Correlations for the SDQ, and Situated identity Scale

	Non Acad. SC General		Non Acad. SC Parents		Acad. SC Math		Acad. SC Verbal		Acad. SC General		Situat. Ident. Japan		Situat. Ident. America	
Non Acad. SC General	-		.72	**	.26		.42	**	.47	**	.02		.34	*
Non Acad. SC Parents	.72	**	-		.14		.26		.28	*	-.16		.30	*
Acad. SC Math	.26		.14		-		.12		.46	**	.11		.35	*
Acad. SC Verbal	.42	**	.26		.12		-		.56	**	-.11		.22	
Acad. SC General	.42	**	.28	**	.46	**	.56	**	-		-.07		.19	
Situat. Ident. Japan	.02		-.16		.11		-.11		-.07		-		-.15	
Situat. Ident. America	.34	**	.30	*	.35	*	.22		.19		-.15		-	

* $p < .05$, ** $p < .01$

Table 5–9 Mean Scores for the Situated Identity Scale: Japan as a function of Sex and Grade

	Grade					
Sex	4		7		10	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	29.42	10.32	21.71	7.99	26.00	6.69
Female	31.40	10.56	20.50	7.33	17.25	5.56

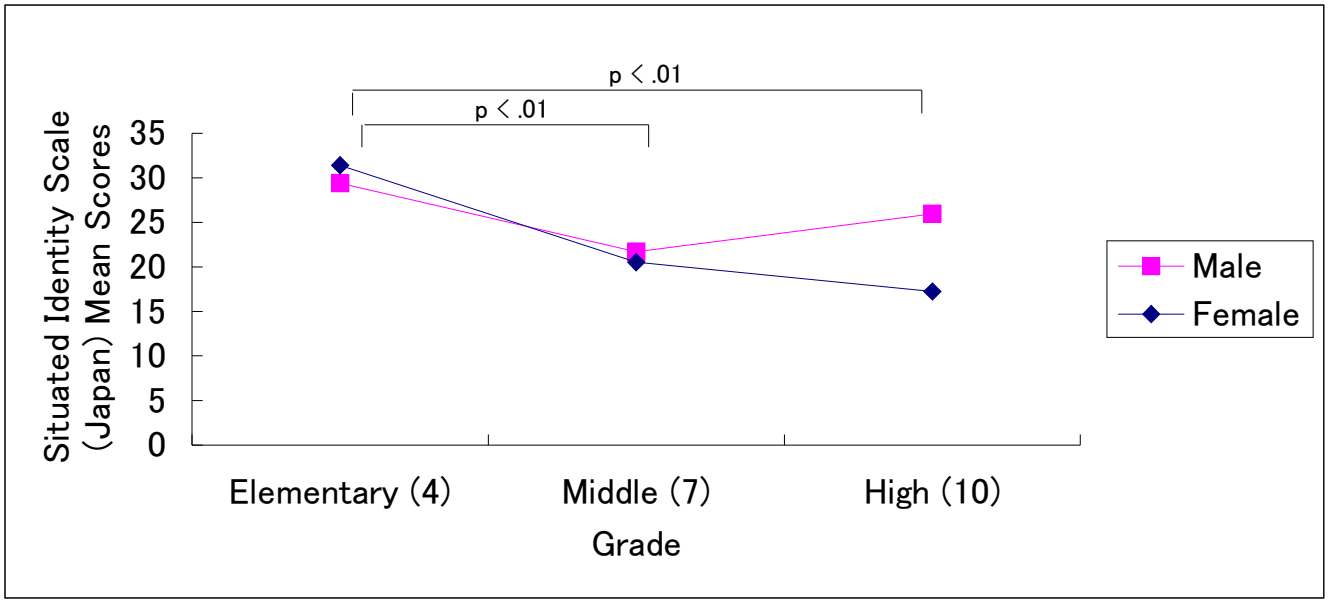


Figure 5-4. Mean Scores for Situated Identity Scale (feelings towards Japan)

5.4 Self-rated language proficiency and motivation towards language learning (Study-8)

Although immersion programs must work towards achieving academic objectives, one of the major questions addressed in immersion studies is the development of second language skills (Genesee, 1984b). While assessment of these skills may take many forms, this study looks at the progression of student's motivation toward this goal, and, as an alternative means of determining the success of second language acquisition, assesses the self-rated second language proficiency of elementary, middle, and high school Japanese immersion students in Anchorage.

5.4.1 Purpose.

Student motivation has been shown to be a strong predictor of academic performance. In particular, strong connections have been demonstrated in studies involving self-efficacy and achievement (Schunk, 1981, 1985), achievement motivation (Dweck & Elliott, 1983; Meece, Blumenfeld, & Hoyle, 1988), and test anxiety (Wigfield & Eccles, 1989). Moreover, in a study conceptualizing student motivation through an adaptation of a general expectancy-value model of motivation (Eccles, 1983; Pintrich, 1988, 1989), the relationship of classroom motivation to academic performance revealed that self-efficacy, intrinsic value and test anxiety were strongly related to cognitive engagement

and performance (Pintrich & De Groot, 1990). Clark (1980) however, argues that student's performance can be reliably predicted through the assessment of self-rated language proficiency.

5.4.2 Method

Subjects

Participants were composed of 37 elementary school students from grade 5 (14 male, 23 female), 19 junior high school students from grade 8 (8 male, 11 female), and 29 high school students from grade 11 & 12 (13 male, 16 female).

Instrument

(1) Self-rated Language Proficiency Scale (Clark, 1980). The questionnaire asks students to rate their second language ability over a number of steadily increasing language tasks. For the purpose of this study, the scale was altered in order to assess student's self-evaluation of their Japanese ability. Factor analysis of the scale resulted in two factors with five items each, the listening subscale, α=.83, and the speaking subscale, α=.83. Responses were obtained on a 4-point Likert scale ranging from Quite easily (4) to Not at all (1) (Table 5-11).

(2) Motivation towards Language Learning Scale (Pintrich & De Groot,

1990). The scale used for this study was part of the Motivated Strategies for Learning Questionnaire (MLVQ). The original questionnaire was not altered other than to have the questions correspond to the learning of Japanese. Three sections were included from the motivational beliefs section of the questionnaire. The first section, self-efficacy consisted of 9 items, α= .91. The second section, Intrinsic value consisted of 7 items,α= .87. The third section, test anxiety consisted of 4 items, α= .87. Responses were obtained on a 4-point Likert scale ranging from Strongly agree (4) to Strongly disagree (1) (Table 5-12).

5.4.3 Results & Discussion

(1) Grade and sex differences

A 2-way ANOVA for grade and sex was performed for each of the subscales. As for grade and sex, a significant effect was shown for the speaking subscale of the Self-rated Language Proficiency Scale (F (2, 78) = 4.19, p < .05). Post hoc tests showed school differences between the elementary school and the middle school, and between the elementary school and the high school (p = .05, Mse = .34). Students at the elementary school displayed the lowest level of confidence in their Japanese speaking ability. There was no effect for the listening subscale (Table 5-13, Figure 5-5).

While no effect was shown for the self-efficacy subscale of the

Motivation towards Language Learning Scale (MLLS) there was statistical interaction between school and sex for the intrinsic value (F (2, 68) = 3.41, p < .05). and the test anxiety subscales (F (2, 69) = 4.66, p < .05). First looking at grade, there were no significant differences for the intrinsic value subscale of the MLLS. As for sex, there was a significant difference for females between the elementary and middle school and between the elementary and high school (p = .05, Mse = . 20). The elementary females had the highest scores on the intrinsic value subscale of the MLLS (Table 5-14, Figure 5-6). For grade, there were no significant differences for the test anxiety subscale of the MLLS. For sex, there were significant differences for females between the elementary and middle school and between the middle and high school (p = .05, Mse = .48). Therefore, scores for females at the middle school

Table 5-11 Factor loadings of the Self-Rated Language Proficiency Scale

		Factor loading		
	Item	Factor 1	Factor 2	C
	Listening			
	Using Japanese I can…			
srlp_52	understand a native speaker who is speaking to me as quickly and as naturally as if he or she	0.65	0.32	
	would speak to another native speaker (in a face-to-face conversation)			
srlp_53	understand movies without subtitles	0.55	0.19	
srlp_54	understand the words of a popular song that I have not heard before (on the radio)	0.59	0.16	
srlp_55	understand two native speakers when they are talking rapidly with one another	0.71	0.32	
srlp_56	understand a native speaker who is taking as quickly and as naturally as he or she would speak to	0.79	0.30	
	another native speaker (on the telephone)			
	Speaking			
srlp_41	ask for directions on the street	0.18	0.78	
srlp_42	buy clothes in a department store	0.28	0.74	
srlp_45	say a lot about my favorite hobby using the correct vocabulary	0.37	0.48	
srlp_46	describe my present job or school work in detail	0.43	0.58	
srlp_47	tell what I plan to be doing 5 years from now, using the correct future tenses	0.24	0.63	
	sum of squares	2.69	2.48	

