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Teaching Language and Culture: The Importance of Prior Knowledge when Reading Chinese as a Second Language

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In this article, the author explores the idea that reading proficiency in a second language involves comprehending the second culture and using it to interpret the world view of the second language. Using cognitive theory, the author examined the relevance of prior knowledge of Chinese language and idioms to understanding text written in Chinese. The nature of Chinese as a second language (CSL) students' and Chinese as a foreign language students'(CFL) surface and deep knowledge of Chinese idioms as reflected in their responses to journal questions were examined. The author also looked at how the levels of students' prior knowledge and reading achievement related to the generation of surface and deep knowledge of Chinese idioms stories. Two groups of 5th- and 6th-grade students totaling thirty participated in this study. The median score on the composite SAT II Chinese Subject Test with Listening was used to classify students as low or high prior knowledge students. Findings from content analysis of students' journal responses showed that students tended to attain a deep level of knowledge when interpreting and personalizing the Chinese idioms. A *t* test indicated a significant difference in level of deep over surface knowledge between the low and high prior knowledge groups of students, favoring the high knowledge group. Parallel to previous studies performed in reading English and Spanish as a first language (L1), as well as English as a second language (L2), my investigation supported that prior knowledge also plays an important role comprehending text in Chinese as a heritage language.

With a global population of 7 billion (West, 2011), China is home to more than 1.2 billion (1,200,000,000) people (Rosenberg, 2011). Using data from the 2010 US Census, Hoeffel, Rastogi, Kim, and Shahid (2012) point out that within the United States, the Chinese have come to represent the largest Asian ethnic group, including 3,535,382 of the general population and the distribution is bicoastal. More than three fourths, or approximately 75.4%, of Chinese Americans live on or near the east or the west seacoasts (Hoeffel et. al, 2012). Interestingly, the Chinese American community has become the fourth largest ethnic group in the United States (Terrazas & Batalova, 2010).

While the population of Chinese is increasing, so is the number of Chinese as a second-language (CSL) learners and/or Chinese as a foreign-language (CFL) learners, indicating a need for them to better understand their Chinese heritage and contemporary community (Hann, 2007). CSLs are students who were exposed to the Chinese language and culture at home growing up but lost speaking fluency, replacing their first language (L1) with the English language. CFLs are those, whom despite their

Chinese heritage, they never developed a solid understanding of the Chinese language growing up, making English their only language.

Both groups of students participate in heritage language schools and can be identified as Chinese heritage language students (CHLs). Some of the characteristics of heritage language students suggested by the National Standards for Foreign Language Learning Education Project (1999) are the ability to "converse in the language in home and community situations but lacking the abilities to interact comfortably in more formal settings" as well as possessing limited literacy skills in reading and writing in their second language (p. 29). Typically, a community is associated with a language heritage and cultural traditions different from those of the mainstream culture. Within the Chinese community, preserving the language skills and cultural knowledge of CSL/CFL learners is an important educational priority (Campbell & Peyton, 1998).

In a typical Chinese family, there often exists a strong sense of Chinese identity, a conscious desire to maintain this identity, and various elements of the Chinese culture (Xiao, 2006). As a result, Chinese heritage schools have proliferated (Chao, 1997) emphasizing the understanding, maintenance, and development of the Chinese language and culture. Generally, classes are offered on the weekends, afterschool, and during the summer. Most of the schools are non-profit with limited financial resources. The schools lease classrooms from churches and/or local public schools, and the teachers are volunteers from parent groups. Primarily, in these classes, teachers emphasize basic Chinese language and linguistic concepts important to developing reading comprehension along with knowledge of the culture and history of their ancestral nation (Chao, 1997). Since Mandarin Chinese is the official language in Taiwan, Mainland China, and Hong Kong (Moore, Walton, & Lambert, 1992), the reading texts used in heritage schools are written in this language and all oral and written communication between the teachers and their students use this language. Speaking, reading, and writing in Mandarin Chinese as well as understanding the Chinese culture are the foci of the curriculum in these schools. The program design includes integrating reading, writing, and spelling into a holistic literacy-learning curriculum for proficiency in Mandarin Chinese speaking and reading comprehension.

Given the increasing numbers of Chinese heritage schools and the important role that reading instruction assumes in teaching the Chinese language and culture to CHLs, I designed a qualitative study to explore the role of background knowledge on the development of reading comprehension in Chinese and, in particular, comprehension of Chinese culture as represented in the text. In this article, I review the scholarly literature to provide the reader with an understanding of the reading process in Chinese highlighting some of the difficulties that Chinese heritage language speakers may face when reading Chinese. The accumulated scholarly knowledge about the role of prior knowledge in supporting the development of reading comprehension in a first and second language (English and Spanish) and in terms of surface and deep knowledge levels are also discussed. Building on the knowledge gaps with respect to reading in Chinese as a heritage language identified through the synthesis of the research, I describe the study's content analysis design and its main findings. Finally, a discussion

interpreting the results and identifying important implications to improve instruction of language and culture in Chinese heritage schools is offered.

Reading Chinese Texts

Since reading comprehension is a key component of the heritage school curriculum, it is important to understand the process used to decode Chinese characters to achieve meaning. In reading Chinese texts, Chinese English-speaking students analytically decode each character and also combine characters into words or phrases, ultimately synthesizing them into deeper meaning. Hsieh (1994), in exploring this process identified three stages. Stage 1 is represented by literal translation, character by character. Stage 2 involves deeper decoding of characters yet limited to surface meaning interpretation, whereas stage 3 requires the interpretation of an amalgam of characters representing the actual meaning in English, which conforms to the language forms used by native English speakers. For example, when a less proficient student reads the Chinese writing 購物中心, the equivalent for the English phrase "a shopping mall", he or she will first decode this phrase as "purchase object middle heart", representing stage 1. Then the student needs to combine "purchase" and "object" into the word "shopping", and "middle" and "heart" into the word "center", representing stage 2. Upon the second translation stage, the student may enter stage 3, translating "the shopping center" into the more common language form "a shopping mall", used by native speakers of English.

No doubt, this reading process is laborious and complicated, because elements of students' linguistic schemas are in English. Since linguistic schemas are those mental structures containing cognitive elements necessary to using and understanding language (Aebersold & Field, 1997), the challenges of teaching Chinese to English-speaking students are substantial. As Wang, Perfetti, and Liu (2003) state, for English-speaking Chinese language learners, learning to read Chinese clearly involves new concepts and a distinct writing system. Unlike an alphabetic language system such as English, Chinese is often labeled as a logographic or morphosyllabic writing system. In this writing system, Chinese characters consist of interwoven strokes. In its reading system, the Chinese language often involves a sequence of clauses or phrases not having coordinating or subordinating connectives (Wang, Perfetti, & Liu, 2003). Other characteristics are reflected in the relative grammatical simplicity of Chinese. For instance, the syntax is not tightly organized, the meaning of a word is largely conveyed through context, and there is no linguistic distinction between singular and plural words (Peregoy & Boyle, 2001). All these linguistic features add to the complexity of learning to read in Chinese by English-speaking Chinese students (Lin, 2004).

