In recent years, the rate of Chinese immigrants to the United States has been increasing. Chinese parents desire that their Chinese-American children learn Chinese as a second language. The purpose of this study is to examine the effects on four American-born Chinese children when the researcher, as an instructor, employed whole language instruction with predictable materials in teaching Chinese as a second language. The teaching tenets and strategies were based on the principles of the whole language approach: child-centered curriculum; the integrity of listening, reading, writing, and speaking; a whole-to-part process; and the interaction of language activities both socially and personally. Three types of data were collected: (1) classroom observation by means of the observer's field notes and after-class notes of children's behaviors; (2) interviews with the children; and (3) content analysis of children's written work during the study period. Results show that predictable materials and a whole language approach can be effective in teaching bilingual children to read, write, speak, and listen in their second language, Chinese. (Contains 29 references.) (Author/SM)
How the Whole Language Approach Using Predictable Strategies Motivates Bilingual Children Learning to Read and Write Chinese as a Second Language

Abstract

In recent years, the rate of Chinese immigration to the United States has been increasing. Chinese parents desire that their Chinese-American children learn Chinese as a second language. The purpose of this study is to examine the effects on four American-born Chinese children when the researcher, as an instructor, employed whole language instruction with predictable materials in teaching a Chinese-as-a-Second-Language. The teaching tenets and strategies were based on the principles of the whole language approach: child-centered curriculum; the integrity of listening, reading, writing and speaking; a whole-to-part process; and the interaction of language activities both socially and personally. Three types of data were collected: (1) classroom observation by means of the observer's field notes and after-class notes of children's behaviors; (2) interviews with the children; and (3) the content analysis of children's written work during the period of the study. The result shows that predictable materials and a whole language approach can be effective in teaching bilingual children to read, write, speak, and listen in their second language, Chinese.
Introduction

In recent years, the rate of Chinese immigration to the United States has been increasing. Many Chinese immigrant parents living in America hope that their American-born Chinese children will learn to speak, read, and write Chinese as a second language and become familiar with Chinese language, culture and customs. There is a growing number of private Chinese schools throughout the United States which aims to satisfy these desires. We need to explore what kinds of effective language instructional models are available to help these bilingual children to learn their second language, Chinese.

Part one of the study introduces the traditional methods of teaching Chinese and the Chinese orthography system. Part two discusses research on how the Chinese language is compatible with whole language strategies. Part three provides an overview of the whole language instruction. Part four presents the application of the whole language approach with predictable materials by the researcher in the model class. The core of teaching strategies and examples of lesson plans are provided. Part five discusses the results of this study.

The Chinese orthography System

Chinese researchers, Hudson-Ross and Dong (1990), and Tao and Zuo (1997), and Ho and Bryant (1997) describe in their studies how the Chinese written language differs from English. They state, that unlike the English written language -- an alphabetic system, the Chinese language is a logographic system wherein a symbol or sign is used to
represent an entire word. Chang and Watson (1988) also explain that the Chinese written language is semantically, not phonologically, based:

In the Chinese language, each separate character has its own meaning, which can stand for one or more English words. When several characters are put together, the result is a new meaning that may be different from the meanings of the individual characters, so Chinese has a semantically based orthography (p.38).

They use the example below to explain how the written form of the Chinese language is semantic, not phonological. In Chinese the word “library” consists of three characters:

Library = picture + book + hall

Thus, beginning readers are unable to sound out a Chinese word by looking at the strokes used in writing the character. The sounds of Chinese words are not easily predicted from the pictograph while the sounds of English words can be predicted from alphabetic letters (Chang & Watson, 1988).

In addition, Chinese is a tonal language. The basic speech unit in Chinese is the syllable with different tones producing different meanings (Ho & Byrant, 1997). For example, the Mandarin syllable [ma] “an address to mother” when used with the high level tone (the 1st tone), “numb” when used with high rising tone (the 2nd tone), means “a horse” when used with mid tone (3rd tone), “scold” when used with low tone (the 4th tone), and “an interrogative particle used at the end of the question” when used with the neutral tone. Ho and Byrant (1997) explain that the number of tones in the Chinese language varies from one dialect to another. For example, there are four tones in Putonghua, five tones in Mandarin, and nine tones in Cantonese. The tones are represented on PinYin (an
alphabetic phonetic system used in Mainland China) and Zhu-Yin-Fu-Hao (a nonalphabetic phonetic system used in Taiwan), but not on Chinese character.

The Traditional Methods of Teaching Chinese

Because of the Chinese orthographic system, the most common approach to teach Chinese to reading and writing in the United States and Taiwan has been to employ the traditional instructional methods used in Chinese schooling. Cheng and Watson (1988) and Tao and Zuo (1997) demonstrate that traditional methods of teaching Chinese reading stress word decoding, phonetic identification, and grammar drills. Children are instructed to read by identifying the shape of Chinese characters. They are taught to “focus on recognizing characters and remembering sounds rather than on reading for meaning” (Chang & Watson, 1988, p. 37). After mastering this procedure, they then move on to phrases, sentences, and whole texts.

Most school educators in Taiwan insist that the traditional instruction of reading skills as a part-to-whole process is the most effective means for teaching students to become both proficient and eager readers (Chen, 1995). I interviewed several elementary school teachers in Tainan, Taiwan about their teaching beliefs, reading instruction methods, and classroom practices. The majority of these teachers believed that the more Chinese characters and idioms children can memorize, the better their ability to read.

According to my interviews, lesson plans used by teachers in most Taiwanese elementary reading classrooms employ the following format:

1. Introduction: Review the prior lesson and tell the children the topics of the lesson.
2. Definition of new words: Discuss each of the new words and their meaning; identify the roots and radials of each word; sound each word out.

3. Definition of new phrases: Discuss phrases related to each of the new words.

4. Have the children read the lesson individually or together.

5. Class discussion: add children's suggestions for additional words and phrases on the chalkboard; explain the grammatical structure of all the whole sentences in each paragraph; discuss the gist of each paragraph; and allow students to express their personal opinions and experiences in relation to the lesson.

6. Review of target words and other unfamiliar words: Discuss each of the words using some of the following techniques; synonyms, antonyms, sentences, and comparisons.

These traditional reading procedures show that the learning of language is considered as a part-to-whole process, focusing on word identity, grammar drills, and then constructing the text. Students are encouraged to memorize a large number of individual words and idioms in order to comprehend the meaning of what they are reading through their own competence.

However, the traditional method of teaching Chinese has raised a question as to whether beginning learners both in the United States and Taiwan have to learn to read and write Chinese only through rote memory of each Chinese word. As Gough, Judel, and Griffin (1992) have demonstrated, there are two problems faced by the learners who want to learn Chinese as a foreign language. The first is a memory problem. When more words are learned, children come to a point where it becomes difficult to differentiate and memorize a large number of visually similar words. The second problem is the inability
to read new words. Each new word is a new visual configuration for the logographic reader that has to be learned independently. These statements lead one to question whether the teacher could help students learn to read Chinese using in different methods instead of the traditional way of teaching.

Why Whole Language is Important?