Table 5-12 Factor loadings of the Motivation towards Language Learning Scale

		Factor loading							
	Item	Factor 1	Factor 2	Factor 3	Comm.	*Mean*	*SD*	*I-T*	α
	Self-Efficacy								
mll_67	I think I will receive a good grade in classes taught in Japanese	0.76	0.24	0.01	0.63	3.32	0.68	0.74	0.91
mll_73	I know that I will be able to learn the material for my classes taught in Japanese	0.75	0.29	-0.17	0.68	3.16	0.62	0.76	
mll_57	Compared with other students in the class, I expect to do well in classes taught in Japanese	0.71	0.05	-0.04	0.51	2.97	0.62	0.68	
mll_61	I expect to do very well in classes taught in Japanese	0.70	0.30	0.07	0.58	3.18	0.59	0.71	
mll_71	Compared with other students, I know a lot about subjects taught in Japanese	0.66	0.28	-0.19	0.55	3.00	0.62	0.73	
mll_65	I am sure I can do an excellent job on the tasks assigned for classes taught in Japanese	0.63	0.41	0.16	0.59	3.14	0.63	0.70	

mll_69	My study skills are excellent compared with other students in classes taught in Japanese	0.60	0.12	-0.11	0.39	2.84	0.69	0.62	
mll_63	I think I am a good student compared to other students in classes taught in Japanese	0.59	0.13	-0.14	0.38	3.08	0.72	0.62	
	Intrinsic Value								
mll_85	I think that what I am learning in my classes is useful for me to know, especially in classes taught in Japanese	0.27	0.78	0.04	0.68	3.34	0.65	0.73	0.87
mll_87	I think that what I learn in my classes is interesting, especially classes taught in Japanese	0.13	0.74	-0.06	0.57	3.15	0.73	0.70	
mll_77	I like what I learn when I study in classes that are taught in Japanese	0.37	0.67	-0.17	0.61	3.18	0.65	0.71	
mll_79	I think I will be able to use what I learn in class in other classes especially when I study in Japanese	0.20	0.67	0.04	0.48	3.04	0.80	0.66	
mll_83	Even when I do poorly on a test, I try to learn from my mistakes, especially in classes taught in Japanese	0.12	0.57	-0.05	0.35	3.39	0.62	0.58	
mll_81	I think that I prefer topics I will learn something from, even if they require more work, especially when I study in Japanese	0.15	0.57	-0.16	0.37	3.04	0.77	0.59	
mll_75	I prefer class work that is challenging so I can learn new things, especially in classes taught in Japanese	0.33	0.45	-0.34	0.43	3.07	0.71	0.57	
	Test Anxiety								
mll_95	I worry a lot about tests that are given in Japanese	-0.04	-0.10	0.78	0.62	2.44	0.98	0.77	0.87
mll_93	I have an uneasy, upset feeling when I take tests in Japanese	-0.14	0.10	0.72	0.55	2.13	0.91	0.71	
mll_91	I am so nervous during tests that I cannot remember the facts I have learned, mostly in classes taught in Japanese	-0.13	-0.15	0.71	0.55	2.30	1.00	0.71	
mll_97	When I take a test, I think about how badly I am doing, especially in classes taught in Japanese	-0.11	-0.12	0.69	0.50	2.27	0.92	0.71	
	sum of squares	4.52	3.49	6.05					

were highest for the test anxiety subscale of the MLLS (Table 5-15, Figure 5-7).

(2) Correlations

A negative correlation was observed between the test anxiety subscale of the Motivation towards Language Learning Scale and the listening subscale of the Self-rated Language Proficiency Scale.

In addition, the self-efficacy subscale of the Motivation towards Language Learning Scale showed a positive relationship with both the speaking and listening subscales of the Self-rated Language Proficiency Scale (Table 5-16).

Table 5-13 Mean Scores for the Self-Rated Language Scale: Speaking as a function of Sex and Grade

Sex	Grade					
	5		8		11, 12	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	2.70	0.73	3.10	0.68	2.97	0.37
Female	2.83	0.69	3.15	0.47	3.34	0.42

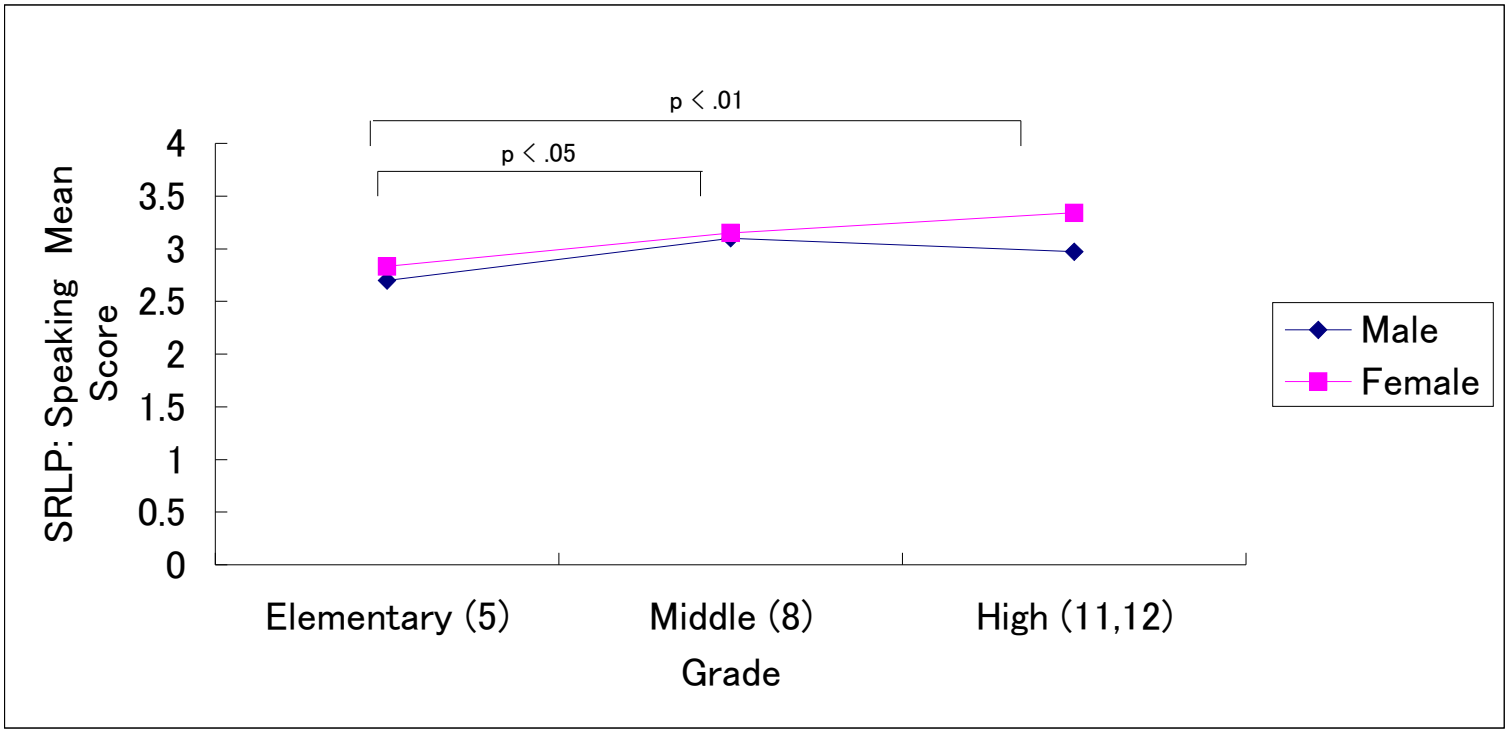


Figure 5-5. Mean Scores for Self-rated Language Proficiency: Speaking

Table 5-14 Mean Scores for the Motivation towards Language learning Scale: Intrinsic Value as a function of Sex and Grade