The Role and Assessment of Background Knowledge in L2 Reading Comprehension

Cognitive theory explains how prior knowledge or schema impacts reading comprehension in a second language. As early as 1972, Piaget suggested that prior knowledge played an important role in learning new knowledge, arguing that children

are born with schema, tendencies to organize their thinking/cognition processes. These schemata are basic operative building processes constituting organized systems of cognitive actions or thoughts (Stott, 2001). Specifically, Rumelhart's (1977) schema theory provides a theoretical basis for the interactive model of the reading process. As people read, they actively incorporate new knowledge into a previously existing schema or create a new schema to accommodate it (Stott, 2001). In this process comprehension is achieved.

The work of Jiménez, García, and Pearson (1996) suggest positive effects of prior knowledge on second language reading comprehension. Landary (2002) validates one's prior knowledge as a potential contributor to reading comprehension in a second language. Concurring, Chan's (2003) work shows the role of prior knowledge affecting language proficiency on second-language reading comprehension. A useful construct for my inquiry is that prior knowledge associated with the first language acts as a bridge in transferring linguistic and cultural knowledge to the second language, facilitating the acquisition of the second language and culture (Cummins, 2000; Littlewood, 1984).

Some scholarly sources have examined prior knowledge, in terms of surface and deep levels of knowledge, and considered some theoretical constructs that support their inclusion into the design and delivery of reading comprehension instruction and assessment. Specifically, several studies (Bond, Smith, Baker, & Hattie, 2000; Carroli, 2001; Lehman & Schraw, 2002) have investigated the importance of surface and deep level of understanding as measures of reading comprehension. Carroli (2001) and Lehman and Schraw (2002) point out that the depth to which readers understand a text is directly connected to their prior knowledge and their ability to relate minimal external information to basic concepts and principles in the cognitive process.

Of significance is the earlier work of Biggs and Collis (1982) and de Jong and Ferguson-Hessler (1996). These researchers argued for exploring the nature of surface and deep levels of knowledge and both developed practical categorization instruments that could be used by practitioners in diagnosing students' learning across different content. Biggs and Collis created a classification tool known as the Structure of the Observed Learning Outcome (SOLO) Taxonomy, to assess outcomes of learning and represent understanding in terms of surface and deep levels of knowledge. This taxonomy, is a unique attempt to evaluate prior knowledge as levels of knowledge connected to instruction of reading comprehension, thus it can be used as an assessment tool in classrooms.

De Jong and Ferguson-Hessler (1996) proposed a conceptual approach to exploring prior knowledge using a matrix representing different types and qualities of knowledge. These researchers applied their approach to instruction by linking the different types and qualities of knowledge to specific learning outcomes within the matrix. They characterize deep knowledge as external knowledge that has been cognitively processed to translate it into basic concepts, principles, or procedures before it is stored into a person's database or schema. In contrast, surface knowledge, stored relatively unprocessed, is more or less an internal copy of external information.

The Importance of Chinese Idioms in Developing Cultural Understanding through Reading

Reading comprehension in any language requires knowledge of the cultural world view ingrained in the text. In the specific case of reading Chinese, some researchers have examined the critical role of Chinese idioms in the construction of text meaning. Wu (1995) refers to Chinese idioms, as the "the heart of Chinese language" (p. 61). They are a means through which native speakers learn about and relate to their culture. They are aphorisms intended to transcend a surface meaning and obtain a deep level of understanding a story, as well as related aspects of the Chinese culture found within the text (Wang & Yu, 2010). Chinese idioms are very prevalent across different genres of Chinese literature. Thus, their understanding is critical to comprehending the text meaning and appreciating the cultural message ingrained within that text. The rich Chinese culture has a host of colorful and insightful idioms embedded with moral and ethical values (Peng, 1985). The Chinese use the term *chengyu* for an idiomatic expression which is associated with a traditional illustrative story. The origins of the idioms are traced to traditional parables, myths, a historical event, or famous works of literature. The stories used to illustrate the idioms were developed long ago and have been passed from generation to generation throughout Chinese history and are used in both oral and written language. Wu (1992) states that Chinese idioms, or chengyu, are a special category of lexical items which not only distinguish themselves by their constituent relations but also show singular types of intrinsic grammatical structure. An idiom is different from a common saying or proverb in that its meaning comes from the whole entity of characters—four-character words, independent of the meanings of the individual character. Tsai and Chen (1993) state that Chinese idioms are, by definition, phrases made up of four words (actually, four Chinese characters) having a deep meaning that is not easily comprehended. Their prevalence and importance is underscored by the fact that today there are idiom dictionaries available for readers to use in interpreting Chinese text. In Chinese, *character* refers to a unified symbolic cluster of strokes having an associated meaning and sound. A combination of two or three characters can represent a word since most Chinese words are formed of two separate characters (e.g. "明天-tomorrow" are formed of " 明-bright" and "天-day") .

The four word rule for Chinese idioms contrasts with the lack of a specific number of words characterizing an English idiom. A further distinction in the case of Chinese idioms is the necessity for a unique story to be associated with the idiomatic expression, whereas English idioms may or may not be associated with such a story. Thus, one finds by comparison that the definitions of the idiom in English and chengyu in Chinese are quite distinct. The only fundamental element in common is that speakers of both languages will use idioms to communicate ideas. However, the nature of the idiom and how it is communicated differs. Another unique quality of the use of idioms in Chinese is that the more educated the speaker, the more idioms that person will use in its speech, writing, and ability to interpret Chinese text.

Chinese idioms or chengyu represent an endemic way of communicating among Chinese people, since they bound together elements of language and culture. Idiom

stories serve a dual purpose in Chinese heritage language schools. For example, the expression "kill two birds with one stone" exists in the Chinese written language as "一石二鳥" — one stone, two birds. This idiom can be and is used for two purposes—to teach components of the Chinese language and culture and to teach the moral of the idiom story. In Chinese heritage schools, Chinese idioms are introduced to students by first reading the idiomatic phrase and then explaining its meaning. After that the teacher presents the story associated with the idiom to introduce the related moral value implied in the idiom. In effect, this tends to make the teaching of reading comprehension in the case of Chinese idioms more complex and difficult. The difficulty in understanding Chinese idiom stories is rooted in their dual nature, one literal and the other symbolic. In this sense, the stories are represented at two levels of meaning, surface and deep. Characteristically, the surface level consists of simple events and facts sufficient unto themselves to carry meaning. At the deep level, there are relationships, causes and effects, and connection to a more profound meaning (Peng, 1985; Wu, 1992).

