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## How Can Students Benefit From Chinese Immersion Schools

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# HOW CAN STUDENTS BENEFIT FROM CHINESE IMMERSION SCHOOLS

by

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A capstone submitted in partial fulfillment of the  
requirements for the degree of Master of Arts in Education.

Hamline University

Saint Paul, Minnesota

December 2017

Laura Halldin  
Qin Qiong

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## CHAPTER ONE

### Introduction

My research question is “How can students benefit from Chinese immersion schools?” During my student teaching in a local Chinese immersion school, I observed several aspects about this school that are different from the English schools I have volunteered in and observed over the past few years. First of all, the environment of this Chinese immersion school is just like my elementary school back in China; students are highly respectful of their teachers and follow the teacher’s instructions in class. Secondly, students achieve good grades in both reading and math on the national NAEP test and state MCA test. Thirdly, some students’ Chinese language skills in speaking and reading are as good as native Chinese students at the same age. I was amazed by those findings and also wondered if these trends were only present in this school or if it is common in all the Chinese immersion programs. Later, I discovered that some of the highest-ranking elementary schools in Minnesota are Chinese immersion schools; therefore, I’m curious about how learning content through a second language-Chinese-immersion setting affects the students. For my research question, I will investigate how students can benefit from Chinese immersion schools.

From my observation in several local Chinese immersion schools and the research that I have done so far, I found out that Chinese immersion schools can benefit students in many areas, but this paper will focus on the following three areas: they can encourage



better Chinese language skills, they can improve students' academic success, and they can provide effective classroom learning environments.

### **Chinese Immersion Schools Can Encourage Better Chinese Language Skills**

I started to learn English as a second language in elementary school back in China. English was also a mandatory subject in all my middle school and high school years. Because I was very lucky to have an excellent high school English teacher, Ms. Wong, I became very fond of studying this language. I even chose English as my major in college. In my college, I learned more about the culture of English-speaking countries, such as the U.K., Austria, and the United States. The more I learned about these cultures, the more I wanted to come and visit these countries for myself.

That's why in the summer of 2012, in my junior year of college, I joined the international student exchange program and came to United States for the first time. I can still remember the first two weeks when I came to the U.S. and all the culture shock I experienced because of the language difference. The English I learned in school in China was more "text book" language style. However, in my everyday life when I communicated with local people, there were so many words and phrases that I did not understand at all: such as "buck" which means "dollar," and "what's up?" which means "How are you doing?". The most hilarious moment was when my co-worker asked me: "What's up?" I thought she meant to ask me "what is up in the sky?" I looked up and told her: "Nothing is up there." She was confused for a moment, then she burst into laughter and explained to me what she really meant was just to say "Hi." Similar things happened several times later while I was trying to interact with local people in English. Because I

was in a total English immersion environment, I had to find a way to communicate with those around me, but with my very limited vocabulary, I had to explain my ideas using simple English words and body language. Through this experience, I began to acknowledge that the more I practiced my English with native speakers, the better I was able to understand this language.

When I returned to China four months later, I noticed a huge improvement in my spoken English because of talking to my college professors. Compared to the many years of studying English as a second language in China, my English language skills (listening, and speaking) had greater progression due to my communication with native English speakers in America. That's when I realized that the best way to learn a second language is to study it in an immersion environment. So, when I later heard about Chinese immersion schools in America, I deeply agreed with this kind of education method. I knew it was the best way to learn Chinese for students who grew up speaking English. At that moment, I decided that I want to be a Chinese immersion school teacher overseas.

### **Chinese Immersion Schools can Improve Students' Academic Success**

When taking a course in teaching elementary school mathematics at Hamline University, I read an article about how the Chinese number system helps students learn math more easily than in English. The concept of this article was interesting to me because I always liked studying math ever since I was a young child. I thought I was good at math because I enjoyed it and practiced a lot; However, it never occurred to me that my native Chinese language may actually have helped with my math skills. Also, the high math and English reading test scores in the Chinese immersion schools led me to ask

another question: How does learn content through Chinese language help in other subjects, such as mathematics and English, improve student academic success?

According to researchers, “Children who study a foreign language tend to develop new perspectives and depth of understanding about the vocabulary and structure of their first Language” (Stewart, 2005, p.14). I believe content learned through a second language can help students with their first language learning and I think Chinese immersion schools can improve students’ academic success.

### **Chinese Immersion Schools can Provide Effective Classroom Learning Environments**

From 2015-2016, while studying elementary education at Hamline University, I did volunteer work at two local English Elementary schools. I also went on multiple field trips with several other elementary schools from different districts in Minnesota. From all my observation experience with these schools, I was shocked to see how some students disrespected their teachers in the classroom and how much time these teachers wasted managing classroom behavior. My student teaching experience in a Chinese immersion school is totally different from what I had experienced with other schools. In my four-months of student teaching, the homework was 95% done, and the students always handed in homework on time every morning. I could use at least 90% of classroom time in each period just to focus on teaching the content without any interruptions. The students respected me very much as a student teacher. Later I went to observe another Chinese immersion school and I saw a similar situation. All of this made me question why students behave so differently in the Chinese immersion schools. I believe the

Chinese cultural background must have some effect on this phenomena. “Students of foreign languages also develop an understanding of geographical and cultural perspectives that enhances learning in other classes such as social studies, science, art and music.” (Stewart, 2005, p.14) From my background as a student in schools of China, and my experience in local Chinese immersion schools, I believe that Chinese immersion schools can provide effective classroom learning environments as a result of cultural practices and norms.

