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FOREIGN-LANGUAGE IMMERSION AS PREFERRED BILINGUAL/
BILITERATE PROGRAM MODEL FOR ELEMENTARY
ENGLISH EDUCATION IN TAIWAN

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Teaching English to Speakers of Other Languages

by
Shih-Hao Huang

June 2005

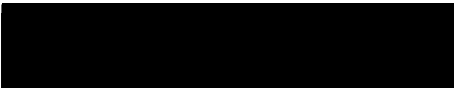
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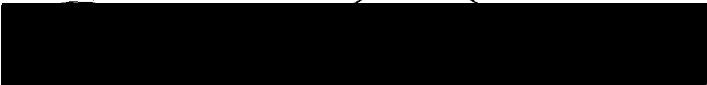
A Project
Presented to the
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by
Shih-Hao Huang

June 2005

Approved by:


Dr. Lynne Diaz-Rico, First Reader


Dr. Bonnie Piller, Second Reader

June 7, 2005
Date

ABSTRACT

The primary aim of this project is to clarify the contexts of English as a foreign-language instructional program in Taiwan. Based on the discussion of cross-linguistic influence between the first language (L1) and the second language (L2), the model of foreign-language immersion serves as the preferred program for teaching English as a foreign language in Taiwan, if students are to achieve bilingualism and biliteracy in Mandarin and English.

This project consists of five chapters. Chapter One presents the background of this project. Chapter Two reviews the related literature. Chapter Three provides a theoretical framework that integrates five key concepts presented in Chapter Two. Chapter Four offers a curriculum unit that includes five lessons. Chapter Five outlines the forms and methods of assessment featured in the lessons. The instructional unit is presented in the Appendix.

ACKNOWLEDGMENTS

I would like to thank the people who helped and supported me to make my dream come true. First I would like to appreciate my MA coordinator, Dr. Lynne Diaz-Rico, who guided me through the program and extended endless patience to me. I would also like to thank my second reader, Dr. Bonnie Piller, who supported me in finishing the project.

I cannot forget my appreciation to my family. My parents, Lisa Lin and Chuan-Song Huang, who gave me spiritual support and financial aid; my elder brother, Shih-Yi Huang, who inspired me to go abroad for studying; my younger sister, Kelly Huang, who gave me a hand to adapt myself to my American life; and my grandmother, Pian-Pian Huang, who always prays for me everyday to finish the project.

A special thanks to my friend, Hsiao-Juo Huang, who has accompanied with me through my American life, and has given me assistance in aspects of my study and daily life.

DEDICATION

This project is dedicated to my grandfather, Tian-Fu Huang, who encouraged me to go abroad for studying and supported me with financial aid. September 15, 2002, was the day I left for the United States, and it was also the day of my grandfather's funeral.

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CHAPTER ONE

INTRODUCTION

Background of the Project

The Role of English in Modern Taiwan

With the growth of economics, politics, science, and technology, there has grown the trend to make the world a global village. Communication with people from different countries is becoming more important than ever before. People from a variety of nations communicate with each other by speaking English, which functions as a world trade language. In Taiwan, English plays a vital role for people in business, studying, and living. For instance, a person who is fluent in English has higher priority when a company is hiring new employees. Currently, people utilize English as a medium to enhance their personal competitive ability. This is why learning English is becoming more and more popular in Taiwan. Furthermore, through learning English, people can learn about different cultures, and expand their views on internationalization.

History of English Teaching and Methodologies in Taiwan

Even though English is not an official language in modern Taiwan, it is still a compulsory course for junior and senior high school students. Before 1996, the majority

of students started to learn English in their first year of junior high school. Because of the pressure of applying to prestigious schools, the students and English teachers focus on reading and writing skills in English. Therefore, the students lack the abilities to speak and listen in English after they have learned English for at least six years.

To correct this drawback, many scholars suggest extending English learning to pupils because they do not have to take the entrance exam to enter junior high schools. Without the stress of an entrance examination, pupils may learn English more easily and naturally. From 1996 to 2001, local governments started to expand English instruction for elementary schools at a variety of different grade levels. However, in 2001, the Ministry of Education made English a part of compulsory education starting in fifth grade. As a result, in Taiwan, different grades of students began to learn English differently, depending on local areas. For example, students who live in Taipei City start to learn English in their first year of elementary school, but students who live in Taipei County start to learn English in the third grade.

Predicaments of English Teaching in Taiwan's Elementary Schools

English has been a compulsory course in elementary school in Taiwan since 2001. After one year of the implementation of English teaching in elementary school, in 2003, many scholars began to investigate the results of the current English teaching situation in elementary schools. One of the research reports from the National Teachers' Association R.O.C. (Republic of China) indicates that there are several factors that have impeded the success of the elementary English program. By and large, these factors can be divided into two aspects.

The first aspect includes two components that occur in the classroom. One is that the majority of classrooms do not have the tools for teaching English such as computers, projectors, and printers. For example, computer-assisted language learning (CALL) would provide not only an efficient method for educators to teach English, but also an interesting way for students to learn English. However, most of the traditional classrooms only have one or two computers. Therefore, utilizing CALL for instruction is not meeting the standards of educators.

The other component is the huge difference of achievement levels among students. Many parents worry that

their children cannot keep up with their classmates in learning English, so they take their children to tutoring centers ("cram schools") for learning English. Thus, this condition results in the difficulty of teaching English in class when some students have already been tutored to attain a more advanced level of proficiency. For example, some students have no experience in learning English, and they have to gain knowledge of English including the alphabet, whereas others can make a long speech and read a lot. If instruction of English is too easy, advanced students will lose their interest. On the other hand, when English is too difficult, beginners cannot catch up. To solve this problem, some scholars suggest classifying students according to their English levels. After all, different levels of students need different teaching styles and materials. This method could help them learn English more efficiently. However, the issue of classifying is still under discussion because many parents do not agree with this proposal. Parents do not like their children being placed into low levels.

The second part includes two challenges that occur outside the classroom. One challenge is limited time for the instruction of English. On the average, pupils attend English class one or two hours per week. In terms of

English instructors, the amount of instructional time is not enough. Take an elementary school where I served, for example. There is only one hour of English class per week. Some English teachers often complain that they have to review what they have taught in the past week all the time, and some of them feel frustrated after teaching for a semester. In terms of EFL students, they have contact with English only one hour per week, and they lack time to practice. This is also the why the English cram schools are so popular.

Another challenge is the problem of articulation between curricula among the first to the sixth grades. English teachers who teach different grades may choose textbooks that are from different publishers. For example, third grade teachers may choose textbooks from one publisher. However, the fourth grade English teachers may decide to choose a textbook from another publisher. The students may be confused because the writing styles of the two publishers are different. It may also be challenging for the students to catch up to the class as the degree of difficulty from the previous publisher many not have been as high. English teachers may not easily understand what pupils have been taught before. To solve this problem, teachers must communicate with each other closely by

choosing textbooks together and studying teaching materials for all grades. However, this task may make the teacher's burdens heavier.

Target Teaching Level: Third Grade

I have served in an elementary school for five years, and taught pupils from second to sixth grade, but I have never taught English before. In these five years, I have done my best to become a good teacher. I also have strong confidence. However, I am well aware that teaching English for EFL students is a different content area from other subjects, especially after I went to a museum garden for service learning with children. Without fluent English, I was just like an inexperienced teacher. I could not exactly express what I wanted to. Nevertheless, I still have keen interest for teaching on this challenge. Above all, I must improve my English skills first and then learn how to teach English to speakers of other languages.

My target teaching level is the third grade because I have had experience teaching third grade students for two years. Moreover, I comprehend their mentality and behavior more than other grades. As a result, as a teacher who is inexperienced in teaching English, selecting third grade students would be the best choice.

In summary, I am aware of distinct instructional problems in teaching English in elementary school, such as the huge difference of prior achievement among students, insufficiency of teaching media, curriculum articulation problems between grade levels, and limited time for the instruction of English. English teachers have the responsibility to face and overcome these problems. After all, it is teacher's duty to lead children to love learning English.

The Purpose of the Project

The primary goal of this project is to clarify the contexts of English as a foreign-language instructional programs in Taiwan. According to the discussion of the cross-linguistic influence between the first and the second language, the model of foreign-language immersion is probably one of the best choices to enable Taiwanese students to achieve bilingualism and biliteracy.

The project provides a theoretical framework to integrate those important concepts, such as bilingualism, biliteracy, foreign-language immersion, cross-linguistic influence, and the effect of the L2 on L1. Based on these concepts, a unit of instruction that includes five lessons

is designed for learners to build basic concepts about bilingualism and biliteracy.

The Content of the Project

The project consists of five chapters: Introduction (Chapter One), Review of the Literature (Chapter Two), Theoretical Framework (Chapter Three), Curriculum Design (Chapter Four), and Assessment (Chapter Five).

Chapter One describes the background and predicaments of English as a foreign language (EFL) education in Taiwan. Chapter Two presents five key concepts: bilingual education in Taiwan, biliteracy in Taiwan, foreign-language immersion, cross-linguistic influence (language transfer), and the effect of the second language on the first-language learning of children.

Chapter Three provides a theoretical framework to model bilingualism and biliteracy in Mandarin and English that can help to clarify aspects of dual-language acquisition in Taiwan. The framework is based on the five key concepts presented in Chapter Two.

Chapter Four provides a curriculum unit which includes five lessons. The design of each lesson is based on the key concepts presented in Chapter Two. The lesson plans of the unit are presented in the Appendix. Chapter

Five presents methods of assessment applied in these lessons.

The Significance of the Project

Based on the increasing value of children's English education and through the introduction of the concept of bilingual education from the United States, more and more bilingual tutorial centers and private schools are being established in Taiwan. In the United States, bilingual education includes a variety of programs and types, and the goals of bilingual education vary from program to program. However, in Taiwan, the term "bilingual education" is often used as a general term that relates to English learning. This may lead to confusion when describing Taiwanese dual-language education.

Consequently, the significance of the project explores five important concepts related to bilingual education, and provides a theoretical framework to integrate these key concepts. Based on the framework, a curriculum unit is designed for students to observe and examine the relationship between Chinese and English in aspects of culture, literacy, and reciprocal effect of languages.

CHAPTER TWO

REVIEW OF THE LITERATURE

Bilingual Education in Taiwan

Based on the increasing value of children's English education and through the introduction of the concept of bilingual education from the United States, more and more bilingual "cram" (tutorial) schools and private schools are being established in Taiwan. Most implementation of bilingual education in Taiwan is intended to construct an integrated context for learning English and Mandarin, even though English is a foreign language (Jhang, 2004). In fact, English is becoming less a foreign language than a second language in Taiwan, although the social environment of English use is different from countries in which English is a widely used second language, such as India, Singapore, and Nigeria.

Definition of Bilingual Education in the United States

The term bilingual is used to indicate "the linguistic skills of individuals competent in two or more languages" (Diaz-Rico, 2004, p. 5). In the United States, bilingual education is "the use of English and another language for instructional purposes" (Feinberg, 2002, p. 1). Specifically, bilingual education is "teaching

English to speakers of other languages with variable levels of support for the primary language" (Balderrama & Díaz-Rico, in press). Further, according to Krashen (1981), "bilingual education refers to situations in which students are able to study subject matter in their first language (L1) while their weaker language skills catch up" (p. 52).

In the United States, bilingual education is often used as a general term that includes a variety of programs and models designed for language-minority students (Feinberg, 2002). Basically, these programs include three features: "1) continued development of the primary language; 2) acquisition of a second language, usually English; and 3) instruction in the content areas" (Díaz-Rico & Weed, 2002, p. 308). However, the goals of bilingual education vary from program to program. Some programs are intended to support or maintain children's L1, but some only emphasize second-language acquisition regardless of their L1 development. No matter what type of program, the acquisition of second language (L2) is an ultimate purpose in bilingual education (Krashen, 1981).

Types of Bilingual Programs

Bilingual education includes a variety of programs and types, such as submersion, pull-out English as a

second language (ESL), transitional bilingual education, and immersion programs. According to Diaz-Rico and Weed (2002), "the various programs models vary in the degree of support for the home language" (p. 169). The least-supported program for children's home language is the submersion model, which is "the default model for educating English learners in U.S. classrooms (Diaz-Rico & Weed, 2002, p. 169).

Submersion. The goal of submersion is to develop children's competence in L2. In submersion programs, English learners are placed in the same classroom with native-English speakers and receive instruction in English, but do not get any extra lessons in English. People who support submersion think that "sink or swim" is the best way for English learners to learn English. "Swim" means English learners can succeed in acquiring English, and "sink" implies that they do not attain academic success in English language instruction (Krashen, 1981).

Submersion Plus Pull-Out ESL. English learners in pull-out ESL get extra instruction in English, usually an hour or half-hour per day; otherwise, they are submersed in English-language instruction. The provision of pull-out ESL services is the distinction between the submersion and pull-out ESL models. However, pull-out ESL has

implementation problems. First, pull-out ESL demands much expenditure on recruiting resource teachers for English classes. Second, English learners may miss some regular curricula when instructed in pull-out English classes (Diaz-Rico, 2004).

Transitional Bilingual Education (TBE). The goal of TBE is to develop English learners' competence in English. TBE uses L1 as an instructional support in the beginning. When English learners attain a certain level of proficiency in English, usually after two to three years of L1 instruction, they transfer into English-only classrooms. However, many scholars enumerate problems with TBE. For instance, Lessow-Hurley (2005) indicated that "It is unrealistic to expect all children to master a second language in a three-year period" (p. 13). In addition, Diaz-Rico (2004) claimed that two to three years are "long enough for students to achieve basic interpersonal communication skills (BICS) but not long enough for children to build cognitive academic language proficiency (CALP) either in their native tongue or in English" (p. 171).

Maintenance Bilingual Education (MBE). Also called developmental bilingual education, maintenance bilingual education (MBE) is designed to "support education and

communication in the students' primary language as well as students' heritage and culture" (Diaz-Rico, 2004, p. 171). MBE focuses not only on students' proficiency in both L1 and L2, but also on their culture. Viewed from this perspective, students build self-esteem and are proud of their culture. In addition, based on the above-mentioned features of MBE, Lessow-Hurley (2005) claimed that MBE is one of the most effective programs for language-minority (non-English-speaking) students.

Immersion Programs. Immersion education originated from Canada in 1965. According to Krashen (1981), Canadian immersion programs include first-language development, second-language acquisition, and teaching content through the second language (see Foreign-Language Immersion in this chapter). The goal of immersion programs is to develop functional competence in the second language and to promote or maintain normal progress in first-language development (Genesee, 1984). The most significant feature of immersion education is the use of L2 as a medium for classroom instruction. Furthermore, the distinction between immersion education and other bilingual programs is that students participating in immersion programs are language-majority (native-English) speakers in Canadian society (Snow, 1990).

In the United States, there are two distinct immersion program models: enrichment and two-way immersion (TWI) programs. Enrichment immersion is similar to Canadian immersion and "immerse[s] monolingual English speakers in a second language" (Lessow-Hurley, 2005, p. 15). In other words, participating students in the program are language-majority (native-English-speaking) students in the United States. However, students in TWI programs include monolingual English-speaking children as well as native speakers of a minority language. The goal of TWI is to develop bilingualism and biliteracy for language-minority and language-majority students (Lessow-Hurley, 2005). In short, bilingual education involves varied program models, most of which are designed for language-minority students in an ESL environment rather than for language-majority students in an EFL environment.

The Misuse of Term "Bilingual Education" in Taiwan

In the United States, except for particular bilingual programs such as TWI and enrichment immersion, most bilingual programs are designed for ESL students who are language-minority speakers (Snow, 1990). However, in Taiwan the term "bilingual education" is used differently because the English learners are not minority-language

speakers. Therefore, the enrichment immersion model is a closer fit for the EFL context. To add to the confusion, some private institutions that represent their curriculum as "bilingual education" use ESL materials to teach students rather than EFL materials. In addition, at least one bilingual-private school principal has indicated that the definition of bilingual education in Taiwan is different from other countries. In Taiwan, "bilingual education" means using time to separate instruction between English and Mandarin. For instance, a school may utilize English as a medium to teach some subject matter in the morning and use Mandarin as a medium to teach other subjects in the afternoon (Lin, 2004).

Regarding public elementary schools in Taiwan, English is instructed through the language arts. In general, students at the fifth- and sixth-grade level attend two forty-minute periods of English per week (Taiwan Ministry of Education, 2004). Thus, considering the social context in Taiwan and the time spent on instruction of English in most elementary schools, the model of Foreign Language in Elementary School (FLES) in the United States is probably a better model than bilingual education for English-as-a-foreign-language instruction in Taiwan.

Foreign Language in Elementary School

FLES is an overall term for foreign-language instruction in elementary schools in the United States (Lipton, 1988). The basic type of FLES is standard FLES, which introduces one foreign language as a subject in elementary school for two school years or more. This is also called sequential, revitalized, or traditional FLES. The goal of standard FLES is to "provide instruction in the four skills: listening and understanding, speaking, reading, and writing, as well as cultural awareness" (p. 3).

The second type of FLES is Foreign Language Experience or Exploratory (FLEX) which introduces one or more foreign languages for one or more school years. The FLEX approach is called a language-awareness or culture-awareness program. FLEX programs emphasize "exposure to more than one language and culture, with an orientation of cross-cultural contrasts" (Lipton, 1988, p. 3). The goal of FLEX is similar to the standard FLES, but sometimes only focuses on oral skills. Thus, the FLEX is also regarded as a minimal foundation in language learning. The third type of FLES is enrichment immersion (or partial immersion), which has been discussed before.

Comparison among the Three Types of FLES. Lipton (1988) compared standard FLES, FLEX, and immersion programs by examining their goals, outcomes, teachers, students, materials, content, and instruction time (see Table 1).