In sum, cognitive theory fosters the notion that learning is an active on-going process that enables students to construct their own knowledge based upon their prior knowledge (Cummins, 2000; Jiménez, García, & Pearson, 1996; Landary, 2002; Littlewood, 1984; Piaget, 1972; Rumelhart, 1977; Stott, 2001). Since students' prior knowledge influences their understanding, cognitive theorists believe that collaborative types of instructional models can support students' prior knowledge and improve reading comprehension by developing both surface and deep knowledge (Bakhtin, 1986; Calderón, Hertz-Lazarowitz, & Slavin, 1998; Johnson & Johnson, 1987; Koschmann, 1999; Slavin, 1990; Vygostky, 1978). Also, attention to Chinese idioms when reading text in Chinese is necessary for the construction of meaning as well as the development of Chinese language and culture (Peng, 1985; Tsai & Chen, 1993; Wu, 1992).

This synthesis of the research supports Lau and Chan's (2003) contention that despite the proliferation of studies on reading comprehension in a first language (English) and in a second language (English and Spanish), there are relatively few studies on reading comprehension in Chinese. More specifically, an unexplored area in the reading research highlights the importance of Chinese idioms to understand Chinese text. With this in mind, the purpose of this study was to explore the role of cultural and linguistic background knowledge in understanding text read in Chinese. Specifically, two research questions guided the exploration: (a) What is the role of CHLs' prior knowledge in comprehending Mandarin Chinese idiom stories?; and (b) What is the role of CHLs' prior knowledge in interpreting the cultural message embedded in Mandarin Chinese idiom stories?

Research Methods

This study was part of a larger investigation that focused on issues related to type of instruction and its effects on reading comprehension of Chinese text using a single-group pretest-posttest design (Gall, Gall, & Borg, 2003; Semel & Wiig, 1981). This article describes a smaller qualitative study that employs content analysis of students'

writing samples to explore the role of linguistic and cultural background knowledge on students' understanding of Chinese text. In addition to being the researcher, I also served as one of two Chinese teachers in the study. The following section describes the inquiry's participants, methods for data collection, and analysis.

The school. A nonprofit Chinese school established in 1972, located in Bergen County, New Jersey was the site for this study. The school operates on Sundays providing Chinese as a heritage language program for students from kindergarten through grade 12. There is one class per grade. The entire student body of the school includes approximately 130 students ranging in age from 4 to 18. The majority of the student population consists of U.S. born Chinese (CSL/CFL) along with a few non-Chinese native speakers of English (CFL). Students attend school for three hours of classes over 15 weeks in a given semester. Every year the school holds a cultural knowledge contest that focuses on Chinese idioms.

The students. A sample of convenience was used. Since I was a teacher at the school, I sought and obtained permission from the school administration, students, and their parents to work with one fifth grade and one sixth grade class. Students in the fifth- and sixth-grade classes totaled 30, with 16 females and 14 males, taught by the researcher and a teacher colleague. A description of the sample in terms of gender, age, and school attendance is included in Table 1 below.

Table 1

Demographic Information on Students (N=30)

Grades	Gender		Total Number of Students	Age				Mean Age	Number of Years Attended School
	M	F		9	10	11	12		
Fifth Grade	5	7	12	3	6	2	1	10.08	6
Sixth Grade	9	9	18	2	1	6	9	11.22	7
Totals	14	16	30	5	7	8	10	10.86	

Of the 30 students, 12 were fifth graders and 18 were the sixth graders and all were classified as either CSLs or CFLs. The combined mean age for both groups was 10.86. All students were of Chinese heritage, and all of their parents were well-educated. Of the 60 parents, 2 held bachelor's degrees, 56 held masters, and 2 had PhDs. Most of the participating students were born and have resided exclusively in the United States. One student was born in Taiwan and she has resided in the U.S. for most of her life. However, she is considered a transnational student, since she moves back and forth from Taiwan to the U. S. as a result of her father's work responsibilities. For consistency in this paper I identify the CSL and CFL students as CHLs since all of them attended the Chinese heritage language school.

The teachers. The fifth grade teacher and I, the sixth grade teacher, are native Mandarin Chinese speakers from Taiwan. At the time of the study, I had been teaching Chinese for more than five years. Ms. Chu (pseudonym) had four years of Chinese language teaching. She has a Master's degree in Multilingual Education. Both of us had experience teaching second languages, English as a second language, and Chinese as a second language, in numerous schools in Taiwan and the United States. I also hold a Master's degree in Multilingual Education –TESOL; in addition, to a PhD in Language, Learning, and Literacy completed at a university in the US.

Data Collection

The implementation of the study was done over a 15-week period. Table 2 below specifies the schedule for study activities. Two main instruments were used to collect data: a standardized test and a Student Writing Journal. A brief description of each instrument follows.

Table 2

Schedule of Study Implementation Activities

Activity	Week
Administer Pre-test	1
Score Pre-test and create students' groups	2
Instruction of Idiom Lessons; collection of written journals; coding of written journals	3-14
Final analysis of coded data	15-16

Standardized Test: The SAT II Chinese Subject Test with Listening.[1] The purpose of this test was to assess students' understanding and proficiency of spoken contemporary Mandarin Chinese, written language usage (using 4 different ways to represent written Chinese); and reading comprehension in Chinese; thus indicating their prior knowledge of the Chinese language at the onset of the study. The relationship between reading comprehension and listening comprehension has been well established in the literature (Bell & Perfetti, 1994; Gernsbacher, Varner, & Faust, 1990; Stanovich, Cunningham, & Freeman, 1984). As Rayner, Foorman, Perfetti, Pesetsky, and Seidenberg (2001, p. 42) put it, 'It can be reasonably argued that learning to read enables a person to comprehend written language to the same level that he or she comprehends spoken language" (cited in Nation, 2005, p. 251).

The test scores also helped classify the students by their level of previous knowledge on Chinese language and culture. Since cultural knowledge was embedded within the test questions, a second purpose in using this instrument was to evaluate the prior knowledge that students had of both Chinese culture and language. The study design called for determining the degree of prior knowledge students have of what is to be taught. The usefulness of such a design is explained by Dick and Carey (1990). They stated that,

> a pretest attempts to measure the extent of entry knowledge needed to benefit from instruction, and the behaviors and skills that need to be taught during the

unit of instruction. Its purpose is to show growth as well as provide useful information about the learner (p. 149).

Form A of this test was used to initially determine Chinese language proficiency of students and their level of cultural knowledge before instruction of Chinese idiom reading stories was done. Table 3 below describes in detail each of the language components covered, as described in the test manual.