Based on the sociopsycholinguistic perspectives, Goodman et al (1979) asserts that the basic concept of language instruction does not change across cultures. “Learning to read and reading occur in the same way across cultures, and the underlying learning process is the same for all people” (cited in Chang & Watson, 1988, p.36). Although the whole language and predictable strategies have been used successfully by educators and teachers in English instruction, it still leads to a question of whether the whole language can be applied effectively to help students learn to read and write Chinese whose linguistics and orthography are different from English?

Although whole language educators stress that the whole language approach can be beneficial for second language learning, few studies have investigated its effectiveness in teaching Chinese as a second language. Only Chang and Watson (1988) provide an example of using prediction strategies and predictable materials to teach bilingual children to learn to read Chinese. They indicate that bilingual children learn to read Chinese through the use of predictable strategies and materials, even though “Chinese linguistic and orthographic systems” are much different than those of English (see Chang & Watson, 1989, p. 36). They found that, like those beginners learning to read in English, children “perform the same cognitive activities including predicting, confirming, and
integrating information in order to construct meaning in Chinese from Chinese texts” (Chang & Watson, 1988, p. 43). Particularly, predictable materials with repeated language patterns and rhyme encourage children to construct the complete text by the use of semantic (meaning) cueing systems rather than the graphophonemic (symbol-sound) cueing system (Chang & Watson, 1988). Chang and Watson conclude that although children cannot predict from the shapes of written symbols, as with the English alphabet, prediction of meaning from a text is possible in Chinese, just as it is in English.

The study of Chang and Watson that bilingual children’s Chinese reading comprehension can be improved through the use of the prediction strategies and materials was pursued for the research project presented here. However, their analysis specifically studies the improvement of children’s reading’s comprehension, but rarely discusses how their early writing and reading behaviors and attitudes have changed over time. It did not provide information about students’ perception of the task. Thus, the author was inspired to conduct a project that applied the whole language approach employing predictable materials in her class of teaching Chinese as a second language.

The Purpose of The Study

The purpose of the study was to examine how the predictable materials employed by the whole language can assist students learning to read and write Chinese. It also examined how bilingual children’s early L2 reading and writing behavior and attitudes have changed. Given these purposes, there were four research questions for the investigation:
1. How do the children's reading and writing behaviors change over time?
2. In which ways do their L1 (English) and L2 (Chinese) language experiences influence them to learn Chinese as a second language?
3. Do children increase their interest and motivation in learning Chinese?
4. How do their writing performances change over time?

**What is Whole Language?**

The definition of whole language in this study is drawn from current scholarly literature (e.g., Freeman, 1988; Goodman, 1986; Watson, 1989; Waver, 1990; Edelsky, Altwerger & Flores, 1991; Stahl, 1999) to set up the teaching tents and strategies for this research project. The characteristics of whole language are introduced as followings:

**Learner-centered curriculum**

In a holistic reading program, the whole process of language study is learner-centered, "empowering children to direct their own learning" (See Stahl, 1999, p. 18). Instruction should occur not when the teacher or curriculum developer plans it, but in response to students' needs as they are attempting to use language for communication (Stahl, 1999). Goodman (1986) indicates that in whole language classrooms, language development is empowering. The learners "control" the language learning process, make the decisions about when to use it, and determine their goals.

Freeman (1988) suggests that the learner's needs and interests be considered first. Materials are centered around topics that are familiar to the learners and build upon their background knowledge and interests. Teachers should encourage students to engage actively in the learning task, not merely to go through the paces of completing
assignments. Waver (1990) also points out, “the teacher should best facilitate learning by providing learning opportunities in which children choose to engage and invest themselves” (p. 10). Teachers should create learning climates in which students can take risks without fear of “failure” (Waver, 1990).

**Social interaction and conversation in language activities**

In the whole language classroom, learning is often fostered through social interaction. The teacher should encourage students to discuss, share ideas, and work together to solve problems. Students are also allowed to move around the classroom to assist classmates (Freeman, 1988; Waver, 1990). Strickland (1969) has demonstrated that social contact and experiences “enlarge children’s opportunity for language development and increase their motivation for learning. Group discussion makes it possible for children to respond freely in their own way and may draw even a timid child into the circle of participation” (p. 190).

**Four language modes**

The processes of reading, writing, speaking, and listening are interrelated and interdependent. It is impossible to separate out one language process from the teaching task (Freeman, 1988; Goodman, 1989). Whole language instruction integrates the teaching of listening, speaking, reading, and writing in a meaningful context, based on students’ strengths, background knowledge, and experience (Acuna-Reyes, 1993). Students construct the meaning of the text through reading, writing, listening and speaking (Watson, 1989). When children engage in the complex processes of reading, writing, discussing, and thinking, they simultaneously develop language and literacy, and learn about and through these processes (Waver, 1990).
Whole-to-part

Traditional reading instruction is often part-to-whole: the teacher first teaches sounds and letters before progressing to words. Whole language instruction moves in the opposite direction, from meaningful wholes to parts— for example, from enjoying a repetitive and predictable story, song, or poem to gaining increasing control over the words and letter-sound associations (Waver, 1990, p. 109). Smith (1978) demonstrates that, in a whole language reading program, students learn language based on constructing the meaning of the whole context rather than word-identification skills and the practice of grammar:

Learning to read does not require the memorization of letter names, or phonic rules, or large lists of words, all of which are in fact taken care of in the course of learning to read and little of which will make sense to a child without some experiences and drills, which can only distract and perhaps even discourage a child from the business of learning to read (p.178)

Harste, Burke, and Woodward (1983) also state that an overemphasis on skill instruction impedes the natural literacy development process. An instructional emphasis on letters and sounds does not permit children to experience literacy in use, richly embedded within a real functioning environment. Once this kind of formal literacy instruction begins, children begin to rely on graphophonemic knowledge and ignore the semantic and syntactic general knowledge.

Smith (1971) indicates that, because language is comprised of these interdependent systems working together simultaneously, it is predictable. Predictability depends on the flexible use of the readers’ different cueing systems of language—graphophonemic, syntactic, and semantic cues as well as their relevant knowledge,
experiences, and interests. Moreover, Bridge (1979) and Rhodes (1979) recommend that prediction is essential in helping the reader comprehend the text. The use of prediction instruction and predictable reading materials can help children gain meaning from the print more easily.

Application in a Model Class

The following presents the setting, the teaching tenets, reading materials, activities and an example of lesson plans the researcher used in the research project.

Setting

The class used in the study was comprised of four Chinese-American children between the ages of three and twelve. The students were enrolled in the program of a private Chinese school which is sponsored by Chinese-immigrant parents. Its purpose is to help American-born Chinese children learn Chinese as a second language while exposing them to their mother culture and customs. Special materials are prepared and sent from Taiwan, free of charge, to overseas Chinese language schools. Most of these reading materials are the textbooks most teachers use in Taiwan.