Advantages and Drawbacks of Standard FLES Programs. Balderrama and Díaz-Rico (in press) indicated three advantages for children in standard FLES programs. The first is fostering children to achieve nativelike pronunciation in a foreign language. According to Penfield and Roberts (1959), children's brains are more plastic than adults; and after puberty, the human brain becomes fixed and less favorable for learning languages. Thus childhood, probably before the age of eleven, is the best time to learn a foreign language. Even though this point of view is still controversial, in terms of phonology most researchers agree that children who are exposed to a foreign language at an initial age may achieve a native accent in that foreign language (Gass & Selinker, 2001).

Table 1. Comparison of Three Types of Foreign Language in Elementary School Programs

<u>[Standard] FLES</u>	<u>FLEX (Exploratory, Language Awareness)</u>	<u>Immersion and Partial Immersion</u>
One language, taught for two school years or more	One or more languages taught for one or more school years	One language, K-6
Grade K-6	Grade K-6	Grade K-6
Foundation language learning in four skills and culture	Minimal foundation; language learning in four skills (listening, speaking, reading, writing) and culture (sometimes only oral skills)	Subject matter of elementary school curriculum taught in the FL
Outcomes: Limited proficiency	Outcomes: Very limited proficiency	Outcomes: Proficiency in the foreign language
Interest in language and culture(s)	Interest in language(s) and culture(s)	Interest in language and culture
Interest in FL study	Interest in future FL study	Interest in study of other FL's
Correlation of FL with social studies and language arts	Correlation of FL with social studies and language arts	High correlation with social studies and language arts
Integral part of elementary school curriculum	Possibly integral part of elementary school curriculum	Integral part of elementary school curriculum
Teachers: Specialist or nonspecialist	Teachers: Specialist, nonspecialist, volunteers	Teachers: Specialist in FL
Students: Available to all; some selection due to budget	Students: Available to all students the first year	Students: Available to limited number of students who can cope with challenge
Materials: Wide variety to support content and interest	Materials: Wide variety to support content and interest	Materials: Wide variety to support content and interest
Content: Thematic units such as greetings, health, sports, food, etc.; cultural themes	Content: Thematic units with limited vocabulary and structure; cultural themes	Content: Content of social studies, science, mathematics, etc.
Time: Wide range of time based on local needs, finances, and grade levels (ranging from 5% to 20%)	Time: Wide range of time based on local needs, finances, and grade levels (ranging from 2% to 5%)	Time: 50% to 100%

Source: Lipton (1988).

Second, children in standard FLES programs have chances to contact a foreign language and may become aware of the difference between the L1 and L2. This ability is called metalinguistic awareness, which is "the skill of looking at language flexibly, from a 'meta' viewpoint--to stand outside language, in a way, to see it as a system whose rules and representations can vary" (Balderrama & Díaz-Rico, in press). Via metalinguistic awareness, children not only learn their native languages but also acquire language knowledge via foreign-language instruction.

The third advantage is cultural awareness. Because of the inseparability of language and culture, while learning a foreign language, children are expected to contact its culture at the same time. Consequently, "the early introduction of a foreign language tends to break down the 'monocultural' outlook of children" (Lipton, 1988, p. 13). Standard FLES programs foster children to open their minds toward different cultures and races (Balderrama & Díaz-Rico, in press).

Regarding the drawbacks of standard FLES programs, the first is that the lack of sufficient input may limit children's communicative competence. For instance, only one teacher is fluent in the target language in class.

However, children may not have enough opportunities or desire to interact with the teacher in class in the target language. Second, "Spanish and French, in that order, are the languages most commonly taught at the elementary school level" (Feinberg, 2002, p. 134). Considering the population of Hispanics in the United States and the global markets that support Spanish, it is reasonable to teach Spanish as a foreign language in large standard FLES programs. However, just because in the United States most upper- and middle-class parents regard French as a prestigious language, French has become the second popular foreign language in standard FLES programs. "[I]n terms of cultural investment, [standard] FLES programs are not as useful to the economy and culture of the United States in the long run as are developmental bilingual programs" (Balderrama & Díaz-Rico, in press).

Summary

In the United States, by and large, bilingual programs are designed for ESL students. The ultimate purpose of these programs is for students to become proficient in English. In Taiwan, the only official language is Mandarin, and students in elementary school are expected to achieve proficiency in Mandarin and attain at least some basic skills in English. However, because

most bilingual tutoring centers and private schools use the term "bilingual" rather than "enrichment immersion" or "FLES," the public may become confused. In reality, compared to bilingual programs in the United States, FLES programs including standard FLES, FLEX, and immersion programs are probably the most feasible program model for Taiwanese elementary schools.

Biliteracy in Taiwan

Generally speaking, people who can read and write in a language are supposed to be able to speak and listen to the same language. However, most English learners in Taiwan are able to read some English vocabulary and write a few simple sentences in English, but lack abilities in speaking and listening. In order to examine the particular situation above, one must investigate Chinese/English biliteracy in Taiwan.

Definition of Biliteracy

Becoming literate is usually considered a remarkable accomplishment for children because it means that children "develop conceptual constructions, understand written language, acquire new knowledge about how these representations work, and learn how to make meaning with written language" (Moll, Saez, & Dworin, 2001, p. 435). In

this process, children have to face a complex system of reconstruction, "that is, of reconceptualizing this cultural object, the written system, into an object of knowledge in order to assimilate it or make it their own" (Ferreiro, 1996, p. 133). In other words, to achieve literacy is a complex process for children even in monolingual environments.

The most basic definition of literacy is the ability to read and write; by extension, biliteracy is the ability to read and write two languages. According to Dworin (1998), biliteracy is a "term used to refer to a child's literate competencies in two languages, to whatever degree, developed either simultaneously or successively" (p. 3). Specifically, Perez and Torres-Guzman (1992) defined biliteracy as "the acquisition and learning of the decoding and encoding of print using two linguistic and cultural systems in order to convey messages in a variety of contexts" (p. 51). To sum up, "biliteracy is the acquisition and use of two languages in achieving academic goals" (Diaz-Rico, 2004, p. 315).

Biliteracy and Bilingual Education

In the United States, bilingual education is often used as a broad term including a variety of programs and models designed for language minority students (Feinberg,

2002). The goals of bilingual education vary from program to program. The goal of a well-implemented bilingual program is to foster students to achieve academic success and become fluent in two languages (Berman, Chambers, Gandara, McLaughlin, Minicucci, Nelson, Olsen, & Parrish, 1992). However, the actual goal of most traditional bilingual-education programs is to help the learner to perform well in English instead of being bilingual. This is also called a compensatory model: "[In] traditional bilingual education programs, the expectation of the school is for language-minority students to become fluent English speakers" (Cline & Necochea, 1995, p. 38). Thus, it is necessary to restructure traditional bilingual education programs to the enrichment model, which refers to programs promoting students to become biliteracy (Cummins, 1999). In other words, biliteracy has become a distinction between the compensatory model and the enrichment model (Cline & Necochea, 1995).

One of the best features of a well-implemented bilingual program is biliteracy because it is an index of dual-language proficiency. "Biliteracy can be achieved as the next level of bilingual education" (Cline & Necochea, 1995, p. 36).

Benefits of Biliteracy

Through the process of being biliterate, second-language learners gain many benefits: cognitive development, cultural development, and metalinguistic awareness. According to Kenner (2003), "young children are quite capable of learning two different writing systems simultaneously, and this benefits their cognitive and cultural development" (p. 21). Cummins (1999) claimed that children's cognitive development is enhanced by the continued development of both languages.

Learning a second language helps children gain more experiences with literacy. When bilingual children develop strong academic proficiency in both languages, they may experience cognitive advantages over monolinguals (Thomas & Collier, 1997).

In terms of cultural development, knowing a second language is an efficient way to understand other cultures. Through this process, people recognize cultural differences and have chances for intercultural communication (Diaz-Rico, 2004). For instance, "biliteracy extends children's learning and enables them to share cultural experiences with their families and communities" (Kenner, 2003, p. 21).

The central intellectual consequence of becoming literate is the development of metalinguistic awareness—"the acquisition of concepts for talking and thinking about language" (Moll et al., 2001, p. 436). When receiving sufficient stimuli from second-language instruction, children may demonstrate better metalinguistic skills (Lee, 2001).

Implementation of Biliteracy in Taiwan

Language Background in Taiwan. Taiwan is a multilingual society in which people employ more than twenty native languages including Mandarin, Holo Taiwanese, Hakka Taiwanese, and indigenous languages (Grimes, 1996). In general, Taiwanese people are bilingual today in both Mandarin and their dialects (mostly Mandarin and Holo Taiwanese) (Chiung, 2001).

According to Chiung (2001), the written language of these dialects is not well standardized, and the national education system in Taiwan only instructs students in Modern Written Chinese (MWC). Thus, Taiwanese learn how to write in MWC rather than Written Taiwanese (WT). In other words, the general public in Taiwan speaks Mandarin and Taiwanese, but only writes in MWC. (Because Holo Taiwanese is the most common used dialect in Taiwan, the term "Taiwanese language" refers only to Holo Taiwanese).

In addition, the only official language in Taiwan is Mandarin; children receive Mandarin instruction from kindergarten. English is a foreign language and has a compulsory role in education for junior and senior high school students. Before 1996, the majority of students start to learn English from their first year of junior high school. Since 2001, English instruction has started at least from the fifth grade, but each county has the autonomy to decide when to start teaching English. For instance, some students can learn English in the first grade in Taipei, the capital of Taiwan. Because of the lack of a well-standardized written language in Taiwanese, the discussion of biliteracy in Taiwan is limited to English and Chinese.

Relationship between Chinese Literacy and English Literacy. Buckwalter and Gloria-Lo (2002) presented a case study centering on the emergent Chinese and English literacy of a 5-year-old boy from Taiwan. The study provided insights into "the debate within the field of bilingual education as to whether the introduction of literacy in languages with two different writing systems helps or hinders literacy development in both languages" (p. 269).

The boy in the case study received instruction of Chinese literacy and English literacy at the same time, and did not get confused or mix the two writing systems. Meanwhile, the boy became aware of several differences between English written words and Chinese characters. First, English is written by using an alphabet, and English words consist of letters from the alphabet. Chinese is written by using characters, and each character presents a unit of meaning and a syllable. Second, English words contain phonetic clues, and users can utilize this feature to "sound out" words. Chinese characters do not include phonetic information to identify unfamiliar words (Buckwalter & Gloria-Lo, 2002).

Based on this research, being able to identify separate writing systems is on the surface level of emergent literacy awareness. In other words, there is no adverse effect on literacy development when developing Chinese literacy and English literacy at the same time (see Table 2). On the foundational level, literacy development in Chinese shows the positive effect on literacy development in English. Namely, Chinese literacy development causes learners to build basic concepts of literacy, and this knowledge can be transferred to English (Buckwalter & Gloria-Lo, 2002).

Table 2. Characteristics of Chinese and English Literacy Awareness

Emergent Literacy Awareness		
	<u>Chinese</u>	<u>English</u>
Surface Level	Morphosyllabic Characters No phonetic clues	Alphabet Letters form words Phonetic clues
Foundational Level	Intentionality of print Match between written and spoken words Conventions of print	

Source: Buckwalter & Gloria-Lo (2002).

In addition, Chinese characters still have some clues related to their meaning: for example, "bird" (the radical) appears in associated characters such as "duck, goose, pigeon, eagle, and so forth" (Buckwalter & Gloria-Lo, 2002) (see Table 3). In Chinese, one character's meaning may change by means of a tiny difference in the stroke pattern (Kenner, 2003, p. 21). Students' competence in recognizing Chinese characters also affects their achievement of learning English (Chung, 2003).

According to the observation over the course of 15 weeks, the research stated crucial conclusions. First, the introduction of literacy in both alphabetic and non-alphabetic languages for children does not have a

Table 3. Chinese Characters and
English Words: A Comparison

<u>English Words</u>	<u>Chinese Characters</u>
Bird	鳥
Duck	鴨
Goose	鵝
Pigeon	鴿
Eagle	鷹

Source: Buckwalter & Gloria-Lo (2002).

negative effect on their reading and writing abilities in either language. In other words, providing children with opportunities to interact with reading and writing materials in Chinese and English fosters literacy development in both languages. Second, the teacher's knowledge of students' literacy background and attitudes toward literacy in different languages plays a central role in bilingual education because teachers can utilize this knowledge to help inform more effective and individual instruction for students (Buckwalter & Gloria-Lo, 2002).

Biliteracy in Chinese and English

Most studies relating to biliteracy only focus on children learning Spanish and English, and few studies

address cases of two different writing systems, such as English and Chinese. Based on the reason above, two research reports, Biliteracy in Singapore (Cheng, 1997), and Chinese Bilingual Children's Word Definition Skill (Lee, 2001) are significant in addressing the issue of feasibility of biliteracy in Chinese and English.

Cheng's research in 1997 was a survey of the written proficiency in English and Chinese of secondary-school pupils. The Republic of Singapore is a multilingual society including four official languages: English, Mandarin, Malay, and Tamil. The results showed significantly higher written proficiency in English than in Chinese. The characteristic of the testees' reading habits is the main factor causing this consequence (see Table 4). Among 120 testees, only 6.7% read in Chinese, and 69.2% read in English (Cheng, 1997). In addition to the discussion of students' reading habits, Cheng also pointed out two common areas for errors: the use of lexis and the writing of script units. For instance, when pupils translate one language to the other language, they cannot use a verbatim translation.

On the other hand, Lee (2001) investigated metalinguistic skills, such as word-definition skills,

among children in different types of bilingual programs in Taiwan. These bilingual programs are common in Taiwan. The

Table 4. Language Preferences for Leisure Reading

<u>Language Preference</u>	<u>Frequency</u>	<u>Percentage</u>
English	83	69.2
Chinese	8	6.7
I like both	29	24.2

Source: Cheng (1997).

first type is the Mandarin-English immersion program, which immerses monolingual Mandarin speakers in English. The second type is the Mandarin-English bilingual program, in which English is instructed as a language art, and children receive English instruction via English classes, usually forty or eighty minutes per week. The last type is the Mandarin-Taiwanese program, in which children acquire Taiwanese at home and learn Mandarin in school. This program is regarded as a monolingual program because all subjects are instructed through Mandarin in school, and Taiwanese is an elective course, usually forty minutes or less per week.

The aim of Lee's report (2001) was to discover the possible differences on the metalinguistic development of these three bilingual groups. The result indicated that

students in the Mandarin-English immersion program and the Mandarin-English bilingual program perform better than students in the Mandarin-Taiwanese program. The fact that students have followed a different route in acquiring the second language may be the possible reason. In addition, children in the immersion program perform better than counterparts in the bilingual program. The consequence results from different amounts of input of English. To sum up, the more children are exposed to the second language, the better then metalinguistic skills (Lee, 2001).

Summary

Biliteracy is "the acquisition and learning of the decoding and encoding of print using two linguistic and cultural systems in order to convey messages in a variety of contexts" (Pérez & Torres-Guzman, 1992, p. 51). Through the process of acquiring biliteracy, second-language learners gain benefits in cognitive development, cultural development, and metalinguistic awareness. In addition, biliteracy is an index of dual-language proficiency. Thus, the next level of bilingual education is biliteracy.

In Taiwan, because of the lack of a well-standardized written language in Taiwanese, the discussion of biliteracy in Taiwan is limited to English and Chinese (Mandarin). Research relating to study of relationship

between Chinese and English indicated that learning two languages simultaneously did not interfere with literacy development for children. Furthermore, instructors play vital roles on children's biliteracy development.

Even though English is not an official language in Taiwan, more and more people value the importance of English and more and more types of bilingual programs (English and Mandarin) are being implemented. Full biliteracy in Chinese and English may be achieved within the coming decade in Taiwan.

Foreign-Language Immersion

Foreign-language immersion "provides academic and language instruction in two languages" (Diaz-Rico, 2004, p. 312). In the United States, it is also called enrichment immersion which "immerse[s] monolingual English speakers in a second language" (Lessow-Hurley, 2005, p. 15). Foreign-language immersion or enrichment-immersion programs are similar to French immersion program in Canada. In general, immersion programs are divided into early-immersion, delayed-immersion, and late-immersion programs. The differentiation among three kinds of immersion programs is when they use the second language as a medium of content instruction.

In early-immersion programs, the second language is used as a medium of instruction starting in kindergarten. In delayed-immersion programs, students start to use the second language in the middle-elementary fourth or fifth grades. In late-immersion programs, the use of the second language is postponed until the sixth or seventh grade (Genesee, 1984, 1987; Snow, 1990). In addition, total immersion and partial immersion are two principal types of early-immersion programs. The main distinction between two types is the time spent in the second language. Generally speaking, in total immersion, students receive 100 percent of their instructional time in the second language. In partial immersion, only 50 percent of instructional time is spent in the second language. Furthermore, literacy training in the native language is the second distinction between two types. In total immersion, students receive literacy training in the second language first; whereas in partial immersion, students receive literacy training in both languages at the same time (Genesee, 1987; Snow, 1990; Met, 1993).

Definitions of Immersion

In immersion programs, "the second language is used for the delivery of subject matter instruction" (Snow, 1990, p. 111). Specifically, "immersion is defined as a

method of foreign language instruction in which the regular school curriculum is taught through the medium of the language" (Met, 1987, p. 1). Therefore, "all the usual curricular areas are taught in a second language--this language being the medium, rather than the object, of instruction" (Lessow-Hurley, 2005, p. 14). In other words, "immersion education is a type of bilingual education in which a second language (or second languages) is used along with the students' first language for curriculum instruction during some part of the students' elementary and/or secondary schooling" (Genesee, 1984, p. 32). In short, immersion education includes three elements: first-language development, second-language acquisition, and teaching content through the second language (Krashen, 1981).

