

# Language Proficiency, Reading, and the Chinese-Speaking English Language Learner

## Facilitating the L1-L2 Connection

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*A seven-year-old boy sits across from his Chinese-speaking ELL tutor; the boy's father also sits close by. Struggling to make sense of the strange English words on the page in front of him, Xin Wei (pseudonym, pronounced Jin Way) intuitively understands what his tutor and his father both want; i.e., they want him to read the short passage automatically and fluently. Sadly, Xin Wei is afraid he will let both of them down.*

Xin Wei's story is not new to classrooms across the United States. In fact, as our nation's cultural diversity continues to increase rapidly, English language learners (ELLs) laboring to build reading fluency and comprehension are a more frequent occurrence. The National Clearinghouse for English Language Acquisition announced that during the 2005-2006 academic year, U.S. public schools served more than five million school-aged Limited English Proficient (LEP) students. This number represents a 57% increase in the ELL population in U.S. classrooms since 1995 (NCELAQ, 2008).

Similarly, the United States Census Bureau reported that as of July 1, 2008, the minority population in the U.S. reached

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104.6 million, 34% of the total population. Included in this number are Asians, whose population in the United States was 15.5 million, making this group the second-fastest growing minority in the nation (U.S. Census, 2009). This same census report revealed that approximately 2.5 million people in the U.S. ages five and older reported speaking Chinese in their homes.

According to the U.S. Census Bureau, Chinese, second only to Spanish, is the most widely spoken non-English language in the U.S. (2009). Moreover, the U.S. Census Bureau estimated that the Asian population in the United States will almost triple by the year 2050, increasing to 40.6 million, or 9.2% of the U.S. population, concurrently increasing the possible number of Asian ELLs entering the U.S. public school system (U.S. Census, 2008).

What follows is a case study investigating the effectiveness of interventions designed to improve second language and reading proficiency of a seven-year-old Chinese-speaking ELL, Xin Wei, who completed second grade at a diverse metropolitan elementary school in the U.S. While a single case study cannot answer all the questions that arise as a young English language learner attempts to build proficiency in a second language and reading in English, this study can aid in delineating the nature of the questions to be asked, thus enabling researchers to move on to better questions.

### Xin Wei:A Case Study

Xin Wei's introduction to the United States began in June 2006, when he traveled to the U.S. with his parents from Shijiazhuang, the capital city of Hebei Province, located southwest of Beijing in the People's Republic of China. Although his mother, a teacher at a middle school in China, returned home at the end of a short vacation in the U.S. with her family, Xin Wei and his father remained in the U.S.

for the coming academic year. Xin Wei's father was a visiting scholar in the College of Education at a major university in the U.S., and Xin Wei attended a local elementary school designated for international students near the university.

Attending elementary school in the U.S. was the primary reason Xin Wei's parents wanted their son to remain in the U.S. during his father's tenure at the university. They hoped that this opportunity would help their son develop proficiency in English. The seven-year-old had already completed first grade at a primary school in China, giving him some early literacy exposure to his native language in an academic setting; his exposure to English, however, had been limited. In China, Xin Wei had only learned a few simple words in English, such as apple, mother, and father. Upon his arrival in the U.S., Xin Wei spoke very little English.

Based on Xin Wei's age, academic background, and second language acquisition level, after conferring with his father and the school's ESOL teacher, he was placed in a second grade classroom in the diverse metropolitan elementary school designated as an ELL center for the city. All classroom teachers at this school have been trained to use sheltering strategies that provide enhanced content area instruction and language development for ELLs while also rapidly building English language proficiency.

Gunning (2010) defined the concept of sheltered English as "the practice of teaching subject matter content in English to English language learners who have learned conversational English but not academic English" (p. 442). According to Vacca and Vacca (2008), "The concept of 'sheltering' English learners is similar to the concept of scaffolding instruction for all learners who need instructional support to be successful with content literacy tasks" (p. 90). The key difference between the two concepts focuses on adapting the instruction

for nonnative speakers; this includes careful attention to adaptations for both design and delivery as content and language development are blended together.

For a ninety-minute instructional block every morning, Xin Wei participated in a pullout program with other non-English speaking or limited English speaking students in which he received instruction that focused on reading, writing, listening, speaking, and viewing. For the remainder of the day, a regular classroom teacher used sheltering strategies for teaching Xin Wei the subjects of mathematics, science, and social studies; during this time, he was with monolingual English-speaking children and other ELLs.