Table 3

SAT II Chinese Subject Test with Listening Manual

Components	Descriptions
Listening Comprehension	These questions tested the ability to understand the spoken language and were based on short, spoken dialogues and narratives primarily about everyday topics. There were two different kinds of listening comprehension questions (A) a spoken statement, question, or exchange, followed by a choice of three possible responses (also spoken); (B) a spoken dialogue or monologue with a printed question or questions (in English) about what was said.
Usage	These questions asked one to select the answer that best completed a Chinese sentence in a way that was structurally and logically correct. Questions were written to reflect instructional practices of the curriculum. This section of the test was therefore presented in four columns across two pages of the test book to allow each question and its answer choices to be shown in four different ways of representing Chinese: traditional and simplified Chinese characters on the left page, and phonetic transcriptions (Bopomofo) on the right page. One chose the writing form with which one was most familiar and read only from that column.
Reading Comprehension	Reading comprehension questions tested one's understanding of such points as main and supporting ideas, themes and the setting of passages. Some of the passages were based on real-life materials such as timetables, forms, advertisements, notes, letters, diaries and newspaper articles. All passages were written in both traditional and simplified Chinese characters. Most questions dealt with understanding of literal meaning although some inference questions were included. All reading comprehension questions were in English.

(College Board, 2010, p. 34).

Students' Writing Journals. I designed a set of open-ended critical journal questions to determine students' surface and deep level of knowledge of Mandarin Chinese idioms. The use of journal questions, specifically open-ended type of questions, is supported by Johnson and Christensen (2000), Kerlinger (1973), and Tuckman (1999). Kerlinger describes a specific type of more open-ended question as the funnel, representing a set of questions directed toward getting information on a single

important topic. The form of a funnel starts with an open-ended question followed up with a more specific one, characterizing the nature of questions used in this research.

The students were asked to answer two sets of questions in their writing journals immediately after the reading lesson was done. They could write in either Chinese or English. The questions were as follows:

1. a) What is your interpretation of this idiom?

    b) Have you experienced a similar situation that represents the moral within this idiom? Explain.

2. a) What have you learned from this idiom that helps you better understand your Chinese culture?

    b) How may it relate to your life?

Responses to question 1a) were meant to indicate the students' understanding of the idiom and their ability to interpret the idiom in their own words. The responses to question 1b) explored if students had previous knowledge of an idiom or expression in English similar to the Chinese idiom presented in the story. Responses to question 2a) inquired about students' appreciation of the idiom as related to the Chinese culture and the extent to which the students understood the moral within the idiom. Question 2b) inquired about how the moral related to their personal lives. In essence, analyzing student responses to both set of critical questions could enable me to determine whether or not they understood the idiom stories; whether that understanding was at a surface or a deep level, and whether it was connected to prior Chinese cultural understanding.

Data collection procedures.

The SAT II Chinese Subject Test with Listening (Form A) took 60 minutes to complete; 20 minutes for listening comprehension, 20 minutes for usage, and 20 minutes for reading comprehension. Each part of the test represented approximately 33% of the total test. All of the 85 questions were based on typical real-life experiences and situations in any Chinese community (e.g., how to read an advertisement or a sale sign) along with familiarity with the appropriate usage of idioms and phrases embedded in oral and written language (College Board, 1998).

The scoring procedures of this test yield a raw score. Following the test guidelines for scoring, the raw score was the number of points students earned, based on the number of questions that they answered correctly minus a fraction of the number they answered incorrectly. Students received one point for each correct answer and subtracted one third of a point for each wrong answer to a 4-choice question, and half of a point for a 3-choice question. If students skipped a question, that question would not be counted, and no points would be subtracted.

Subscores for each section of the test were determined and used to compute the total score, but their individual contributions differed as they were based on different skills. Both listening comprehension and reading comprehension consisted of 30

questions whereas the usage section had only 25 questions. The listening comprehension, usage, and reading comprehension subscores were weighted equally.

The test was administered to students on the first day of week 1 of the study. Upon analyses of the pre-test scores, students were classified as low or high prior knowledge groups. The administered raw scores indicated a range 0 to 80 out of a potential range of 0 to 85 with a median score of 37. Students below the median were considered to be in the low prior knowledge group, and students equal or above the median were considered to be in the high prior knowledge group. Both groups consisted of 15 students. Within these classifications, students were randomly assigned to receive reading comprehension instruction in Chinese as a second language.

Subsequent to the administration of the pre-test (Form A), heterogeneous groups of students were created following the procedures described above. Each teacher then conducted the reading comprehension lessons to teach 12 idioms by implementing the Cooperative Integrated Reading and Composition (CIRC) model (Stevens, Maden, Slavin, & Farnish, 1987). While an exploration of CIRC and its impact on comprehension is beyond the scope of this study, a general description of the instructional model is offered here to contextualize the reading lessons and journal writing for the reader. CIRC is a comprehensive approach to literacy learning involving students working in collaborative heterogeneous groups and engaging in story-related activities with partners along with teachers' direct instruction. Each lesson included the instructional format established by CIRC: story-related activities, direct instruction in comprehension strategies, and integrated writing and language arts within a collaborative setting (Stevens & Slavin, 1995). A more detailed description of this instructional model is found in Appendix A and an example of a scripted lesson is included in Appendix B. An example of a lesson worksheet illustrating the activities is found in Appendix C.

Each lesson was presented in a 50 minute session every week for a total of 12 weeks. Each week a different idiom was introduced (See Appendix D for a list of the idioms introduced over this time period). In both fifth- and sixth-grade classes, the teacher followed identical lesson scripts, guiding students to understand the text and the moral within each idiom lesson: the title of the idiom, the lesson objectives, the content of the lesson, and student's worksheet and activities associated with that particular lesson.

Subsequent to each lesson, the teachers had students write in their journals. Students recorded responses to the same two sets of questions (see previous section for the specific questions asked) in their writing journals for all twelve lessons. Students were encouraged to use Mandarin Chinese to write their responses but they were allowed to use any language they preferred to avoid any communication barriers. The students' journals were collected by the two teachers at the end of each idiom lesson. The responses within journals were reviewed and discussed by both teachers and scored using a rubric and coding scheme (both are described below) following each lesson. Reliability in scoring was achieved since we reviewed, discussed, and scored each journal response together. In this way we discuss any differences to reach an agreement on each given score (Serafino, 1998).

The following section explains the procedures for the analysis of the journal responses to explore the influence of cultural prior knowledge on understanding Chinese text.

Data analysis procedures.

Data analysis was done concurrently with data collection. Content analysis (Berelson, 1952; Kondracki, Wellman, & Amundson, 2002; Krippendorff, 1980; U.S. General Accounting Office, 1996; Weber, 1990 as cited in Stemler, 2001) involved the use of coding and categorization, discerning and describing key patterns, explaining important similarities, and pointing out important relationships in the content studied.

Content analysis of students' journal entries explored students' comprehension of Chinese idiom stories and their understanding of the Chinese cultural aspects within the idioms and the level of that understanding. Five types of analyses were conducted relative to students' responses to journal questions.

First analysis. Journal Writing Questions 1a) and 1b): What is your interpretation of this idiom? Have you experienced a similar situation that represents the moral within this idiom? Explain. The content of journal responses was analyzed using the Structure of the Observed Learning Outcome (SOLO) Taxonomy rubric (Biggs, 1999; Biggs & Collis, 1982). This coding rubric was useful to determine if students understood the meaning of each Chinese idiom reading story.