### **Role of the Researcher**

As a native Chinese speaker who also has education experience as an ESL (English as Second Language) student at Hamline University, I’m confident that the best way to learn Chinese as a second language is to learn it in a Chinese immersion environment. On the one hand, I feel proud to be in this field as a Chinese immersion school teacher. On the other hand, I can understand the concerns most local parents have when it comes to school choice; especially when they cannot understand a single word of Chinese. Therefore, I want to investigate my research question: How can students benefit from Chinese immersion schools? I am curious to explore the impact of Chinese linguistics and a Chinese classroom environment on student success. I want to find out the answer and use it to convince more parents who are interested in Chinese immersion schools, but still have doubts due to lack of knowledge, that it is a beneficial place for their student. I know there are many studies about immersion schools, but most of them are about French immersion and Spanish immersion; therefore, I would like to find more

information focused on Chinese immersion programs specifically to help people get to know more about these schools.

### **Summary**

In this study, I will focus on my question: How can students benefit from Chinese immersion schools? I will perform research mainly on three areas in regard to this question: the encouragement of better Chinese language skills, the improvement of students' academic success, and the provision for effective classroom learning environments. I am curious to research what makes Chinese immersion schools different and I want to introduce all the benefits of these schools I can find to the public.

Chapter 1 introduced my research by establishing the purpose, significance and need for the study. Additionally, it described the role and background of the researcher. Chapter 2 will provide a review of the literature relevant to how students benefit from Chinese immersion schools in regard to their Chinese language skills development, their overall academic success, and the classroom learning environment.

## **CHAPTER TWO**

### **Literature Review**

#### **Introduction**

Because Chinese immersion programs are still relatively young compared to other language immersion programs, such as Spanish and French, the study of Chinese immersion education still lacks extensive research. The following literature review includes some limited Chinese immersion studies and additional research findings about other language immersion. This chapter will discuss ways Chinese immersion schools can benefit students according to relevant research.

Section one will introduce why students should learn Chinese, what immersion education is, and the Chinese immersion schools in Minnesota. Section two will elaborate on the nature of Chinese language needs in Chinese immersion schools, using/ by presenting two studies that discuss acquisition of Chinese language skills in Chinese immersion schools. Section three will talk about how Chinese immersion education improve students' academic success in math and English proficiency. Section four will explore how Chinese immersion schools provide effective classroom learning environments from Chinese teacher's cultural expectation. Finally, section five will summarize Chapter Two.

#### **Why Learn Chinese?**

First of all, there are one fifth of the world's population speak Chinese, and learning Chinese can build a bridge to communicate with all those people. Secondly,

Chinese is a beautiful language. “Chinese is particularly fascinating because of its beautiful handwriting, melodic spoken language, and poetic phrasing” (Confucius Institute, 2015). Thirdly, with China’s fast growing economy and increasing political power, learning Chinese has become more useful to Americans (Jacobson, 2013). Furthermore, “Chinese language ability is increasingly importance to national security, economic competitiveness, delivery of healthcare, and law enforcement in the United States” (Fortune, 2012, p.4). Last but not least, as one of the oldest countries in the world, China has developed an extremely rich history over the past 5000 years. The journey of learning Chinese provides numerous opportunities to explore Chinese tradition and culture (Confucius Institute, 2015).

### **What is Immersion Education?**

As Genesee notes, “Immersion is a means of learning a language” (as cited in Santamaria, 2013, p. 13). In most immersion programs, students spend 50 to 100 percent of their instructional time using the second language (Santamaria, 2013). In addition, teachers in these programs must be “fully proficient in the language(s) they use for instruction” (Santamaria, 2013, p. 13).

Shrum and Gleason (2005) point out that an immersion program is mainly to help students learn content and become fluent in the target language and understand the culture behind the target language (Santamaria, 2013).

### **Chinese Immersion Schools in Minnesota**

Minnesota is one of the most cutting-edge states implementing Chinese immersion programs from Kindergarten through 8th grade. Most Chinese immersion

schools in Minnesota start as a full immersion model. In this model, students are instructed 90% of the time in Chinese and 10% in English (Asia society, 2012). The amount of English instruction gradually increasing each year until English and Chinese are used 50/50 during instruction. This shift generally happens by fifth grade (Asia society, 2012).

By Fall 2011, there were seven Chinese immersion programs and approximately 1,400 students studying Chinese in Minnesota (Asia society, 2012). Yinghua Academy was the first Chinese immersion school established in Minnesota and the only one to serve students in grades K-8. Out of all seven schools in Minnesota, only Yinghua Academy in Minneapolis and Lakes International Language Academy in Forest Lake are charter schools (Asia society, 2012). A Spanish immersion program is also included in Lakes International Language Academy. There are another five Chinese immersion programs located in four public school districts in Minnesota: Eisenhower Elementary XinXing Academy in Hopkins, Scenic Heights Elementary and Excelsior Elementary Mandarin Immersion Programs in Minnetonka, Madison Elementary Guang Ming Academy in St. Cloud, and Jieming Elementary Mandarin Immersion school in Saint Paul (Asia society, 2012).