Additionally, Xin Wei participated in his school's extended day program, which was available to 1<sup>st</sup> through 5<sup>th</sup> grade students. The program provided Xin Wei opportunities to enhance his academic development and to participate in extracurricular activities, which included fitness, technology, and educational field trips. The program ran Monday through Thursday for approximately three hours after the school day ended.

In spite of the intensive academic support provided by the elementary school, Xin Wei's father became concerned about his young son's progress, particularly given the time parameters of their stay in the U.S. His father observed at home that Xin Wei was having great difficulty reading his textbooks independently; also, Xin Wei's school progress reports indicated that he was performing below second grade level in English reading, writing, listening, speaking, and viewing.

Complicating Xin Wei's reading development in English was the fact that he was not yet reading in Mandarin upon arrival in the United States. It was at this point that Xin Wei's father sought additional academic assistance for his son; i.e., he initiated tutoring sessions for his son with a bilingual ELL tutor whose first language was also Mandarin.

### Research Questions

As work with Xin Wei began, several important questions regarding oral reading fluency and literacy development came to the forefront:

1. What is the nature of oral reading fluency?
2. What is the cognitive load required of children, such as Xin Wei, to acquire fluency in L2 oral reading?

3. At what age, or stage of L1 literacy development, is it most efficacious to introduce children to L2 reading and writing?

Looking closely at the case study of Xin Wei, a Chinese ELL, we address these specific issues.

#### **Question 1:**

*What is the nature of oral reading fluency?*

In the earliest studies, the focus of fluency was on speed and accurate decoding (National Institute of Child Health and Human Development [NICHD], 2000). Later studies recognized that fluency also involved the ability to understand phrasing and syntax. The National Reading Panel defined reading fluency as "the ability to read text quickly, accurately, and with proper expression" (NICHD, 2000, Ch.3, p.5); Pikulski & Chard (2005) concurred, adding that fluency is manifested in accurate, rapid, expressive oral reading. As early as 1987 and 1991, Schreiber concluded that fluent readers exhibit prosody; i.e., they use the appropriate pitch, pace, phrasing, and expression.

Hudson, Pullen, Lane, and Torgesen (2009) further asserted that fluent reading is proficient reading, which they described as follows: "accurate and efficient, it occurs with reasonable speed that varies with the text, and it involves good comprehension of the meaning of the text" (p. 5). The earlier findings of the National Assessment of Educational Progress in Reading supported this positive relationship between oral reading fluency and reading comprehension (Pinnell, Pikulski, Wixson, Campbell, Gough, & Beatty, 1995).

In order to reach appropriate levels of reading proficiency, Chall (1996) maintained that children must progress through several stages of reading. For older children reaching the third stage of reading development, reading moves beyond decoding and the slow processing of text word by word to a level of automaticity. In this stage, children begin to read more smoothly, more accurately, and with expression.

It is often assumed that students who can decode will become fluent readers; however, research has indicated that this is not necessarily so (Allington, 1983; Reutzel, 1996). Many struggling readers may not gain fluency incidentally or automatically. In contrast to skilled readers, struggling readers often need direct, explicit instruction in how to read fluently (Hudson, Lane, & Pullen, 2005).

For ELLs, achieving automaticity and

fluency is often a particular challenge. In addition to going through the same reading processes that native speakers do, nonnative speakers may need to translate English words into their own language to arrive at meaning.

Thus, becoming automatic in processing words and developing fluency in reading texts are extremely important tasks for English language learners (Graves, Juel, & Graves, 2007). Palumbo and Willcutt (2006) stressed, "Not having appropriate command of English vocabulary is often the cause of ELL's reading difficulties" (p. 161). This lack of vocabulary, as well as being nonnative speakers, specifically affects reading fluency (Palumbo & Willcutt, 2006).

To refine this argument further, it is beneficial to consider the work of Krashen and Terrell (1983) who presented the Natural Approach to language acquisition. This model illustrates how learners progress toward fluency. The steps are sequential, and the authors further hypothesized that the steps must be followed in a specific order; there are no shortcuts (See Appendix). According to Krashen and Terrell (1983), by the time second language learners reach Stage 3, Speech Emergence, they begin attempts at pronouncing coded text in order to access the knowledge of a known word.

For instance, when a second language learner comes across an unknown word in print, such as hippopotamus, an attempt is made, using word recognition strategies, to access the stored knowledge the beginning reader has in his or her head for a hippopotamus. If the child is successful in decoding the word and he or she has robust knowledge of a hippopotamus, then comprehension should occur. However, if the child unsuccessfully decodes the word, has no stored knowledge about a hippopotamus, or the knowledge is stored under an entirely different pronunciation, i.e., another language, then it would be impossible to have the comprehension that is an expected component of proficient reading.