The SOLO taxonomy (Biggs, 1999; Biggs & Collis, 1982) consists of five hierarchical levels that reflected students' understanding of the learning tasks: prestructural, unistructural, multistructual, relational, and extended abstract. The prestructual level (level 1) refers to students not showing any evidence of comprehension. The term unistructural (level 2) refers to students who responded with only one relevant item or one aspect of the task. The multistructual level (level 3) shows that students picked up several aspects of the task, but did not integrate them. The relational level (level 4) indicates that the students integrated elements of the task into a coherent whole. The abstract (level 5), which is the deepest level, refers to students who were able to generalize the whole task beyond the immediate context.

For example, the Chinese idiom "掩耳盜鈴 — *to plug one's ears while stealing a bell*" boils down to "fooling yourself." Briefly stated, the idiom story tells of a man who steals a bell and when he runs away with it, he plugs his ears. He thinks that if he cannot hear the bell, no one else can either. A student response which stated that the story involved a man plugging his ears indicated that students recognize and name the characters, details and events in the text. Using the SOLO rubric, the response would be judged as a surface level answer. It picks up several aspects of the story but does not interrelate or integrate them into an overall story. If a student mentioned a bell and the man stealing it and also stated that the man deceived himself into believing that because he could not hear the bell neither could other people, then he had fooled himself. The student's response then would generalize beyond the immediate context and would be judged as showing a deep level of knowledge. Levels 1–3 were categorized as surface level of understanding of the meaning of the idiom stories whereas levels 4–5 represented a deep level of understanding.

Second analysis. A second type of analysis was performed based on the responses to questions 1a) and 1b). I wanted to explore why the students achieved either surface level or a deep level of understanding of the idiom stories. This second analysis was done using only the five stories where students achieved the highest scores of surface level knowledge and the five stories where students achieved the highest deep level of knowledge. For every student I compared the answers to journal questions 1a) and 1b). In other words, I examined if there was a connection between being able to explain the moral of the story and knowledge of a similar expression or proverb in English. When a connection was identified, I then checked if a similar pattern was found in the responses for the other 11 idiom reading stories that the student gave. This analysis helped determine if achieving a deep level of understanding was related to having prior knowledge of a similar expression in English.

Third analysis. The last analysis of Journal Questions 1a) and 1b) was conducted to determine if there was a significant difference between students with low and high prior knowledge of Chinese language and culture and those with surface and deep levels of knowledge of Chinese idiom stories. A t test was applied to examine whether the students with high prior knowledge scored at deep levels of knowledge of Chinese idiom stories and students with low prior knowledge scored at surface levels of knowledge at the .01 level of significance.

Fourth analysis. An analysis of content using the SOLO rubric was also done for students' responses to Writing Journal questions 2a) and 2b): What have you learned from this idiom that helps you better understand your Chinese culture? How it may relate to your life? (Gall, Gall, & Borg, 2003). The purpose of the fourth analysis was to determine the level of understanding students had of Chinese culture embedded in the idiom or reflected in their own lives. The analysis of questions 2a) and 2b) followed the same procedure using the SOLO rubric as done with questions 1a) and 1b). SOLO levels 1–3 were categorized as surface level of understanding Chinese culture whereas levels 4–5 represented a deep level of understanding.

Fifth analysis. An additional analysis was performed to triangulate the data on identification of surface or deep level of understanding of Chinese culture. Each journal entry was coded using a schema based on the five virtues that, "Confucius believed fundamental for harmonious hierarchical societies. The five virtues are *ren* (仁 – benevolence), *yi* (義 – righteousness), *li* (禮 – propriety), *zhi* (智 – intelligence), *xin* (信 - honesty)**...**" (Hui, 2005, p. 19). The use of these virtues in a coding scheme to assess students' understanding of Chinese culture is appropriate since Confucius philosophy is very embedded in the Chinese way of life and beliefs systems. Hui (2005) validates the use of the virtues when he states "the cultural knowledge embodied in the Chinese cultural schema of education exerts profound influence on teachers, students (regardless of their ages) and their parents" (p. 17). This author adds that, "persistence and prevalence of Confucianism reinforces the cultural understanding that moral virtues are the prerequisite of social harmony" (p. 19). Researchers in other disciplines (i.e., leadership; business) have also used the virtues to interpret Chinese cultural understanding (Kirby & Fan, 1995; Yuan, 2012).

Student journal responses that indicated at least one virtue were coded as deep level of knowledge. The classification using the virtues coding scheme was then compared to the classification of understanding Chinese culture using the SOLO rubric. The comparison was useful in verifying which students had surface or deep level understanding of Chinese culture.

Findings and Discussion

Table 4 shows the percentage of responses classified as surface or deep understanding for each of the twelve class sessions and their associated idiom stories.

Table 4.

Students' Responses to the Journal Questions 1a) and 1b) (N = 30)

	Level (%)	
Idioms	Surface	Deep
1	57.0	43.0
2	54.0	46.0
3	42.0	58.0
4	47.0	53.0
5	30.5	69.5
6	50.0	50.0
7	41.0	59.0
8	25.0	75.0
9	35.0	65.0
10	55.0	45.0
11	10.0	90.0
12	37.7	62.3
M	40.35	59.65
SD	13.84	13.84

With respect to exploring if the students understood the idiom stories [Journal Questions 1a) and 1b)], results indicated that for all 12 idiom stories a range between 10% and 57% of the students (*N*=30) had a surface knowledge level, with a mean of 40.35%. Table 4 also shows that a range between 43% and 90% of the students (*N*=30) had a deep knowledge level, with a mean of 50.65%. The results suggest that a majority of students (mean of 59.65) gained a deep level of understanding after each of the lessons. The wide ranges for each of the levels suggest great variability of understanding across the different idiom stories. The variability might be a result of differences in the type of idiom (i.e., parables; historical events; myths or famous literary works); however, they could also reflect different levels of students' prior knowledge of Chinese idioms. To investigate this finding, I conducted a second analysis which focused on determining if prior knowledge of a familiar expression in English influenced their level of understanding the Chinese idiom stories.

Table 5

Comparison between Idiom Stories for which Students had Surface Level of Understanding and Students Answers to Questions 1a) and 1b)

Idiom	Main Idea	Students' Answers
1	A prime minister displayed a set of books, entitled "Lǔshì Chūnqiū" on the city gate and asked if anyone could add or subtract one character to or from the book, he would give that person a thousand pieces of gold.	A person offered a thousand pieces of gold.
10	The snipe and the clam had a quarrel and both of them refused to give in. A fisherman came by and saw both of them and snatched up both of them.	The snipe and the clam had a quarrel then a fisherman came by and snatched up both of them.
2	There was a man selling spears and shield out in the street. He said that his spears can pierce anything. He also said that nothing can pierce any of his shields. The seller was completely lost for a response when someone questioned his words.	There was a man selling spears and shield out in the street.
6	The general led an army to fight a war. They marched into the mountains for days and drank all of the water. They all felt thirsty and tired. The general thought of an idea to comfort his soldiers by telling them there was a plum tree forest ahead. As the soldiers thought of the plums, their mouths began to water and their energy was restored and they marched forward quickly.	The general was smart. He comforted his soldiers with little white lie by telling them there was a plum tree ahead
4	A man invited his friend over to his house for a drink. When his friend was drinking wine he noticed a snake in the glass. Ever since, he had been sick. The host looked carefully around his house and found out that the bow hanging on the wall where they had drinks had been reflected in the glass of wine of his friend. He then invited his friend over for a drink at the same place again and pointed to the bow on the wall. His friend now understood that it was the reflection of the bow in the glass. He was relieved and his illness disappeared.	Student 1: Chinese bows look like snakes. Student 2: The guest saw a snake in the glass of wine but he still finished that glass of wine. Ever since, he had been sick.