	Grade					
Sex	5		8		11, 12	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	3.38	0.48	3.23	0.47	2.92	0.47
Female	3.49	0.36	2.64	0.65	2.96	0.44

Table 5-16 Correlations for Self-Rated Language Proficiency, Motivation towards Language Learning										
	Self-Rated LP (speaking)		Self-Rated LP (listening)		Motivation LL (self-efficacy)		Motivation LL (intrinsic value)		Motivation LL (test anxiety)	
Self-Rated LP (speaking)	-		.60	**	.31	**	.05		-.21	
Self-Rated LP (listening)	.60	**	-		.24	*	.06		-.28	*
Motivation LL (self-efficacy)	.31	**	.24	*	-		.58	**	-.19	
Motivation LL (intrinsic value)	.05		.06		.58	**	-		-.09	
Motivation LL (test anxiety)	-.21		-.28	*	-.28	*	-.09		-	
* p < .05, ** p < .01										

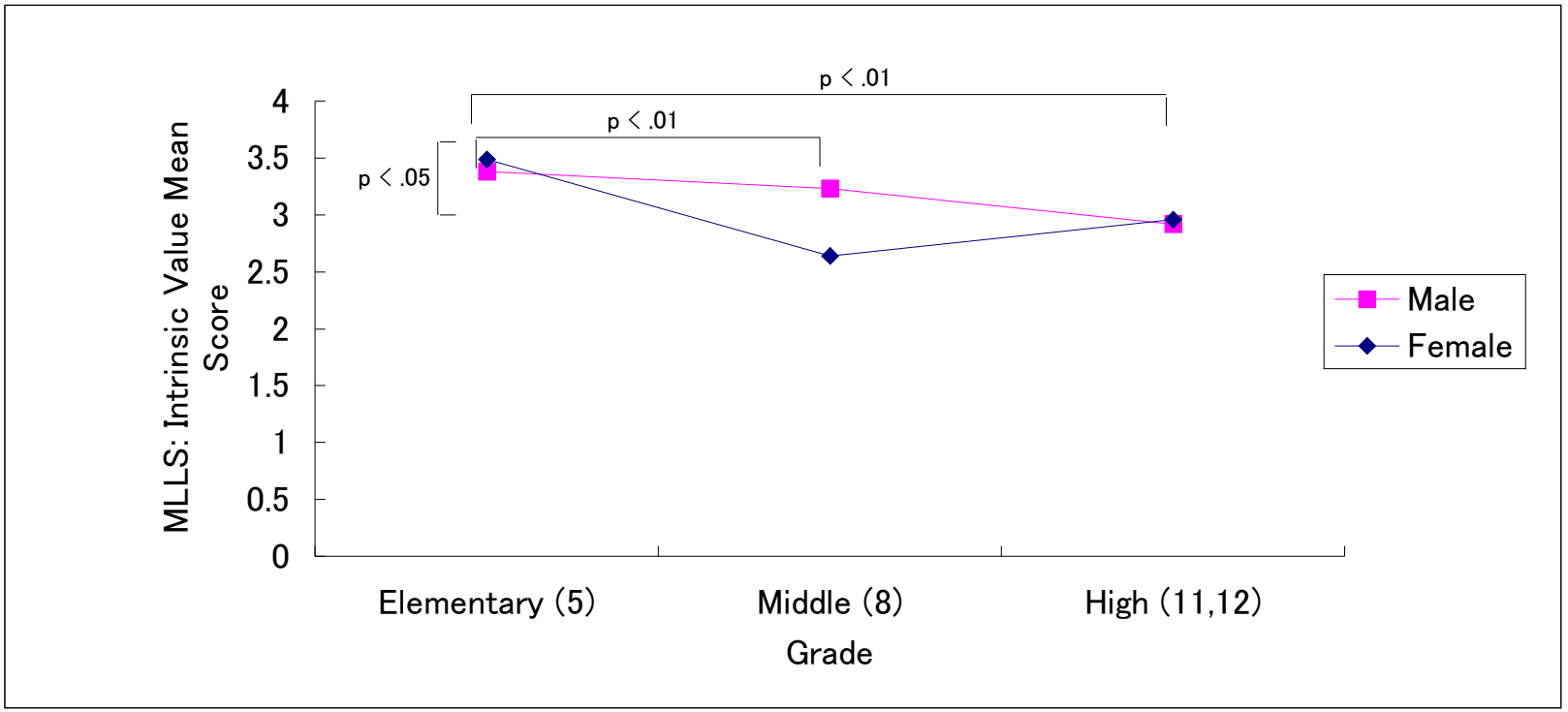


Figure 5-6. Mean Scores for Motivation towards Language Learning: Intrinsic Value

Table 5-15 Mean Scores for the Motivation towards Language learning Scale: Test Anxiety as a function of Sex and Grade

	Grade					
Sex	5		8		11, 12	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	2.63	0.94	2.21	0.77	1.83	0.78
Female	2.08	0.71	2.98	0.82	2.19	0.57

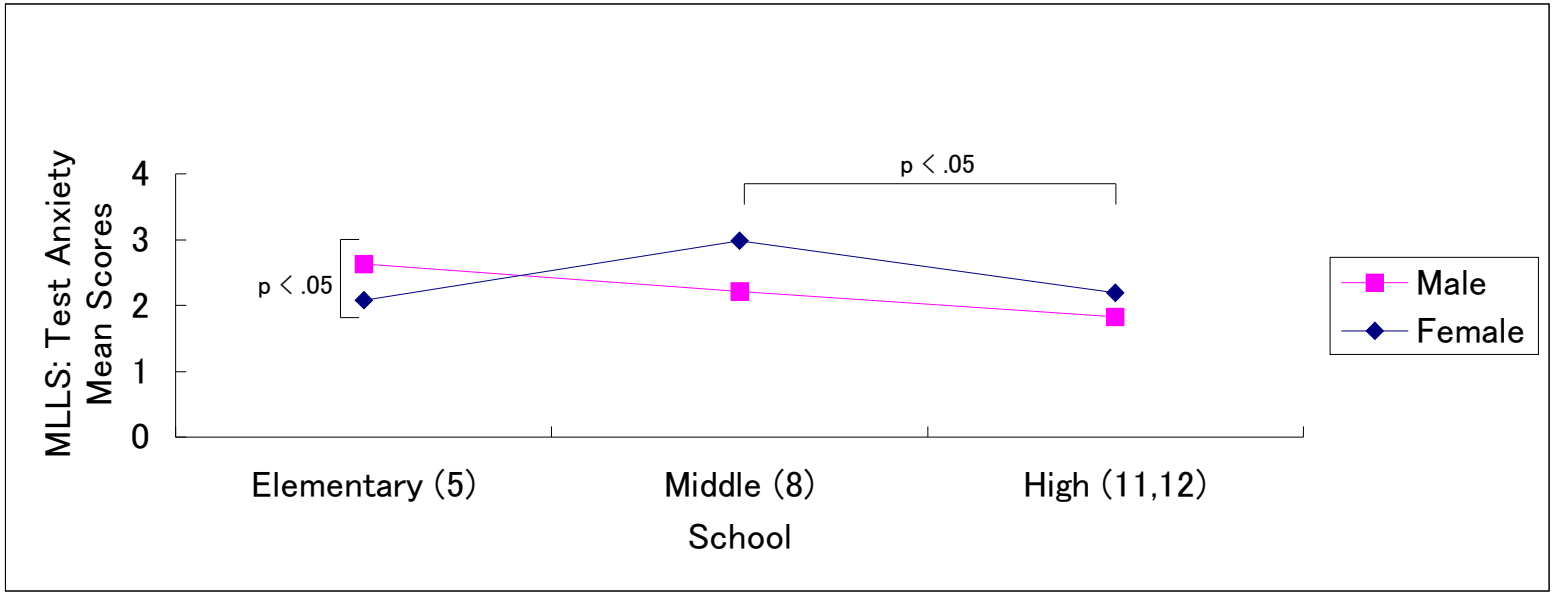


Figure 5-7. Mean Scores for Motivation towards Language Learning: Test Anxiety

5.5 Self-rated language proficiency and Language networks, parent and student attitudes towards language learning (Study 9)

5.5.1 Purpose

All of the studies in this chapter have considered the relevance of certain variables in relation to the success or failure of immersion. As a final study, self-rated language proficiency is paired with questionnaires that represent the background, or support of students in order to determine if evaluation of ability to speak or listen in Japanese is related to attitudes of parents and children towards the language learning process, or to how the child chooses to communicate with his or her second language.