#### **Question 2:**

*What is the cognitive load required of children, such as Xin Wei, to acquire fluency in L2 oral reading?*

For children such as Xin Wei, reading in the child's L1 is an important consideration as he or she progresses through the stages of development toward oral reading fluency in English. Carlo (2007) summarized the research that describes linguistic abilities that are present in a child's L1 as he or she begins the process of learning to read. This process includes the ability to perceive the phonemes of the

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language (Menn & Stoel-Gammon, 2000), the ability to recognize how morphemes change the meaning of words, and the ability to know the meanings of approximately 1,000 words and to recognize their spoken forms (Tager-Flusberg, 2000).

According to Bryant (2001), other linguistic abilities that are present during the learning process include having knowledge of language pragmatics and some knowledge of concepts of print (e.g., word boundaries, directionality, etc.) in the native language. Snow (2001) added that the cognitive processes supporting skilled reading in L1 are the knowledge of “the alphabetic principle, vocabulary, an understanding of discourse structures, and the ability to treat text as communicative” (pp. 599-600). For ELLs, Garcia (2004) also found that some of these capacities apply to those students who speak any language, while some apply only to specific languages. In the case of Chinese ELLs like Xin Wei, the difference between an alphabetic and a logographic language exemplifies the language-specific transfer difficulties.

For children attempting to acquire oral reading fluency in a second language, Carlo (2007) contended that “equally challenging is the task of constructing meaning from text when a high proportion of the words in the text are unknown” (p. 107). To this contention, Snow (2001) added, “Children learning to read in a language they do not speak are at a high risk for poor outcomes” (p. 599). For second language learners, Snow, Burns, and Griffin (1998) asserted the following:

Although print materials may be used to develop understanding of English speech sounds, vocabulary, and syntax, the postponement of formal reading instruction is appropriate until an adequate level of proficiency in spoken English has been achieved. (p. 11)

This appeared to be the case with Xin Wei, whose proficiency level in spoken English was low. In such cases, Carlo (2007) advocated designing reading instruction that first addresses weaknesses in oral language, ensuring that the ELL will benefit from more advanced reading instruction to follow.

### Question 3:

*At what age, or stage of L1 literacy development, is it most efficacious to introduce children to L2 reading and writing?*

Considerable research by developmentalists, linguists, and language educators has attempted to identify the best age for

second language acquisition, commonly called a critical period hypothesis (CPH). While this debate is somewhat relevant to this case study, its usefulness is limited by two factors. First, CPH is commonly applied to the spoken language only; second, many variables beyond age (i.e., previous schooling in L1, prior instruction in English, experience with the print nature of L1, and family and home literacy background) also appear to affect L2 acquisition.

While it is also commonly believed that younger children are better suited to second language acquisition, Collier (1998) pointed out that this is not necessarily true. Older second language learners must engage the second language at a higher level than their younger counterparts. The language structure and vocabulary are more difficult, making it appear that older students have more difficulty with second language acquisition. However, Collier's (1998) research findings indicated that compared to younger children, students between the ages of 8 and 12 actually make greater L2 acquisition gains.

Furthermore, Collier (1998) reported that children 8-12 years of age “maintain a greater cognitive advantage over younger children initiating second language acquisition at 4 to 7 years of age” (p. 514). Older children will have had ample exposure to their L1, which minimizes their confusion in conceptual transfer from one language to another.

Based on knowledge of Xin Wei's stage of language acquisition as well as theoretical knowledge of L2 language acquisition, Xin Wei must be able to accomplish the following cognitive tasks before he can become a proficient oral reader of English:

- a. Decode an English word and then recognize that the word is an English representation of a word that he already knows in Chinese,
- b. Access stored knowledge that he has regarding the meaning of the word in Chinese,
- c. Translate the word back to English, and
- d. Rapidly, automatically, and with expression, read the word in English.

The term linguists apply to these cognitive tasks is mediated lexicon access, meaning that in order for fluent oral reading to occur, the student must develop knowledge of English phonics as well as a large stored lexicon of English words.

Collier (1998) emphasized that the

implications of research findings indicated that neither proficiency in L2 nor academic achievement happen quickly. According to Cummins (1994), it takes about two years for ELLs to become proficient with conversational everyday English, which is contextualized; by contrast, academic language is more abstract and may take five or more years to acquire.