### **Chinese Immersion Schools Encourage Better Chinese Language Skills**

**The nature of Chinese language needs in Chinese immersion.** Studies of the benefits of various language programs (including foreign language program, partial immersion and full immersion) have demonstrated that immersion is the most effective way to learn a foreign language (Campbell, Gray, Rhodes & Snow, 1985).



Chinese language has its own unique nature. According to Li and Thompson (1981), the Chinese language belongs to the Sino-Tibetan language family: Chinese has its own special characteristics unlike English and other European languages.

First, the Chinese writing system is different. As Fortune (2012) pointed out, unlike other language writing systems that are phonetic based, the Chinese language is special because of its character-based writing system. It is not easy to learn how to write Chinese characters, mostly because these characters are a combination of strokes (Padilla, Fan, Xu & Silva, 2013). The simplest Chinese character can only have one stroke, such as “一”, which means “one”, there are also some very complex characters such as “贛” which means “a Chinese province called Jiangxi”, and “麤” which means “source”, they have more than 20 strokes in those words (Padilla et al., 2013). Learning to write those strokes is not the hard part, but remembering the position and combination for different Chinese characters can be very difficult for non-Chinese native speakers (Padilla et al., 2013).

Second, Chinese language has its own pronunciation system called Pinyin. Pinyin is a coding system with Roman letters plus ü adopted by the Chinese government to help pronounce Chinese characters (Padilla et al., 2013).

Third, Chinese is a tonal language. The 4 tones are high level, rising, falling-rising, and falling, each tone is showing a different Chinese word with different meanings (Padilla et al., 2013). For example, high-level yī “衣” means “clothes”, rising yí “疑” means “wonder”, falling-rising yǐ “椅” means “chair”, and falling yì “異” means: different.

Last but not least, the challenge of mastering Chinese reading and writing is that it takes more time than other languages. It's equally difficult for both Chinese native speakers and non-Chinese speakers. (Fortune, 2012).

In summary, Jacobson (2013) stated that compared to learning other European languages, the process of learning Chinese language is more complicated due to the combination of its character based writing system, Pinyin pronunciation system and tones. Chinese Immersion programs meet the needs of long time intensive study to master Chinese language. Therefore, Chinese immersion is the best way to learn Chinese (Jacobson, 2013).

#### **Students from different background can develop Chinese language skills.**

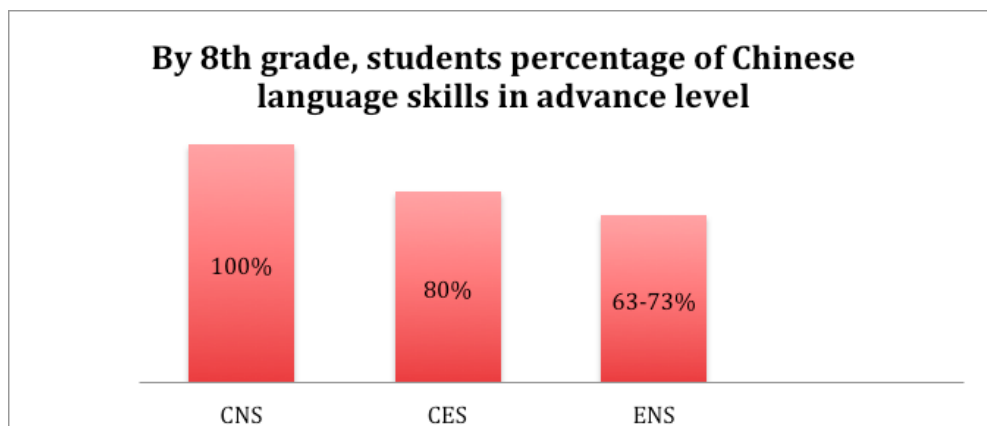
Languages are generally taught and assessed in terms of the four skills: listening, speaking, reading, and writing. The research study about Chinese language skills in Chinese immersion schools is mainly focus on these four Chinese language skills.

A research study was conducted by Lindholm-Leary (2011) of two groups of students from Grades 4-8 who have participated in Chinese immersion schools since kindergarten or first grade. The background of the students including Chinese native speakers (CNS), Chinese heritage/English speakers (CES) and English native speakers (ENS) Lindholm-Leary (2011). The percentage of students background shows as Table 1.

Ethnicity and language background (%)	School 1	School 2
CNS (Chinese native speakers)	35	54
CES (Chinese heritage/English speakers)	28	28
ENS (Other ethnic English speakers)	37	18

*Table 1.* Breakdown of student's background by speaking proficiency, adapted from Lindholm-Leary, 2011.