Each Chinese session is held once a week and is two hours long. There are two classes in the Bloomington Chinese school: the basic class and the advanced class. The basic class is for beginning learners, ages 3 to 12. Those who have had little experience of learning Chinese or have been studying only one to three years attend this class. The advanced class is for proficient learners, from elementary to secondary school level, who have been studying Chinese for more than four years. Most of them have gone back to Taiwan and stayed with their grandparents to study Chinese during the summer.
Teaching Tenets

There are seven tenets the researcher employed in this project:

(1) Language learning requires risk-taking, error and experimentation (Newman & Church, 1990). Scribbling, reversed and invented letters, creative Chinese characters, and reading and writing miscues are positive indications of growth toward control of the language process” (Goodman, 1986).

(2) The lessons are learning-centered. Reading materials are related to students’ interests and knowledge (Freeman, 1988).

(3) Language is learned from whole to part. Rather than beginning with syllables or even isolated words, children are introduced to whole texts that are read to them; they read with, and to, the teacher and each other (Weaver, 1990).

(4) Language learning employs the four modes of language -- listening, speaking, reading, and writing.

(5) Children work together, interacting socially and personally (Freeman, 1988).

(6) Language learning involves constructing meaning and relating new information based on prior knowledge (Newman & Church, 1990).

(7) Children are encouraged to relate their Chinese predictable stories with the classroom activities, either by speaking, drawing, or writing (Chang & Watson, 1989).

The core of these seven tenets is the understanding that language literacy is best developed when language (oral or written) is not fragmented, but kept whole.
Reading Materials

The researcher provided the children with predictable reading materials. Two groups of reading materials were selected. The first groups were excerpts from Taiwanese reading textbooks consisting of simple stories with repeated language patterns. The topics of the stories are Chinese holidays and culture. These reading materials are selected according to the concerns of parents and the principal who wanted the children to become familiar with Chinese culture and values. Two stories were chosen which were recommended by the parents and principal: The Greatest Teacher, Confucius and The Story of the Dragon-Boat Festival.

The second group of reading materials were English picture books Have You Seen My Duckling, Brown Bear, Brown Bear, What Did You See?, and Where is My Spot?. All are translated into Chinese, and Chinese orthography is substituted for English print. The second group was chosen based on students’ interests and experiences. Before the lessons began, the researcher interviewed students to find out what kinds of stories and themes they were interested in reading. The selection of this second type of books was based on the following criteria: (1) Reading content is relevant to the participants’ interests and experiences. Children also feel familiar with the content. (2) The text is predictable, using repeated language patterns. The language is simply and direct, giving the reader a clear picture of the process (Huck, Hepler & Hickman, 1993). (3) The illustrations are consistent with the text (Huck, Hepler & Hickman, 1993). Two teachers with elementary school teaching experience in Taiwan and the United States helped evaluate all the books and made the final selection decision. Then the researcher showed
several selected predictable books to the participating students. They chose three of them for reading in this study.

Activities

There are five lessons in this study with each lesson using one predictable book: The Greatest Teacher in China, Confucius was used in lesson one, The Story of the Dragon-Boat Festival in lesson two, Have You Seen My Duckling in lesson three, Brown Bear, Brown Bear, What Do You See? in lesson four, and Where is My Spot? in lesson five. Each lesson involved three main steps: (1) the reading of predictable book; (2) the introduction of simple Chinese words; and (3) free writing. The following is a description of the teaching strategies and activities that the researcher used at each step:

**Step One: The Reading of Predictable Books**

The researcher encouraged students to determine the meaning of the whole story rather than to identify each word, or to sound it out. Students were allowed to take risks in predicting the text and were encouraged to be brave rather than to worry about making mistakes. To initiate the lesson, the researcher showed students the English and Chinese title of the book and encouraged them to use both language (L1/L2) “talk about their prior experiences and knowledge related to these predictable stories” (Burke & Jurenka, cited in Chang & Watson, 1988, p. 39). The purpose was to allow bilingual children to use their language experience in both English and Chinese to predict the story.

**Step Two: The Introduction of Simple Chinese words**

The researcher introduced one or two simple Chinese words based on the reading materials. Students were encouraged to imitate what the researcher wrote on the blackboard. For example, the teacher introduced the word “老師 (Teacher)” in lesson
one, “日（Moon）” and “月（Sun）” in lesson two, “看见（See）” in lesson three, “你（You）” and “我（I）” in lesson four, and “左（left）,” “右（right）,” “up（上）” and “down（下）” in lesson five. Worksheets (see Figure 1) for their practice were included. Students were allowed to write in their own way. The major goal was to encourage them to make sense of the written Chinese language.

Figure 1

A sample of the worksheet

Step three: Free writing

Students were encouraged to do their own free writing, even if they did not know how to write Chinese characters conventionally. Its purpose was to “provide an opportunity for students to engage in both the writing and reading processes” (Carrasquillo, 1993, p.3). Sometimes, the researcher encouraged children to use invented writing to create a story by themselves. This process helps students develop conventional and creative writing.

Classroom Environment

The teacher allowed students to use both L1 and L2 in the classroom. Students were encouraged to have free talk and discussion, and share their experiences together. The classroom activities were intended to lower anxiety.

The following is a sample of a lesson plan used by the researcher:
Lesson Plan for Chinese Language Learning

Objective: Using interesting predictable materials to integrate the speaking, reading, listening, and writing skills of Chinese language learning.

Materials: Brown Bear, Brown Bear, What Do You See?

Procedure:

1. Introduction: Tell the children the topic of the reading material and encourage them to discuss their personal experiences and knowledge related to this text.

2. Reading Together: Invite children to read and discuss the meaning of the written text together. Encourage them to determine the meaning of the text themselves.

3. The Introduction of One or Two Chinese Characters: Write two Chinese words, “You” and “I” on the blackboard and encourage students to imitate what is written on worksheets provided. Avoid error correction of children’s handwriting.

4. Free Writing: Invite children to do free writing. Encourage their creative and inventive expression. Allow students to move around the classroom to assist classmates or share ideas.

5. Collect children’s written work.

Methodology

Researcher Background

Ya-Chen Su was the researcher of the study. She was born and raised in Taiwan. Two-years of teaching reading classes in a southern Taiwan’s elementary schools helped her realize that the traditional way of teaching Chinese, focused on drills and practice, decreased students’ motivation to learn Chinese.

At the time of the study, she was the first-year instructor at a private Chinese school while she was a graduate student and was taking courses in language education.
from Dr. Burke. The theories of the whole language were used as framework for lesson development. In addition, the researcher’s training in the fields of bilingual education and multicultural education mentioned her to create the project presented here. Dr. Burke also helped her set up this project.

Participants

Four children in the basic class participated in this project. Participating students are referred to using pseudonyms. All of them were born and are being raised in the United States. Their parents all immigrated from Taiwan. At the time of the study, two of the students, “Joe” and “Matt”, were attending kindergarten, “John” was attending elementary school and “Anna” was attending secondary school. They spoke English fluently and were learning to read and write in English. In this class, Anna was the only student having no background in the Chinese language, whereas other three students had attended this Chinese school at least one year. All of them, except Anna, could recognize a few written Chinese words, and their speaking skills were adequate. The participating students from this study are described below.

John, the most proficient of any of the students, had learned to read, write, and speak Chinese. His mother read an easy-to-read Chinese book to him once a month for at least two years and he had to speak Mandarin at home. Observation indicated that he was willing and capable of working on the teacher’s assignments.