Academic language by definition includes “words used to label key concepts in the content areas and also abstract words commonly used in instruction” (Gunning, 2010, p. 520). Collier (1998) also noted three independent studies that supported the position that ELLs may need an additional five years of instruction in the L2 in order to reach the 50<sup>th</sup> percentile on a normal curve of a standardized assessment, even if the student is a capable learner.

Cummins (2001) added that obtaining a valid assessment of the ELL's ability and performance is an ongoing problem, explaining that ELLs do not perform as well on tests of academic proficiency as native speakers. Thus, a range of assessment measures would better ensure validity for academic performance.

## Description of the Study

### Initial Assessment

Having been previously apprised of Xin Wei's academic background and the circumstances leading to this intervention, the bilingual ELL tutor first met with Xin Wei to interview him informally in his native language. During this interview, Xin Wei spoke about the various aspects of his U.S. school that he enjoyed; e.g., Xin Wei stated that he enjoyed having the freedom to move around the classroom to engage in different activities, watching videos as part of the ESOL program before studying his text, and working in the computer lab where he had won several prizes for his work.

Xin Wei also reported that he did not feel lonely in the U.S. because he had met many English-speaking friends. At the conclusion of the interview, Xin Wei's father added that they read English or Chinese stories together at home, continuing Xin Wei's exposure to English. His father also reported that Xin Wei watched English cartoon programs on television almost every day after school, and Xin Wei's father tried to expose his son to spoken English in natural settings by taking short trips to various locations in the United States.

Throughout the interview, Xin Wei seemed to understand the simple English used by the bilingual ELL tutor; however,

he appeared to be very shy when asked to express himself in English. When speaking about his favorite cartoons, Xin Wei exhibited excitement, but only spoke one word, the main character's name. At the conclusion of the interview, the tutor asked Xin Wei to read a short passage aloud in English. An observational assessment of this oral reading exercise indicated that Xin Wei had problems with decoding words in English. His oral reading also lacked expression, and the tutor noted that Xin Wei ignored punctuation, phrasing, and pause structures.

Based on the informal interview and this oral reading observation, the bilingual ELL tutor determined that the following three specific formal assessments would provide additional and beneficial information: the *Peabody Picture Vocabulary Test* (Dunn & Dunn, 1997), the *Names Test* (Cunningham, 1990), and the *Jennings Informal Reading Inventory* (Jennings, Caldwell, & Lerner, 2006).

The first assessment, the *Peabody Picture Vocabulary Test* (PPVT), Form III-A (Dunn & Dunn, 1997) was administered in English and in Mandarin, as translated by his bilingual ELL tutor. This modification (administration in Mandarin) was used to determine the extent of Xin Wei's receptive vocabulary in both languages. Although the PPVT-III is a norm-referenced, individually administered measure of receptive vocabulary for speakers of English, Washington and Craig (1999) found the PPVT-III to be a culturally fair test of receptive vocabulary.

Next, the tutor administered the *Names Test* (Cunningham, 1990). This instrument, administered to Xin Wei in English, was used to determine his knowledge of English phonics. The *Names Test* (1990), also administered individually, is a quick screening tool to obtain information regarding a student's developing decoding skills.

Finally, the *Jennings Informal Reading Inventory* (Jennings, Caldwell, & Lerner, 2006) was administered to determine Xin Wei's independent, instructional, and frustration levels for texts. This inventory was administered in English; it consists of a series of graded oral and silent reading passages with accompanying comprehension questions.

#### **Initial Assessment Results**

Based on the results of a range of assessments administered in English, the findings revealed that Xin Wei performed well on the alphabet recognition test, identifying all of the letters of the alphabet,

both uppercase and lowercase. He also understood English concepts of print, was successful with blending and segmenting sounds, and Xin Wei could tell beginning letters and their corresponding sounds.

However, when asked to read English text even at the pre-primer level, Xin Wei was unable to do so independently. It was determined that English pre-primer text was at Xin Wei's frustration level. Furthermore, on tests of phonics patterns, such as nonsense words and *The Names Test* (Cunningham, 1990), Xin Wei lacked knowledge of common phonics elements. The administration of *The Peabody Picture Vocabulary Test* (Dunn & Dunn, 1997) indicated that Xin Wei's receptive vocabulary in English fell under the first percentile for his age.