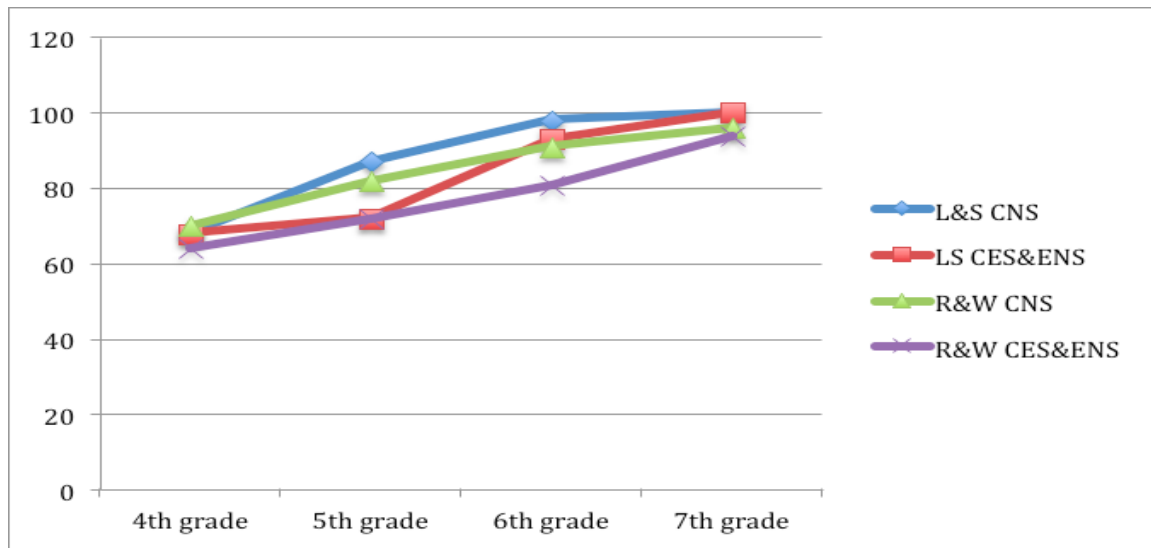
In school 1, the teacher use rubrics rate students Chinese listening, speaking, reading and writing, the result shows more and more students moved to advanced level (Lindholm-Leary, 2011). Figure 1 shows that by 8th grade, the percentage of students language skills in advanced level.



*Figure 1.* description students percentage language skills, adapted from Lindholm-Leary, 2011.

According to Lindholm-Leary (2011), all Chinese native speaking students at 8th grade progressed to advanced levels in reading, writing, listening, and reading. “80% of the CES students and the majority (63%-75%) of ENS students in eighth grade were also classified as advanced level in Chinese listening, speaking, and reading skills.”

(K.Lindholm-Leary, 2011, p.91)



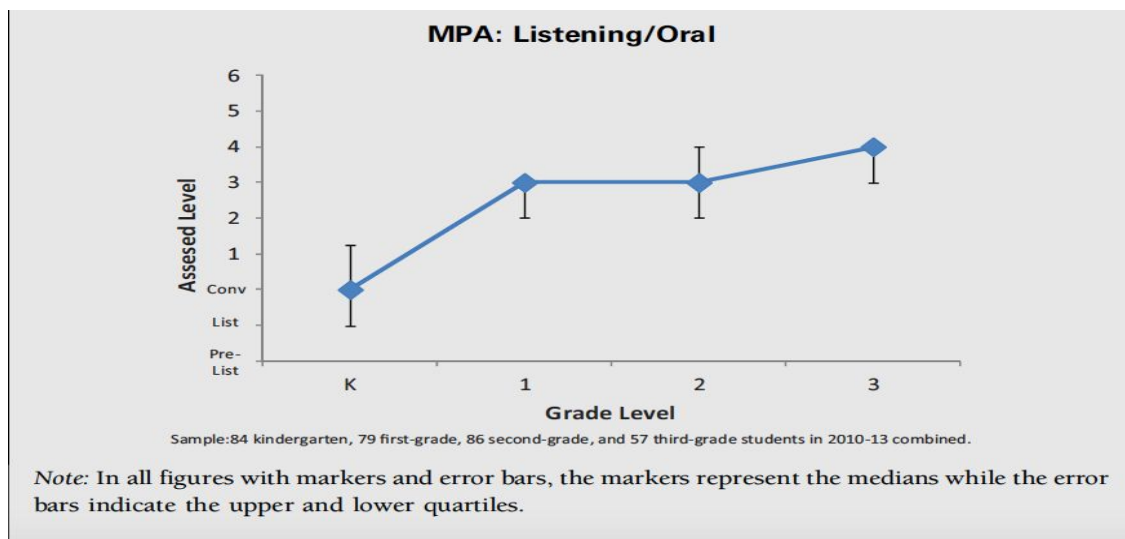
*Figure 2.* description of students media percentage correct of language skills, adapted from Lindholm-Leary, 2011.

Figure 2 shows the four language skills of students from 4th grade to 7th grade in school 2 by the median percent correctness. (Lindholm-Leary, 2011) “ Students had fairly high median scores in both listening/speaking and reading/writing (at/above 81% correct), though the scores were lower for 4th grade (64-70%) and 5th grade English native speakers (72%)” (Lindholm-Leary, 2011, p. 93). But in general, students made progress of their four language skills from 4th to 7th grade.