Joe was a talkative student in the class. John is his elder brother. Joe can work better when he was paired with his brother. According to interviews, he enjoyed using his drawing to describe his feelings and thoughts.
Matt was a shy and self-affecting person. He spoke so softly that it was difficult to hear what he was trying to say. Matt often gave the impression of being cooperative with teachers’ activities.

Anna had a very difficult time with reading, writing, speaking, and listening Chinese because she had never tried to learn it before. Her Chinese-language proficiency was lower than other students. She expressed frustration with reading, writing, speaking, and listening to Chinese in classes. Unlike the other students, Anna was reluctant initially to get actively involved in the research project. She described reading and writing Chinese as a mission impossible. However, by the end of the project, she had warmed up and was willing to invent Chinese characters and read the children’s books with her peers.

The Procedure of Data Collection

Three types of data were collected: (1) classroom observation; (2) follow-up interviews with the children; and (3) the content analysis of the children’s written work are the course of the study. The purpose of multiple data collection was to provide a deeper understanding of the students’ reading and writing growth in the second language, Chinese.

Classroom observation

Data collection included five qualitative observations of participating students in the classroom environment. Besides the researcher, there was an observer in the classes and his role was as a “participant-as-a-observer” (see Fraenkel & Wallen, 1993, p. 384), which means that he not only participated in the classroom activities but also observed
what was happening in the class, allowing him to develop an insight into the participants and their behaviors.

Each lesson of classroom activities was taped and later transcribed. The observer’s handwritten field notes and after-class teacher’s notes were also used as a means of verifying the data. Children’s behaviors within the classroom were observed according to five primary categories: (1) their responses to reading, hearing, writing, and listening predictable materials employing the whole language strategies; (2) their awareness of the print and books in Chinese; (3) social interaction between the teacher and students and interaction among students; (4) what reading strategies (e.g., language cue systems, background knowledge) they used to construct the meaning of the text; and (5) how reading behaviors and attitudes changed. The observations helped understand the interaction between students and the teacher and their peers during instruction. They also helped understand the change in students’ reading performance over time.

**Interview**

Each informal interview with individual participants was conducted at the end of each lesson. Because all of the participants were familiar with the researcher as an instructor, they felt comfortable expressing their experiences, feelings, ideas and thoughts. Questions for an interviews protocol were based on two information resources, the initial research question and insights gained from early participant observation field notes and after-class teacher notes.

Students were asked to respond to questions, such as the following: What was their prior literacy experience of both L1 (English) and L2 (Chinese)? What L2 learning problems did they face in the past? What do they think about classroom activities,
including reading and free writing activities? How do they feel about writing Chinese in their prior and present experiences? How do the predictable materials and the way the teacher teaches help them comprehend the text? How do they feel about working with peers? The interview data provided information about students’ personal feelings, thoughts, and perceptions of learning Chinese. They also helped the researcher understand how their feelings and thoughts changed over time.

The analysis of written work

The written work of each participating child was collected and examined to determine: (1) how the reading materials affected writing content; (2) written language used in English and Chinese; (3) how each student’s writing performance in Chinese had changed; and (4) whether students conveyed meaning through writing for a variety of purposes. The written data of children helped the researcher understand how their writing performances had changed over time.

Qualitative Analysis of Data

Data was coded and analyzed using qualitative analysis techniques described by Glesne & Peshkin (1992) and Bogdan & Biklen (1992). There are three stages of data analysis. First, all observation notes, interviews, and instructional data was transcribed. Second, all of the data pertaining to each of the participating students was put into a separate file. Third, the preliminary list of coding categories using specific phrases and words was developed while all of the data was read. All of the data was coded by the following primary categories: (1) children’s response to writing and writing activities; (2) children’s Chinese print awareness; (3) children’s integration of L1/L2 language ability and their background knowledge and experiences; (4) the use of L1 and L2 in reading
and writing Chinese; (5) peer interaction and corporation; and (6) children's writing content. Fourth, all of the data was read through once again and coding categories were modified. New categories were developed if the date did not fit in the old coding categories.

Finally, emerging themes were refined by asking two outside readers for their comments and feedback. These outside readers were researchers in the fields of the whole language and teaching English as a foreign language. They have written on issues of the whole language, teaching English as a second language, and working with students from culturally and linguistic diverse background. In addition, after refining the thematic development of the research, the researcher continued to consult the raw data as a check on the fit of the resultant framework and presentation.

These themes were summarized as prepositional statement and used as described headings in the results and discussion sections.

**Results**

The study showed that the use of predictable materials and the employment of whole language strategies led to positive responses by the beginning Chinese learners. Children's written work provided examples of growth in writing Chinese. Four findings emerged in this project:
Finding one: Students' prior knowledge and language experiences help them predict the meaning of the texts.

When reading two excerpts from Taiwan’s textbooks, The Greatest Teacher in China, Confucius and The Story of the Dragon Boat Festival, students could not predict the text very well even thought the sentence structure consisted of repeated language patterns and the text and illustrations matched each other. Because these texts were not culturally relevant, the participants found no cues to predict. They even lost patience while reading. The following example shows the interaction between the researcher and students in reading the excerpt, The Greatest Teacher in China, Confucius:

Researcher: 今天我要介紹中國最偉大的老師，孔子。你們有沒有聽過他？（Today, I am going to introduce the Greatest Teacher in China, Confucius. Have you heard about him?）

Students: 誰？（Who？）【Students looked confused】

Researcher: 他是中國最偉大的老師。他有很多學生。（He was the greatest teacher in China. He has a lot of students）【Students were not listening.】

讓我們先看課文第一個圖片。從圖片中，你們知道看到什麼？（Let’s look at the first illustration. What do you seen from it?）【Students remained silent and looked uncaring. Only John spoken out.】

John: It is weird 那些人穿很奇怪的衣服。（It is weird that these people wore a lot of strange clothes.）
Other three students: 對丫！為什麼？（Right, why?）【The researcher tried to explain that it is Chinese traditional dress. They paid little attention】

Researcher: 你知道這些人在做什麼？Can you tell me what they are doing?

Students: 不知道。（We do not know.）

Researcher: 你們有沒有看到每個人桌上有本書嗎？（Have you seen that each person has a book on the table?）

Joe: 你是說他們是 students。（You mean that they are students.）

Researcher: 對丫！他們是學生。他們在做什麼？（Right! They are students. What are they doing?）【Students looked confused and remained silent. The researcher tried to explain the illustration to them. They did not paid attention. The researcher continued to asked students.】

你們有沒有看到有一個人站在這些學生前面？你們猜他是誰？（Have you seen that there is a person standing in front of students. Can you guess who he is?）

Students: 【losing patience】我們不知道。我們不想知道。我們沒興趣。（We do not know. We do not want to know. We are not interested.）【They all nodded in agreement. When the teacher read the text, they were not listening.】

On the other hand, when reading the English picture books in Chinese versions, such as *Have You Seen My Duckling?*, *Brown Bear, Brown Bear, What Did You See?*, and *Where is My Spot?*, which were children’s favorites, they became eager to construct
the meaning of the text. As soon as the researcher showed these books, they were eager
to talk about the text and its illustrations:

Researcher: 今天我要介紹這本書？（Today we are going to read this book
(Brown Bear, Brown Bear, What Did you See?)