Next, two assessments were administered to gauge Xin Wei's proficiency in Chinese. To assess his writing, Xin Wei was asked to translate some Chinese sentences into English. He wrote, "She likes me. I like my dad. My dad like me. I go (should be "I went") to Beijing." His English translation seemed to indicate that he had little knowledge of subject-verb agreement and verb tense. Then, to assess Xin Wei's reading growth in Chinese, he was asked to read a text that he might encounter in a second grade classroom in China. Two selections were chosen from second-grade Chinese texts provided by Xin Wei's father.

On the first oral reading assessment of the passage, "I Think I Can Handle It," Xin Wei's oral reading was dysfluent. He pointed to the Chinese characters in the text one by one with his index finger, recognizing words only by memory. When he encountered new words, he skipped over them. Xin Wei miscued 50 of 138 Chinese characters. Following the oral reading, Xin Wei was asked questions about the passage, and he was able to answer them all correctly; however, Xin Wei's father had recently read this passage aloud to his son.

On a second passage, "A Wall with Nine Dragons," Xin Wei was asked to read silently and to answer five questions that followed the passage. He was not able to answer any of the questions correctly. Xin Wei reported that the passage contained too many words that he could not understand at all. It became clear from this assessment that second grade Chinese text was too difficult for Xin Wei and that he had very little understanding of the Chinese coding system.

The difficulty Xin Wei was experiencing possibly can be explained by exploring his academic background at the time of arrival in the U.S. Xin Wei, who had only

completed first grade, lacked essential reading skills that he would have received in a Chinese second grade classroom. Moreover, Xin Wei's father had discouraged his son's study of Chinese because he was afraid that Xin Wei might be confused by the differences in the Chinese and English writing systems.

As a result, Xin Wei could not decode new words in Chinese, even with the pronunciation written above the characters. However, results from *The Peabody Picture Vocabulary Test* (Dunn & Dunn, 1997) administered in Chinese translation placed Xin Wei's receptive vocabulary in Chinese at the 99<sup>th</sup> percentile for his age, according to the charts provided by the test developers for speakers of English. At this point, it became obvious that Xin Wei was a very intelligent youngster, with an extensive receptive vocabulary in his native Chinese language, who was failing to become literate in either Chinese or English.

To add to the assessment of Xin Wei's reading ability, the following factors must be considered. Xin Wei arrived in the U.S. at the age of seven with his parents; they were quite eager for Xin Wei to read and write in English. After his mother returned to China, Xin Wei and his father both focused their attention daily on Xin Wei's studies. When Xin Wei left China, he brought with him a large Chinese receptive vocabulary. Because of this, it may be assumed that Xin Wei had a rich home language environment that provided him with many opportunities to hear and see print in his native language.

However, Chinese has a difficult logographic code for children to learn, and Xin Wei did not appear to have learned to decode accurately the Chinese ideographic system. He had limited cognitive knowledge of decoding available for transfers from his L1 to his L2, as well as an extremely limited English receptive vocabulary.

Based on this knowledge, it might be theorized that Xin Wei would profit by first strengthening his Chinese decoding skills in order to access his large Chinese oral vocabulary through print. Another option would be to provide Xin Wei with extra time to listen to and to speak English prior to asking him to read English text. Several factors, though, complicated both of these approaches: (1) Xin Wei and his father were to be in the United States for only one year, (2) his father was very eager for Xin Wei to read English, and (3) Xin Wei was nearing the critical period for second language acquisition. Therefore, an

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alternative plan was developed with the bilingual ELL tutor to scaffold Xin Wei as he developed his English decoding ability concomitant with his spoken language as provided by his U.S. elementary school's ELL program.

### Instructional Intervention Plan

The bilingual tutor worked with Xin Wei for a total of ten weeks. During the first and last weeks, the tutor administered pretests and posttests. For the remaining eight weeks, Xin Wei and his tutor met twice weekly, approximately 45-60 minutes per session, at the end of the day. During these sessions, they worked on building language proficiency and building connections between Chinese and English. Tutoring sessions were held at the university, enabling Xin Wei's father to be present. An integral part of these biweekly interventions included direct, explicit instruction in English decoding, comprehension, and fluency. Each lesson was based on a reading selection that would challenge Xin Wei and also capture his attention.

For each session, lessons began with a check of Xin Wei's prior knowledge about the subject of the text. Questions to assess his prior knowledge were designed to aid Xin Wei in acquiring the metacognitive skills of previewing, predicting, and setting a goal for reading. Following this activity, the tutor encouraged Xin Wei to scan the text for unknown words; she modeled this process and scaffolded Xin Wei as needed. Then, using direct, explicit instruction in phonics by analogy, the tutor scaffolded Xin Wei as he developed generalizations concerning the decoding of unknown words.