The second analysis of questions 1a) and 1b), identified the 5 idiom stories for which most students had deep level knowledge: 11th (90%), 8th (75%), 5th (69%), 9th (65%), and 12th (62.3%). It was noted that 90% of the students, the highest percentage, indicated a deep knowledge level of the 11th idiom, 熟能生巧, the equivalent of the English proverb *Practice makes perfect*. Perhaps the English idiom *Practice makes perfect* was the most familiar one to the students among the total set of twelve idiom stories which enable them to more easily relate this particular idiom to their own experiences or prior understandings. To assess if familiarity with the idiom in English was a valid explanation, I proceeded to check if students' responses to the other 4 idiom stories with high deep knowledge levels reflected similar familiarity with English expressions.

In general, this analysis revealed that similar to idiom 11, the Chinese idioms # 8, 5, 9, and 12 were closely related to English expressions and were referenced as such in students' responses. For example, in idiom 8, 揠苗助長 — *to try to help the shoots grow by pulling them upward*, it was found that approximately 75% of the students indicated a deep level of understanding. Some common English expressions equivalent to this Chinese idiom would be "Let well enough alone", "Don't do more harm than good", and "Haste makes waste". Idiom 5 or 畫蛇添足— *add legs to a snake*, was similar to the English expressions, "Don't overdo something" and "gild the lily." Idiom 9, 有志竟成 — *where there is a will, there is a way* and Idiom 12, 半途而廢 — *to quit halfway down the road*, were similar to the English expression "Don't quit half way down the road". An assumption was made that when students were familiar with the equivalent idiom in English and had reached a deep level of comprehension, they referenced the connection in their journal responses. If a student did not indicate the deep level of knowledge on a question or was not familiar with the English equivalent, connections were not made.

Further, the answers of students with the highest five percentages of surface level knowledge were examined. It was found that students had surface level knowledge for idiom stories 1, 10, 2, 6, and 4, respectively, at 57%, 55%, 54%, 50%, and 47%. Table 5 specifies the main idea of these idiom stories with students' answers to questions 1a) and 1b).

The content analysis suggested that the lower scores may have been due to the students' unfamiliarity with the English equivalent. As it can be seen in Table 5, in most cases, students' responses provided surface details of the story events, but their answers lacked any engagement with the basic idiom story or main idea.

A comparison between students' responses to journal questions 1a) and 1b) with the level of students' prior knowledge was also performed. Table 6 presents students' responses to the journal questions 1a) and 1b) based on levels of students' prior knowledge.

Table 6.

The t Test Summary of Students' Responses to the Journal Questions for Prior Knowledge Level Differences (N = 30)

Level	M	SD	t	p
High (n = 15)	43.73	8.754	3.182	0.004**
Low (n = 15)	34.07	7.86		

**$p < .01$, two-tailed.

Table 6 shows a significant difference between the two levels of students, $t(28) = 3.182$, $p < .01$, revealing that students with high prior knowledge ($M = 43.73$, $SD = 8.754$) scored considerably higher than students with low prior knowledge ($M = 34.07$, $SD = 7.860$). An effect-size analysis, Cohen's d, was also performed (Cohen, 1988). The result of the effect-size analysis confirmed that there was a significant difference between the two levels of students, ($d = .82$). The result of the t test indicated that students with high prior knowledge scored significantly higher than students with low prior knowledge. This finding suggests that students' prior knowledge (of English expressions equivalent to Chinese idioms) contribute to their success in comprehending Chinese idiom stories. The reader then, is able to relate appropriately what they know with the message they encounter in the text being read (Carroli, 2001; Lehman & Schraw, 2002). Thus, the depth to which a reader understands a text is directly connected to his/her prior knowledge.

Overall, the above findings suggest a pattern that the idiom stories for which students achieved deep levels of understanding had similar expressions in English familiar to the students. The analysis seems to indicate that the degree of prior knowledge with a similar expression in English influence their level of understanding of Chinese idiom stories.

Different from the initial set of journal questions, the purpose of Journal Questions 2a) and 2b) explored students' comprehension of Chinese culture embedded in the stories. The content analysis using the SOLO rubric of responses to Journal Questions 2a) and 2b), revealed that for all 12 idiom stories a range of 4% to 50% of the students ($N = 30$) had deep knowledge level of cultural understanding, resulting in a mean of 22%. As Table 7 suggests, in most cases, however, a range of 50% to 96% of the students ($N = 30$) showed only a surface knowledge, a mean of 78%.

The results suggest that a majority of students (mean of 78%) possessed a surface level of understanding Chinese culture. It was found that most of the students were able to recognize surface features of the Chinese culture. For instance, they were able to write about idioms which were related to historical events and moral lessons important to the Chinese culture. These features although significant to Chinese education, failed to reveal if and how students related the stories to their personal lives.

Table 7:

Students' Responses to the Journal Questions 2a and 2b (N = 30)

Idioms	Level (%)	
	Surface	Deep
1	90.0	10.0
2	68.0	32.0
3	96.0	4.0
4	87.0	13.0
5	93.0	7.0
6	94.0	6.0
7	80.0	20.0
8	74.0	26.0
9	62.0	38.0
10	76.0	24.0
11	50.0	50.0
12	66.0	34.0
M	78.0	22.0
SD	14.57	14.57

To confirm this finding, I performed a second content analysis of Journal Questions 2a) and 2b). This analysis, using Confucius five virtues coding scheme, was conducted for all the questions. This analysis verified that the students who achieved a surface level of understanding of Chinese culture in the SOLO rubric were not able to write about any of the virtues. A surprising finding was that not all of the students who achieved a deep level of understanding of Chinese culture using the SOLO rubric were able to write about the virtues. I expected that these students would discuss at least one of the virtues. However, the findings showed that only a range of 3% to 33% of the students (N = 30) indicated deep knowledge level of cultural understanding over the 12 idiom story responses, with a mean of 9.2%. For example, in their responses to idiom 4 "杯弓蛇影 — *to mistake the reflection of the bow for a snake*", students indicated that it is rude for the guest to refuse something the host gives which is a cultural understanding embedded in the story representing the virtue propriety, yet peripheral to the main theme (not to worry about an imaginary thing).