5.5.2 Method

Subjects

Participants were composed of 8 (3 male, 5 female) junior high school students from grade 8, and 8 (3 male, 5 female) high school students from grade 11.

Instrument

(1) Self-rated Language Proficiency Scale (Clark, 1980) (See above).

(2) The Parent and Student Attitude towards Language Learning Scales

(Sung & Padilla, 1998) (see above).

(3) The INLC (Individual Network of Language Contacts) (Allard & Landry, 1994) (see above).

5.5.3 Results & Discussion

(1) Correlations

Three relationships were observed between the scales. First, there was a positive relationship between student perception of parent's involvement in language learning, and parent's involvement in the language learning process. Second, there was a positive correlation between parent's involvement and student's language contacts. Third, there was a negative relationship between self-rated language proficiency (speaking) and parent attitude towards language learning (Table 5-17).

Table 5-17 Correlations for Self-rated language profoency Scale, INLC, Attitudes towards Language Learning Scales

	St. Percep. of Parents' Involv.	Integ./Inst. Motivation	Parent Invol.	Parent Att.	INLC	St. Sch. Rel. Motiv.	St. Per. Int. Rel. Motiv.	Self-Rated LP (speaking)	Self-Rated LP (listening)
St. Percep. of Parents' Involv.	-	-.38	-.59 *	.01	.40	.16	.23	.06	.28
Integ./Inst. Motivation	-.38	-	-.30	-.24	-.32	.18	.16	-.08	-.33
Parent invol.	.59 *	-.30	-	.38	.66 *	.11	.22	-.34	-.28
Parent Att.	.10	-.24	.38	-	-.04	.07	-.40	-.59 *	-.05
INLC	.40	-.32	.66 *	-.04	-	.18	.46	.25	.07
St. Sch. Rel. Motiv.	.16	.18	.11	.07	.18	-	.40	.11	.01
St. Per. Int. Rel. Motiv.	.23	.16	.22	-.40	.46	.40	-	.34	-.11
Self-Rated LP (speaking)	.06	-.08	-.34	-.59 *	.25	.11	.34	-	.61 *
Self-Rated LP (listening)	.28	-.33	-.28	-.05	.07	.01	-.11	.61 *	-

* $p < .05$, ** $p < .01$

5.6 Conclusions from the related factors studies

In Parts 2 and 3, we learned of what might be considered to be the measurable successes of the immersion program in two different environments. While positive effects on cultural identity where demonstrated in Part 2, the question of identity has been less significant in the literature than questions of academic achievement. In Part 3, strengths in academic achievement were demonstrated for both immersion programs in comparison to students in traditional programs. In Part 4, factors related to the success of immersion were examined. In addition to showing grade and sex differences between some of the variables in this chapter, correlation studies have revealed positive and negative relationships. In particular, this examination of the Japanese immersion students in Anchorage has pointed to a relationship between students and parents regarding attitudes and motivations towards the language learning experience, and also between students' confidence and self-evaluation of their language ability. Although further studies are needed in order to clarify these relationships, these results support what has been said about immersion in the past, that the positive participation of parents in the program is essential to a student's success.

PART 5: DISCUSSION AND CONCLUSIONS

This thesis has presented an investigation into some of the

psychological factors involved in the language immersion program in two ethno-linguistic educational contexts. In this section, each of the research questions undertaken are addressed taking into account the implications for immersion.

While previous research has examined the immersion program specifically, there has not been a great deal of focus on the supporting factors. Although the linguistic differences existing between Japanese and English in the programs investigated must also be considered in order to fully understand the implications of these studies, this thesis proposes that, in addition to considering the specific pedagogy within the immersion program itself, and the effect resulting from the distance of language pairs, other supporting factors such as attitudes and motivations towards the language learning process are essential to determining the reasons for student's successes or failures.

Chapter 6. Answers to the research questions

Three research questions were investigated in this thesis.

1. *What effect does an English language immersion program have on Japanese students' sense of cultural identity? How does this compare with students in regular (non-immersion) schools?*

With a new questionnaire designed to measure subjective attitude towards the Japan and the West, this study addressed real concerns regarding identity expressed by parents and educators in Japan, specifically by parents deciding between immersion and the regular

program at Katoh School. The general result of the study was a conclusion that while identity scores for immersion students seemed to drop after grade 6, immersion did not negatively affect the development of student's cultural identity, but rather produced a very positive sense of Japanese identity including a positive attitude toward the target language and culture.

A discussion of existing notions concerning cultural identity held by the Japanese may have provided some answer as to why the worries have arisen concerning identity. In addition to supporting past research on identity within bilingual education, the results of this study have important implications for the immersion program in Japan.

However, while the comparative nature of the study was intended to serve as a means of validating the results, the implications for immersion must be cautiously considered. Immersion seeks to promote additive bilingualism with majority language children. Unlike regular programs whose students study English through traditional methods, the immersion program aims to fulfill the national curriculum requirements while allowing students to develop near native second language ability. Therefore, the value of immersion in relation to regular schools is not a question. Moreover, before concluding that the Japanese cultural identity of immersion students is 'stronger' than that of regular students, a clearer result of this study is that the immersion experience has not been negative.

2. *What effect does an English immersion program in Japan, and*

Japanese immersion program in the United States have on students' academic achievement?

This question focused on the measurable successes of the immersion program, revealed by measures of academic achievement, and first language development for immersion students in Japan and North America. Results of each of the three studies showed that the immersion students' achievement was at least equal to that of the comparable students in regular programs.

At Katoh School, two achievement studies were undertaken. The first was a comparison of math and Kokugo (Japanese) raw scores for immersion and regular students on a junior high school entrance examination. There were no significant differences between the groups extending internal studies by Bostwick (1999, 2000, in press) that have demonstrated the academic and Japanese language strengths of the English immersion students. In the next study, the immersion students' first language development was examined with a standardized test of Japanese vocabulary ability. Although there may be some question as to the comparability of the immersion and regular groups, as a similar pattern of scores was shown between the groups in a one-way ANOVA and significant differences in a two-way ANOVA, the implications for immersion in Japan seem clear. Despite the fact that the students spend a significant portion of their day learning new concepts in classes such as math, and science through the medium of the English language, the students have been able to maintain a similar pattern of achievement in

Japanese vocabulary ability as that of regular students. Moreover, in this area of achievement, it seems evident that the immersion experience has not been negative.

The California Achievement Tests were used as an index of achievement for Japanese immersion students in Anchorage, Alaska. A comparison of the immersion students to other students in regular programs within the District showed significant differences in favor of the immersion students. While significant differences were shown in chi-squared tests for some of the demographic categories, the results indicate high levels of academic achievement for students in the Japanese immersion program, which is evidence of the programs success.

An examination of academic achievement, including first language development for the immersion students has shown positive affects. While the effect of very distanced languages on student's academic achievement has not been explored in this thesis, the results provide evidence of the success of immersion in these areas, and add to the body of research that has demonstrated no negative effects for academic achievement as a result of immersion in a foreign language.

The results of these studies should be encouraging, especially in view of the plans of the Japanese Ministry of Science and Education to reconstruct the English education system.

3. *What factors might be responsible for students' success or failure in the immersion program?*

In Parts 2 & 3 central questions related to immersion were investigated in comparative studies. In Part 4, the purpose was to determine what contributing factors are the most significant in explaining, or predicting success or failure within the immersion program.

Fulfilling the objectives of immersion, and what has been described as an additive type of bilingualism, successful students have been defined in this thesis to be those who are able to keep up with the curriculum, while achieving satisfactory academic achievement, and first language development. In addition, successful students maintain positive attitudes not only towards the target language culture, but also towards their home language and culture.

Statistically significant relationships between the variables in this chapter have been identified, however, there is a need to continue the investigation into these relationships in order to fully determine the implications for the immersion program.

In study 6, relationships between student's language networks, and parent and student attitudes towards language learning were examined. Differences were seen for sex where male students at the middle school were shown to use Japanese to communicate with parents, relatives, friends, etc. more than female students. In addition, correlations indicated that students are influenced by the attitudes of parents towards their Japanese immersion program, and also that student's own reasons

for choosing immersion determine their attitudes and motivations towards the immersion program.