Next, he was asked to complete a timed oral reading of the English text followed by an oral retelling in his native language. The bilingual tutor offered assistance in this translation if Xin Wei struggled for the correct word or phrase in Chinese. Following this translation activity, he was asked to answer the comprehension questions in oral English. Through this activity, Xin Wei could begin to access meaning in his L1, building the connection to L2.

During the final fluency component of the lesson, Xin Wei and the tutor reviewed his reading rate and number of miscues from his first reading of the text. They set goals, which included practice, for Xin Wei to achieve on his next timed reading of the same text. Then, the tutor either modeled a fluent reading of the passage or asked Xin Wei to listen to a taped recording of

the passage. The tutor scaffolded Xin Wei through a second reading of the passage using echo reading, unison reading, or assisted cloze reading.

During the assisted close reading, the tutor read the text until she came to a word that Xin Wei had identified previously as unknown. At that moment, Xin Wei would pronounce the word as he had practiced in the earlier part of the lesson. Next, Xin Wei and his tutor would reverse their roles and this time, using the assisted cloze reading method, Xin Wei would read the passage and the tutor would pronounce the identified word. Xin Wei particularly enjoyed this strategy because it helped him develop a stronger vocabulary of English words; at the same time, this strategy reinforced sentence structure and the use of the identified word in context.

Finally, Xin Wei was given some time to practice orally reading the text independently. When Xin Wei indicated that he was ready, the tutor would time him again on the independent oral reading of the entire text. As the lesson concluded, Xin Wei was given the text to take home and read again. At the beginning of each consecutive tutoring session, Xin Wei would first read the mastered text aloud prior to being introduced to new text.

Overall, Xin Wei appeared to enjoy the selected texts and the format of the lessons; using these strategies, he was even willing to engage with text selections that were above his instructional level. During lessons, Xin Wei would ask questions related to the text, and he was always enthusiastic about moving on to the next page in the story. In contrast, the tutor noted that Xin Wei appeared to be more easily distracted when he was given simple texts. Xin Wei's reactions to the more challenging and interesting texts support the findings of Stahl, Heubach, and Holcomb (2005), who concluded that greater progress was made in fluency when students were given more challenging materials for repeated readings.

### Final Assessment Results

Following the eight-week intervention, Xin Wei arrived for his final session proudly bearing a portfolio containing all of the reading materials he had mastered during his tutoring sessions. These materials included several texts, different lists of sight words, and his timed reading charts. Using the materials in his portfolio, Xin Wei demonstrated the ease with which he could now read the passages. Xin Wei was also able to retell fluently each of the

stories and answer questions about the texts that his tutor asked him in English. During his conversation with the tutor, Xin Wei also correctly used many of the new sight words he had recently acquired.

Impressed with the progress Xin Wei had made in his second language, the tutor then spoke privately with Xin Wei's father regarding his son's progress in English. His father attributed Xin Wei's remarkable growth to his eleven-month exposure to English, along with the direct, explicit instruction provided by his bilingual ELL tutor and practice reading at home. At the elementary school, all of Xin Wei's teachers were English native speakers. Even in the ESOL reading class, he heard no Chinese even though his teacher was Chinese-American; Xin Wei spoke Mandarin and his teacher's second language, second-generation Cantonese, was almost non-existent.

In order to measure Xin Wei's progress accurately in both English and Chinese literacy proficiency, a second battery of assessments was administered. First, the tutor administered the *Comprehensive Reading Inventory* (Cooter, Flynt, & Cooter, 2006). A different informal reading inventory was chosen for the follow-up assessment because Xin Wei had received direct instruction on the text in the *Jennings Informal Classroom Inventory* (Jennings et al., 2006) that was used in his initial assessment. The *Comprehensive Reading Inventory* (Cooter et al., 2006) follows the standard format of the *Jennings Informal Classroom Inventory* (2006), consisting of graded reading passages followed by comprehension questions with an opportunity to further check comprehension through oral retelling, and it measures reading progress at four different levels: PrePrimer, Primer, One, and Two.

On the *Comprehensive Reading Inventory* (Cooter et al., 2006), Xin Wei was most successful reading at Level 2 (2<sup>nd</sup> grade) text. He was able to read the text, "The Pig and the Snake" (111 words), with only five miscues. The majority of these miscues were omissions, which appeared to be the function of reading quickly to see what would happen next. His oral retelling was impressive (39% correct unassisted; 61% correct when assisted; no errors); Xin Wei self-corrected once. He read 90 words correct per minute (wcpm) on this test. These results support the findings of Kroll, Michael, Tokowicz, & Dufour (2002) on naming and translation tasks. Kroll et al. (2002) concluded, "With increasing expertise in a second language, learners acquire a richer

lexical network for words in L2 that is at least partly responsible for the increasing speed and accuracy" (p. 165).