In addition, immersion education means teaching foreign languages to language-majority students (Snow, 1990). For instance, participating students use the majority-group language, which is English in Canada, and receive French instruction in immersion programs. In the United States, the participating students' home language is English, which is the majority-group language in America; students are instructed via the second language in immersion programs (Genesee, 1984).

The Goals and Features of Immersion Education

The first goal in immersion programs is to develop functional competence in the second language. The second is to promote and maintain normal progress in first-language development. The third is to ensure students get commensurate instruction in academic subjects compared to students in the regular school instruction. The fourth is to develop positive attitudes toward people who use the second language and toward their culture by learning their languages (Genesee, 1984, 1987; Met, 1987; Snow, 1990). Snow (1990) claimed that an additional goal for American immersion settings is that students "will have the opportunity to be schooled in an integrated setting with participants from a variety of ethnic groups" (p. 113).

Genesee (1984) proposed two distinctive features of immersion education. Teaching content through a second language is the first feature. In the beginning, students are allowed to use their first language in class because of insufficient second-language skill. With the increased acquisition of the second language, teachers encourage students to communicate in the second language and do not overcorrect their errors in grammar. Until most students approach a certain level in the second language, teachers

will assist students to use the language in school. In other words, this creates a similar circumstance to that in which children learn the first language.

The second feature in immersion education includes the use of monolingual language model and linguistic territories. The monolingual language model means creating a monolingual environment for students. The immersion teacher plays an important role in this model and is regarded as monolingual rather than bilingual. In French-Canadian immersion, the French teachers only speak French to students except for teachers in the kindergarten and the first grade because most students in this stage have not acquired enough competence in the second language. Linguistic territories mean setting a distinct line between first-language classrooms and second-language classrooms. In French-Canadian immersion, for example, when English is taught as a subject, students have to use English in English classrooms; but in French classrooms, students must speak French. Students have a natural tendency to use their strong language rather than their weak language. Therefore, these two strategies (monolingual language model and linguistic territories) are effective for promoting students' frequent use of the second language (Genesee, 1984).

Snow (1990) offered three additional key features of immersion education. First, immersion programs last at least four to six years. Learning a new language is a step-by-step process and takes time. Participating students may not get benefits in language learning if they withdraw halfway through the education. Thus, some immersion programs require a formal commitment from parents to keep their children in the program at least six months or one year (Met, 1993). Second, "the two languages are separated for instruction" (Snow, 1990, p. 112). This principle is similar to such approaches as the monolingual model and linguistic territories proposed by Genesee (1990). The same material is never taught in both languages, and no translation occurs from the target language and the home language. Third, there is no risk for children to lose their first languages in immersion education because the majority language (the first language) still exists in the world outside of school. Children have sufficient opportunities to contact and use their first languages outside of school.

Theoretical Considerations

According to Lambert (1984), one of the fundamental premises in immersion education is that "people learn a second (or third) language in the same way as they learn

their first" (p. 11). Thus, immersion education emphasizes the creation of circumstances which are similar to children's first language learning, and children can learn target languages as well as their native languages (Genesee, 1984).

Genesee (1984) pointed out three dimensions to explain why immersion programs are implemented in elementary grades instead of later grades. From a neuropsychological perspective, "the human brain is more 'plastic' and, consequently, better able to acquire languages prior to puberty" (Genesee, 1984, p. 42). From a psycholinguistic perspective, the facility of first-language learning is innate, and this facility not only results from language-specific ability, but also stems from general cognitive capacities. With the growth of age, the capacities will decrease, and the difficulty of learning first and second language will increase. In social psychology, evidence has shown that young children are more open to accept other languages because of fewer affective factors that can interfere with learning languages among them. Thus, young children can learn second languages better than older children because of social-psychological considerations (Genesee, 1984).

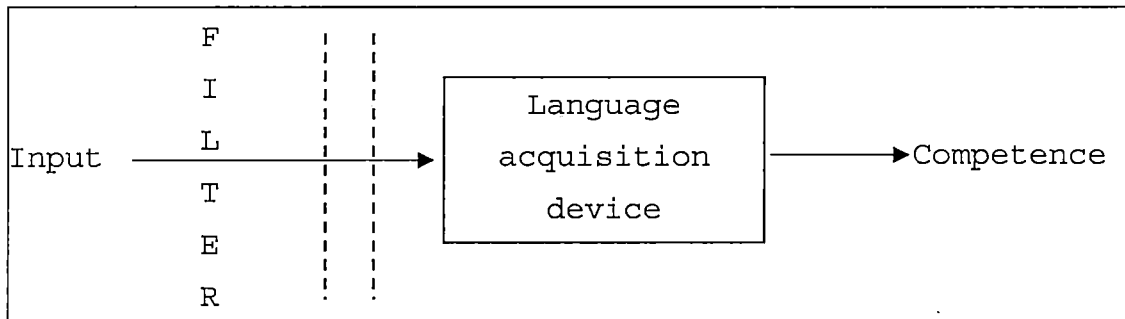
In current second-language theories, there is no consensus between the effect of age and second-language learning. For instance, some researchers argued that older children's more mature level of cognitive development and positive transfer from their first-language systems may help them learn a second language better. On the other hand, some researchers have argued the opposite (Gass & Selinker, 2001).

Furthermore, two current theories of second-language acquisition related to immersion education are the input hypothesis and the affective-filter hypothesis proposed by Krashen in 1985 and 1981 (Genesee, 1984).

The Input Hypotheses. Krashen (1985) indicated that "second languages are acquired by understanding messages, or by receiving comprehensible input" (p. 2), and assumed there is an innate mental processor (the language acquisition device) that is able to handle both first- and second-language acquisition. The language-acquisition device is triggered by comprehensible input. In other words, comprehension input results in language acquisition, and the occurrence of comprehension input depends on communication between teachers and students (Krashen, 1985).

Second-language acquisition in immersion education is reflected in Krashen's input hypotheses; "there is an emphasis on creating a desire in the student to learn the language to engage in meaningful and interesting communication" (Genesee, 1984, p. 44). Evidence has shown that teachers focus on communication skills in immersion program more than in traditional classes. For instance, in traditional schooling, teachers who teach subjects in the native language are likely to regard students' misunderstanding as the students' problem. However, such misunderstanding is attributed to an immersion teachers' poor communication because students are taught via second-languages in immersion programs. Thus, immersion teachers are likely to repeat and clarify their utterance until students really understand (Genesee, 1984).

The Affective Filter Hypothesis. Krashen (1981) claimed that second-language acquisition is heavily influenced by affective factors, such as motivation, anxiety, self-confidence, and attitude. In the affective-filter hypothesis, Krashen drew an analogy between those factors and the filter. Input is passed through the language acquisition device when the filter is down, and the acquisition will occur. On the other hands,



Source: Krashen (1981). Bilingual education and second language acquisition theory. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework, (p. 62). Los Angeles: Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.

Figure 1. Operation of the Affective Filter

when the filter is up, the input does not pass through the device, and acquisition will not take place (see Figure 1).

Socio-cultural Theory. Several socio-cultural conditions are involved in successful immersion education. First is support of the community, parents, teachers, and administrative personnel. Second, the participating students, teachers, parents, and administrative personnel in immersion programs value students' first language and culture. Third, the target-language community supports participants' efforts to learn the target language. These socio-cultural premises of immersion education correspond with Krashen's affective filter hypothesis (Genesee, 1984).

Evaluation of Immersion Education

According to Met (1993), successful immersion programs include several characteristics, such as administrative support, qualified teachers, community and parental support, and so forth. Because these factors affect the result of immersion education, "the results [of immersion education] should not be generalized beyond the particular program" (Swain, 1984, p. 89). In other words, different immersion programs in different locations may lead to different results.

In terms of immersion education in Canada, Swain (1984) used three dimensions to evaluate its outcome. The first dimension is immersion students' academic achievement, such as in science and mathematics. The next relates to their first-language development. The last presents the results of their second-language development.

Academic Achievement. In early total-immersion programs, immersion students' performance in science and mathematics is as high as that of students in monolingual class. In early partial-immersion and late-immersion programs, immersion students may experience delay in the beginning when conducting the second-language instruction in science and mathematics. The possible reason is that "their proficiency in the second language [is] not high

enough yet to understand relatively complex subject matters in French" (Bournot-Trites & Tillowitz, 2002). Results have shown that eventually, immersion students will achieve the same levels of academic achievement when compared to English-instructed peers (Swain & Lapkin, 1982).

First-Language Development. In early total-immersion, all curricula are instructed in the second language in the initial stages (kindergarten and first grade). The lack of development in the first language in the initial stages concerns some educators and parents. They worry that "the negative consequences of the early total-immersion program on the development of first-language literacy skills in the child's formative years would be irreparable" (Swain, 1984, p. 92). These concerns prompted the use of early partial-immersion programs, which teach both languages from the stage of kindergarten.

Swain (1983) claimed that students in early total-immersion programs lag behind students in monolingual instruction in literacy skills at first. After one year's instruction in the first language for immersion students, the two groups present the equivalent competence on standardized tests of first-language achievement. However, early partial-immersion students do not perform

as well as the two groups mentioned above. One possible reason is that teaching two languages at the same time may lead to interference, and it takes time for children to overcome this hindrance. Swain (1984) suggested that "it is preferable to teach initially literacy-related skills in only one language, whether it be the first or second language" (p. 93).

Second-Language Development. Swain (1984) indicated that students in early total-immersion far exceed students in core French as a second language (FSL) in second-language performance. Further, compared to students in monolingual instruction (native speakers of French), immersion students perform as native speakers only in receptive skills (listening and reading). However, regarding productive skills, which are speaking and writing, immersion students do not attain nativelike proficiency.

In addition, early total-immersion students perform better in second-language acquisition than students in partial immersion and in late immersion. However, one interesting finding suggested that late-immersion students can learn the second language more effectively than students in early total-immersion. In other words, older learners progress more quickly in second-language

acquisition than do younger learners. Nevertheless, Swain (1984) claimed that "early immersion students feel more comfortable and at ease in the second language and maintain to a greater extent their facility in the second language over the long run" (p. 100).

In the United States, the first foreign-language immersion program was the Culver City Spanish Immersion Program (CCSIP). CCSIP is similar to early immersion programs in Canada. Students were monolingual speakers of English and were instructed by Spanish at initial periods. The students' achievements presented the similar result as early immersion education in Canada (Cohen, 1974).

In addition, the Hawaiian Language Immersion (HLI) program, started in 1994, features indigenous language immersion in Hawaii. The evaluation of HLI showed that students' achievements in English were equivalent to their peers in non-immersion classes. Regarding Hawaiian indigenous language (*kaiapuni*), "although there are no norms for Hawaiian language development against which to compare immersion students' achievement in Hawaiian, Kaiapuni students are achieving literacy at grade-level standards set by Kaiapuni educators (Genesee, 1999, p. 35). HLI leads not only to reinforcing *kaiapuni*

students' self-identity but also to making one precious indigenous language survive (Genesee, 1999).

However, compared with the social context between Canada and America, foreign-language immersion (enrichment immersion) is inappropriate as a model for English learners in the United States. Most English learners in the United States are minority-language users, and when participating in a majority-language program, the result may lead to loss of their first language. Diaz-Rico (2004) claimed that "the low status of the students' primary language puts it at risk for suppression" (p. 312).

In addition, French and English are high-status languages in Canada, and most immersion students' parents are in the middle class. In the United States, "when the minority language is not a high-status language, few middle-class, English-speaking parents will favor having their children immersed in it for instructional purposes" (Diaz-Rico, 2004, p. 312).

Summary

According to Lambert (1984), immersion education is an effective method for students to become bilingual. In Canadian immersion or CCSIP and HLI in the United States, immersion students' academic achievement, first-language development, and second-language development are verified

to be as good as that of students in traditional classes. Moreover, children in immersion education develop positive attitudes toward people who use different languages and cultures. However, a successful immersion program should consider several essentials: external conditions (social context) and internal conditions (school systems). Without these precondition, foreign-language immersion may be not appropriate in some school districts, areas, or even countries.

Cross-linguistic Influence: Language Transfer

Cross-linguistic influence (CLI) is defined as "any language influence from the L1 to the L2, from one IL [interlanguage] to another or from the L2 [the second language] back to the L1 [the first language]" (Gass & Selinker, 2001, p. 452). According to Oldin (1989), cross-linguistic influence was known as language transfer. Selinker (1992) pointed out that "language transfer is best thought of as a cover term for a whole class of behaviors, processes and constraints, each of which has do with CLI (cross-linguistic influence)" (p. 208).

To clarify the nature of transfer is crucial before discussing issues of language transfer. "Transfer means learning something in one context and applying it in

another" (Fogarty, Perkins, & Barell, 1992, p. ix). For instance, people learn reading strategies in English class (the first context), and use the same strategies in history class (the second context). Namely, "[t]ransfer is applying old learning to new situations" (Diaz-Rico & Weed, 2002, p. 34). Hunter (1982) proposed a similar opinion: transfer is "the ability to learn in one situation and then to use the learning in another situation where it is appropriate; linking old learning to the new (p. 3). Regarding the function of transfer, transfer can be positive or negative. A previously learned situation (the first context) can either facilitate (positive transfer) or inhibit (negative transfer) the learning of a second situation (the second context).

The term "transfer" includes various meanings. The term language transfer is applied to deal with the linguistic aspects of transfer. Gass and Selinker (2001) indicated that language transfer is "the use of the first language (or other languages known) in a second language context" (p. 456). Specifically, language transfer is "the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired" (Oldin, 1989, p. 27). Language transfer plays an important

role in second-language acquisition (Oldin, 1989). Thus, negative and positive transfer in second-language acquisition could be defined as follows: negative transfer means "learners use rules from their first language that are not applicable to the second" (Diaz-Rico, 2004, p. 319), and positive transfer is "the use of the first language (or other languages known) in a second language context resulting in a target-like second language form (Gass & Selinker, 2001, p. 453).

Early Research on Transfer

In the 1940s and 1950s, American linguists began to discuss transfer. Subsequently, in the 1950s and 1960s, Lado (1957) stated that "individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture" (p. 2). In addition, most scholars believed that comparing and contrasting differences between learners' native languages and the target language was a way to predict learners' errors (Benson, 2002). This was also known as contrastive analysis: "systematic comparison of two or more languages" (Oldin, 1989, p. 165).

Contrastive analysis was based on following assumptions. Language was habit, and the "language

learning involves the establishment of a new set of habits" (Gass & Selinker, 2001, p. 72). The belief that language was based on habit originated from behaviorism, which was prevalent during the time. In behaviorist theory, one notion playing an important role was transfer: "the learning of task A will affect the subsequent learning of task B" (Gass & Selinker, 2001, p. 66). Therefore, the habits from first-language learning would be transferred to the habits of second-language acquisition, and most scholars considered transfer as interference with the second-language acquisition (Benson, 2002).

In contrast, the general consensus in the 1970s was against this view. A majority of scholars thought that learners making errors in second-language acquisition did not result from first-language transfer because learning a second language was similar to learning the first language (Benson, 2002).

In addition, more and more evidence indicated that the validity of contrastive analysis was questionable. For instance, copula verb forms exist in Spanish but not Russian, and contrastive analysis might only explain the error that Russian speakers omitted forms such as "is" rather than explained the same error that was found to

occur in Spanish speakers or even in children learning English as their native language (Oldin, 1989).

Current Thinking on Transfer

Cross-linguistic influence is a very important aspect of second-language acquisition and is defined as "the interplay between earlier and later acquired languages" (Kellerman & Sharwood Smith, 1983, p. 1). Oldin (1989) pointed out four misconceptions to clarify the concept of transfer. First, transfer is not simply a consequence of habit formation. Second, transfer is not simply interference. Third, transfer is not simply a falling back on the native language. Fourth, transfer is not always native-language influence.

In addition, several current thoughts about transfer have come into discourse. Dechert and Raupach (1988) claimed,

Language transfer is a theoretical notion, concept, or conception that aims at describing or explaining certain linguistic phenomena, resulting from the interaction of two or more areas of language (intralingual transfer) or languages (interlingual transfer) within a speaker or hearer, to be found in his or her linguistic behavior or output. (p. x)

When the first language and the target language are identical linguistic systems, transfer may result not only in assistance (positive transfer) but also in overproduction (negative transfer). Transfer such as avoidance may occur as the forms (structures) do not exist in the first language, and transfer may lead to either delay or promotion regarding the rate of language development (Benson, 2002).

Occurrence of Transfer

Three dimensions are concerned to clarify the occurrence of transfer: when transfer occurs, why transfer occurs, and in what context transfer occur. First, transfer may occur consciously and unconsciously, both in formal and informal context, and among children as well as among adults. Second, learners' interlanguage is not fixed and permeable. Thus, the likelihood that transfer may occur is increased. The last, transfer may occur in all linguistic domains such as phonology, syntax, semantics, and so forth.

When Does Transfer Occur? Transfer may occur consciously and unconsciously. In the former, learners may adopt a deliberate communication strategy to express meaning when they use their second language (Benson, 2002). Communication strategies are composed of three

elements: problematic, consciousness, and intentionality. Learners find and recognize a problem in communication (problematic), then are aware of doing something to overcome the problem (consciousness), and make a decision to choose an appropriate option to react (intentionality). Therefore, transfer may occur consciously under this circumstance (Gass & Selinker, 2001).

On the other hand, transfer may occur unconsciously as well. For instance, when using second languages, learners may not know the correct forms of the second languages or they do not internalize the forms that they have learned before (Benson, 2002).

Oldin (1989) claimed that "transfer occurs both in informal and formal contexts" (p. 152). In other words, transfer may occur not only in school settings but also in naturalistic studies. Furthermore, regarding transfer and age of acquisition, some researchers suggested that adults might be more receptive to transfer, but some evidence indicated that transfer was an inevitable phenomenon in child second-language acquisition. Even though the exact relation between age and transfer is still a controversial issue, one thing that can be verified is that "transfer occurs among children as well as among adults" (Oldin, 1989, p. 152).