In summary, from the research in two Chinese immersion schools with students from different background, the result prove that Chinese native speakers, Chinese ethnic English speakers, and English native speakers all developed satisfying Chinese listening, speaking, reading, and writing skills. (Lindholm-Leary, 2011)

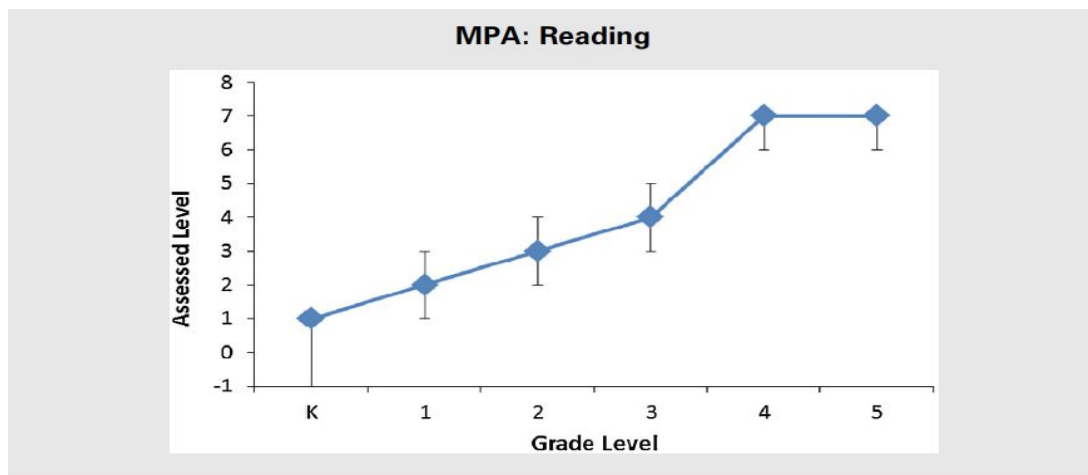
**Students can acquire high level Chinese language skills in Chinese immersion schools.** A research study conducted by Padilla, Fan, Xu and Silva (2013) on students' Chinese language skills in a California mixed grade Chinese immersion school from 2010 to 2013. The study tracked a group of 40 students from kindergarten to 5th grade, half of them are Chinese native speakers, and the other half cannot speak Chinese before they came to school (Padilla, Fan, Xu and Silva, 2013).

Students' Chinese listening, speaking, reading and writing skills were assessed by the Mandarin Proficiency Assessment (MPA) test in this research (Padilla, Fan, Xu and Silva, 2013). The rubric of listening/speaking test has 6 levels, the reading test has 8 levels, and there are a total of 20 points for students writing test overall performance. (Padilla, Fan, Xu and Silva, 2013). The results of students' Chinese language skills progress are as follows.



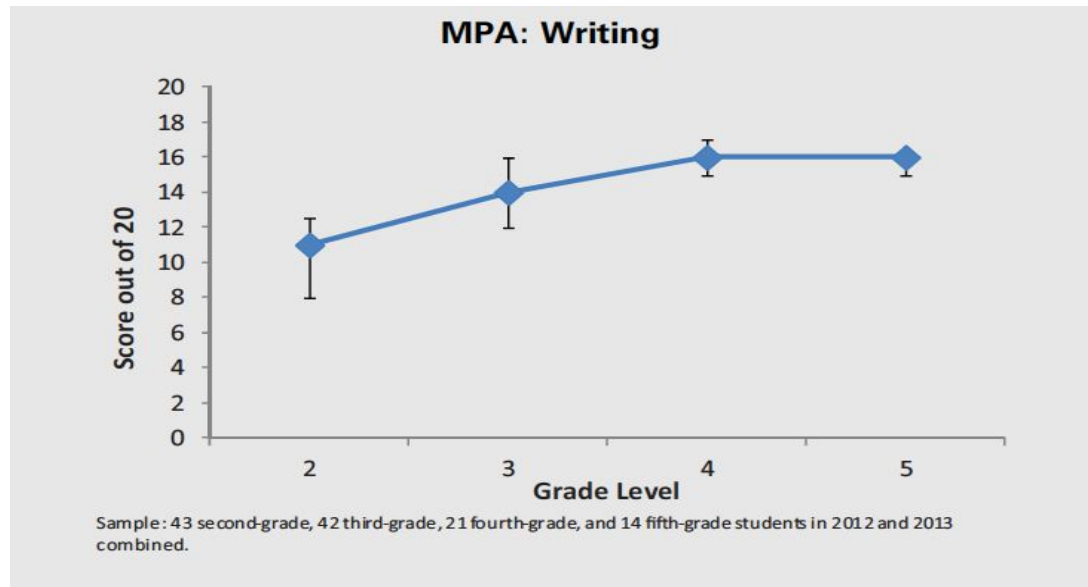
*Figure 3.* Description of the MPA listening/speaking scores, adopted from Padilla, Fan, Xu & Silva, 2013

According to Padilla, Fan, Xu & Silva (2013) that students' Chinese listening and speaking results shown in figure 3 that at the beginning, about one third of the kindergarten students barely made to level 1 by the end of the school year. But in 1st grade, some students made to level 2 and some even reached level 3 (Padilla, Fan, Xu & Silva, 2013). One year later, there were a large number of second graders made at or above level 3. In third grade, the average of students' performance was already at level 4. (Padilla, Fan, Xu & Silva, 2013)



*Figure 4.* Description of the MPA reading scores, adopted from Padilla, Fan, Xu & Silva, 2013.

Based on Padilla, Fan, Xu & Silva (2013), students' Chinese reading performance reached to level 1 by the end of kindergarten. After that, students moved to next level each year until level 4 as third graders (Padilla, Fan, Xu & Silva, 2013). Surprisingly, in 4th and 5th grade, they made a huge progress all the way to level 7 (Padilla, Fan, Xu & Silva, 2013).