Of special note, Xin Wei's performance on Level 1 text was not as proficient. While Xin Wei's interest in the topic of the Level 2 passage was high, this had not been the case with the content of Level 1 text. On Level 1 text, he read 53 wcpm and miscued six times. He substituted the word "pond" for the text word "pool," indicating that he used meaning and syntax as well as initial consonants to access unknown words. Xin Wei also made several attempts to decode the English word "laughing" by using sounding-out strategies; he was unable to do so. These unsuccessful decoding attempts caused him to miss a comprehension question. Overall, however, Xin Wei's success on this assessment showed remarkable growth, considering that he could not read English text at the Pre-Primer level eight weeks earlier.

Following the reading inventory, the *Peabody Picture Vocabulary Test, Form III-B* (Dunn & Dunn, 1997) was administered in English and in Chinese (bilingual ELL tutor translated). The PPVT, III-B revealed that Xin Wei's Chinese oral receptive language sustained itself at the 99.9% level for his age, and his English oral receptive vocabulary showed some growth. At the beginning of the intervention, Xin Wei's score for English oral receptive vocabulary was <.01%. At the end of the intervention, his score on the same instrument was 1%. Compared to the impressive growth measured by the informal reading inventories, these results were less than expected.

Finally, Xin Wei was asked to read a text written in Chinese, "The Orange in the Tree." This text is written at the second grade level and contains 253 words. During this assessment, Xin Wei miscued 58 words out of the 253 in the text. He read the Chinese text dysfluently, word-by-word, exhibiting great difficulty with the Chinese code. However, an oral retelling revealed that Xin Wei had a high level of comprehension for this text.

From these assessments, it is possible to draw the following conclusions:

1. Xin Wei showed significant growth in English language proficiency and reading fluency across this eight-week intervention.

2. His growth in reading Chinese text has slowed and may be declining slightly. This could be problematic since Xin Wei will complete his education in China, following his year

in the U.S.; but, in all likelihood, he will catch up quickly after returning to China.

3. He is developing an oral vocabulary in English, but there is some evidence that his print acquisition as a decoder has surpassed his oral vocabulary.

It must also be noted that factors beyond the tutoring sessions contributed to his success with English oral reading. Xin Wei received instruction during the school day specifically designed for ELLs; all teachers at this international school were well trained in the use of sheltering strategies in the classroom. Xin Wei also has a highly involved, bilingual, articulate father who strongly supported his son's instruction and educational experience in English; not only did he arrange for a bilingual tutor, he also spent each evening at home helping his son with his studies. Additionally, Xin Wei is a bright and engaging youngster with many friends, both Chinese and English-speaking.

### Implications

Generalizations made from a single case study must be considered as material for further inquiry rather than substantiated facts. However, an observation of Xin Wei's growth in English literacy acquisition allows another window for observing this difficult cognitive process of learning to read in a second language. The following speculations seem reasonable, yet subject to further investigation.

First, the critical period hypothesis, that period between ages 8 and 12, is the most efficient time for second language acquisition is both confirmed and questioned in the observation of Xin Wei, who was seven at the time of this intervention. His eighth birthday occurred two days following his final assessment; at this point, he could not be considered biliterate.

This reality also seems to confirm the need for direct instruction in reading in one's native language. For Xin Wei, instruction in reading Chinese was suspended during his time in the United States. How easily he will catch up with his peers when he returns to China is yet to be seen. A related question is whether he will retain his knowledge of English orthography over time. Will his brief exposure to English text at an early age solidify, to a significant extent, his bilingualism?

Secondly, Xin Wei appeared to be able to develop his knowledge of English print concurrent with the process of acquiring

oral language skills in English that are generally considered precursors to reading. His growth in oral reading fluency, therefore, might be closely related to his growth in oral language.

This growth also seems to support the previous related theory concerning the importance of oral proficiency occurring prior to formal reading instruction. It would be interesting to investigate if this development is a correlate of Xin Wei's age at the time of the language immersion or simply an anomaly unique to Xin Wei and his individual circumstances.