Interlanguage. Gass and Selinker (2001) claimed that interlanguage is the basic assumption in second-language acquisition. Interlanguage is an intermediate system or a language system that learners create (Diaz-Rico & Weed, 2002). Specifically, "interlanguage is the type of language produced by second and foreign language learners who are in the process of learning a language" (Richards, Talbot Platt, & Platt, 1992, p. 186). Interlanguage tends to favor neither native languages nor target languages (Selinker, 1972). The possible reason why transfer occurs is that "interlanguage (the learner's interim grammar of the L2) is not fixed and rigid like the L1, but permeable" (Benson, 2001, p. 69).

Interlanguage process belongs to the field of psychology rather than linguistics. In terms of psycholinguistic processing, one approach to second-language acquisition is the competition model, which illustrates how speakers interpret sentences. The central concept of this model is "speakers must have a way to determine relationships among elements in a sentence. Language processing involves competition among various cues, each of which contributes to a different resolution in sentence interpretation" (Gass & Selinker, 2001, p. 193). For instance, a native speaker of English may

depend on various cues to construct an English sentence. These cues include word order, knowledge of the meaning of lexical items, animacy criteria, and morphology.

However, different languages use varied cues to make sentences. In Italian, morphological agreement, semantics, and pragmatics are more important than word order comparing to English. Furthermore, learners are used to search correspondences from their native languages first. Therefore, because of different cues and interpretation strategies, conflicts occur among second-language learners. To deal with the conflicts, Gass and Selinker (2001) pointed out that:

Learners first resort to their NL interpretation strategies and, upon recognition of the incongruity between TL and NL systems, resort to universal selection of meaning-based cues as opposed to syntax-based cues before gradually adopting the appropriate TL biases as their L2 proficiency increases. (p. 197)

In What Context Does Transfer Occur? Evidence from several studies claimed that transfer occurs in all linguistic domains, including phonology, syntax, semantics, pragmatics, and morphology (Kellerman &

Sharwood Smith, 1986; Oldin, 1989; Gass & Selinker, 1983; Benson, 2002).

Compared to other linguistic subsystems, cross-linguistic influence in phonology is relatively obvious. Foreign accent is an example (Benson, 2002). Furthermore, "a great deal of evidence has also been found for syntactic transfer (both positive and negative) in studies of word order, relative clauses, and negation" (Oldin, 1989, p. 85). For instance, "I very much like England" may be a transfer of Chinese word order into English. "Speakers of a flexible language may use several word orders in English even though English word order is quite rigid" (Oldin, 1989, p. 87). Regarding relative clauses, Oldin (1989) pointed out that English relies on a Right Branching Direction (RBD), which "the relative clauses appear to the right of the head noun" (p. 98). Japanese and Chinese are Language Branching Direction (LBD), which the modifying clause appears to the left of the head noun" (p. 98). Thus, the speakers of Chinese and Japanese (LBD languages users) often avoid using relative clauses in their English writing and speaking. In contrast, RBD language users such as Arabic often use such clauses in using English (Schachter & Hart, 1979).

In semantics, Benson (2002) described that transfer may occur in "false cognates." Second-language learners may assume that "an L2 word has the same meaning as a similar L1 word" (p. 69). For instance, a Spanish word "embarazada" means "pregnant" in English. Thus, when seeing an English word "embarrassed," a Spanish speaker may regard its meaning as "pregnant." In addition, Seliger (1988) claimed that "[r]estrictions in L1 cause the form to be avoided in L2 for contexts in which it is not normally used in L1" (p. 32). In Seliger's study, the target form is the passive voice, which does not exist in Hebrew. Therefore, when using English, Hebrew speakers often avoid the passive. A similar case also happens in Chinese speakers. For instance, "If you burned your finger, it would hurt" and "If you had burned your finger, it would have hurt." In Mandarin, there is no particular syntactic device to identify the difference between the former and the latter sentence. Therefore, Chinese speakers often confuse these types of sentences and may try to avoid using them (Bloom, 1981).

Lexicon includes not only the meaning of words, but also syntactic and morphological information. Thus, lexical transfer results in the occurrence of morphological and semantic transfer. However, some

information may facilitate second-language acquisition, but some may lead to interference (Oldin, 1989). "False cognates" is an example. Nevertheless, cross-linguistic influence in morphology is less influential than other linguistic subsystems (Benson, 2002).

Nonstructural Factors in Transfer

Most studies of language transfer focus on analysis of linguistic structures between two languages. "If two languages are perceived as close, transfer (both positive and negative) is more likely to occur" (Benson, 2001, p. 69). However, structural descriptions cannot explain all phenomena in second-language acquisition. Kellerman and Sharwood Smith (1986) stated that "structural identity is not a sufficient condition for transfer to occur" (p. 2). Specifically, "[c]ross-linguistic effects do not appear always and in all grammatical domains in bilingual first language acquisition" (Argyri, 2003, p. 1). Therefore, nonstructural factors such as learners' personality, language proficiency, and the social dimensions may result in the occurrence of language transfer (Oldin, 1989).

Individual Variation. Individual differences may influence the probability of transfer either increasing or decreasing. A language learner's motivation, type, and

personality affect the likelihood of transfer. In terms of second-language acquisition, a highly motivated second-language learner probably learns more or learns faster than a poorly motivated one, no matter what first languages and second languages are involved (Oldin, 1989). Transfer occurs more frequently in learners who focus on form than learners who focus on meaning (Benson, 2002).

Furthermore, Oldin claimed that "[a]nxiety and empathy are two personality characteristics that appear to interact with transfer" (1989, p. 131). When second-language learners use unfamiliar forms such as relative clauses, they may experience anxiety. This anxiety leads to the phenomenon of avoidance when using the second language (Schachter, 1974). On the other hand, Oldin (1989) stated the relation between individual empathy and transfer: "the less an individual learner can feel emotionally 'inside' the target language speech community, the more pervasive the influence of native language pronunciation will be" (p. 131).

Proficiency. To evaluate second-language proficiency is a controversial issue because there is no absolutely objective test that can reflect learners' second-language skills completely (Oldin, 1989). In addition, some evidence suggested that the probability of transfer

decreases with increased proficiency. In other words, less proficient learners tend to rely on transfer (Taylor, 1975). However, some researchers pointed out that Taylor's analysis focused only on negative transfer. Relatively, some evidence suggested that positive transfer may occur in the advanced stages of second-language acquisition. Nevertheless, Taylor's study is still regarded as an important index in terms of the relation between transfer and proficiency (Oldin, 1989).

The Social Dimensions of Transfer. "A thorough understanding of cross-linguistic influence depends very much on a thorough understanding of social contexts" (Oldin, 1989, p. 14). Researchers investigate the relation between transfer and social context, such as formal versus informal settings. Researchers argued the effects of formal education on transfer with regard to second-language acquisition. Some researchers claimed that formal education results in the occurrence of transfer, while others thought that transfer occurs via informal transfer. Actually, the dichotomy may regard the issue as oversimplification.

In Oldin's view, "While transfer is primarily a psychological phenomenon, its potential effect on acquisition may be large or small depending on the complex

variations of the social settings in which acquisition takes place" (1989, p. 14). For instance, in some countries in which English is a foreign language instead of a second language, the likelihood of the occurrence of transfer may increase inside the classroom rather than outside the classroom. The reason is that learners lack opportunities for language interaction in nonacademic settings (Benson, 2002).

Implication for Teaching

Oldin (1989) claimed that "[c]ross-linguistic influence has considerable potential to affect the course of second language acquisition both inside and outside the classroom" (p. 157). Further, transfer can be positive as well as negative. Thus, teachers should possess knowledge of transfer, including negative and positive transfer, to facilitate students in second-language acquisition.

The first thing discussed here is attitudes toward negative transfer. For instance, foreign accents from speakers may lead to less respect or a negative reaction from listeners. Teachers should be aware of the occurrence of this phenomenon from second-language learners, and "do what they can do to eliminate the prejudices in a society" (Oldin, 1989, p. 159).

Second, teachers should keep an eye on the differences between learners' language backgrounds, and capitalize on the difference to facilitate their teaching. For example, teachers can observe that students from different language backgrounds often make similar mistakes on some vocabulary, pronunciation, grammar structures and so forth that are specific to that group.

Third, "[c]onsideration of the research showing similarities in errors made by learners of different backgrounds will help teachers to see better what is difficult or easy for anyone learning the language they are teaching" (Oldin, 1989, p. 4). In addition, to "explicitly point out or elicit awareness of differences between L1 and L2" was also a good strategy to facilitate second-language acquisition (Benson, 2002, p. 70).

In short, according to the statement that a previously learned situation can either facilitate (positive transfer) or inhibit (negative transfer) the learning of a second situation, teachers should employ the knowledge of transfer to help students "become aware of ways in which they can draw from prior knowledge" to make learning the second language easier (Diaz-Rico, 2004).

Summary

Language transfer is related to the influence between L1 and L2. Transfer plays an important role in second-language acquisition. Language transfer occurs not only in all linguistic domains such as semantics and syntax, but also in nonstructural factors including individual motivation and social setting.

Further, language transfer may lead to different rates of development in the second-language acquisition: either delay (negative transfer) or acceleration (positive transfer). Thus, a learner who recognizes the characteristics of transfer may become a better language learner. Teachers can employ such features of transfer to monitor learners' language development and give them better instruction during second-language acquisition.

Effect of a Second Language on the First-Language Learning of Children

Introduction

Extensive research has addressed the issue of whether introduction of a second language helps or interferes with the development of both languages, the first language (L1) and the second language (L2). Many scholars indicate that the L1 has crucial influence on second-language learning.

For instance, Lado (1957) stated the role of the native language in a second-language learning situation as affecting transfer: "individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture" (p. 2). Ringbom (1987) claimed that "the importance of the L1 in L2-learning is absolutely fundamental" (p. 134). Overall, the student's competence in L1 plays an important role in learning L2.

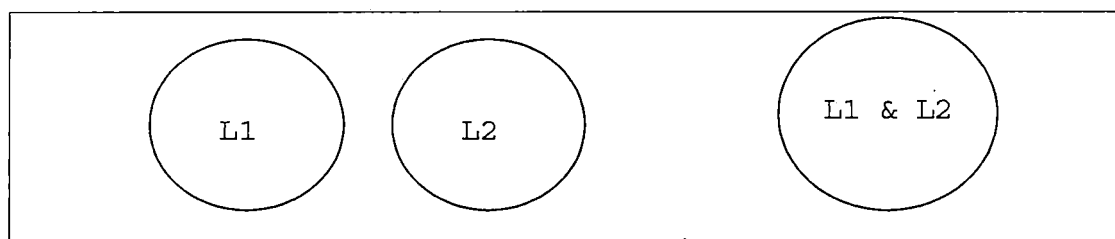
However, the issue also includes the effect of a L2 on the L1, which is called "reverse" or "backward" transfer. Based on Cook (2003), discussing the relationship between the L1 and the L2 is prerequisite to exploring the negative or positive effects of the L2 on the L1.

The Relationship between the First and Second Language

Some scholars explained the relationship between the L1 and the L2 by using the separation model, in which there are no links between the L1 and the L2 (see Figure 2). Based on this model, L2 instructors may ignore learners' L1 when teaching the L2 because there is no relationship between the L1 and the L2. In other words,

there is no point to debating the influence of the L2 on the L1 (Cook, 2003).

The opposing view to the separation model is the integration model, which is a single merged system formed by users (see figure 2). In other words, L2 users have a single system which integrates L1 and L2. For example, the L2 users have a mental lexicon which includes vocabulary of L1 and L2 (Cook, 2003).



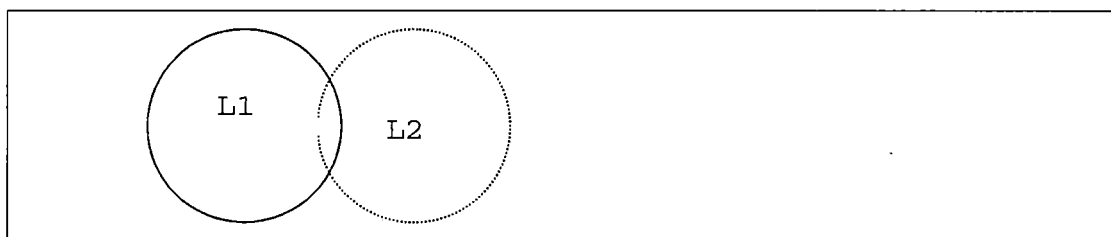
Source: Cook (2003). Introduction: The changing L1 in the L2 user's mind. In V. Cook (Eds.), Effects of the second language on the first (p. 7). New York: Multilingual Matters Ltd.

Figure 2. Separation Model and Integration Model

However, total separation and total integration seem too extreme to explain the relationship between the L1 and the L2. Regarding total separation, when learning L2, people have L1 and L2 in mind at the same time; in terms of total integration, "L2 users can keep the languages apart" (Cook, 2003, p. 7).

According to Cook (2003), one type of interconnection between the L1 and the L2 is the partial integration

model, which "captures the idea of partial overlapping of the two language systems at the same time" (Cook, 2003, p. 8). Some aspects of language knowledge, such as syntax and vocabulary, may be shared in the overlap (see Figure 3).

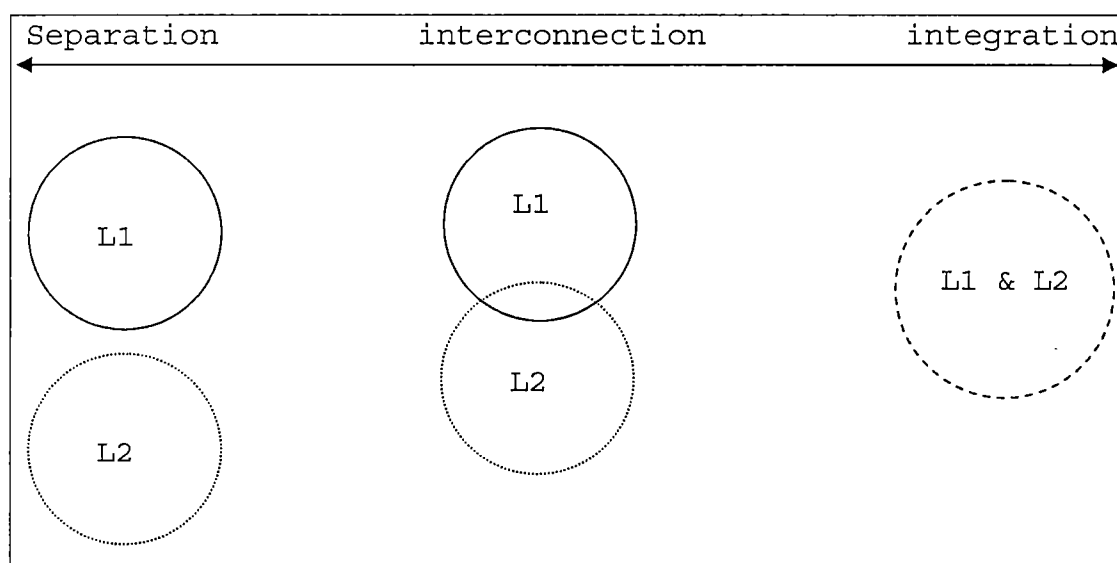


Source: Cook (2003). Introduction: The changing L1 in the L2 user's mind. In V. Cook (Eds.), Effects of the second language on the first (p. 8). New York: Multilingual Matters Ltd.

Figure 3. Partial Integration

In sum, Cook (2003) displayed the integration continuum to illustrate the relationship between L1 and L2 (see Figure 4). "The continuum does not necessarily imply a direction of movement" (Cook, 2003, p. 9). In other words, some people may stay in the separation model; gradually, they move from separation to interconnection, and they arrive at integration model in the long run. However, some people may start with integration model and move toward separation model, and some may stay in the separation model permanently.

However, the continuum may not apply to all aspects of language knowledge (Cook, 2003). For instance, a L2 user may have a mental lexicon integrating L1 and L2, but his/her phonology may be separated. In addition, the continuum may vary from person to person because of individuals' perception of the language model and personal factors (Grosjean, 2001).



Source: Cook (2003). Introduction: The changing L1 in the L2 user's mind. In V. Cook (Eds.), Effects of the second language on the first (p. 9). New York: Multilingual Matters Ltd.

Figure 4. The Integration Continuum

Negative Effects on the First Language

In common sense, when people attain certain level of a L2, and live in a circumstance where their L1 is less used, they may to some extent lose their command of the L1

(Cook, 2002). In terms of learning L2 in childhood, Wong-Fillmore (1991) stated that the younger the children are when they come into contact with L2, the greater the impact of the L2 is on their L1. Many children, particularly those who start learning L2 before the age of five, already start to lose their L1. In Wong-Fillmore's study, these children had already given up their native language before mastering their L2.

Some scholars attribute L1 loss and impairment to the effect of L2 on L1. Cook (2003) indicated that "the usual context for discussing possible harmful effects of the L2 on the L1 is language loss or attrition" (p. 12). Oxford (1982) claimed that "language loss refers to loss or attrition of skill in one's native language or a second or foreign language" (p. 160).

Overall, language loss means that a child's competence in his/her L1 diminishes, but skills in L2 are not comparable to those of native speakers (Kaufman & Aronoff, 1991). According to Anderson (1998), language loss and maintenance relates to two main factors: social and environmental factors, and linguistic factors.

Social and Environmental Factors. Poole (1992) claimed that "all language learning is culture learning, and the acquisition of linguistic knowledge and

socialcultural knowledge are integral to one another" (p. 594). In Taiwan, pupils' English competence relates to their socio-economic status, English learning experience, parents' attitudes toward learning English, and even school location (Chung, 2003).