*Figure 5.* Description of the MPA writing scores, adopted from Padilla, Fan, Xu & Silva, 2013

The Chinese writing test started taken by students after 2nd grade, so there are no data for students in kindergarten and 1st grade (Padilla, Fan, Xu & Silva, 2013).

The results shows, the median score out of a maximum of 20 points was 11 in second grade, 14 in third grade, and 16 in fourth and fifth grade. Overall, in fourth and fifth grades, 94% of the students received 13 points or more. (Padilla, Fan, Xu, & Silva, 2013, p. 669)

In conclusion, students acquired high-level of Chinese listening, speaking, reading, and writing skills in Chinese immersion school. Study also shows that students make consistent progress in their Chinese language skills from kindergarten to 5th grade. (Padilla, Fan, Xu & Silva, 2013)

**Impact of these studies.** According to Lindholm-Leary (2011), students from different language background can develop Chinese language skills in Chinese immersion school. “These results are consistent with research in Spanish two way immersion programs” (Lindholm-Leary, 2011, p. 93).

Lindholm-Leary (2011) mentioned in study one that compared to English native speakers, Chinese native speakers developed higher level of Chinese language skills in the same school. But, study two pointed out that “a comparison of Mandarin heritage students with non- heritage students in the immersion program initially favored heritage students in the acquisition of Mandarin; however, this advantage was not statistically significant in the later grades” (Padilla & Fan & Xu & Silva, 2013, p. 661).

### **Chinese Immersion School Improves Students’ Academic Success**

This section will first discuss the academic success of English proficiency in Chinese immersion. It will then introduce the benefit of studying mathematics in Chinese language. Next, it will talk about a research study compare Chinese immersion students with their non-immersion peers. At last, it will elaborate the transfer of concepts from other language immersion to Chinese immersion.

### **English Proficiency**

According to Fortune and Tedick (2003), the number one concern most parents have is that students who study in Chinese instead of in English may have lower academic achievement or underdeveloped English language skills. However, consistent studies prove that students’ English proficiency becomes stronger while studying in immersion schools. (Fortune & Tedick, 2003)



Fortune (2012), when it comes to standard tests, Chinese immersion students whose first language is English, can reach their grade level or even outscore their non-immersion peers in English reading and math tests.

Genesee (2014) agreed, native English speaking students develop the same level of English language skills in bilingual programs compared to mainstream English only students.

A significant factor is that if students are in total immersion program will not have English instruction from the very beginning, then there will be a temporary influence on their English language development (Fortune, 2012). Studies also shows once immersion students start to take English classes for one to two years, the gap of their English skills resolves. The influence of their English only holds back for a short time (Fortune, 2012).

Lindholm-Leary and Genesee (2014) also agreed that after consistent evaluation of immersion students' English language development, research proved that there is no huge difference between them and students in the English only programs in the long term.

### **Mathematics**

“Several characteristics of the Chinese language, particularly the structure of its number and counting systems, have been credited in the aid of acquisition of number terms and concepts in children” (Chang, 2008, p.3).

a) From one to ten										
Arabic Numeral	1	2	3	4	5	6	7	8	9	10
English	one	two	three	four	five	six	seven	eight	nine	ten
Chinese (written)	一	二	三	四	五	六	七	八	九	十
Chinese (spoken)	y ī	èr	s ān	sì	wu	liù	qī	bā	jiu	shí
b) Eleven to twenty										
Arabic Numeral	11	12	13	14	15	16	17	18	19	20
English	eleven	twelve	thirteen	fourteen	fifteen	sixteen	seventeen	eighteen	nineteen	twenty
Chinese (written)	十一	十二	十三	十四	十五	十六	十七	十八	十九	二十
Chinese (spoken)	shí y ī	shí èr	shí s ān	shí sì	shí wu	shí liù	shí qī	shí bā	shí jiu	èr shí
c) Twenty to ninety-nine										
Language	Rule									Example
English	Decade name (twen,thir,for,fif,six,seven,eight,nine) + “-ty” + unit									thirty-seven
Chinese (written)	Decade unit (two,three,four,five,six,seven,eight,nine)+ten(shi2)+unit									三十七
Chinese (spoken)										s ān shí qī

Figure 6. Description of the Chinese base 10 number system, Miller, Kelly & Zhou, 2005.

The base 10 number system in Chinese shows exactly how number terms are composed with ones and tens units (Geary, Bow-Thomas, Liu, & Siegler, 1996). Students, especially the younger kids, find it easier to learn how to count with the Chinese numbers system (Han & Ginsburg, 2001). As Figure 6 shows, take arabic number 12 as an example. The number 12 in Chinese called “shí èr”, “shí” in Chinese is number 10, “èr” in Chinese is number 2, so basically when you say the Chinese word “shí èr” you already know it is a 10 plus a 2 (Chang, 2008). If we continue, number 13 in Chinese is “shí s ān” which means 10+3. The number 14 in Chinese is “shí sì” which means 10+4. This pattern continues all the way to number 20, which in Chinese is “èr shí

”, in English means “two\*ten”. The number 30 in Chinese is “sān shí”, in English means “three\*ten”, and number 35 in Chinese is “sān shí wǔ”, in English means “three\*ten+five”. all the other numbers in the Chinese number system, they all follow the same rules in construction (Han & Ginsburg, 2001). While in English, number 11 pronounced as “eleven”, number 12 pronounced as “twelve”, it’s hard to connect the number term with the ones and tens units like in Chinese (Geary et al., 1996). The well designed base 10 Chinese number system has a consistent rule to form the number terms which makes counting easier than English number system to learn (Han & Ginsburg, 2001).