Finally, which instructional practices contributed to his literacy growth, and how can these practices be modified to assist other children such as Xin Wei? Was the bilingual tutoring the most significant instructional factor, or did the intervention design and delivery provide the scaffolding for his growth? What variables provided the most benefit? Can those variables be adapted for classroom use? In the case of Xin Wei, it is evident that the home (his father) -school connection was a main factor associated with his success; specifically, Xin Wei's father was highly educated, fluent in Mandarin and English, and eager to spend time each day to support his son's growth in learning English.

### Conclusion

Xin Wei is a student with excellent Chinese oral vocabulary indicating that he is a bright youngster who benefited greatly from wide exposure to language early in life, and several factors described by earlier researchers may explain Xin Wei's remarkable growth in English reading proficiency. Romanova (2009) confirmed that acquiring advanced literacy skills in L1 or L2 is a difficult and long process, and it is an especially difficult process for ELLs; therefore, instructional design that follows a conceptual framework to build spoken, written, and oral literacy is most effective (Romanova, 2009). It is likely that the combination of interventions designed by the bilingual ELL tutor, the sheltering strategies provided at the elementary school, and the efforts of his father account for the positive effect on Xin Wei's learning.

Lightblown and Spada (1999) also concluded that students learning to read in a second language could benefit from short periods of intensive instruction. Thus, the concentrated nature of instruction with a bilingual ELL tutor over a brief period appears to be a contributing factor to Xin Wei's success. Furthermore, Collins, Hal-

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ter, Lightblown, and Spada (1999) found that students with a wide range of academic abilities could benefit from other types of intensive instruction, such as Xin Wei's participation in the elementary school's Sheltered English program with the pull-out component for youngsters who spoke little to no English. Additionally, Morra and Tracey's (2006) findings support that using multiple fluency interventions, such as modeling, providing corrective feedback, and using repeated readings, can be associated with improved reading performance in students, such as Xin Wei.

Obviously, this case study provided as many questions as answers, but the new questions are necessary vehicles for achieving optimal learning for Chinese ELLs. Further research is needed in the area of language and literacy development with Chinese-speaking ELL populations. Evolved from this study are some of the areas of interest for researchers to consider:

- ◆ Strategies for overcoming language and cultural barriers;
- ◆ Age-related issues for optimal L2 learning;
- ◆ Metacognitive awareness and self-monitoring;
- ◆ Assessment measures for ELLs in both languages;
- ◆ Best teaching practices for ELLs to acquire and become proficient in both L1 and L2;
- ◆ Vocabulary instruction in the content areas; and
- ◆ Preservice and inservice teacher-training needs related to curriculum for ELLs.

Xin Wei has helped us shine a brighter light on the path ahead for Chinese second language learners in U.S. schools and for their teachers. As Palmer, Chen, Chang, and Leclere (2006) recommended, inservice for teachers and support staff must be designed to include research-based knowledge of second-language acquisition as well as components on Chinese language and culture.

Moreover, the caution of Fu (2003) must be heeded as research is conducted and as inservice instruction is designed; i.e., avoiding stereotypes such as the "model minority" images associated with Asian students. It is imperative that careful attention be given to the vast differences among ELLs, particularly with research endeavors that will inform practice.

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## Appendix

### **Stages of Language Acquisition in L1 and L2: The Natural Approach** (adapted from Krashen & Terrell, 1983)

L1 (First Language)	L2 (Second Language)
<b>Stage 1:</b> Preproduction—characterized by careful and responsive listening, development of a receptive vocabulary, and non-verbal response to oral language.	
Preproduction occurs from birth through early childhood until the onset of speech.	Requires anywhere from 10 hours to 6 months of exposure to the second language.
<b>Stage 2:</b> Production—characterized by continued listening, non-verbal and 1 to 2 word responses to oral language.	
This stage usually occurs between the ages of 1 and 2; early speech production, isolation of phonemes, and language structures are apparent.	Requires from 3 to 6 months and up to one year of exposure to the second language.
<b>Stage 3:</b> Speech Emergence – development of a small sight vocabulary and concepts of print; oral language contains phrases and sentences.	
This stage usually occurs around the age of 2 and continues until the onset of formal education.	Requires from 1 to 3 years of exposure to the second language.
<b>Stage 4:</b> Intermediate Fluency—the student can engage in full dialogue; may seem fluent in speaking, oral reading and writing, but still needs to expand vocabulary and CALP, Cognitive Academic Language Proficiency. This stage was termed by Cummins (1979, 1984 as BICS, Basic Information Communication Skills).	
This stage is completed by most students by the end of third grade in the United States, representing approximately eight years of exposure to the native language since birth.	Requires 3 to 4 years of exposure to the second language.