Anderson (1988) indicated five social and environment factors that influence L1 maintenance or loss in minority language children. First are majority attitudes toward minority languages. When minority languages are rejected by minority-language speakers, an individual's minority language may not be maintained or may be lost (Dressler, 1991).

A second factor is the size of the minority-language community (Anderson, 1998). A first language may be maintained in certain areas where most people share the same first language (Anderson, 1998). A third factor is the rank of the minority language. When a government or the public does not value or support a minority language, the language assumes a lower rank in the society, and its maintenance will be difficult. The lower the rank of a language in a society, the more difficult it is for the language to persist.

The fourth factor is the use of the first language at home, an essential key for maintaining the first language

(Anderson, 1998). "The effect of the children's use of English in the home can be seen both in what happens to their retention of the primary language, and on their parents' language patterns" (Wong-Fillmore, 1991, p. 336). Research suggests that family members using both languages interchangeably in the home environments may cause first-language loss, and subsequently result in a monolingual second-language environment in the home. When English is instructed in schools, and the first language is not maintained at home, first-language loss and attrition may occur because of insufficient chances of exposure to the first language. Even though it may be maintained, there is a reduction in input (Anderson, 1998).

The last factor concerns parents' values. Although this factor is not directly related to language loss in children, it does have an effect on language performance. Wong-Fillmore (1991) indicated, "Many parents in the main sample reported that although English was not a language they were able to express themselves in easily, they were using it in speaking to their children" (p. 337). In other words, many parents in the American immigrant context value English more than their first language, and when

this value is communicated to the children, it increases the probability of first-language loss.

In Taiwan, a famous professor researching English development in children supported immersion programs. She experimented on her daughter. The professor immersed her daughter in an English environment, using only English in the home and enrolling her daughter in an English kindergarten. However, when the child attended a regular elementary school, she could not adapt to the Chinese school environment, and rejected learning everything related to Chinese culture, such as speaking in Chinese, recognizing Chinese characters, and even being interested in Chinese holidays. Therefore, her Chinese performance was lower than other children of the same age (Zhang, 2003). This demonstrates the very real possibility of L1 loss.

Linguistic Factors. Learning two languages simultaneously may lead to interference of the development of L1 (Swain, 1984). When children are younger than five years old, they are still acquiring the basic grammatical and phonological aspects of their first language. Teaching them in a second language must be very carefully done because the linguistic structures of both languages may interfere with each other (Snow, 1992). According to

Anderson (1998), the influence of language loss leads to changes in aspects of semantics and grammar.

Many semantic changes result from language transfer. For instance, people use L2 words for L1 words. This involves loan translation, which is "an idiomatic phrase or vocabulary from the second language is transferred to the first language, where it is ungrammatical" (Anderson, 1998, para. 13). For example, the meaning of a Spanish word "camioneta" is "truck" in English. However, some Hispanic Americans whose first language is Spanish may use "troca" instead of "camioneta."

Grammatical Features. "Patterns observed in the L1 grammar of individuals who are experiencing language loss have been ascribed to both L2 transference and universal patterns of acquisition" (Anderson, 1998, para. 16). For example, the Taiwanese mother tongue of the third-grade pupils affects their writing in Mandarin. The significant influence of Taiwanese on Mandarin writing vocabulary includes using words as synonyms or antonyms for quite different meanings. In general, significant influence of Taiwanese is found in compositional writing structures (Kuo, 2001).

Positive Effects on the First Language

According to Bournot-Trites and Tillowitz (2002), to describe the contexts of second-language acquisition (SLA) is necessary before discussing the effects of L2 on L1 because various contexts of SLA may lead to different results. For instance, language-minority children's L1 is at risk when they attend a bilingual program whose goal is to develop their proficiency in L2 regardless of their L1. In this context of SLA, children may suffer loss or attrition of skills in their L1.

The Contexts of Second-Language Acquisition. The contexts of SLA include a variety of bilingual programs. In general, these programs result in either subtractive or additive forms of bilingualism. Subtractive forms of bilingual education means developing minority-language children to achieve proficiency in the dominant language (L2). Gradually, their L1 is replaced by the dominant language (L2) (Lambert & Tucker, 1972).

Two types of bilingual programs that lead to subtractive bilingualism are submersion and transitional bilingual programs. In the former, language-minority students are placed in the same classroom with native-English speakers and receive instruction in English. In the latter, L1 is used as an instructional

support in the beginning, and after two to three years of L1 instruction, students are transferred into English-only classrooms. The ultimate goal of submersion and transitional bilingual programs is to develop language-minority students' L2 despite their L1 (Krashen, 1981).

Additive bilingualism means that "the L2 is an addition to the L1 competence, with no loss of L1 knowledge" (Bournot-Trites & Tillowitz, 2002, p. 8). The main difference between subtractive and additive forms of bilingualism is in degree of support for students' L1. The goal of additive bilingualism is to foster students to become bilingual and biliterate. In other words, these "additive" bilingual programs focus not only on students' L2, but also on their L1 (Lambert & Tucker, 1972).

The additive bilingual programs include maintenance bilingual education and immersion education. The former is designed to "support education and communication in the students' primary language as well as students' heritage and culture" (Diaz-Rico, 2004, p. 171). The goal of the latter (immersion education) is to develop functional competence in the second language and to promote or maintain normal progress in first-language development (Genesee, 1984). Two representative of immersion programs

are French immersion in Canada and two-way immersion programs in the United States. Generally speaking, all or some subjects are instructed by L2 in immersion education.

Overall, various contexts of SLA lead to different outcomes: subtractive or additive bilingualism. Negative effects of L2 on L1 occurs when students in subtractive bilingual programs. Conversely, learning L2 has positive effects on L1 in additive bilingual programs (Bournot-Trites & Tillowitz, 2002).

The Effects of Immersion Education on First-Language Development. In French immersion, students' L1 is English, and French (L2) is used as a medium of content instruction. Basically, there are three types of immersion programs in Canada: early immersion (starting French instruction in kindergarten), mid-immersion (starting from fourth or fifth grade), and late-immersion (starting from sixth or seventh grade) (Genesee, 1984).

In terms of English literacy skills such as reading comprehension and spelling, students in early-immersion programs lag behind monolingual peers in the beginning, but after one year's instruction of English for immersion students, the two groups attain the equivalent competence on reading comprehension of English. As regards spelling, immersion students catch up their monolingual peers in

fourth grade. With regard to oral English skills such as listening comprehension, there is no significant difference between immersion students and monolingual students (Lambert & Tucker, 1972). Furthermore, evidence showed that immersion students perform better than monolingual students in English grammatical usage, punctuation, and vocabulary (Swain & Lapkin, 1982).

According to this research, learning French (L2) for immersion may not interfere with the development of English (L1). Conversely, learning L2 enhances the development of L1 (Bournot-Trites & Tillowitz, 2002).

Cases in Other Countries. In Hong Kong, for example, a large-scale longitudinal study in late-immersion education, in which Mandarin was the L1 and English is the L2, showed that when students are instructed in English, their achievements in Mandarin (L1) and English (L2) are improved (Marsh, 2000). Verhoeven (1994) investigated 96 Turkish children who live in the Netherlands, with Turkish as their L1 and English as their L2. The result showed that a strong positive transfer from the first language to the second language in reading abilities. In addition, a case study, in which Mandarin and English was introduced to a five-year-old boy from Taiwan, indicated that providing children with opportunities to interact with

reading and writing materials in Chinese and English does not show any negative effect in either language.

Contrarily, it fosters literacy development in both languages (Buckwalter & Gloria-Lo, 2002).

Summary

The relationship between the first language and the second language in an L2 user's mind is neither total separation nor total integration. It may start from separation, move to interconnection, and end in the integration or vice versa. However, the integration continuum may not apply to all aspects of language knowledge, and may vary from person to person in light of individuals' perception of the language model and personal factors.

Educators still argue about how learning a second language affects the first-language learning of children. More and more educators are concerned about the issue of language loss, language attrition, and language erosion in the first language. In other words, these educators deem that learning L2 shows a negative effect on L1 development or maintenance. Perhaps some people can learn L1 and L2 well at the same time, but many people lose their first language when they are instructed or proficient in a second language at too early an age.

On the other hand, recent research showed that learning an L2 has a positive effect on L1 development. However, the context of SLA should be concerned because various contexts of SLA lead to different outcomes: subtractive or additive bilingualism. The former result in negative effects of L2 on L1 and the latter cause the positive effects of L2 on L1. In terms of immersion education in Canada, there is a lot of authoritative evidence showing the positive effects of L2 on L1. In addition, there is evidence around the world that shows similar results. These positive findings may inspire second-language learners with the knowledge that learning a second language does not necessarily threaten competence in the first language.

CHAPTER THREE

THEORETICAL FRAMEWORK

Aspects of Dual-Language Acquisition in Taiwan

Five topics presented in the literature review can contribute to a framework to model bilingualism and biliteracy in Mandarin and English that can help to clarify aspects of dual-language acquisition in Taiwan. The term "bilingual education" is often used as a general term that relates to English learning in Taiwan. This may lead to confusion when describing Taiwanese dual-language education. In the United States, bilingual education includes a variety of programs and types, and the goals of bilingual education vary from programs to program. Some emphasize the acquisition of the L2, but most focus on achieving competence in L2 at the expense of continuing proficiency in L1.

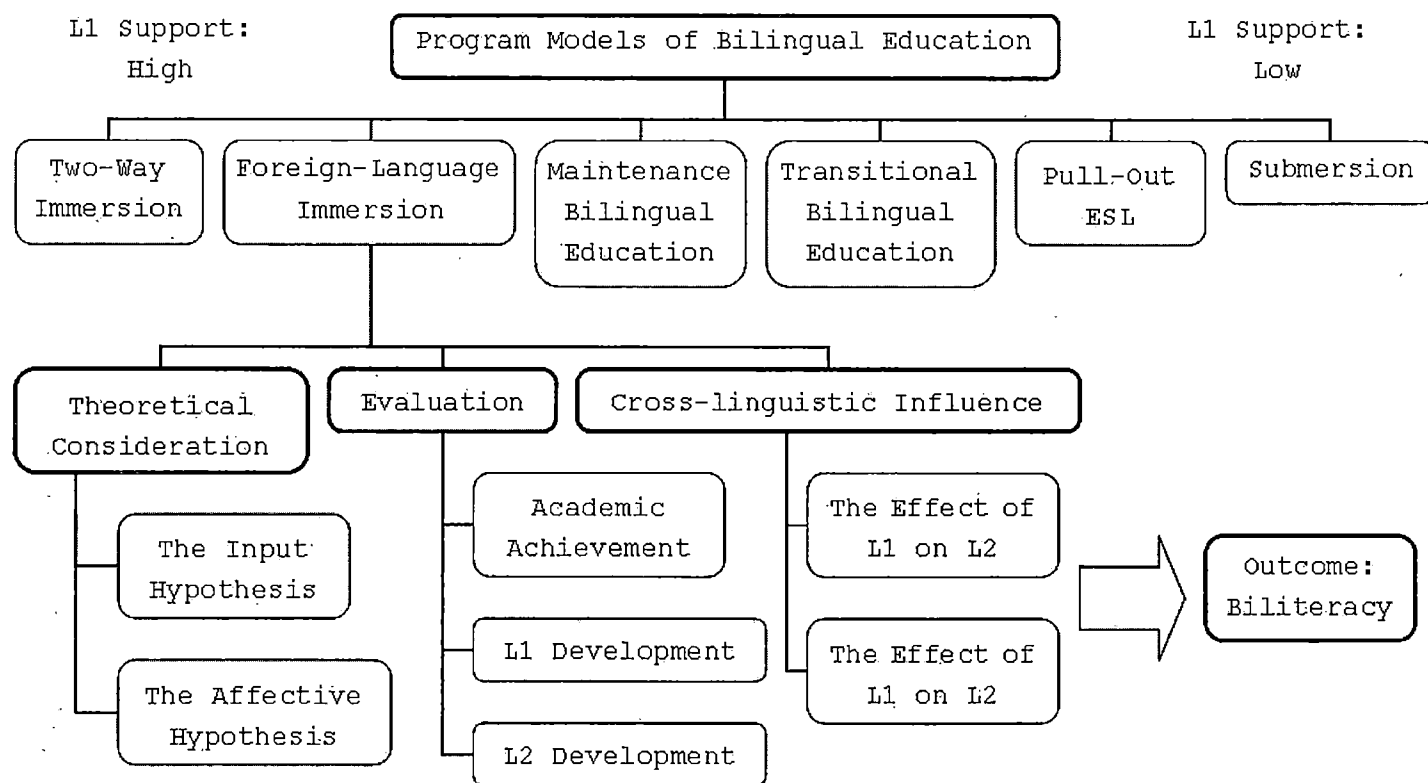
Surveying dual-language programs in the United States, the program model Foreign Language in Elementary School (FLES) in the United States is probably the closest curriculum and instruction model to the English curriculum in the public elementary schools in Taiwan. However, the goal of FLES is not bilingualism and biliteracy. Therefore, the model of Canadian-style foreign-language

immersion (FLI) is probably one of the best choices for Taiwanese schools if the goal is to achieve bilingualism and biliteracy. The theoretical principles of foreign-language immersion are based on the input and affective filter hypotheses proposed by Krashen. Evidence showed that students in immersion programs perform well in aspects of academic achievement and first- and second-language development. Furthermore, considering cross-linguistic influence from the L1 to the L2 or from the L2 back to the L1, there appears to be little actual inference when students receive instruction of Mandarin and English simultaneously. In short, the project proposes that foreign-language immersion serve as a model program for teaching English as a foreign language in Taiwan, if students are to achieve bilingualism and biliteracy in Mandarin and English.

The Theoretical Model in Detail

The framework presented in Figure 5 includes five major components. The first part introduces program models of bilingual education. Canadian-style foreign-language immersion (FLI) is among these bilingual programs. The second part discusses theoretical principles of FLI, which includes the input and affective hypotheses. The third

Figure 5. Theoretical Framework



part examines the evaluation of FLI according to students' academic achievement and first- and second-language development. The fourth part investigates cross-linguistic influence between the L1 and the L2. The last part displays the outcome of FLI: biliteracy. Each of these parts will be presented in turn..

Program Models of Bilingual Education

The generalized definition of bilingual education means "teaching English to speakers of other languages with variable levels of support for the primary language" (Balderrama & Diaz-Rico, in press). Furthermore, bilingual education is often used as a general term that includes a variety of programs and models, such as submersion, pull-out ESL, transitional bilingual education, maintenance bilingual education, two-way immersion, and foreign language immersion. The different programs vary in degree of support for the L1. The least-supported program for children's L1 is the submersion model.

Submersion. The submersion model develops students' competence in L2 regardless of their L1. In other words, English learners are placed in the same classroom with native-English speakers and receive instruction of subject matter through English. There is no support for their L1 in this model.

Pull-Out ESL. The most obvious distinction between the model of submersion and pull-out ESL is that English learners get extra instruction in English. Otherwise, English learners are submersed in English-only classrooms.

Transitional Bilingual Education (TBE). TBE utilizes English learners' L1 as instructional support in the beginning. After English learners attain a certain level of proficiency in English, usually two to three years, they transfer into English-only classrooms. In the TBE model, English learners' L1 is regarded as a transitional tool to assist them to enter English-only classrooms with less trouble. In other words, the development of L1 is not a goal of TBE. However, compared to submersion and pull-out ESL, English learners in TBE receive more support in L1.

Maintenance Bilingual Education (MBE). The goal of MBE is to develop English learners' L2 and preserve or develop their L1. English learners in MBE may build self-esteem and are proud of their culture because of the support of L1.

Two-Way Immersion (TWI). TWI includes three main features: first-language development, second-language acquisition, and teaching content through the second language. In addition, a goal of TWI is to develop

bilingualism and biliteracy for both language-minority and language-majority students.

Foreign Language Immersion (FLI). FLI is also called enrichment immersion in the United States, and is designed for language-majority students to achieve bilingualism and biliteracy. FLI may provide monolingual English speakers immersion in a second language. In general, some subject matter is instructed via a second language in foreign-language immersion.

Theoretical Considerations of Foreign-Language Immersion

There are two current theories of second-language acquisition related to FLI: the input hypothesis and the affective filter hypothesis. The input hypothesis focuses on understanding messages (comprehensible input) that lead to the occurrence of second-language acquisition. In class, the comprehension input depends on communication between teachers and students. Because teachers in FLI use L2 as a medium to teach students, teachers pay more attention on communication with students in FLI than teachers in regular classes.

In terms of the affective filter hypothesis, Krashen (1981) claimed that second-language acquisition is heavily influenced by affective factors such as motivation and

anxiety. These affective factors are like filters. When the filter is down, the acquisition will occur, but when the filter is up, the acquisition will not occur.

Evaluation of Foreign-Language Immersion

Swain (1984) evaluated the outcome of immersion education by three dimensions: academic achievement, first-language development, and second-language development. Considering students' academic achievement, such as in science and mathematics, results have shown that immersion students achieve the same levels of academic achievement when compared to English-instructed peers (Swain & Lapkin, 1982).

In terms of first-language development, students in immersion programs may lag behind students in monolingual instruction in literacy skills at first, but immersion students catch up their peers in monolingual instruction after one or two years. The last factor concerns students' second-language development. Compared to students in monolingual instruction, immersion students may perform at the level of native speakers only in receptive skills (listening and reading). However, regarding productive skills (speaking and writing), immersion students do not attain native like proficiency.

Cross-Linguistic Influence

Cross-linguistic influence (CLI) is a very important aspect of second-language acquisition and is defined as "the interplay between earlier and later acquired language" (Kellerman & Sharwood Smith, 1983, p. 1). Consequently, discussing CLI involves not only the effect of the L1 on the L2, but also the effect of the L2 on the L1.