Study 7 looked at student's self-concept in relation to situated identity. An analysis of variance between grade and sex revealed that the elementary school students' scores were higher on the feelings towards Japan subscale of the Situated Identity Scale. Results of correlations between the variables showed positive relationships linking situated identity to academic self-concept and nonacademic self-concept. In addition, significant relationships were observed between subscales of both the academic and nonacademic self-concept scales. These results point to the existence of important relationships between students and parents in and out of the academic environment.

Study 8 looked at the relationship between students' self-rated language proficiency and motivation towards language learning. Analysis of variance for grade and sex showed significant differences for the speaking subscale of the Self-rated Language Proficiency Scale where the elementary school students had the lowest scores, indicating they were less confident in their ability to speak Japanese than other grades. For the Motivation towards Language Learning Scale, significant effects were seen for the intrinsic value and test anxiety subscales. While intrinsic value scores were highest for females in the elementary school, test anxiety was highest for females in the middle school. Results of the correlations showed a negative relationship between test anxiety and

self-evaluation of listening ability. However, self-efficacy was positively related with self-evaluation of speaking and listening ability in Japanese

It was not surprising to observe that the elementary school students had lower confidence in their ability to speak Japanese. While it was not particularly surprising to notice that test anxiety was highest for junior high students, the negative correlation between test anxiety and self-evaluation of listening ability was unexpected, and needs further investigation. However, the relationship showing an increasing self-evaluation of speaking and listening ability with self-efficacy was encouraging, lending support to the idea that achievement and confidence in learning are related (see Schunk, 1981, 1985; Dweck & Elliott, 1983; Meece, Blumenfeld, & Hoyle, 1988),

Finally, in study 9, the relationship between self-rated language proficiency, language networks, and parent and student attitudes towards language learning was examined. This study looked at one final combination of variables in order to determine factors related to immersion. Positive relationships indicate that an increase in student perception of parent's involvement in language learning is paired with an increase in parent's involvement in the language learning process. Another relation showed that the more children use Japanese to communicate, the higher is parent's involvement in their child's learning. A final relationship was observed between self-rated language proficiency (speaking) and parent attitude towards language learning indicating that student achievement results in more positive parental

attitudes towards the program.

Greater emphasis has been placed on understanding the role of parents in children's motivations and attitudes towards learning second languages (Sung & Padilla, 1998), or towards academic achievement in general (Hess & Holloway, 1985). In this respect, a great deal has been learned about the importance of a student's environment in relation to learning. In addition, a deeper understanding of linguistic networks has led to progress in learning how ethnic groups' language and culture vitality survive in linguistically or culturally challenging environments (Landry & Allard, 1994).

Two different linguistic environments were chosen to investigate psychological factors within the language immersion program. While both partial immersion programs in Japan and America shared a similar, immersion structure, the opposite language pairs involved created a contrasting view of immersion education. This thesis has demonstrated positive results for the immersion students in the two immersion programs involving Japanese and English. The first question, of cultural identity was found to be more a reflection of parental misconceptions concerning the immersion program than a factor influencing whether immersion has been successful of not. In addition to confirming the academic success of both programs, an investigation into the psychological factors within immersion has revealed interesting relationships that may further our understanding of the successes and

failures of immersion.

Although the findings from these studies point to the importance of supporting factors within immersion, further research is needed to understand the complex causal relationships that exist between these factors. Significant strides within bilingual research have taught us the importance of taking notice of a child's surrounding environment in addition to what is happening in the classroom. The future success of the immersion program in Japan and abroad will depend on information that will allow educators and parents alike to make informed decisions regarding optimum conditions for their child's education. Moreover, a deepener understanding of the psychological factors responsible for the successes and failures of immersion students will lead us closer to finding a second language education program that will work for everyone.

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APPENDICES

A: Pilot AJWQ (English translation)

		Strongly Agree	Agree	Disagree	Strongly disagree
	eg I watch television every day.	1	2	3	4
1	I sometmes feel I am different when playing with friends from other schools	1	2	3	4
2	I have a clear image of the character of a Japanese	1	2	3	4
3	I think I would like to become more Japanese	1	2	3	4
4	I admire the face and body shape of Westerners	1	2	3	4
5	I don't really understand how Japanese think	1	2	3	4
6	I don't think there are any similarities between Japanese and Westerners	1	2	3	4
7	No matter how hard they tried, Japanese could never become like Westerners	1	2	3	4
8	I think Japanese people are better than Western people	1	2	3	4
9	I am glad that I was born a Japanese.	1	2	3	4
10	I regret that I was born a Japanese	1	2	3	4
11	I sometimes feel that I am not Japanese	1	2	3	4
12	I sometimes feel that my personality is Western	1	2	3	4
13	If there was a war against the West, I would naturally side with Japan	1	2	3	4
14	My lifestyle is Japanese	1	2	3	4
15	I like Western movies more than Japanese movies	1	2	3	4
16	I like Western animation characters more than Japanese animation characters	1	2	3	4
17	I like Western movie actors more than Japanese movie actors	1	2	3	4
18	I would feel more comfortable getting to know a Western celebrity than a Japanese celebrity	1	2	3	4
19	When I grow up, I would like to marry a Westerner	1	2	3	4
20	When choosing someone to be alone with, I would feel more comfortable with a Japanese than a Westerner	1	2	3	4
21	I am proud of Japanese culture and traditions	1	2	3	4
22	I like the English language better than I like the Japanese language	1	2	3	4
23	I have no intention of ever living outside of Japan	1	2	3	4
24	If I was to be reborn, I would like to be reborn a Westerner	1	2	3	4
25	I think Western culture is attractive	1	2	3	4
26	I like the study of Japanese (Kokugo)	1	2	3	4
27	My real self comes out more when I speak in English than when I speak in Japanese	1	2	3	4
28	I am able to express my thoughts better in English than in Japanese	1	2	3	4
29	I think differently than Japanese people	1	2	3	4
30	I think that Japanese children and Western children's way of thinking is different	1	2	3	4
31	I am sometimes told by others that I "don't seem Japanese"	1	2	3	4

B: Pilot AJWQ (Japanese)

		1	2	3	4
1		1	2	3	4
2		1	2	3	4
3		1	2	3	4
4		1	2	3	4
5		1	2	3	4
6		1	2	3	4
7		1	2	3	4
8		1	2	3	4
9		1	2	3	4
10		1	2	3	4
11		1	2	3	4
12		1	2	3	4
13		1	2	3	4
14		1	2	3	4
15		1	2	3	4
16		1	2	3	4
17		1	2	3	4
18		1	2	3	4
19		1	2	3	4
20		1	2	3	4
21		1	2	3	4
22		1	2	3	4
23		1	2	3	4
24		1	2	3	4
25		1	2	3	4
26		1	2	3	4
27		1	2	3	4
28		1	2	3	4
29		1	2	3	4
30		1	2	3	4
31		1	2	3	4

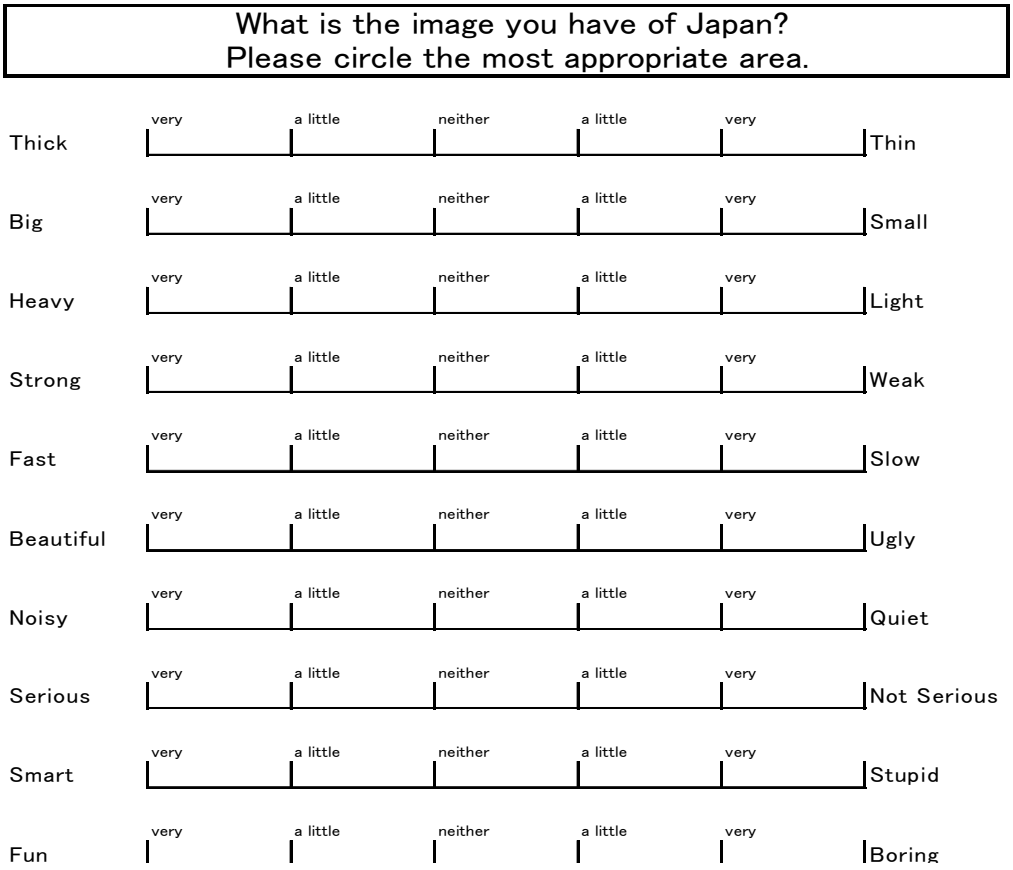
C: Cosmopolitanism Scale (English translation)