John: 你知道！我知道！我以前看過這本書，很喜歡。（I knew. I knew. I read it before. I like it very much）

Anna: Really! What is the story about?

John: 故事是關於動物。你記得嗎，Joe？（It is talking about a lot
of animals. Do you remember, Joe？）

Joe: Oh, I remember 記得。（Oh, I remember that）

Researcher: Matt, have you read it before?

Mat: 有！我喜歡圖畫，很漂亮。（Yet, I like the illustrations.
They are very beautiful.）

Researcher: 你們想不想一起唸這本書？（Do you want to read it
together?）

John: 好ㄚ！我好奇中文寫什麼？（Yes, I am curious about what it
is written in Chinese.）

Other three students: 【They all nodded in agreement.】。對ㄚ！我們也是。Let's
read it.（We, too. Let's read it.）

These two excerpts show the students’ different response to the two types of the reading
materials used in classes. They were better able to utilize their own experiences to talk
about the second type of texts than the first.
When the researcher asked students their opinions of these two types of reading materials, the four students all expressed that they were not interested in reading the first two excerpts, *The Greatest Teacher*, *Confucius* and *The Story of the Dragon-Boat Festival*. They had no understanding of Chinese culture, customs, and festivals, so it was difficult for them to construct these text. On the other hand, the students commented that they liked the books, *Have you Seen My Duckling*, *Brown Bear, Brown Bear, What Did You See*, and *Where is My Spot?*, because they were related to their interests and prior reading experiences. The followings are John, Joe, and Matt’s comments about the two types of readings:

John: 我看不懂故事、圖片。看起來很奇怪。You know 我不知道中國。我喜歡 other three books。媽媽讓我看過 *Have You Seen My Duckling?* 和 *Brown Bear, Brown Bear, What Do You See?*。我好奇中文寫什麼。（I did not know what the text and illustration depicted. Everything looked so strange. You know that I have no idea of China. I liked to the other three books. My mother helped me to read *Have You Seen My Duckling?* and *Brown Bear, Brown Bear, What Do You See?* before. I am curious how they are written in Chinese.）

Joe: 當我看到 pictures，I can’t find Chinese words。看起來都一樣。I don’t want to learn Chinese。I am not interested in learning Chinese. I do not want to know what the text is written. I like animals. I like to read books which are talking about animals.（When I looked at the picture, I can’t find Chinese words. They looked the same. . . . I am not interested in learning Chinese. I do not want to know what the text is written. I like animals. I like to read books which are talking about animals.）

Matt: 你要我們看圖回答問題，I don’t know how to answer, because 不知道中國。It’s hard for me. . . . 我很喜歡 *Brown Bear, Brown Bear, What Did You See?*. 
Both observation and interviews indicated that content-relevant and familiar texts increase students' motivation in learning and provide opportunity to interact with the text in a meaningful way.

Moreover, when children were interested in the texts, they took more time and were more eager to figure out the text even if somewhat difficult. They used all of their first and second language cueing systems, familiarity with the story structure, and prior background experiences to "confirm and disconfirm their prediction" (see Goodman, 1989, p. 212). For example, in reading Have You Seen My Duckling, children first hesitated to predict the text, so the researcher used the illustrations to help them. Once children were repeatedly exposed to the basic syntactic sentence and word orders of the sentence "have you seen...?" orally in the Chinese text, they attempted to match Chinese spoken language with that of the written language:

Researcher: 讓我們來看這張圖片。母鴨在找什麼？（Let us look at the illustration! What is the mother duckling looking for?）【pointed to the little ducking to give students a cue.】

Joe: 她在找她的小鴨。（She is looking for her little duckling.）

Researcher: 當他看見青蛙的時候，她可能會問什麼？What might she ask when he saw the frog?

Mat: She might ask the frog, 你看見我的小鴨？(You saw my duckling.)
John: 不，我們應該說你有沒有看見我的鴨子。(No, we shall say, “You have or haven’t seen my duckling.”)

Joe: 為什麼 (Why?)

John: 當你用中文問 “Have you,”你要說“你有沒有” (When you ask someone “Have you” in Chinese, you shall say, “you have or have not”).

Researcher: 很好！現在你們猜猜這個句子的意思。 (Good! Now let’s guess what the whole sentence means.)

Joe: Maybe it is about 你有沒有看見我的小鴨。

Researcher: 對！所以你們認為這個句子的第一個字應該是什麼？ (Right! Do you think what the first Chinese orthography in this sentence would be? )

Matt: 【said confidently.】The sentence is 你有沒有看見我的鴨子, so I guess the first Chinese orthography is “you.” (The oral sentence is “Have you Seen my duckling,” so the first Chinese written orthography is “you.”)

Researcher: 很好！(Good!) 那麼其他的字是什麼意思。 (How about the rest of them?)

John: It maybe 有沒有看見我的鴨子。

Researcher: Can you point to me what words are “有沒有看見”(have you seen)?

John: 【Pointed to the second four words.】I guess these words are “have you seen.” (I guess these words are “have you seen.”)

When reading Brown Bear Brown Bear What Did You Seen? and Where is My Spot?, children were familiar with the syntactic structure and the story in English. Such reading experience encouraged them to use their first language (English) and prior L2
reading experience to confirm their prediction of the Chinese text. Furthermore, children made use of their basic L1 and L2 syntactic and semantic knowledge, picture clues, and prior reading experiences to comprehend the whole text. Through interactions with their peers, they even developed an awareness of the different syntactic system between Chinese and English.

Researcher: 你們看過這本書嗎？你們記得這本書的中文名字是什麼嗎？
（Have you seen this book before? Do you remember what its Chinese title is?）

John: 我記得英文名字是 Brown Bear, Brown Bear, What Did You See?，所以中文應該是....。（I remember that its English title is Brown Bear, Brown Bear, What Do You Seen, so in Chinese, it should be....）【Matt interrupted】

Matt: I know, I know. 應該是“你看見”。（It shall be said “You see.”）【Matt stopped and said again】什麼（what）你（you）看見（see）。

John: No, No, We should say 你（you）看見（see）什麼（what）

Research: 為什麼？（Why?）

John: 當我們用中文說“What do you see”, “What”要放在後面。我猜寫的和說的 sentence 句子一樣。（When we orally asked someone “What do you see?” in Chinese, we often put “what” in the end of the sentence. I guess that the written sentence should be the same.）
Researcher: 好！那麼“brown bear”中文怎麼說？（Good job! How about “brown bear” in Chinese?）

Joe: 應該是“棕色的熊”。（Brown Bear in Chinese should be...）

Researcher: 所以這本書的中文名字是...。（So the title of this book in Chinese should be...）

All students: 棕色的熊，你看到什麼？【Then, the teacher asked students to read the title together. The teacher pointed to each Chinese orthography while reading. After reading, she turned to the first page, pointed to the sentence, and asked...】

Researcher: 現在你們猜猜看這個句子寫什麼？Now can you guess what this sentence is talking about?【Students looked at each other and hesitated to answer. Finally, Matt spoke out.】