The Effect of the First Language on the Second Language. Many scholars claimed that the L1 has crucial influence on L2 learning, and the L1 is the foundation for learning L2. People tend to transfer the forms and meanings from their L1 to L2. According to Oldin (1989), CLI is known as language transfer. Transfer may occur consciously and unconsciously, both in formal and informal contexts, and among children as well as among adults. In addition, transfer occurs in all linguistic domains, such as phonology, syntax, semantics, pragmatics, and morphology.

However, structural descriptions cannot explain all phenomena in second-language acquisition. There are some nonstructural factors resulting in the occurrence of transfer. These factors include individual variation, social contexts, and the definition of proficiency in the second language.

The Effect of the Second Language on the First Language. The effect of the L2 on the L1 is also called reverse transfer or backward transfer. The negative effects of the L2 on the L1 may lead to the possibility of L1 loss. According to Anderson (1988), language loss is attributed to social and environmental influences as well as linguistic factors.

However, some scholars think that various contexts of SLA may lead to different results in terms of positive or negative effects of the L2 on the L1. For instance, when language-minority students participate in a submersion program, which has no support for students' L1, the possibility of L1 loss may increase for these students. On the other hand, when students participate in an immersion program, which has high support for students' L1, they may achieve academic competence both in L1 and L2. In sum, subtractive bilingual programs, which offer little or no support for students' L1, may lead to negative effects of the L2 on the L1; whereas additive bilingual programs, which support students' L1 as well as L2, may result in positive effects of the L2 on the L1.

Outcome: Biliteracy

The ultimate goal of the theoretical framework is to achieve biliteracy, which is "the acquisition and learning

of the decoding and encoding of print using two linguistic and cultural systems in order to convey messages in a variety of contexts" (Pérez & Torres-Guzman, 1992, p. 51).

Considering bilingual education (Mandarin and English) in Taiwan, research relating to the relationship between Mandarin and English has indicated that learning two languages simultaneously does not interfere with literacy development for children.

In conclusion, the theoretical framework clarifies the contexts of English as a foreign language instructional program in Taiwan. Based on the discussion of the cross-linguistic influence between the L1 and the L2, the model of foreign-language immersion is probably one of the best choices for Taiwanese students if they want to become bilingualism and biliteracy.

CHAPTER FOUR

CURRICULUM DESIGN

The curriculum unit presented in the Appendix is based on the theoretical framework presented in Chapter Three. The title of this unit is Cultural Ambassadors of Taiwan to the World. The target teaching level is Taiwanese EFL third-grade students. Most of them are in early-production stage of learning English.

Unit of Instruction

Cultural Ambassadors of Taiwan to the World consists of five lessons, each of which focuses on a key concept presented in Chapter Two. Lesson One, Be a Culture Ambassador, teaches students how to introduce Taiwanese culture using English. Lesson Two, Spring Festival, leads students to discern the differences between Chinese and English reading and writing. Lesson Three, Geographical Features of Taiwan, uses English as a medium to teach Taiwanese geography. Lesson Four, Introducing Myself in English and Chinese, teaches students to present an introduction of themselves in English and Chinese. Lesson Five, Bilingual and Bicultural, helps students discover there is no fear of losing L1 or negative influence on L1 (Chinese) when acquiring the L2 (English).

Lesson Format

Each lesson presents a clear format that provides background, explicit objectives, and systematic procedures for instructors. The factors target teaching level, students' English level, and time frame are presented in the beginning of each lesson. In addition, each lesson has teaching materials including focus sheets, work sheets, and assessment sheets.

Each lesson involves the connection of three elements, the objectives, activities (task chains), and assessments. The objectives of each lesson include three types: a learning-strategy objective, a content objective, and a language objective. The learning-strategy objective means using a direct or indirect strategy to enhance acquisition of new information or skills. The content objective is the subject of the lesson. The language objective means increasing some skills in English.

Task chains involve a variety of learning activities. Basically, the task chains correspond to the three types of objectives. In other words, each task chain matches an objective. To evaluate the success of the task chains, each lesson provides various assessments. Some assessment activities are used at the end of the task chain, but some are used the end of the lesson.

Lesson Content

The design of the unit of instruction is based on the key concepts presented in Chapter Two and the framework presented in Chapter Three. Thus, the content of the unit of instruction focuses on discussing the relationship between Chinese and English in aspects of culture, literacy, and reciprocal effect.

Lesson One. The unit plan is designed to stimulate students to think about the purpose of becoming bilingual, and shows them one advantage of being bilingual, which is being a culture ambassador to introduce Taiwanese culture using English. Through this lesson, students can learn to identify features of Taiwanese culture, and learn to use a comparison chart to compare various features of Taiwanese culture. Furthermore, students try to use English to introduce Taiwanese culture.

Lesson Two. The design of Lesson Two is based on the concept of biliteracy presented in Chapter Two, and intends to show the difference between Chinese and English reading and writing. Through this lesson, students learn the use of a T-chart, and create a T-chart to contrast and compare Chinese characters and English words.

Lesson Three. Based on the feature of foreign-language immersion, which uses L2 as a medium to

instruct subject matter, Lesson Three uses English as a medium to teach Taiwanese geography, which includes basic topographical features of Taiwan.

Lesson Four. Based on the concept of cross-linguistic influence presented in Chapter Two, the lesson provides students the opportunity to compare Chinese-style and American-style self-introduction. The content of this lesson is teaching students to make an introduction of themselves in Chinese and English. The instructor asks students to take notes when listening to other students' speech, and leads students to compare a self-introduction between Chinese and English. Through this lesson, students are able to discover that they can use the same order when introducing themselves in English and Chinese.

Lesson Five. Most Taiwanese children know that learning English is important because of expectations from parents and teachers. However, they seldom ask themselves about the same issue. This lesson uses a K-W-L chart, and tries to help students think for themselves about the purposes of becoming bilingual. The instructor explains the function of a K-W-L chart in the beginning, and lets students reflect on what they know about being bilingual and bicultural. According to their prior knowledge about bilingualism and biculturalism, the instructor leads

students to discuss what they want to know about being bilingual and bicultural. The instructor illustrates the concepts of bilingual and bicultural based on students' responses. Finally, students present what they have learned about being bilingual and bicultural.

In summary, the curriculum unit focuses on discussing the relationship between Chinese and English in aspects of culture, literacy, and reciprocal effect of the languages on one another. In addition, it uses English as a tool to teach subject matter such as geography. A final goal is for students to be stimulated to think about bilingualism and biculturalism. Finally, students are able to recognize that there should be no fear of losing the first language or no negative effect of the L1 when acquiring the L2.

CHAPTER FIVE

ASSESSMENT

Assessment is used to measure the extent to which students have learned. It should be used in multiple forms because diverse assessment can reflect students' learning in all aspects. A key principle of assessment is accessing what students know and can do rather than what they do not know and cannot do. Thus, teachers should be careful when designing assessment that the content of assessment includes what is taught in the class. Assessment can be used at the end of the task chain or at the end of the lesson. Based on the results of assessment, teachers can decide either to advance to the next lesson or reteach the lesson.

The project presents a unit of instruction which includes five lessons. Each lesson uses both formative and summative assessment to evaluate students' performance and understanding.

Formative Assessment

As a means of monitoring instruction, formative assessment provides feedback and suggestions for teacher to modify teaching and learning activities. In Lesson One, the teacher observation method is used. The teacher

observes students' responses and students' group discussion to see if students are focusing on the questions or topics. In addition, the teacher evaluates students' compare/contrast skills by analyzing their work sheets. In Lesson Two, the teacher observes students' pronunciation of vocabulary in the beginning, and checks students' work sheets about making a story outline. Furthermore, the teacher accesses students' compare/contrast skills by checking their work sheets of creating a T-chart.

In Lesson Three, the teacher observes at the beginning if students can correctly point out where Taiwan is on a map of Asia. During the first task chain, the teacher observes if students can identify directions and basic topography correctly on a map of Taiwan. During the second task chain, the teacher evaluates students' concept development by analyzing their work sheets, as they create a concept chart of basic Taiwanese topography. During the third task chain, the teacher observes if students can orally describe basic topographic features of Taiwan by using "there are" sentences.

In Lesson Four, students take notes when listening to each others' self-introductions in English and Chinese. The teacher circulates in the class to see if students can

take notes from people's speech appropriately. The teacher checks if students can correctly circle the common points from their notes. In addition, the teacher assesses students' compare/contrast skills by checking their work sheets on creating a comparison chart.

In Lesson Five, the teacher observes if students can express their ideas about bilingualism clearly. Furthermore, the teacher uses a K-W-L chart for students to self-evaluate their learning about the concepts of being bilingual and bicultural.

Thus, formative assessment allows the teachers monitor and adjust the teaching and learning before final (summative) assessment. This improves instruction.

Summative Assessment

Summative assessment takes place in the end of the lesson with the intent of evaluating the learning outcomes with a specific grade. In Lesson One, the teacher assesses students' vocabulary about features of Taiwanese culture using their assessment sheets. In Lesson Two, the teacher uses several multiple-choice questions to evaluate students' reading comprehension. In Lesson Three, the teacher uses a map as an assessment sheet to evaluate students' understanding of the content. In Lesson Four,

the teacher evaluates students' nonverbal and vocal skills of public speech by using the rubric featured on the assessment sheet. In Lesson Five, students present their individual learning processes about the concepts of being bilingual and bicultural. The teacher uses the rubric on the assessment sheet to evaluate students' nonverbal skills, vocal skills, and the content of their presentation. The summative use of a rubric determines a student's grade.

In summary, assessment of the unit plan consists of both formative and summative assessment. Based on the result of formative assessment, such as students' responses, checking students' work sheets, and observing students' group discussion, the teacher is able to determine whether to advance to the next task chain or instruct the same task chain again. Furthermore, the results of summative assessment can provide useful information about the efficacy of instruction. Therefore, the teacher can utilize this information to decide to move forward to the next lesson or reteach the original lesson.

The project includes information about teaching English as a foreign language in aspects of instructional programs, cross-linguistic influence of Mandarin and English, and biliteracy in Taiwan. Foreign-language

immersion serves as a model program for teaching EFL in Taiwan, if students are to achieve bilingualism and biliteracy in Mandarin and English. Using an appropriate program model--that of foreign-language immersion--ensures to achievement of the outcome of biliteracy in Mandarin and English without the fear of losing L1 (Chinese) or of negative influence on L1 when acquiring the L2 (English).

APPENDIX

INSTRUCTIONAL UNIT - CULTURAL AMBASSADORS

OF TAIWAN TO THE WORLD

INSTRUCTIONAL UNIT

Cultural Ambassadors of Taiwan to the World

Instruction Plan One: Be a Culture Ambassador	103
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Instruction Plan Four: Introducing Myself in English and Chinese	124
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**Instruction Plan One:
Be a Culture Ambassador**

Level: Elementary EFL 3rd grade

English Level: Early production

Time Frame: 40 minutes

Content Objective:

1. To identify features of Taiwanese culture

Language Objective:

2. To present Taiwanese culture

Learning Objective:

3. To compare features of Taiwanese culture by using a comparison chart

Materials:

- Poster 1-1
- Focus Sheet 1-2
- Work Sheet 1-3
- Assessment Sheet 1-4

Warm-up:

1. The instructor asks students to imagine being a culture ambassador.
2. The instructor asks students to express their ideas about what aspects of Taiwanese culture that they would like to introduce to foreigners.

Task Chain I: To identify features of Taiwanese culture

1. The instructor displays Poster 1-1 that illustrates pictures and vocabulary.
2. Students read Focus Sheet 1-2.
3. The instructor asks some questions about features of Taiwanese culture from Focus Sheet 1-2.

Task Chain II: To compare features of Taiwanese culture by using a comparison chart

1. The instructor illustrates how to create a comparison chart by using Focus Sheet 1-2.
2. Students work in groups to discuss Work Sheet 1-3.
3. The instructor leads students to finish Work Sheet 1-3.

Task Chain III: To present Taiwanese culture

1. The instructor asks students to present Taiwanese culture based on Work-Sheet 1-3, and add some details from Focus Sheet 1-2.
2. Students present features of Taiwanese culture.
3. Students answer Assessment Sheet 1-4.

Final Assessment:

Formative assessment:

During warm up:

Students will express their ideas clearly.

During Task Chain I:

The students will answer questions appropriately.

During Task Chain II:

1. The students will create a comparison chart on Work Sheet 1-3 correctly.

During Task Chain III:

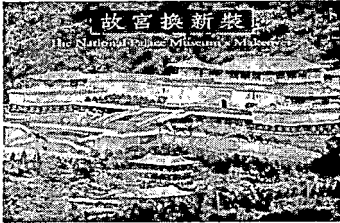
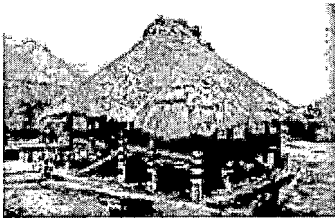
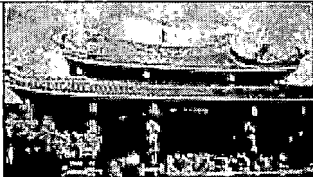
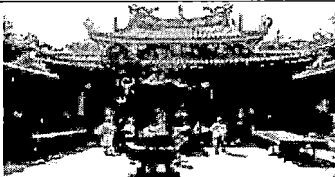
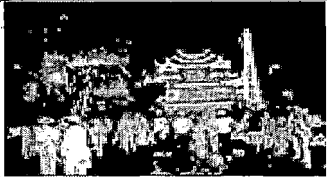
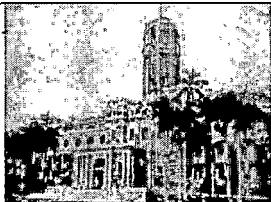
1. The students will present features of Taiwanese culture appropriately.

Summative Assessment:

1. The students can answer Assessment Sheet 1-4 correctly.

Scores	Representative
90-100	Excellent
80	Good job
70	Needs improvement
60	Study harder

Poster 1-1
Images of Taiwanese Culture

		
National Palace Museum	Traditional aboriginal house	Bangiao at the Lin Family Garden)
		
Longshan (Dragon Mountain) Temple	The Mazu Temple (Queen of Heaven Temple)	The Burning of the Plague God Boat in Donggang
		
Aboriginal rituals	Fort San Domingo Portugal and Holland	The Presidential Office Building (Japan)
		
Lantern Festival	Taiwanese opera	Glove puppet

Focus Sheet 1-2

Multifaceted Taiwanese Culture

A rich historical background has provided Taiwan with a multifaceted culture. Taiwanese people are from many different places and backgrounds, such as Taiwan's indigenous people, the southern Fujianese from early China, Hakka immigrants, the Dutch, Spanish, and Japanese, and the recent immigrants from mainland China.

In general, Taiwanese culture includes Chinese culture, aboriginal culture, and colonial culture, plus elements unique of Taiwan.

Chinese Culture

You can see Chinese culture in temples and architecture in Taiwan, such as National Palace Museum, the Lin Family Garden at Bangiao, the Longshan (Dragon Mountain) Temple, the Mazu Temple (Queen of Heaven Temple) in Lugang, and the Chaotian Temple in Beigang.

In terms of cultural events, some of Taiwan's most important annual holidays and festivals are the Chinese New Year, the Lantern Festival, the Dragon Boat Festival, Lovers' Day, and the Hungry Ghosts Festival. In local Taiwanese folk events, the Goddess Mazu making rounds of inspections in Beigang and the burning of the Plague God boat in Donggang are also regarded as important celebrations.

In addition, there are traditional Chinese opera, Taiwanese opera, and the famous glove puppet theater.

Aboriginal Culture

There are more than ten different tribes that have their own languages, traditions, and tribal structures that can be distinguished in Taiwan. Their unique cultures give an extra dimension to Taiwan's culture. One of the most famous celebrations is Smatto's Harvest Festival.

In addition, Orchid Island's Yami(Tao) tribe has been relatively isolated due to the island's geographical location, and was the last to come in contact with the Han Chinese; this tribe, therefore, has been best able to preserve its aboriginal culture.

Colonial Culture

Remnants of colonial periods can still be found in many parts of Taiwan. Fort San Domingo in Danshui, for example, used to be home to the Portuguese and the Dutch successively. In addition, the Presidential Office

Building, Executive Yuan, etc. are outstanding baroque architecture left by the Japanese.

Work Sheet 1-3
Comparison of Features of Taiwanese Culture

Name: _____

	<u>Chinese Culture</u>	<u>Aboriginal Culture</u>	<u>Colonial Culture</u>
Architecture			
Ceremony			
Cultural Events			
Others			

Assessment Sheet 1-4

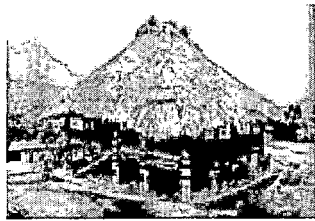
Name:

Please match the following pictures to the correct answer by drawing lines connecting pictures to description.

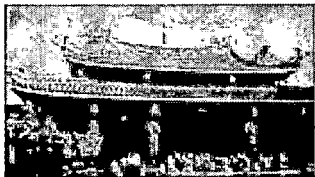
Each/20 pts. (Total 100 pts.)



A traditional aboriginal house



Taiwanese opera



The presidential office building



Longshan (Dragon Mountain) Temple



The National Palace Museum.

Instruction Plan Two Spring Festival

Level: Elementary EFL 3rd grade

English Level: Early production

Time Frame: 40 minutes

Content Objective:

1. To distinguish Chinese (reading/writing) from English (reading/writing)

Language Objective:

2. To outline the story by writing six simple sentences

Learning Objective:

3. To create a T-chart to compare Chinese (reading/writing) with English (reading/writing)

Materials:

- Poster 2-1
- Focus Sheet 2-2
- Work Sheet 2-3
- Work Sheet 2-4
- Work Sheet 2-5
- Assessment Sheet 2-6

Warm-up:

1. The instructor uses Poster 2-1 to illustrate vocabulary used in the story of Spring Festival.
2. The instructor leads students to read the vocabulary aloud.