		Strongly Agree	Agree	Disagree	Strongly disagree
1	I think that the Japanese people are great	1	2	3	4
2	Japan is rich because of the excellence of its people	1	2	3	4
3	I feel admiration whenever I come into contact with other cultures and lifestyles	1	2	3	4
4	Neither a country nor its culture should be judged as being good or bad	1	2	3	4
5	I would like to live in as many countries as I can	1	2	3	4
6	I would like to know as much as I can about cultures and lifestyles in other countries	1	2	3	4
7	All the countries of the world must learn to cooperate	1	2	3	4
8	Every country in the world has a great culture	1	2	3	4
9	There is no need for countries in this world	1	2	3	4
10	Wars are caused by differences in race and culture	1	2	3	4

D: Cosmopolitanism Scale (Japanese)

1		1	2	3	4
2		1	2	3	4
3		1	2	3	4
4		1	2	3	4
5		1	2	3	4
6		1	2	3	4
7		1	2	3	4
8		1	2	3	4
9		1	2	3	4
10		1	2	3	4

E: National Image Scale (English translation)

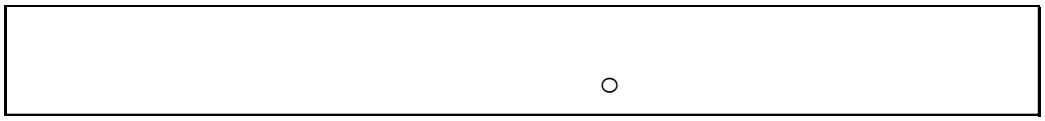


E: National Image Scale cont. (English translation)

What is the image you have of America?
Please circle the most appropriate area.

	very	a little	neither	a little	very	
Thick						Thin
Big						Small
Heavy						Light
Strong						Weak
Fast						Slow
Beautiful						Ugly
Noisy						Quiet
Serious						Not Serious
Smart						Stupid
Fun						Boring

F: National Image Scale (Japanese)



	とても	すこし	どちでもない	すこし	とても	
あつい						うすい
おおきい						ちいさい
おもい						かるい
つよい						よわい
はやい						おそい
うつくしい						みにくい
さわがしい						しずかな
まじめな						ふまじめな
かしこい						おろかな
たのしい						つまらない

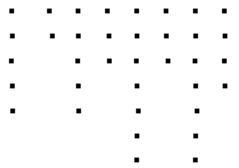
F: National Image Scale cont. (Japanese)

	とても	すこし	どちでもない	すこし	とても	
あつい						うすい
おおきい						ちいさい
おもい						かるい
つよい						よわい
はやい						おそい
うつくしい						みにくい
さわがしい						しずかな
まじめな						ふまじめな
かしこい						おろかな
たのしい						つまらない

G: AJWQ (English translation)

		Strongly Agree	Agree	Disagree	Strongly disagree
	eg I watch television every day.	1	2	3	4
1	I have a clear image of the character of a Japanese	1	2	3	4
2	I admire the face and body shape of Westerners	1	2	3	4
3	I think Japanese people are better than Western people	1	2	3	4
4	I am glad that I was born a Japanese.	1	2	3	4
5	My lifestyle is Japanese	1	2	3	4
6	I like Western movie actors more than Japanese movie actors	1	2	3	4
7	I regret that I was born a Japanese	1	2	3	4
8	My real self comes out more when I speak in English than when I speak in Japanese	1	2	3	4
9	I like Western animation characters more than Japanese animation characters	1	2	3	4
10	If there was a war against the West, I would naturally side with Japan	1	2	3	4
11	When I grow up, I would like to marry a Westerner	1	2	3	4
12	I am proud of Japanese culture and traditions	1	2	3	4
13	I like the English language better than I like the Japanese language	1	2	3	4
14	I have no intention of ever living outside of Japan	1	2	3	4
15	If I was to be reborn, I would like to be reborn a Westerner	1	2	3	4
16	I think Western culture is attractive	1	2	3	4
17	I like the study of Japanese (Kokugo)	1	2	3	4
18	I like Western movies more than Japanese movies	1	2	3	4
19	I am able to express my thoughts better in English than in Japanese	1	2	3	4
20	I think differently than Japanese people	1	2	3	4

H: AJWQ (Japanese)



		1	2	3	4
1		1	2	3	4
2		1	2	3	4
3		1	2	3	4
4		1	2	3	4
5		1	2	3	4
6		1	2	3	4
7		1	2	3	4
8		1	2	3	4
9		1	2	3	4
10		1	2	3	4
11		1	2	3	4
12		1	2	3	4
13		1	2	3	4
14		1	2	3	4
15		1	2	3	4
16		1	2	3	4
17		1	2	3	4
18		1	2	3	4
19		1	2	3	4
20		1	2	3	4

I: SDQ (Academic self-concept)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
38. Mathematics is one of my best subjects	38	☐	☐	☐	☐	38
39. I'm hopeless in my English class……	39	☐	☐	☐	☐	39
40. People come to me for help in most school subjects…...	40	☐	☐	☐	☐	40
41. I often need help in mathematics…..	41	☐	☐	☐	☐	41
42. I look forward to my English class.	42	☐	☐	☐	☐	42
43. I'm too stupid at school to get into a good university……	43	☐	☐	☐	☐	43
44. I look forward to mathematics classes	44	☐	☐	☐	☐	44
45. I do badly on tests that need a lot of reading ability in English…..	45	☐	☐	☐	☐	45
46. If I work really hard I could be one of the best students in my school year..	46	☐	☐	☐	☐	46
47. I have trouble understanding anything with mathematics in it……	47	☐	☐	☐	☐	47
48. Work in my English class is easy for me	48	☐	☐	☐	☐	48
49. I get bad grades in most school subjects	49	☐	☐	☐	☐	49
50. I enjoy studying for mathematics….	50	☐	☐	☐	☐	50
51. I'm not very good at reading in English..	51	☐	☐	☐	☐	51
52. I learn things quickly in most school subjects…	52	☐	☐	☐	☐	52

I: SDQ (Academic self-concept cont.)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
53. I do badly in tests of mathematics….	53	☐	☐	☐	☐	53
54. English is one of my best subjects…	54	☐	☐	☐	☐	54
55. I am stupid at most school subjects…	55	☐	☐	☐	☐	55
56. I get good grades in mathematics..	56	☐	☐	☐	☐	56
57. I hate reading in English….	57	☐	☐	☐	☐	57
58. I do well on tests in most school subjects	58	☐	☐	☐	☐	58
59. I never want to take another mathematics course…..	59	☐	☐	☐	☐	59
60. I get good grades in English….	60	☐	☐	☐	☐	60
61. I have trouble with most school subjects	61	☐	☐	☐	☐	61
62. I have always done well in mathematics	62	☐	☐	☐	☐	62
63. I have trouble expressing myself when I try to write something in English…	63	☐	☐	☐	☐	63
64. I'm good at most school subjects…	64	☐	☐	☐	☐	64
65. I hate mathematics….	65	☐	☐	☐	☐	65