Matt: 我認得“看見”。以前看過。第一頁也有看到。（I can recognize the words “see.” I learned them before [from Have You Seen My Duckling?]. I saw them on the first page, too.）

John: You are right! Now I remember. 我看到“你”、“我”。（I can recognize “you” and “I.”）

Researcher: 很好！所以你們現在可以猜猜看這個句子是什麼意思？（Good job! So can you guess what the whole sentence is?）

【Students get together to discuss and confirm their prediction】

All students: 我們認為是“棕色的熊，你看見什麼？”（We think that the sentence is “Brown bear, what do you see?”）
Researcher: 那下一個句子？（How about the next sentence?）

All students: 我看見【They all stopped when they saw unknown vocabularies.】我們不知道這些字。（We do not know these vocabularies.）

Researcher: 沒關係！讓我們先看這張圖片。（That's ok! Let's see the illustration firstly.）【The researcher turned to the next page.】

從這張圖片中，你看見什麼？（What do you see from the illustration？）

Students 【in chorus】: 我們看見紅色的鳥。（We see a red bird.)【The teacher turned to the prior page and asked again.】

Researcher: 假如我問你們從這個圖片中你們看見什麼，你們會回答...。（If I asked you “what do you see from this illustration,” you will answer...）【Students responded immediately.】

Students 【in chorus】: 我看見紅色的鳥。

Researcher: 所以這個句子應該是...。（So this sentence might be...）

Students 【in chorus】: 我看見紅色的鳥。

Researcher: 很好！讓我們一起唸這個句子。（Good job! Let’s read the whole sentence together.）

Students 【in chorus】: 棕色的熊，你看見什麼？我看見紅色的鳥。【The researcher pointed to each Chinese orthography while reading.】

The children could predict what was happening easily and quickly as they got accustomed to risk taking and prediction. The repeated language patterns increased their
confidence in constructing the meaning of the text. They even became less dependent on visual aids when they were reading the next page. By reducing their reliance on illustrations, they spent more time identifying the printed words. They could even distinguish the differences between Chinese and English written symbols. Even when the researcher forgot to substitute Chinese characters on one page *Brown Bear, Brown Bear, What Do You See?*, they discovered it and asked why there was only the English print on this page:

Researcher: 讓我們看下一頁。（Let us read the next page.）【Before the teacher turned to the next page, John first responded】.

John: 【spoke confidently】你看見什麼？(What do you see?).

【Other three students look surprised.】

Researcher: John, 你怎麼知道？(how do you know?)

John: 因為“你看見什麼”常常出現（Because “what do you seen” is repeated in this story.）

Researcher: John,你能不能告訴我這個句子寫什麼？(Can you tell me what the whole sentence is about, John?) 【He looked at the illustration for a cue.】

John: 紅色的鳥，你看見什麼？(Red bird, What do you see?)

【All students also looked at the illustration and responded together immediately.】

Students 【in chorus】:我看見黃色的鴨子。(I see a yellow duck.) 【Before the researcher turned the page, students spoke loudly together.】
Predictable Strategies

When the researcher turned the page, they were saying “我看見”(I see) while they were looking at the illustration for a visual clue. Suddenly the students found something wrong in the text. They pointed out the English print and spoke out loudly.

Students: 等一下！為什麼這裡有英文。（Wait! Why do they have English words here.）

Unlike the prior reading experiences, students could recognize the differences between the Chinese and English. They used different strategies to predict, confirm, and correct in order to comprehend the text. The interchanges between students and the researcher also support the Burke’s theory (1980) that children’s familiarity with repeating language patterns as well as their semantic and syntactic knowledge encourage them to read the printed material with confidence and minimize their reliance upon the graphic symbols.

When the researcher asked the participating students what strategies they used to help themselves to comprehend the text, they all expressed that they integrated the text to their personal knowledge of language and experiences. When they faced unknown vocabularies and sentences, they tried to use illustrations, the prior knowledge of vocabulary terms, and reading and writing experiences to guess the meaning of the text as well as confirm their prediction:

John: 剛開始, 我很害怕猜它的意思。我用圖片猜意義。我發現有些句子出現很多次。在看Brown Bear, Brown Bear, What Do You See, 我知道“你看見什麼？(What do you see?)”這句子常常出現。所以我看不懂句子，我會先猜是這句子。And, 我認得單字，“你（you）” and “我（I）”，可以幫我
make sure what I guess is right. (At the beginning, I was afraid of guessing the meaning of the text. Then, I tried to use the illustration for help. I also found some language patterns are repeated again and again. In reading *Brown Bear, Brown Bear, What Do You See*, I knew that “What do you see?” is repeated again and again. So when I saw an unknown sentence, I guessed that it may be “What do you see.” Also, I can recognize the words “You” and “I” which helped me confirm my prediction.)

The findings from interviews and observation support the theory of Grave (1981) and Hudelson (1985) that, as in the reading process, the reader builds meaning by interaction with print and by utilizing, their own background of experiences and personal information as well as their development knowledge.

**Finding 2: Students prefer using predictable materials to comprehend the text rather than rote memorization. Repeated language patterns help children predict the text and develop a linguistic awareness of Chinese syntax.**

In this project, the researcher provided some predictable materials that have meaningful and repetitive language structures as well as content relevant to the reader’s prior language experiences and background. As a result, these students see that “reading is a pleasurable activity” (Saccardi, 1996, p.5888). They enjoyed discovering the meaning of the text. For example, the four participating children described their personal feelings of learning to read Chinese in the interviews. John, Joe, and Matt even compared the Chinese reading experiences in the past and the present:

John: 以前不喜歡學中文，因為媽媽、老師常常叫我背許多單字和 *bo po mo fós*. 每次要學校，要唸許多單字。It is boring. 現在比較好玩。不害怕看中文。

(In the past, I disliked learning Chinese, because my mom and former Chinese...
Predictable Strategies

I often wanted me to memorize a lot of Chinese vocabularies and the bo po mo fos (the Chinese phonic). Each time we went to the class, we had to react Chinese words and sentences again and again. I felt bored. Now it is fun to read Chinese. I am not afraid of figuring out the text.

Joe: 我常常問媽媽，為什麼要學中文。我所看到的英文，以前，上課時，老師常常給我們看好多圖片，要我們記得 each Chinese word。我不能記得，太多了。老師要我們看故事，圖片不知道。故事不知道。每個字都不知道。老師常說 We learned these words before。It's too difficult。我喜歡看有圖片的故事書。可以用圖猜意思。很好玩。（I often asked my mom why I have to learn Chinese because what I see here is all English. In classes, my former teacher used flash cards to let us memorize and practice Chinese vocabulary, but I could not memorize all of them. When I read the Chinese books, I still did not understand what the pictures depicted and the stories were talking. I did not recognize a single Chinese word even though the teacher often said that we learned them before. It is too difficult. I liked reading picture books. I can guess its meaning from the pictures. It's fun.）

Matt: I can't believe 我會看中文書。以前看中文很痛苦。不知道，I am very confused about 圖和故事。以為記住很多中文字，才能知道讀中文書。現在看我有興趣故事書，也有圖片。現在很喜歡。我發現很多字出現很多次，... 看見 (see), 什麼 (what), 我 (I), 你 (you) 我會認得，不用記。（I cannot believe that I can read the book with the Chinese print. I felt painful when reading Chinese. I was very confused about the text and the illustration. At that time, I thought that I should memorize a lot of Chinese vocabularies in order to understand the text. Now, I like reading these picture books.）
books that are related to my interests. Because there are several words, “看見 (see),” “什麼 (What),” “我 (I),” and “你 (You)” repeated again and again in texts, I can recognize them all by myself.