According to Stigler, Lee, & Stevenson (1986), “Another theory of linguistic influences on number learning is the notion that number terms in Chinese have shorter pronunciation durations than those in English, which may enable speakers to have greater digit spans than their English-speaking counterparts” (as cited in Chang, 2008, p.3). The less time kids use to pronounce a number, the quicker they can remember the number terms, which may influence the way they work on basic math problems (Geary et al., 1996, ). In other words, students who can speak Chinese may have an advantage when solving math problems due to the lesser time they spend on number pronunciation (Chang, 2008).

In summary, Chinese language can help students learn Mathematics.

### The Comparison Between Chinese Immersion and Non-Immersion

A study compare a group of Chinese immersion students' academic performance with their same-age peers attending the same school but not enrolled in the Chinese immersion program, the results are as follows (Padilla, Fan, Xu & Silva, 2013).

English in advance level	Chinese Immersion	Non-Immersion
2nd Grade	75%	81%
3rd Grade	84%	82%
4th Grade	97%	92%
5th Grade	100%	96%

*Table 2. Description of the percentage of students in English language arts in advance level, adopted from Padilla, Fan, Xu & Silva, 2013.*

Table 2 shows that students in Chinese immersion program of this school have better performance in English language arts compared to their non-immersion peers after 2nd grade (Padilla, Fan, Xu & Silva, 2013). A writing test in 4th grade shared the same result that more students in immersion program achieved proficiency than non-immersion students (Padilla, Fan, Xu & Silva, 2013).

Math	Chinese Immersion	Non-Immersion
2nd Grade	96%	88%
3rd Grade	84%	86%
4th Grade	92%	79%

5th Grade	100%	83%
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*Table 3. Description of the percentage of students in math in advance level, adopted from Padilla, Fan, Xu & Silva, 2013.*

According to Table 3, the math test results between Chinese immersion students and non-immersion students had a huge gap (Padilla, Fan, Xu & Silva, 2013). Chinese immersion students performed better in math than their non-immersion peers in general (Padilla, Fan, Xu & Silva, 2013).

In conclusion, Chinese immersion students acquire higher academic scores in English language arts and mathematics tests than their peers which in the non immersion program in the same school (Padilla, Fan, Xu & Silva, 2013).

### **Transfer of Concepts from Other Language Immersion to Chinese Immersion**

Research on Chinese immersion is very limited, especially the comparison study between Chinese immersion and non-immersion, but there are lots of other language immersion studies existed, therefore, looking at the benefits of immersion classrooms, even if they are in a different language is necessary. For example, according to a French immersion study also compared to the non-immersion students, Research from French immersion shows that students who learn all the content in French, “perform as well as or better than their mainstream English school peers on the subjects of English-language mathematics, science, and history”. (Lazaruk, 2007, p. 615).

According to Campbell et al. (1985), “Foreign language immersion programs are the most successful school based language learning program models currently available

and immersion students typically achieve higher levels of proficiency when compared with students in non-immersion programs” (As cited in Jacobson, 2013, p. 33).

Genesee (1987) concluded decades of research on English-speaking students of various academic abilities immersed in other languages showed that these learners were capable of achieving high levels of functional proficiency in the immersion language while at the same time achieving academically at or above their non-immersion peers on standardized tests administered in English. (As cited in Jacobson, 2013, p. 33)

Due to the limitation of Chinese immersion academic research, the long history of academic success of other foreign language immersion schools also proves that Chinese immersion schools are similarly successful.

### **Chinese Immersion Schools Provide Effective Classroom Learning Environments**

This section will provide examples to show that students can benefit from the effective classroom learning environment in Chinese immersion schools. First, it will talk about Chinese teachers’ cultural expectations in American classroom. Then, it will discuss Chinese teachers’ high expectations and students’ high self-expectations. Furthermore, it will explain how Chinese teachers act as a culture bridge.

### **Chinese Teachers’ Cultural Expectations in U.S. Classroom**

Research conducted by Zhou and Li (2014), which related to Chinese teachers’ classroom management in American classrooms, reported on six Chinese language teachers’ cultural expectations for their American students. (Zhou & Li, 2014)

According to Zhou and Li (2014), Chinese teachers have culturally-rooted

expectations for their American students. First of all, Chinese teachers want American students to respect them as authorities, like students in China, Chinese teachers expect American students to pay attention when they are teaching, follow teacher' instructions when asked, and never talk back to the teacher. (Zhou & Li, 2014) Secondly, Chinese teachers expect American students to sit in a proper posture; like Chinese students who always sit quietly and still during class.(Zhou & Li, 2014) Chinese teachers believe proper sitting position can help students adjust their learning attitude and concentrate on learning. Last but not least, Zhou and Li (2014) stated that Chinese teachers expect American students to have a positive attitude in terms of studying, while developing good learning habits. (Zhou & Li, 2014) For example, students should be ready when class starts, finish their homework on time and hand it in the right place, as well as correct their errors in their homework when the teacher points it out. (Zhou & Li, 2014)

According to Stevenson and Stigler (1992), Chinese teachers' classroom management styles are highly influenced by Chinese traditional culture. Because of Chinese traditional culture, Chinese students are well behaved in class, which allows Chinese teachers to focus on teaching instead of spending most of their time on managing the classroom (Stevenson & Stigler, 1992). Wubbels (2007) agreed that American teachers consider classroom management as the number one problem in U.S. schools, and that "noncompliance, overactivity, and inattention are their most common complaints" (Zhou & Li, 2014, p. 19).