Task Chain I: To outline the story by writing six simple sentences

1. Students read Focus Sheet 2-2 (Spring Festival).
2. The instructor leads students to discuss the story of Spring Festival by using Work Sheet 2-3.
3. Students work in groups to finish Work Sheet 2-3.

Task Chain II: To distinguish Chinese (reading/writing) from English (reading/writing)

1. The instructor uses "Think Aloud" to demonstrate Work Sheet 2-4.
2. The instructor leads whole class to finish Work Sheet 2-4

Task Chain III: To create a T-chart to compare Chinese and English

1. The instructor shows some examples for using T-chart.
2. The instructor gives some hints on Work Sheet 2-5, and leads students to discuss the difference between Chinese characters and English words.
3. Students finish Work Sheet 2-5.
4. Students answer Assessment Sheet 2-6.

Final Assessment:

Formative assessment:

During warm up:

Students will read the vocabulary correctly.

During Task Chain I:

1. The students will outline the story on Work Sheet 2-3 appropriately.
2. The students will work in groups and discuss the subject seriously.

During Task Chain II:

1. The students will translate English into Chinese and Chinese into English on Work Sheet 2-4 appropriately.

During Task Chain III:

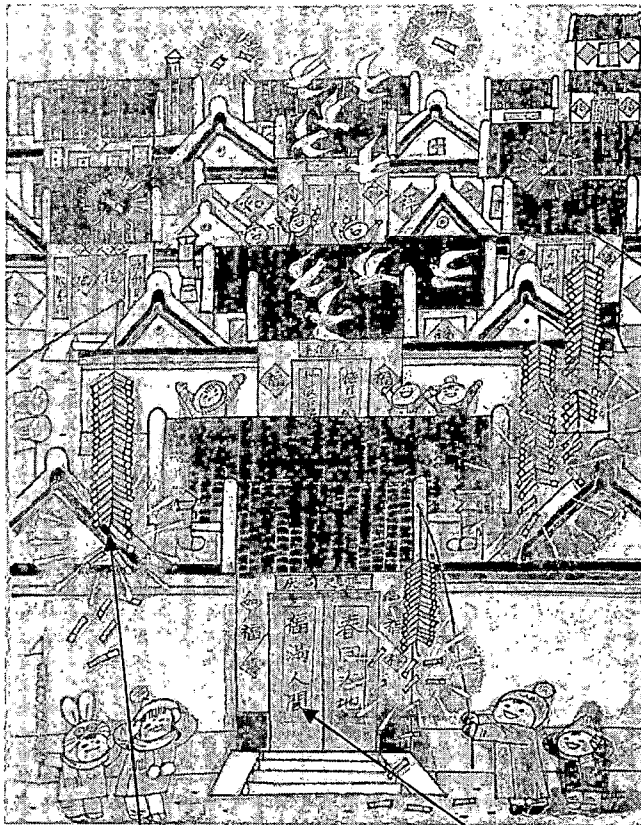
1. The students will create a T-chart on Work Sheet 2-5 appropriately..

Summative Assessment:

1. The students can answer Assessment Sheet 2-5 correctly.

Scores	Representative
90-100	Excellent
80	Good job
70	Needs improvement
60	Study harder

Poster 2-1
Vocabulary Bank



The Heavenly God



Demon: Nian



firecrackers

couplet

mountain



gong



drum



Focus Sheet 2-2
Spring Festival (1)

The Spring Festival is the lunar Chinese New Year. Every family sets off firecrackers and puts up couplets on their gates to usher in a happy life in the coming year.

Long, long ago, there was a ferocious demon called *Nian*. It did evil things everywhere. The Heavenly God locked this demon into remote mountains and only allowed him to go out once a year.

Shortly after twelve months had passed, *Nian* come out of the mountains. Gathering together, people discussed how to deal with him. Some said that *Nian* was afraid of the red color, flames, and noises. So people put up red couplets on their gates, set off firecrackers, and kept on beating gongs and drums.

The demon *Nian* trembled with fear. Night fell and every house was brightly lit. *Nian* was terrified. He fled into the mountains and didn't dare to come out. *Nian* was thus subdued, and the custom of celebrating the lunar New Year was passed down from then.

Li, S. (1997). Legends of ten Chinese traditional festivals. Beijing: Dolphin Books.

Work Sheet 2-3
Outline

Name:

According to the story of Spring Festival, what occurred in the beginning?

What occurred in the middle?

What occurred in the end?

Work Sheet 2-4
Spring Festival (2)

Name: _____

Please translate English into Chinese.

For example,

English: The Spring Festival is the lunar Chinese New Year.
 春節 舊曆的 中國 新年

Chinese: 春節就是舊曆的中國新年。

English: Every family sets off firecrackers and puts up couplets
 點燃 鞭炮 放置 春聯
on their gates to usher in a happy life in the coming year.
 大門 引進 即將來臨的一年

Chinese: _____

English: Long, long ago, there was a ferocious demon called *Nian*.
 長久地 在...以前 兇猛的 惡魔 被稱作 年

Chinese: _____

Please translate Chinese into English.

Chinese: 牠到處做壞事。

English: _____

it 牠 everywhere 到處 evil things 壞事

Chinese: 天神把這隻惡魔關在很遠的山上並且只允許牠一年出來一次。

English: _____

the Heavenly God 天神

allow 允許

lock 關

go out 外出

remote 遙遠

mountain 山

Work Sheet 2-5
A T-Chart

Name: _____

Compare Chinese characters with English words by using Work Sheet 1-4. Write down your findings to the following questions.

1. Give an example where a single Chinese character means a single word in English.

2. Now complete the following chart to summarize what is the same and different about English and Chinese:

Same	Different

Assessment Sheet 2-6

Name: _____

According to the story of the Spring Festival, please choose the right answer for each question.

1. The Spring Festival is the _____. (20 pts.)
 - A. Lantern Festival
 - B. Lunar Chinese New Year
 - C. Dragon Boat Festival
 - D. Mid-Autumn Festival
2. Who locked the demon Nian in the mountain? (20 pts.)
 - A. The people
 - B. The Chinese emperor
 - C. The soldiers
 - D. The Heavenly God
3. Nian is afraid of _____. (20 pts.)
 - A. the color green and fresh leaves
 - B. the color red and firecrackers
 - C. mountains
 - D. people
4. In Chinese New Year, people like to put up _____ on their gates. (20 pts.)
 - A. pictures of the Heavenly God
 - B. pictures of Nian
 - C. red couplets
 - D. gongs and drums
5. What was the ending of the story? (20 pts.)
 - A. Nian set off firecrackers with people.
 - B. Nian wrote Spring Festival couplets for people.
 - C. Nian beat gongs and drums with people.
 - D. Nian fled into the mountains.

Instruction Plan Three:
Geographical Features of Taiwan

Level: Elementary EFL 3rd grade

English Level: Early production

Time Frame: 40 minutes

Content Objective:

1. To recognize basic topographical features of Taiwan

Language Objective:

2. To orally describe basic topographical features of Taiwan

Learning Objective:

3. To use a graphic organizer (a concept chart) for understanding of content

Materials:

- Poster 3-1 (A map of Asia)
- Poster 3-2 (A topographic chart of Taiwan)
- Work Sheet 3-3
- Assessment Sheet 3-4

Warm-up: The instructor displays Poster 3-1 (a map of Asia) on the whiteboard, and asks students to point out where Taiwan is.

Task Chain I: To recognize basic topographical features of Taiwan

1. The instructor shows Poster 3-2 (A topographic chart of Taiwan).
2. The instructor points out the compass on the map (Poster 3-2) and illustrates its function.
3. The instructor points out different colors referring to different altitudes.

Task Chain II: To use a graphic organizer (a concept chart) for understanding of content

1. The instructor gives students Work Sheet 3-3, and helps students to finish it.
2. Students complete Assessment Sheet 3-4.

Task Chain III: To orally describe basic topographical features of Taiwan

1. The instructor writes several simple sentences with the beginning of "there are."
There are many plains in the West of Taiwan.
There are many mountains in central Taiwan.
There are little plains in the East of Taiwan.
There are some hills in the North of Taiwan.
2. The instructor explains how to make sentences with "There are _____ in _____ of Taiwan."
3. Students orally describes basic topographic features by using "There are" sentences.

Final Assessment:

Formative assessment:

During warm up:

Students will correctly point out where Taiwan is on a map of Asia.

During Task Chain I:

1. The students will identify the function of the compass on the map correctly.
2. The students will identify that different colors refer to different altitudes on the map.

During Task Chain II:

1. The students will finish Work Sheet 3-4 appropriately.

During Task Chain III:

1. The students will orally describe basic topographic features of Taiwan by using "there are" sentences correctly.

Summative Assessment:

1. The students can answer Assessment Sheet 3-5 correctly.

Scores	Representative
90-100	Excellent
80	Good job
70	Needs improvement
60	Study harder

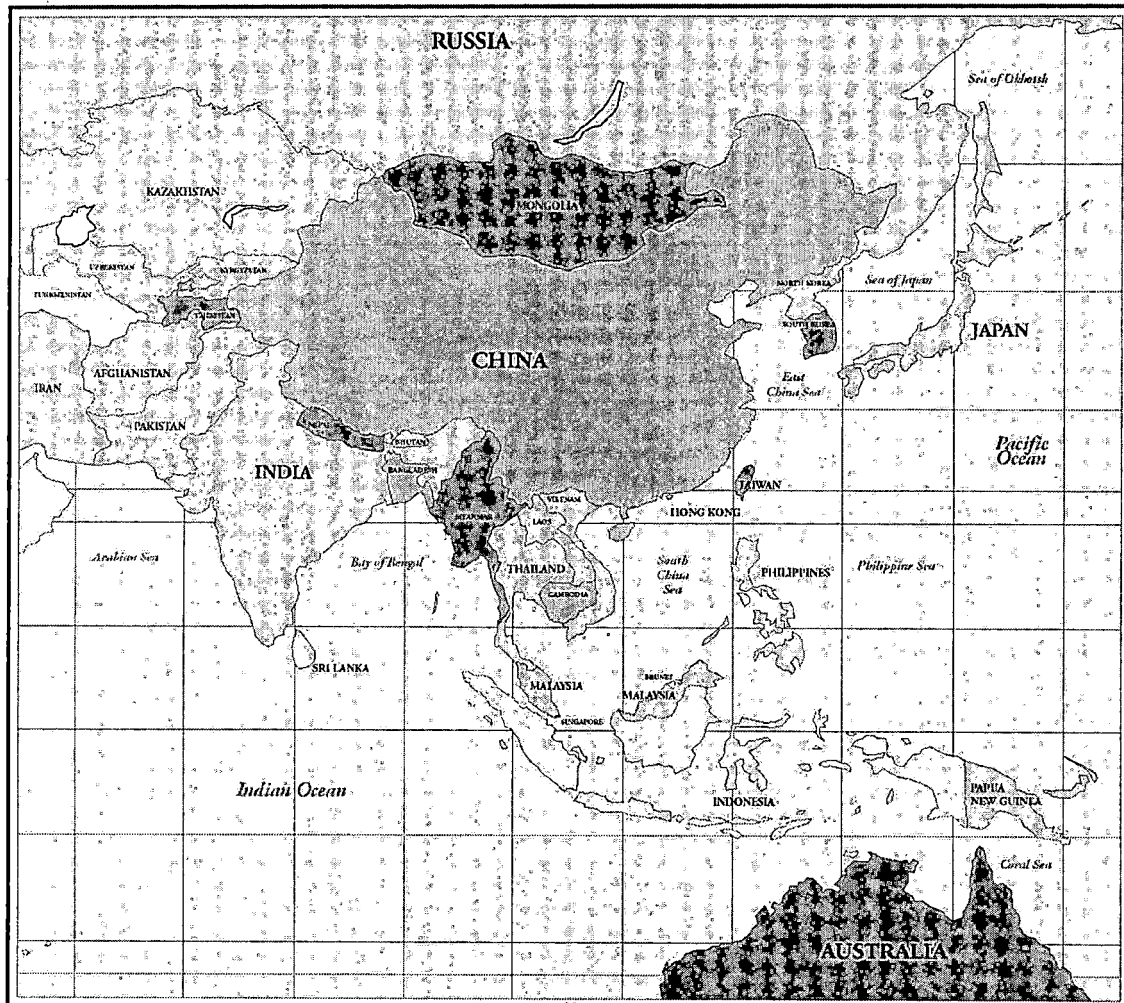
Poster 3-1
Where Is Taiwan?

Taiwan is an island of 36,000 km². Taiwan lies north of the Philippines and south of Japan.

Can you find out where the Philippines is?

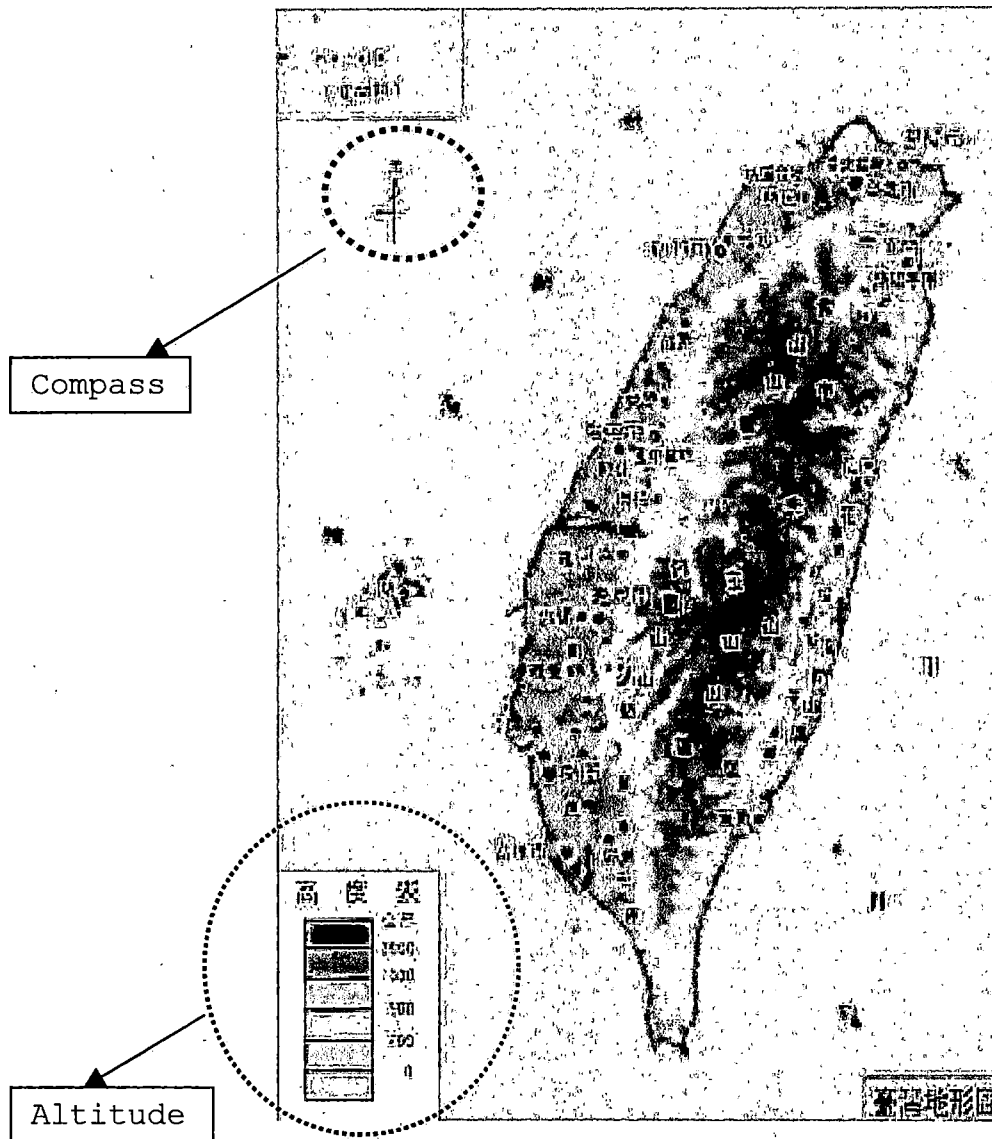
Can you find out where Japan is?

EAST ASIA



Produced by the Cartographic Research Lab
University of Alabama

Poster 3-2
A Topographic Chart of Taiwan



Color	Landforms	Elevation (Meter)
	Mountain	Over 1500
Yellow	Hill	100-1500
	Plain	0-100
Blue	Ocean	Below 0

Work Sheet 3-3
A Concept Chart

Name:

According to Poster 1-2, please fill in following blanks by using plains, mountains, and hills.

<u>Taiwan</u>	<u>Basic Topographic Features</u>
The North	
The West	
The Central	
The East	
The South	

Assessment Sheet 3-4

Name: _____

Please circle the right answer.

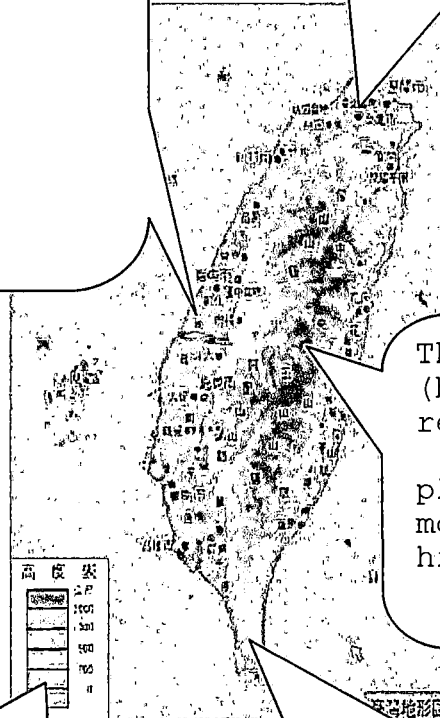
Each question is 25 points.