Ann: At the beginning, I hated to read, because I cannot read the Chinese print. Not a single Chinese word do I recognize. But, the illustrations and repeated language patterns give me some cues to comprehend the text. Even though I do not recognize any of Chinese words in texts, I know what the whole text is talking about. It is fun to use this type of book to learn to read Chinese.

These four students all expressed that they enjoyed reading the predictable materials with colorful pictures and repeated language patterns which increased their interest in learning to read Chinese.

Furthermore, predictable books with repeated language patterns and structures helped these children increase their confidence in predicting and confirming the meaning, and then in identifying each word. Some examples have already been given in the proceeding sections. When reading the book Have You Seen My Duckling?, at first they hesitated to predict the repeated language patterns, but soon content prediction became easier and more rapid. As the lesson continued, when reading Brown Bear, Brown Bear, What Do You See? and Where Are My Spot?, they gained the courage to construct the meaning without being afraid of making mistakes. Even if the researcher did not turn the pages, children tried to predict what would happen: “the combination of prior knowledge and familiarity with the story and its structure permit a child to read with comprehension and with few visual clues” (Crawford, 1993, p. 71).

Repeated language patterns aid children in figuring out unfamiliar words and strengthen the decoding process of sign vocabulary and language patterns (Bridge, 1979).
They developed a linguistic awareness of the sentence structures and vocabulary terms, “你有没有看见. . . (Have you seen. . .)?” “你看见什么？(What do you see?),” “在哪儿？(Where is. . .?),” “. . .在桌子上(on the table),” “. . .在桌子下(under the table),” “红(red),” “黄(yellow),” and “蓝(blue),” etc. They even tried to use these language patterns to do some oral practice in classes. For example, after finishing these lessons, these students spontaneously used the syntactic patterns and some vocabulary terms they had learned from the text to ask each other questions:

<table>
<thead>
<tr>
<th>John:</th>
<th>Joe, 有沒有看見 我的本子？(Joe, have you seen my notebook?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe:</td>
<td>有々！(Yes, I do.)</td>
</tr>
<tr>
<td>John:</td>
<td>在哪裏？(Where is it?)</td>
</tr>
<tr>
<td>Joe:</td>
<td>在桌子上. (There it is on the table.) 老師，我的書在哪裡？(Teacher, where is my book?)</td>
</tr>
<tr>
<td>Researcher:</td>
<td>在椅子上. (There it is on the chair.) 【pointed to her own book.】 你有沒有看到我的書，Matt？(What do you see, Matt?)</td>
</tr>
<tr>
<td>Mat:</td>
<td>有々！【pointed to his book】 Joe，你 看見 什麼？</td>
</tr>
<tr>
<td>Joe:</td>
<td>我看見鉛筆(I see a pencil.)</td>
</tr>
<tr>
<td>Researcher:</td>
<td>它是什麼顏色？(What color is it?)</td>
</tr>
<tr>
<td>Matt:</td>
<td>我看見紅色鉛筆. (I see a red pencil.) 【pointed to his blackboard】 你看見什麼，Anna？(What do you see on the blackboard, Anna?)</td>
</tr>
</tbody>
</table>
Anna: 我看见 a lot of Chinese on the blackboard. I see a lot of Chinese words.

This interchange shows that students learn and use language in a meaningful context.

Finding three: Writing and reading experiences encouraged children to become more willing to express themselves through Chinese writing and develop their awareness of Chinese orthographic features.

When the researcher encouraged children to invent their own Chinese writing during the first lesson, they only drew pictures and wrote their Chinese names or some English words they knew (see Figures 2-1 and 2-2).

As the school year continued, children lost their fear of making mistakes when writing Chinese. They became more willing to represent their feelings, ideas, and thoughts by writing and using Chinese formation of invented writings (See Figures 3, 4-1 & 4-2). When the researcher asked what they were writing and drawing, they explained the whole stories by focusing on the construction of meaning rather than on correct Chinese letter formation. For example, Figure 3 presents a child’s story written by Joe. He explained that this writing is about what he felt in the morning when his teeth hurt.
Figures 4-1 and 4-2 show the story, written by Peter. The story is about two dinosaurs fighting.

These children expressed how they felt about inventing Chinese:

John: 我從沒有想中國字是什麼樣子。我喜歡寫中文但是不知道怎麼寫。因為擔心寫不對。現在不會害怕。我跟同學喜歡一起發明中國字。我也喜歡告訴同學，我認為中國字是什麼樣子。（I never thought about what Chinese character looked like. I was afraid of writing Chinese, because I do not know how to write it correctly. . . . Now I am not afraid. inventing Chinese. My classmates and I get together to figure out what Chinese orthography looks like. I enjoy using invented Chinese to tell my classmates what I'm writing. I enjoying telling classmate how I figure out what Chinese orthography looks like.

Matt: 我在寫故事書時，我覺得中國字像方格子，裏面好多線。When I wrote Chinese, I tried to create it like that. (Through the reading and writing, I figured out that Chinese written character is like a square which is filled with lines. When I invented Chinese, I tried to create it like that.)
Joe: I like drawing, so I enjoy using my invented Chinese to tell my classmates how I feel. It is interesting. I do not need to worry about whether I make mistakes.

Ann: It is fun to see my classmates invent Chinese. They share their writings with me. I am surprised because each writing is telling you a story. They even encourage me to invent some Chinese myself.

These early Chinese written pieces demonstrate that they involved in the writing process, which indicated that they can use writing for different purposes and communication before they have complete control over the oral and written systems of the second language (Hudelson, 1985). Their behaviors reveal that “children become aware that the meaning can be communicated through pictures and invented writing” (Hannan & Hamilton, 1984, p. 365).

As the lesson progressed, such reading and writing experiences not only helped them develop an awareness of Chinese print. For example, at the beginning, children could not tell the differences between Chinese and English characters. Through the integration of reading and writing activities, over time, children became aware of Chinese written forms and how to differentiate between Chinese and English. The evidence can be seen in Figures 4-1 and 4-2. When writing English, children scribbled and scribbled. When writing Chinese, their writings consisted of a lot of lines and square-shaped characters even though they did not know how to write Chinese characters “correctly.” The children also commented that, although they are not good at writing Chinese, at least they knew that, unlike English written language, each Chinese written word is like square-shaped.
Over time, children integrated their reading into their writing activities. They even sought clues to invented writing by questioning other classmates and by using books they had read before. They increasingly tried to write words by using words or patterns they had seen in print. Matt’s writing pieces show how his writings have changed. Figure 5-1 shows his early writing. Figure 5-2 shows that he could write some Chinese comparative words, such as “大 (big),” “中 (medium),” and “小 (small),” and prepositions, such as “上 (up)” and “下 (down).” He also wrote down numbers 一 (one)、二 (two) and 三 (3). When Matt was asked why he wrote down these words, he said, “發明中國字很有趣，but 想讓同學、老師知道，我不看書也會寫一些中國字。我學這些字 from Where Is My Spot?” (Although it is fun for me to invent Chinese, I wanted to show you [the researcher] and the classmates I could write some Chinese orthography correctly without looking at the books. I learned these words from the book Where Is My Spot?) This revealed that the integration of reading and writing strengthen students’ awareness of Chinese print and help students memorize some vocabulary from the text without drill practice. In the class, when the researcher gave the children some worksheets with Chinese printed words to teach them to write basic orthography, they became self-initiating and
less dependent on the teacher. They tried to imitate these words by themselves without
caring about what the researcher was teaching or asking her for help. They tried to figure
them out in their own way.