I: SDQ (Academic self-concept cont.)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
66.	I learn things quickly in my English class.....	66				66
67.	Most school subjects are just too hard for me.....	67				67

J: SDQ (Nonacademic self-concept)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
38. Overall, I have a lot to be proud of.	38	☐	☐	☐	☐	38
39. My parents are usually unhappy or disappointed with what I do	39	☐	☐	☐	☐	39
40. Overall, I am no good…….	40	☐	☐	☐	☐	40
41. I get along well with my parents…	41	☐	☐	☐	☐	41
42. Most things I do, I do well.	42	☐	☐	☐	☐	42
43. It is difficult for me to talk with my parents……..	43	☐	☐	☐	☐	43
44. Nothing I do ever seems to turn out right……..	44	☐	☐	☐	☐	44
45. My parents treat me fairly……	45	☐	☐	☐	☐	45
46. Overall, most things I do turn out well……..	46	☐	☐	☐	☐	46
47. I have lots of arguments with my parents……..	47	☐	☐	☐	☐	47
48. I don't have much to be proud of..	48	☐	☐	☐	☐	48

J: SDQ (Nonacademic self-concept cont.)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
49. My parents understand me…..	49	☐	☐	☐	☐	49
50. I can do things as well as most people……...	50	☐	☐	☐	☐	50
51. I do not like my parents very much	51	☐	☐	☐	☐	51
52. I feel that my life is not very useful	52	☐	☐	☐	☐	52
53. My parents really love me a lot…	53	☐	☐	☐	☐	53
54. If I really try I can do almost anything I want to…….	54	☐	☐	☐	☐	54
55. Overall, I am a failure…….	55	☐	☐	☐	☐	55

K: Situated Identity Scale

			VERY			NOT AT ALL
56.	When I have contacts with other students in class, I feel.....	Japanese	☐	☐	☐	☐
57.		American	☐	☐	☐	☐
58.	When I listen to music, I feel.....	Japanese	☐	☐	☐	☐
59.		American	☐	☐	☐	☐

			VERY			NOT AT ALL
60.	When talking with teachers, I feel	Japanese	☐	☐	☐	☐
61.		American	☐	☐	☐	☐
62.	When I think about where I would want to live in the future, I feel..	Japanese	☐	☐	☐	☐
63.		American	☐	☐	☐	☐
64.	When I am playing with my classmates, I feel.....	Japanese	☐	☐	☐	☐
65.		American	☐	☐	☐	☐
66.	When I read Japanese comic books, I feel.....	Japanese	☐	☐	☐	☐
67.		American	☐	☐	☐	☐
68.	When I think about what I want to become in life, I feel.....	Japanese	☐	☐	☐	☐
69.		American	☐	☐	☐	☐
70.	When I participate in cultural activities (New Year's Day, etc.), I feel.....	Japanese	☐	☐	☐	☐
71.		American	☐	☐	☐	☐
72.	When I prepare food, I feel.....	Japanese	☐	☐	☐	☐
73.		American	☐	☐	☐	☐

K: Situated Identity Scale (cont.)

74. When I think about my future wife or husband, I feel.....	Japanese	☐	☐	☐	☐	
75.	American	☐	☐	☐	☐	
		VERY			**NOT AT ALL**	
76. When I write something, I feel...	Japanese	☐	☐	☐	☐	
77.	American	☐	☐	☐	☐	
78. When I watch sports, singing shows or anime on television, I feel	Japanese	☐	☐	☐	☐	
79.	American	☐	☐	☐	☐	
80. When I am at home, I feel.....	Japanese	☐	☐	☐	☐	
81.	American	☐	☐	☐	☐	
82. When I travel, I feel.....	Japanese	☐	☐	☐	☐	
83.	American	☐	☐	☐	☐	

L: Individual Network of Language Contacts (INLC)

		ALWAYS	OFTEN	RARELY	NEVER
38.	How often are you with your father or male guardian?.....	38 ☐	☐	☐	☐
39.	How often do you speak to your father or male guardian in Japanese?.....	39 ☐	☐	☐	☐
40.	How often are you with your mother or female guardian?.....	40 ☐	☐	☐	☐
41.	How often do you speak to your mother or female guardian in Japanese?...	41 ☐	☐	☐	☐
42.	How often are you with your brother(s) and/or sister(s)?.....	42 ☐	☐	☐	☐
43.	How often do you speak to your brother(s) and/or sister(s) in Japanese?	43 ☐	☐	☐	☐
44.	How often are you with your neighbours?	44 ☐	☐	☐	☐
45.	How often do you talk to your neighbours in Japanese...?.....	45 ☐	☐	☐	☐
46.	How often do you participate in group activities, or in social and cultural organizations (e.g., sports and leisure)?	46 ☐	☐	☐	☐
47.	How often do you talk to the participants in Japanese?	47 ☐	☐	☐	☐
48.	How often are you with your friends and acquaintances in school?	48 ☐	☐	☐	☐
49.	How often do talk to your friends and acquaintances in Japanese...?	49 ☐	☐	☐	☐

L: INLC (cont.)

		ALWAYS	OFTEN	RARELY	NEVER	
50.	How often are you with your friends and acquaintances away from school?	50 ☐	☐	☐	☐	50
51.	How often do talk to your friends and acquaintances in Japanese...?	51 ☐	☐	☐	☐	51
52.	How often do you attend social gatherings (e.g. parties)?.....	52 ☐	☐	☐	☐	52
53.	How often do the participants talk to you in Japanese....?	53 ☐	☐	☐	☐	53
54.	Excluding homework, how often do you read comics or books?.....	54 ☐	☐	☐	☐	54
55.	Excluding homework, when I read comics or books, they are written in Japanese	55 ☐	☐	☐	☐	55

M: Attitude towards Language Learning (student)

"I chose Japanese immersion because..'		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
56. It is my parent's language.....	56	☐	☐	☐	☐	56
57. I want to speak with my relatives.....	57	☐	☐	☐	☐	57
58. I want to speak with my friends.....	58	☐	☐	☐	☐	58
59. My parents encouraged me to study the language.....	59	☐	☐	☐	☐	59
60. My parents forced me to study the language.....	60	☐	☐	☐	☐	60
61. I heard that language classes at my school were good.....	61	☐	☐	☐	☐	61
62. I heard that language teachers at my school were good.....	62	☐	☐	☐	☐	62
63. I have friends who decided to study the language.....	63	☐	☐	☐	☐	63
64. I want to study in a foreign country as a "study abroad" student.....	64	☐	☐	☐	☐	64
65. I want to travel to countries where the language is spoken...	65	☐	☐	☐	☐	65
66. I thought that studying the language would be interesting.....	66	☐	☐	☐	☐	66
67. I thought that it would be more interesting than studying other languages...	67	☐	☐	☐	☐	67

M: Attitude towards Language Learning (student cont.)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
	"My parents.."					
68.	Encourage practicing the language as much as possible.....	68	☐	☐	☐	☐ 68
69.	Believe language should be learned as much as possible.....	69	☐	☐	☐	☐ 69
70.	Encourage continuing study of the language.....	70	☐	☐	☐	☐ 70
71.	Show considerable interest in things related to the language.....	71	☐	☐	☐	☐ 71
72.	Really encourage study of the language	72	☐	☐	☐	☐ 72
73.	Stress importance of the language after graduation.....	73	☐	☐	☐	☐ 73
74.	Think more time should be devoted to language study.....	74	☐	☐	☐	☐ 74
75.	Try to help with language homework...	75	☐	☐	☐	☐ 75
76.	Urge getting help from the teacher if I have problems with the language class	76	☐	☐	☐	☐ 76

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
	"Studying Japanese is important because.."					
77.	I will be able to participate in cultural activities of the language group.....	77	☐	☐	☐	☐ 77
78.	I will be able to meet and converse with more people.....	78	☐	☐	☐	☐ 78
79.	It will help me to better understand and appreciate art and literature of the culture...	79	☐	☐	☐	☐ 79

M: Attitude towards Language Learning (student cont.)