This is the _____
of Taiwan.

North
West
East
South
central

This is the _____
of Taiwan.

North West East
South central



This color
(brown)
represents ____.

plains
mountains
hills

This color (green)
represents ____.

plains
mountains
hills

This is the _____
of Taiwan.

North central
West South
East

Instruction Plan Four:
Introducing Myself in English and Chinese

Level: Elementary EFL 3rd grade

English Level: Early-production

Time Frame: 40 minutes

Content Objective:

1. To take notes when listening to people's speech

Language Objective:

2. To present an introduction of self in English

Learning Objective:

3. To create a comparison chart for English and Chinese in making an introduction of self

Materials:

A video which records five American children's self introduction

Work Sheet 4-1

Work Sheet 4-2

Work Sheet 4-3

Work Sheet 4-4

Assessment Sheet 4-5

Task Chain I: To take notes when listening to people's speech

1. The instructor invites five volunteers to make an introduction of themselves in Chinese, and asks other students to take notes on Work Sheet 4-1.
2. The instructor asks students to find out the common points in the volunteers' speech and circle them on Work Sheet 4-1.
3. The instructor asks students to present their findings.
4. The instructor plays a video which records five American children's introductions of themselves, and asks students to take notes.
5. The instructor asks students to circle the common points in American children's speech on Work Sheet 4-2.
6. The instructor asks students to present their findings.

Task Chain II: To create a comparison chart for English and Chinese in making an introduction of themselves

1. The instructor asks students to compare Work Sheet 1-1 with Work Sheet 4-2.
2. The instructor asks students to express their findings.
3. Students finish Work Sheet 4-3.

Task Chain III: To present an introduction of myself in English

1. The instructor gives students Work Sheet 4-4.
2. The instructor teaches students how to make an effective presentation by using the rubric of Assessment Sheet 4-5.
3. Students present introductions of themselves in English by using Work Sheet 4-4.

Final Assessment:

Formative assessment:

During Task Chain I:

1. The students will take notes on Work Sheet 4-1 and Work Sheet 4-2 appropriately.
2. The students will circle the common points on Work Sheet 4-2 appropriately.
3. The students will circle the common points of American children's speech on Work Sheet 4-2 appropriately.
4. The students will express their findings clearly.

During Task Chain II:

1. The students will present their findings clearly.
2. The students will finish Work Sheet 4-3 correctly.

During Task Chain III:

1. The students will finish Work Sheet 4-4 appropriately.

Summative Assessment:

1. The students can present a self instruction in English appropriately.

Scores	Representative
90-100	Excellent
80	Good job
70	Needs improvement
60	Study harder

Work Sheet 4-1
Take Notes in Chinese

Name :

The first child	The second child	The third child	The fourth child	The fifth child

Work Sheet 4-2
Take Notes in English

Name:

The first child	The second child	The third child	The fourth child	The fifth child

Work Sheet 4-3
Comparison of Chinese and English
in Introducing Oneself

Name: _____

<u>The Common Points of Chinese Self Introduction</u>	<u>The Common Points of English Self Introduction</u>

Work Sheet 4-4
My Self Introduction

Name: _____

My name is _____.

I am _____ years old.

I live in _____.

My hobby is _____.

My favorite food is _____.

I like _____.

I don't like _____.

My best friend is _____.

or

My best friends are _____ and _____.

or

My best friends are _____, _____, and _____.

Assessment Sheet 4-5
Teacher Assessment Rubric

Name:

During students' self introduction,

Nonverbal Skills		Score
Eye contact	10 points	
Facial expression	10 points	
Gesture	10 points	
Posture	10 points	
Vocal Skills		
Pronunciation	20 points	
Vocalized pauses (uh, well uh, um)	10 points	
Content		
Includes at least three autobiographical details such as name, age, and etc.	30 points	
Total score:		

Comment:

Instruction Plan Five Bilingual and Bicultural

Level: Elementary EFL 3rd grade

English Level: Early production

Time Frame: 40 minutes

Background: Students recognize features of Taiwanese culture through Lesson One: Be a Culture Ambassador.

Learning Objective:

1. To use a K-W-L chart to access understanding of the content

Content Objective:

2. To identify the concept of bilingual/bicultural

Language Objective:

3. To orally present personal learning process based on personal K-W-L chart

Materials:

- Work Sheet 5-1
- Assessment Sheet 5-2

Warm-up:

1. The instructor asks students to recall features of Taiwanese culture instructed in Lesson One.
2. The instructor tells students that the prerequisite of being a cultural ambassador is being bilingual.

Task Chain I: To use a K-W-L chart to access understanding of the content

1. The instructor explains the function of a K-W-L chart on Work Sheet 5-1.
2. Students work in groups to discuss what they know about being bilingual (English/Mandarin) and bicultural (Taiwanese culture/American culture).
3. The instructor suggests students to consider the benefits and drawbacks of being bilingual/bicultural, and asks students to write their ideas on Work Sheet 5-1.
4. Each group presents their ideas successively.

Task Chain II: To identify the concept of
bilingual/bicultural

1. The instructor asks students to think about what they want to know about being bilingual/bicultural.
2. Each group discusses the issue and writes down their ideas on Work Sheet 5-1.
3. Each group presents their ideas.
4. The instructor illustrates the concept of being bilingual/bicultural based on students' questions.

Task Chain III: To orally present personal learning
process based on personal K-W-L chart

1. The instructor asks students to discuss what they have learned about being bilingual/bicultural and write these ideas on Work Sheet 5-1.
2. The instructor students to self-examine their learning process based on Work Sheet 5-1.
3. Students present their learning process about the concept of being bilingual/bicultural.

Final Assessment:

Formative assessment:

During warm up:

Students will express their ideas clearly.

During Task Chain I:

1. The students participate in discussion seriously.
2. The students will present their ideas appropriately.
3. The students will write down their ideas on Work Sheet 5-1 appropriately.

During Task Chain II:

1. The students participate in discussion seriously.
2. The students will present their ideas appropriately.
3. The students will write down their ideas on Work Sheet 5-1 appropriately.

During Task Chain III:

1. The students participate in discuss seriously.

2. The students will finish Work Sheet 5-1 appropriately.

Summative Assessment:

1. The students can present their learning process appropriately.

Scores	Representative
90-100	Excellent
80	Good job
70	Needs improvement
60	Study harder

Work Sheet 5-1
The K-W-L Chart

Name: _____ Date: _____

What we know	What we want to know	What we have learned

Assessment Sheet 5-2
Teacher Assessment Rubric

Name:

Nonverbal Skills		Score
Eye contact	5 points	
Facial expression	5 points	
Gesture	5 points	
Posture	5 points	
Vocal Skills		
Pronunciation	10 points	
Vocalized pauses (uh, well uh, um)	10 points	
Content		
Includes three subjects: what they know, what they want to know, and what they have learned	60 points	
Total score:		

Comment:

REFERENCES

- Anderson, R. T. (1998) Examining language loss in bilingual children. The Multicultural Electronic Journal of Communication Disorders, 1(1).
- Argyri, E. (2003). Crosslinguistic influence in bilingual first language acquisition. Paper presented at the postgraduate conference, May 28, Edinburgh University.
- Balderrama, M. V., & Díaz-Rico, L. T. (in press). Teaching performance expectations for educating English learners. Boston: Allyn & Bacon.
- Benson, C. (2002). Transfer/cross-linguistic influence. ELT Journal, 56(1), 68-70.
- Berman, P., Chambers, J., Gandara, P., McLaughlin, B., Minicucci, C., Nelson, B., Olsen, L., & Parrish, T. (1992). Meeting the challenge of language diversity: An evaluation of programs for pupils with limited proficiency in English. Berkeley, CA: BW Associates.
- Bloom, A. (1981). The linguistic shaping of thought: A study in the impact of language and thinking in China and the west. Hillsdale, NJ: Erlbaum.
- Bournot-Trites, M., & Tillowitz, U. (2002). Report of current research on the effects of second language learning on first language literacy skills, (pp. 1-31). Halifax, NS: The Atlantic Provinces Educational Foundation.
- Buckwalter, J. K., & Gloria-Lo, Y. H. (2002). Emergent biliteracy in Chinese and English. Journal of Second Language Writing, 11(4), 269-293.
- Cheng, N. L. (1997). Biliteracy in Singapore: A survey of the written proficiency in English and Chinese of secondary school pupils. Hong Kong Journal of Applied Linguistics, 2(1), 115-128.
- Chiung, W. V. T. (2001). Digraphia with and without biliteracy: A case study of Taiwan. Paper presented at the graduate student conference on East Asia, February 10, Columbia University, New York.

- Chung, H. M. (2003). A study of the English competence and Chinese-character reading of elementary grades in Pingtung. Unpublished master's project, National Chengchi University.
- Cline, Z., & Necochea, J. (1995). 2000 Biliteracy. Thrust for Educational Leadership, 24 (4), 36-39.
- Cohen, A. D. (1974). The Culver City Spanish immersion program: The first two years. Modern Language Journal, 58 (3), 95-103.
- Cook, V. (2003). Introduction: The changing L1 in the L2 user's mind. In V. Cook (Ed.), Effects of the second language on the first (pp. 1-18). New York: Multilingual Matters.
- Cummins, J. (1999). Biliteracy, empowerment, and transformative pedagogy. In J. V. Tinajero & R. A. DeVillar (Eds.), The power of two languages: 2000 (pp. 9-19). New York: McGraw-Hill.
- Dechert, H. W., & Raupach, M. (1988). Transfer in language production: An introduction. In H. W. Dechert, & M. Raupach (Eds.), Transfer in language production (pp. ix-xvii). Norwood, NJ: Ablex.
- Diaz-Rico, L. T. (2004). Teaching English learners: Strategies and methods. Boston: Allyn & Bacon.
- Diaz-Rico, L., & Weed, K. (2002). The crosscultural, language, and academic development handbook. Boston: Allyn & Bacon.
- Dressler, W. U. (1991). The sociolinguistic and patholinguistic attrition of Breton phonology, morphology, and morphophonology. In H. W. Seliger & R. M. Vago (Eds.), First language attrition. Boston, MA: Cambridge University Press.
- Dworin, J. E. (1998). Biliteracy development: Perspectives from research in children's reading and writing. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA (ERIC Document Reproduction Service No. ED420845).
- Feinberg, R. C. (2002). Bilingual education: A reference handbook. Santa Barbara, CA: ABC-CLIO.

- Ferreiro, E. (1996). The acquisition of cultural objects: The case of written language. Prospects, 26 (1), 131-140.
- Fogarty, R., Perkins, D., & Barell, J. (1992). The mindful school: How to teach for transfer. Palatine, IL: Skylight Press.
- Gass, S., & Selinker, L. (2001). Second language acquisition (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Gass, S., & Selinker, L. (Eds.). (1983). Language transfer in language learning. Rowley, MA: Newbury House.
- Genesee, F. (1984). Historical and theoretical foundations of immersion education. In Studies on immersion education: A collection for U.S. educators (pp. 32-57). Sacramento, CA: California Department of Education.
- Genesee, F. (1987). Learning through two languages: Studies of immersion and bilingual education. Cambridge, MA: Newbury.
- Genesee, F. (Ed.). (1999). Program alternatives for linguistically diverse students. (Educational Practice Report 1). University of California, Santa Cruz: Center for Research on Education, Diversity & Excellence.
- Grimes, B. (1996). Ethnologue: Languages of the world (12th edition). Dallas: Summer Institute of Linguistics.
- Grosjean, F. (2001). The bilingual's language modes. In J. Nicol (Eds.), One mind, two languages (pp. 1-22). Oxford: Blackwell.
- Hakuta, K., & D'Andrea, D. (1992). Some properties of bilingual maintenance and loss in Mexican background high-school students. Applied Linguistics, 13, 72-99.
- Hunter, M. (1982). Teach for transfer. El Segundo, CA: TIP Publications.

- Jhang, S. W. (2004). 大人拼經濟,小孩拼英語——哈死了的雙語教育. [Adults struggle for economy, and children struggle for learning English-Coveted bilingual education]. 新使者雜誌 [New Messenger Magazine], 84. Retrieved March 6, 2005, from <http://www.pct.org.tw/newmsg/84-3.htm>
- Kellerman, E., & Sharwood Smith, M. (1986). Crosslinguistic influence in second language acquisition: An introduction. In E. Kellerman & M. Sharwood Smith (Eds.), Crosslinguistic influence in second language acquisition (pp. 1-9). New York: Pergamon.
- Kenner, C. (2003). Biliteracy benefits. Literacy Today, (37), 21.
- Krashen, S. (1981). Bilingual education and second language acquisition theory. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework (pp. 51-79). Los Angeles: Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.
- Krashen, S. (1985). The input hypothesis: Issues and implications. New York: Longman.
- Kuo, H. F. (2001). 高屏地區國小三年級學童作文受閩南語影響之研究. [The influences of mother tongue Taiwanese to the vocabulary, grammar, and structure in writing in Mandarin for the third grade pupils in the Kaohsiung and Pingtung areas]. Unpublished master's project, National Pingtung Teachers College.
- Lado, R. (1957). Linguistics across culture. Ann Arbor: University of Pennsylvania Press.
- Lambert, W. E. (1984). An overview of issues in immersion education. In Studies on immersion education: A collection for U.S. educators (pp. 8-30). Sacramento, CA: California Department of Education.
- Lambert, W. E., & Tucker, R. G. (1972). Bilingual education of children: The St. Lambert experiment. Rowley, MA: Newbury.

- Lee, P. F. (2001). Chinese bilingual children's word definition skill. Unpublished master's project, National Taiwan University.
- Lenneberg, E. (1967). Biological foundations of language. New York: Wiley.
- Lessow-Hurley, J. (2005). The foundations of dual language instruction (4th ed.). New York: Pearson.
- Lin, J. J. (2004). 英語焦慮症蔓延全台灣. [The anxiety of learning English pervades in Taiwan]. 天下雜誌 [Common Wealth Magazine], 311. Retrieved March 3, 2005, from <http://www.cw.com.tw/Files/article/frontend/Sub.asp?page=4&SubjectId=1004>
- Lipton, G. C. (1988). Practical handbook to elementary foreign language programs: Including FLES, FLEX, and immersion programs. Lincolnwood, IL: National Textbook Company.
- Marsh, H. W. (2000). Late immersion and language of instruction in Hong Kong high schools: Achievement growth in language and nonlanguage subjects. Harvard Educational Review, 70(3), 303-346.
- Met, M. (1987). Twenty questions: The most commonly asked questions about starting a foreign language immersion program. Foreign Language Annals, 20(4), 311-315.
- Moll, L. C., Saez, R., & Dworin, J. (2001). Exploring biliteracy: Two student case examples of writing as a social practice. Elementary School Journal, 101(4), 435-449.
- Odlin, T. (1989). Language transfer: Cross-linguistic influence in language learning. Cambridge: Cambridge University Press.
- Oxford, R. L. (1982). Research on language loss: A review with implications for foreign language teaching. Modern Language Journal, 66, 160-169.
- Penfield, W., & Roberts, L. (1959). Speech and brain mechanisms. New York: Atheneum Press.

- Perez, B., & Torres-Guzman, M. E. (1992). Learning in two worlds: An integrated Spanish/English biliteracy approach. New York: Longman.
- Poole, D. (1992) Language socialization in the second language classroom. Language Learning, 42(4), 594.
- Richards, J., Talbot Platt, J., & Platt, H. (1992). Dictionary of language teaching & applied linguistics (2nd ed.). Essex: Longman Group UK Limited.
- Ringbom, H. (1987). The role of the first language in foreign language learning. Clevedon, England: Multilingual Matters.
- Schachter, J. (1974). An error in error analysis. Language Learning, 24, 205-214.
- Schacter, J., & Hart, B. (1979). An analysis of learner production of English structures. Georgetown University Papers on Languages and Linguistics, 15, 18-75.
- Seliger, H. (1988). Semantic transfer constraints on the production of English passive by Hebrew-English bilinguals. In H. Dechert, & M. Raupach (Eds.), Transfer in language production (pp. 21-33). Norwood, NJ: Ablex.
- Selinker, L. (1992). Rediscovering interlanguage. London: Longman.
- Snow, C. R. (1992). Concurrent programming. Cambridge: Cambridge University Press.
- Snow, M. A. (1990). Language immersion: An overview and comparison. In A. M. Padilla, H. H. Fairchild, & C. M. Valadez (Eds.), Foreign language education: Issues and strategies (pp. 109-126). London: Sage.
- Swain, M. (1984). A review of immersion education in Canada: Research and evaluation studies. In Studies on immersion education: A collection for U.S. educators (pp. 87-112). Sacramento, CA: California Department of Education.

Swain, M., & Lapkin, S. (1982). Evaluating bilingual education: A Canadian case study. Clevedon, England: Multilingual Matters. *

Taiwan Ministry of Education. (2004). 九年一貫課程綱要總綱. [Grade 1-9 Curriculum Guidelines]. Taipei, Taiwan: Author.

Taylor, B. (1975). The use of overgeneralization and transfer learning strategies by elementary and intermediate students of ESL. Language Learning, 25, 73-107.

Thomas, W., & Collier, V. (1997). School effectiveness for language minority students. Washington, DC: National Clearinghouse for Bilingual Education. *

Wong-Fillmore, L. (1991). When learning a second language means losing the first. Early Childhood Research Quarterly, 6 (3) 323-47.

Zhang, S. J. (2003). 我的孩子不會說中文. [My child cannot speak in Chinese]. Taipei: Parenting Source Press, Inc.