It was reasoned that fewer students appeared to have cultural understanding, when the analysis was done using the five Confucius virtues rather than the SOLO rubric, because the virtues demand a more comprehensive and in-depth appreciation of Chinese cultural beliefs. The findings confirm that when students relate the moral of a story to their personal lives (in terms of knowledge and experience), they achieve a deeper understanding and appreciation of what they read in Chinese. In a parallel manner, cultural understanding of Chinese text is enhanced when personalized.

Conclusions and Implications

This study illustrated how prior knowledge can influence students' achieving a deep level of understanding. Students with high prior knowledge were better able to achieve a deeper level of understanding, in contrast to surface level, than students with low prior knowledge. Specifically, prior linguistic knowledge, prior cultural knowledge,

and personal prior experience contributed to second language learners' success in understanding Chinese idiom stories and Chinese culture embedded in the stories. The current study corroborates findings from previous investigations (Landary, 2002; Stott, 2001) on the importance of prior knowledge, both sociocultural and personal experience (Chan, 2003; Lin, 2004) to understand L2 text.

Given the above conclusions, an instructional implication of this study underscores the notion that teachers should provide direct guidance to activate students' schemas relative to the reading of L2 texts, in particular reading Chinese as a second language text. A second pedagogical proposition is the use of Chinese idiom stories as reading text in the teaching of Chinese language and culture. The use of Chinese idioms and their associated stories showed to be instrumental as a text that exposes students to the moral of the idiom while portraying aspects of Chinese culture. In other words, the type of text that students are presented to read is critical to achieving the goal of teaching language and culture. For instance, rather than presenting students with Chinese translations of English written text, my study stressed that by using Chinese idiom stories, instruction may be better equipped to achieve this goal. Since the idiom stories are unique to the Chinese culture, reading text that includes them will deepen students learning more than a text that just exposes them to the Chinese language. This is an important goal of Chinese heritage schools, which were created to instruct U.S. born English-speaking students in the Chinese language and Chinese culture.

While the current scholarly literature provides a wealth of information on reading comprehension and prior knowledge in English and Spanish as L1 and in English as L2, much needs to be explored about reading in Chinese as a second and heritage language. One area derived from this study suggest inquiry about what types of vicarious experiences teachers may facilitate to accentuate necessary schemata for acquiring new language and cultural knowledge.

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NOTES

1. Psychometric properties of the instrument indicated that experts in a given performance domain generally judge content validity. For example, the content of the *SAT II: Subject Tests* is evaluated by committees made up of experts who ensure that the test covers content that matches all relevant subject matter in each of the academic disciplines. Both face validity and a curricular validity study have been used to establish the content validity of a test (College Board, 2005a). The reliability coefficient of the SAT II Chinese subject test with Listening was indicated in the .93 to .95 range, attesting to the reliability of the test (College Board, 2005b). The coefficient data suggested that the reliability of the SAT II Chinese Subject Test with Listening would be adequate for use in the study.

Appendix A

The CIRC Model

Acknowledging a student's prior knowledge of the second language and combining it with an appropriate teaching model may be a way to increase students' reading comprehension in L2. Parallel to understanding the role of prior knowledge, cognitive theory is also used to support teaching models that impact reading comprehension employing cooperative learning strategies (Johnson & Johnson, 1987; Slavin, 1990). One such model is the Cooperative Integrated Reading and Composition (CIRC) model (Stevens, Madden, Slavin, & Farnish, 1987), whereby the model integrates oral language and written language development, for reading comprehension (Calderón, Hertz-Lazarowitz, & Slavin, 1998). It enables teachers to manage effectively the combination of the primary language (English) and target language (Chinese) at the intermediate level of reading comprehension (Calderón, Hertz-Lazarowitz, Ivory, & Slavin, 1997).

Both Bakhtin (1986) and Vygotsky (1978) stressed the centrality of dialogicality to human thought. The CIRC instructional model applies this notion by fostering the activation of prior knowledge through social interaction between and among teacher and students (Stevens, et al., 1987). A prominent characteristic of the CIRC model is the pervasive role of schema or prior knowledge activation through constructive dialogue between teacher and students, and students among themselves. In other words, it uses collaboration as a strategy to promote learning, more specifically reading comprehension. Here, again, the active role of the learner collaborating and interacting to create meaning is underscored.

Further support for this application is found in the work of Koschmann (1999). This researcher linked Bakhtin's (1986) theoretical dialogicality to pedagogy, using collaborative learning as the specific bridge. He even proposed that collaborative learning could be considered as a theory of pedagogy, whereby learning is enhanced when it takes place in an environment of social interactions. Koschmann portrayed collaboration as the requisite setting for and execution of learning. He noted that subjects could be seen as using utterances as thinking devices, indicating that language and speech were intimately associated with cognition and reading comprehension, including the understanding of levels of knowledge.

In implementing CIRC, each lesson is scripted, applying specific guidelines to be followed (see Appendix B for an example of a scripted lesson). The teacher begins with a concise statement of the main objective of the lesson. Then she presents a quotation of a Chinese idiom and read aloud the text of the idiom story. After the read aloud the students read the Chinese text in concert with the teacher. The lesson scripts specify four types of activities that teachers guide students to complete during the lesson. The first type is called *Treasure Hunts*, consisting of details embedded in the idiom story which the team members had to hunt for. Collaboration of students as part of the hunt was not only permitted but encouraged. The second type of activity involved *vocabulary development*. In cooperation with a partner or team members, each student pronounced

the word, and then demonstrated his/her ability to use the word correctly by putting it into a meaningful sentence. The third type of activity required students to *retell the story* in pairs. Each student used a checklist to score his or her partner's retelling of the story. The final type of activity consisted of several *open-ended questions* to which the students responded in writing Mandarin Chinese. Students were encouraged to discuss the questions and their answers in small groups and with the teacher. The questions were oriented towards helping the student relate to the story in a personal way, permitting imagination and creativity. In discussions, both teachers and students could use the language of their choice, Chinese or English (See Appendix C for an example of a lesson worksheet illustrating the activities).

Appendix B

Sample Lesson Script

Lesson 1: One Character Is Worth A Thousand Pieces Of Gold

Lesson Objectives

1-1   Students will learn to comprehend the concept of the "One character is worth a thousand pieces of gold" idiom story.
1-2   Students will understand the meaning and moral of the idiom through its associated story.
1-3   Students will be able to use the idiom as part of a sentence.
1-4   Students will expand their Chinese vocabulary.
1-5   Students will practice and possibly increase their knowledge of Chinese structure (grammar) through answering/asking the questions and discussion (see questions for treasure hunts).
1-6   Students will enhance their Chinese reading comprehension strategies (i.e., how they create meaning from text, such as identifying main ideas).