Finding four: Peer interaction influences participation and motivation in learning to
read and write Chinese.

Through reading together and free discussion, children worked together to figure
out the meaning of the text and Chinese orthographic features. At the first lesson, when
the researcher asked children to create and invent Chinese writing, most of them
complained that they did not know how to write. All except John refused to write
Chinese in their own way. When the researcher praised his writing, he proudly presented
and explained to his classmates how he invented Chinese language. An Example can be
seen in the following interchange in the classroom:

Researcher: 你們可不可以想想看中國字是什麼樣子？你們可以想想看課本上的
中國字是什麼樣子，並試著自己創造發明看看？（Can you think
about what Chinese words from the books look like and try to invent
Chinese writing on your own?）

All students: 【They complained.】我們不知道寫什麼？怎麼寫？ We do not know
what and how to write?

Researcher: 沒關係。That is OK 試試看！（Just try it.）

All students: 不要，太難了！我們不想寫。（No, it is too hard for us. I do not want
to write it.）
John: 也许我可以 try. (Maybe I can try.) 【He started to drawing a picture and invent some Chinese on his own. The other three students looked at him and seemed surprised】

Researcher: 很好！你能不能把你寫的給同學看看？(Good job! Can you show your writing to your classmates? )

Three students: 讓我們看看！(Let me see it.) Can you tell me what you are writing about and how you do it?

John: 好丫！故事有！.... 我認為中國字應該是.... 你們可以自己試試看，不難！(Sure! My story is about... I think that Chinese is like.... Maybe you can try by yourself. It is not too difficult.)

Through his encouragement, Anna, with limited Chinese experience, used her proficient language (English) to read the story, draw pictures, and to tell of her ideas and feelings about the story in the text. She was eventually also able to predict the text with her classmates. The following example shows how Anna thought about writing and reading Chinese.

At the beginning of the class, I was nervous about reading and writing Chinese, because I have never learned it before. It was very hard for me. Now I feel comfortable in reading and writing Chinese. My friends, John and Joe, helped me a lot. It is fun for us to share ideas. In writing activities, we often get together to figure out how to invent Chinese, even though I do not how to write Chinese words correctly. ... In reading activities, it is interesting because all of the classmates get together to predict the meaning of the text. Sometimes I have no idea how the story is about. Through peer discussion, it helps me comprehend the text and recognize some Chinese words and patterns.
Integrating reading and writing processes encouraged these children to cooperate rather than to compete with each other to construct the meaning from the text. As Watson (1989) states: “learners talk with each other about what they are writing, the books they are reading, the problems they are solving, or not solving, and the experiments they are constructing” (p. 135).

Due to peer influence Anna became willing to invent Chinese and share her writing with her classmates. Figures 6-1 to 6-3 show her writing growth over time. At first, Anna refused to write anything (see Figure 6-1). When the researcher encouraged her, she told the researcher that she only wants to write down something “correctly. She did not want to create Chinese written words. Over time, through peer encouragement, she began to engage in her own creative writing (see Figures 6-2). She demonstrated an awareness of the differences between Chinese and English written languages (see Figures 6-3). She even shared her writing to her classmates and explained what the story is about.

Conclusions

The findings of this research support the assumption that the whole language approach can be used in learning Chinese as well as English.
classroom described in this study, the children feel free to draw, talk, read, and write in Chinese. The four modes of language were used simultaneously as students listened, talked, read, and wrote. In the learner-centered climate, these four children became actively engaged in the learning process. Furthermore, they took risks to construct the meaning of the text without fear of “failure.” As Chang and Watson (1988) demonstrate, although Chinese written language is ideographic, and meaning-based, predictability — repetition, language patterns, and content relevant to students’ language experiences enable these children to use their syntactic and semantic knowledge as well as to bring their personal experiences into the process of reading these texts.

Through writing and reading activities, printed books enable children to become aware of the Chinese writing system. In writing, students can discuss their reading experiences as well as invent Chinese characters according to their own rules.

Classroom Implications

The study offers the following suggestions for teaching Chinese as a second language to early learners:

- Learners’ interests and patterns of development should be central to the curriculum (Dahl, Scharer, Lawson & Grogan, 1999). Students learn to read and write more effectively using material related to their interests, experiences, and cultures.

- Reading and writing should be taught as meaning-centered processes through interactions with connected texts. Learning takes place more effectively using whole-to-part rather than part-to-whole instructional methods (Dahl, Scharer,
Lawson, & Grogan, 1999). Chinese language learners should be introduced to the whole text first instead of beginning with isolated words and sentences. Therefore, drill and rote memorization should be avoided. It is crucial to focus on the comprehension of reading materials. Teachers should make use of students’ L1/L2 language cuing systems, encouraging them to construct meaning through familiarity with the story structure, illustrations of the text, and prior background knowledge. Teachers can encourage children to express themselves through invented writing as one means of developing Chinese written language skills.

- The teacher should select predictable books that are relevant to students’ interests, experiences, language ability, and background knowledge. Comprehension is enhanced if the teacher utilizes the learner’s cultural and experiential background (Goodman & Goodman, 1978; Hudelson, 1989). Books with repeated language patterns can help students predict what is coming next and further increase their confidence in reading.

- The teacher should provide opportunities for students to interact with printed material using a multitude of expressive forms: listening to stories, sharing and talking about books, writing and illustrating stories, as well as reading books (Weaver, 1990). As Freeman (1988) states, when students listen, speak, read or write together, they learn from one another. Participation in all modes of language can enrich a learner’s store of language.
The Limitations and Suggestion

Although this study showed the beginning of children’s development in learning to read and write Chinese through the use of the whole language approach employing predictable materials, it has yielded an important finding that lay a good foundation for future research. However, this study has a number of limitations that should be acknowledged.

The first limitation is that this study covered five lesson plans over a short period. Longitudinal studies in the future will help an insight into Children’s learning development in reading and writing Chinese.

The second limitation of the study is that it limited to four participating bilingual children who are beginning learners. Research can be implemented in large samples with different Chinese language proficiency and compare the different effects of using the whole language approach on the diverse population in the United States as well as in Taiwan.

The second limitation is lack to examine whether the whole language employing with predictable materials can be used in the Taiwan’s reading classes and whether its effects are the same in the United States.
References


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