	"Studying Japanese is important because.."		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
80.	I will feel more comfortable with native speakers of the language…….……	80	☐	☐	☐	☐	80
81.	It will make me a more knowledgeable person……	81	☐	☐	☐	☐	81
82.	I will need the language for my future career……	82	☐	☐	☐	☐	82
83.	It will be useful someday to get a job.	83	☐	☐	☐	☐	83
84.	It will get respect from others if I know a foreign language…….……	84	☐	☐	☐	☐	84

N: Attitude towards Language Learning (parent)

" As a parent I..."		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
1. Encourage practicing the language as much as possible.....	1	☐	☐	☐	☐	1
2. Believe language should be learned as much as possible.....	2	☐	☐	☐	☐	2
3. Encourage continuing study of the language...	3	☐	☐	☐	☐	3
4. Show considerable interest in things related to the language.....	4	☐	☐	☐	☐	4
5. Really encourage study of the language..	5	☐	☐	☐	☐	5
6. Stress importance of the language after graduation.....	6	☐	☐	☐	☐	6
7. Think more time should be devoted to language study.....	7	☐	☐	☐	☐	7
8. Try to help with language homework...	8	☐	☐	☐	☐	8
9. Urge getting help from the teacher if having problems with the language class.....	9	☐	☐	☐	☐	9

N: Attitude towards Language Learning (parent cont.)

"Studying Japanese is important because.."		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
10. My child will be able to participate in cultural activities of the language group.....	10	☐	☐	☐	☐	10
11. My child will be able to meet and converse with more people.....	11	☐	☐	☐	☐	11
12. My child will better understand and appreciate the art and literature of the culture.....	12	☐	☐	☐	☐	12
13. My child will be more at ease with native speakers of the language.....	13	☐	☐	☐	☐	13
14. It will make my child a more knowledgeable person.....	14	☐	☐	☐	☐	14
15. My child will need the language for a future career.....	15	☐	☐	☐	☐	15
16. It will be useful someday to get a job.....	16	☐	☐	☐	☐	16
17. It will get respect from others if my child knows a foreign language.....	17	☐	☐	☐	☐	17

N: Attitude towards Language Learning (parent cont)

	"It is important to study foreign languages because..."		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	
18.	I wish to read newspapers/magazines in Japanese.....	18	☐	☐	☐	☐	18
19.	I want to read literature in the original language, not in a translation.....	19	☐	☐	☐	☐	19
20.	I wish to learn many foreign languages..	20	☐	☐	☐	☐	20
21.	I enjoy meeting and listening to speakers of other languages.....	21	☐	☐	☐	☐	21
22.	Studying a foreign language is an enjoyable experience.....	22	☐	☐	☐	☐	22
23.	I wish I could speak another language perfectly.....	23	☐	☐	☐	☐	23
24.	It is important for everyone to learn a foreign language.....	24	☐	☐	☐	☐	24
25.	If a stay in another country, I can use the language.....	25	☐	☐	☐	☐	25
26.	I want to be able to speak the language if I visit the country.....	26	☐	☐	☐	☐	26

O: Self-rated Language Proficiency

Using Japanese, I can.....		QUITE EASILY	WITH SOME DIFFICULTY	WITH GREAT DIFFICULTY	NOT AT ALL	
38. count to 10.....	38	☐	☐	☐	☐	38
39. say today's date (month, day, year)	39	☐	☐	☐	☐	39
40. order a simple meal in a restaurant	40	☐	☐	☐	☐	40
41. ask for directions on the street...	41	☐	☐	☐	☐	41
42. buy clothes in a department store	42	☐	☐	☐	☐	42
43. introduce myself in social situations, and use appropriate expressions for greetings and leaving.....	43	☐	☐	☐	☐	43
44. give simple biographical information about myself (place of birth, composition of family, early schooling, e.t.c)	44	☐	☐	☐	☐	44
45. say a lot about my favorite hobby using the correct vocabulary.....	45	☐	☐	☐	☐	45
46. describe my present job or school work in detail.....	46	☐	☐	☐	☐	46
47. tell what I plan to be doing 5 years form now, using the correct future tenses.....	47	☐	☐	☐	☐	47
48. understand very simple statements or questions ("Hello", "How are you?", "What is your name?", "Where do you live?", etc.)	48	☐	☐	☐	☐	48

O: Self-rated Language Proficiency (cont.)

Using Japanese, I can…..		QUITE EASILY	WITH SOME DIFFICULTY	WITH GREAT DIFFICULTY	NOT AT ALL	
49. understand a native speaker who is speaking slowly and carefully for me (in a face-to-face conversation)……..	49	☐	☐	☐	☐	49
50. understand a native speaker who is speaking slowly and carefully for me (on the telephone)……..	50	☐	☐	☐	☐	50
51. tell whether the speaker is talking about past, present, or future events (in a face-to-face conversational native speaker who is speaking slowly and carefully for me)…	51	☐	☐	☐	☐	51
52. understand a native speaker who is speaking to me as quickly and as naturally as if he or she would speak to another native speaker (in a face-to-face conversation)	52	☐	☐	☐	☐	52
53. understand movies without subtitles in……	53	☐	☐	☐	☐	53
54. (on the radio), I can understand the words of a popular song that I have not heard before ……	54	☐	☐	☐	☐	54
55. understand two native speakers when they are talking rapidly with one another ……	55	☐	☐	☐	☐	55
56. tell whether the speaker is talking about past, present, or future events (in a face-to-face conversation with a native speaker who is speaking slowly and carefully for me)…	56	☐	☐	☐	☐	56

P: Motivation towards Language Learning

			STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
57.	Compared with other students in the class, I expect to do well in classes taught in:	Japanese	☐	☐	☐	☐
58.		English	☐	☐	☐	☐
59.	I am certain I can understand the ideas when classes are taught in:	Japanese	☐	☐	☐	☐
60.		English	☐	☐	☐	☐
61.	I expect to do very well in classes taught in:	Japanese	☐	☐	☐	☐
62.		English	☐	☐	☐	☐
63.	I think I am a good student compared to other students in classes taught in:	Japanese	☐	☐	☐	☐
64.		English	☐	☐	☐	☐
65.	I am sure I can do an excellent job on the tasks assigned for classes taught in:	Japanese	☐	☐	☐	☐
66.		English	☐	☐	☐	☐
67.	I think I will receive a good grade in my classes that are taught in:	Japanese	☐	☐	☐	☐
68.		English	☐	☐	☐	☐
69.	My study skills are excellent compared with other students in classes taught in:	Japanese	☐	☐	☐	☐
70.		English	☐	☐	☐	☐

P: Motivation towards Language Learning (cont.)

			STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
71.	Compared with other students, I know a lot about subjects taught in:	Japanese	☐	☐	☐	☐
72.		English	☐	☐	☐	☐
73.	I know that I will be able to learn the material for my classes taught in:	Japanese	☐	☐	☐	☐
74.		English	☐	☐	☐	☐
75.	I prefer class work that is challenging so I can learn new things, especially in classes taught in:	Japanese	☐	☐	☐	☐
76.		English	☐	☐	☐	☐
77.	I like what I learn when I study in classes that are taught in:	Japanese	☐	☐	☐	☐
78.		English	☐	☐	☐	☐
79.	I think I will be able to use what I learn in class in other classes, especially when I study in:	Japanese	☐	☐	☐	☐
80.		English	☐	☐	☐	☐
81.	I think that I prefer topics I will learn something from, even if they require more work, especially when I study in:	Japanese	☐	☐	☐	☐
82.		English	☐	☐	☐	☐

P: Motivation towards Language Learning (cont.)

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
83. Even when I do poorly on a test, I try to learn from my mistakes, especially in classes taught in:	Japanese	☐	☐	☐	☐
84.	English	☐	☐	☐	☐
85. I think that what I am learning in my classes is useful for me to know, especially in classes taught in:	Japanese	☐	☐	☐	☐
86.	English	☐	☐	☐	☐
87. I think that what I learn in my classes is interesting, especially classes taught in:	Japanese	☐	☐	☐	☐
88.	English	☐	☐	☐	☐
89. Understanding classes is important to me, especially classes that are taught in:	Japanese	☐	☐	☐	☐
90.	English	☐	☐	☐	☐
91. I am so nervous during tests that I cannot remember the facts I have learned, mostly in classes taught in:	Japanese	☐	☐	☐	☐
92.	English	☐	☐	☐	☐
93. I have an uneasy, upset feeling when I take tests in:.	Japanese	☐	☐	☐	☐
94.	English	☐	☐	☐	☐

Motivation towards Language Learning (cont.)

			STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
95.	I worry a lot about tests that are given in:	Japanese	☐	☐	☐	☐
96.		English	☐	☐	☐	☐
97.	When I take a test, I think about how badly I am doing, especially in classes taught in:	Japanese	☐	☐	☐	☐
98.		English	☐	☐	☐	☐