Content

Title/Idiom: One Character Is Worth A Thousand Pieces Of Gold

Translation of idiom story. Around three thousand B.C., there was a Prime Minister of the state of Chin named Lǔ Bùwéi. He wrote a set of books, entitled "Lǔshì Chūnqiū." He had them put on the city gate of the capital. He announced that if anyone thought these books were not well-written and could add or subtract one character to or from these books, he would give that person a thousand pieces of gold. At that time, there was no one who dared to change a character in the books. Yet, everybody knew there was the set of books, "Lǔshì Chūnqiū." Afterwards, the idiom, "one character is worth a thousand pieces of gold", is used to describe texts which are exceptionally well-written (Su, 2004).

Cooperative Integrated Reading and Composition Script (Lesson 1)

The teacher will give the class an introduction to the story, providing the main theme and establishing context and background information necessary or helpful to reading comprehension. For example, the teacher will explain the main idea of this idiom story (that well-written works are very valuable). This idea is expressed in the idiom, "One character is worth a thousand pieces of gold." The teacher will ask the students to explain the meaning of the term "prime minister." If necessary, the teacher would state the meaning of the term. Then the teacher will relate the term to the story. The teacher will point out to the students that people in general are afraid to challenge authority. That is why no one dared to change a character. However, the story's main point is text that is well-written is very valuable. The teacher may ask the students "Does everyone understand or does anyone have a problem?" If so, the teacher addresses any issues raised. The teacher may also ask the students, "Does anyone wish

to ask a question or want to make a comment?" If so, the teacher will engage in discussion with the students, to which the teacher provides closure.

Throughout the lesson, the teacher will set the structure of the lesson by following step-by-step the CIRC procedures to provide direct instruction in reading activities to the whole class or to each team separately. Teacher will assign students to reading groups based on their levels. The teacher will ask the students to read the story of "one character is worth a thousand pieces of gold" silently and orally with a partner. The teacher will then provide the students with questions related to the idiom story, which is called "Treasure Hunts." After checking the results of the Treasure Hunts, the teacher will give students a list of new vocabulary used in the story (see the Lesson 1 worksheet for CIRC). The students will have to practice saying the words out loud with their partners. The teacher will also ask the students to look up the new words in the dictionary and use them appropriately by creating meaningful sentences. After the reading of the story and the accomplishment of Treasure Hunts and vocabulary tasks, the teacher will ask the students to retell the main idea for their partners, who must evaluate the retelling using a checklist provided by the teacher. Next, the teacher will ask the students to write open-ended responses to questions on the worksheet based on what they have read. The teacher will have the students engage in mutual assessment and help with respect to story related skills/knowledge, covering vocabulary, writing, usage, and comprehension. While the students are engaging in these team/partner tasks, the teacher will visit each group. The teacher will monitor their progress, and give hints or other help as necessary.

When all partners and teams have completed all of the above tasks, the teacher will recombine all of the students into a single unified class group. The teacher will lead them in a final closure session consisting of a wrap-up discussion of the idea, the idiom story, and all things that they have, or should have learned. For example, the idiom "one character is worth a thousand pieces of gold" is used to describe texts which are exceptionally well-written, in terms of content and style, and are valuable.

Appendix C

Lesson 1: Worksheet for CIRC (Objective 1-1)

Activity 1: Treasure Hunts (課文尋寶):

1. When did this happen? (這個故事是什麼時候發生的?)

2. Who wrote the books, "Lǔshì Chūnqiū "? ("呂氏春秋"這部書是誰寫的?)

3. Where did the Prime Minister put the books? (宰相把書放在哪裡?)

4. Why does everyone know about the books, "Lǔshì Chūnqiū"? (為什麼大家都知道"呂氏春秋"這部書?)

5. What does the idiom "one character is worth a thousand pieces of gold" represent? ("一字千金"是用來表示什麼的?)

Activity 2: Vocabulary List (本課生字、新詞):

秦 qín (Chin); 呂 lǔ (Lu); 氏 shì (a surname); 稱讚 chēngzàn (to praise); 成語 chéngyǔ (idiom); 宰相 zǎixiàng (prime minister); 敢 gǎn (dare)

Activity 3: Story Retelling Checklist (Objective 1-2)

Teller's Name：＿＿＿＿＿＿   Date:＿＿＿＿＿

Task: Please evaluate if your partner retells the story correctly with respect to following elements. If so, please make a check mark in each box.

Elements	Detail elements within the idiom story	Check
Title of the idiom	One character is worth a thousand pieces of gold	
Name of the character(s)	Lǚ Bùwéi	
Setting and plots of the story	Lǚ Bùwéi wrote a set of books, entitled "Lǚshì Chūnqiū".	
	He had the books put on the city gate of the capital.	
	He announced that if anyone thought these books were not well-written and could add or subtract one character to or from these books, he would give that person a thousand pieces of gold.	
Climax	There was no one who dared to change a character in the books. Everybody knew there was a set of books, "Lǚshì Chūnqiū ".	
The representation of the idiom	"One character is worth a thousand pieces of gold" is used to describe texts which are exceptionally well-written.	

Signature of the scorer: ＿＿＿＿＿＿＿＿＿＿

Activity 4: Open-ended Questions (Objective 1-3):

1. What was the real purpose of the Prime Minister displaying his set of books on the city gate and asking people to add or subtract one character to or from the books, offering a generous reward? (請問宰相把呂氏春秋放在城門上，並且說只要有人修改其中一個字，就給他很大的獎賞的真正目的是什麼？)

2. What would happen if people did add or subtract one character to or from the books, "Lǔshì Chūnqiū"? (假如真的有人修改呂氏春秋的一個字，會有什麼事情發生？)

Appendix D

Description of the Idioms Presented in each Lesson. A series of traditional Chinese idioms and their associated stories were taken from Su's (2004) *New-Edition Chinese Textbooks* including student workbooks, which the Chinese heritage language school assigned for teaching. The content of a typical lesson in the textbook consisted of an illustration related to the idiom story and a fairly brief (100 to 200 words) text detailing the idiom story. The 12 idioms and stories were selected and assigned by the curriculum committee of the school as part of the fifth- and sixth-grade Chinese cultural knowledge curriculum. A description of the 12 idiom follows:

1. 一字千金— *One character is worth a thousand pieces of gold.*
2. 自相矛盾—*To contradict oneself.*
3. 掩耳盜鈴—*To plug one's ears while stealing a bell.*
4. 杯弓蛇影—*To mistake the reflection of the bow for a snake.*
5. 畫蛇添足—*Add legs to a snake.*
6. 望梅止渴—*To quench one's thirst by thinking of plums.*
7. 守 株待兔—*To stand by a stump for hares.*
8. 揠苗助長—*To try to help the shoots grow by pulling them upward.*
9. 有志竟成—*Where there is a will, there is a way.*
10. 鷸蚌相爭—*The snipe and the clam have a quarrel.*
11. 熟能生巧—*Practice makes perfect.*
12. 半途而廢—*To quit halfway down the road.*