### **Chinese Teacher's High Expectations and Student's High Self-Expectations**

Jacobson (2013) stated that Chinese teachers believe all students can make progress in their academics as long as students are willing to work hard. Chinese culture makes Chinese teachers hold all students accountable and have high expectations for all the students. (Jacobson, 2013) Chinese teachers consider students' academic success due to their practice and hard work, not because they are smart or talented. (Jacobson, 2013) From the interviews, Jacobson (2013) found that, influenced by their Chinese teacher, students in Chinese immersion school also believe that hard work is the key to success in school. Therefore, students set high self-expectations for themselves and work hard to achieve their goals (Jacobson, 2013).

The 'core cultural impact of the Chinese immersion program' was that the teachers set high expectations for all and provided support for the improvement, and the students took their teachers' high expectations as the norm and strived for the success. (Jacobson, 2013, p.177)

### **Culture Bridge: From Teacher-Centered to Student-Centered**

A teacher-center classroom is where teachers do all the talking (i.e., lecturing) and students only listen and take notes; after a teacher's lecture, students work alone to finish their work (Room 241, 2012). While in a student-centered classroom, students can interact with their teachers and also work as groups to help each other and learn together. (Room 241, 2012) An interview conducted by Wang in 2008 shows how four Chinese immersion school teachers transfer their teaching practices from traditional



teacher-centered to student-centered in a Chinese immersion school in the U.S.

According to Wang (2008), teacher A said in her interview that she liked students ask her questions and she would take their suggestions if it help students learning. She allowed students to have freedom to be creative as long as they were on the right path of study (Wang, 2008). She also adjusted her standards to match different students' Chinese language ability when she knew students worked hard in learning (Wang, 2008). Teacher A believed that good relationship with students was the key for them to trust her and feel secure to communicate with her (Wang, 2008). She also considered herself as the example of proper behavior for students; She wanted students to tell her when she made mistakes in class, so she could correct her errors and hoped students followed her as a model. (Wang, 2008)

Teacher B liked to remind her students the responsibility of taking control of their academic constantly (Wang, 2008). She thought all students could use some guidance every now and then when they started to drift away (Wang, 2008). In order to inspire students' confidence about Chinese speaking, teacher B became the number one supporter for her students (Wang, 2008). She made it possible for students to practice their Chinese public speaking and she cheered them on (Wang, 2008).

Instead of teaching the same Chinese words in the same way repeatedly, teacher C used group strategy to facilitate students Chinese speaking practice with different partners about different topics (Wang, 2008). Teacher C also liked to stimulate students' learning motivations by planning her class according to their interests (Wang, 2008). She believed learning Chinese should also be fun for students in her class (Wang, 2008).

Believing in the power of positive words, teacher D used frequent compliments to her students to encourage their hard work in learning Chinese (Wang, 2008).

Teachers A, B, C and D all came from Chinese culture backgrounds; they grew up with traditional, teacher-centered schooling (Wang, 2008). But after spending a few years working in American classrooms, they adopted the student-center teaching style and transformed themselves into “facilitators, stimulators, and inspirers” for their Western students (Wang, 2008, p. 146).

According to Smith (2007), in an effective immersion classroom learning environment, teachers should play the role of facilitators and supporters. Besides giving teaching instructions, a teacher needs to be a communicator, a counselor and a source of knowledge to scaffold students’ development and help students succeed in their academic career (Hedi A Smith, 2007).

In summary, Chinese immersion teachers in one hand can hold high expectations for all the students which lead students to have high self-expectations. On the other hand, they can transfer their teaching style from traditional teacher-centered to student-centered to meet the needs of students in America. That’s why Chinese immersion school can provide an effective classroom learning environment for all the kids.

### **Summary**

This chapter has explained the benefits of Chinese immersion schools from language skills, academic success and classroom learning environment. Chapter 3 will go on to talk about my capstone project: a Website that shows all the benefits of Chinese immersion program from the three aforementioned areas.

## CHAPTER THREE

### Project Description

#### Introduction

My research question is *How can students benefit from Chinese immersion schools?* This chapter will first explain the research paradigm. Secondly, it will talk about the chosen method I used to develop the project. Next, I will introduce the intended audience of this resource. Then, I will describe each step of my project. Last, but not least, I will summarize my timeline for this project.

#### Research Paradigm

After my observations in several local Chinese immersion schools and my student teaching experience, I found out Chinese immersion schools have unique benefits to the students, but most people do not know this due to the lack of specific information. As a Chinese immersion school teacher, I want to explain the benefits of Chinese immersion schools to more people, so parents have more information when it comes to choosing schools for their children.

For my capstone project, I chose to make a website as my resource to talk about the benefits of Chinese immersion schools. I think it is very important to have a website that introduces and focuses on the benefits of Chinese immersion schools. Because I know there are lots of parents want to send their children to learn Chinese and they are very interested in the immersion school idea, but the resources of introducing Chinese

immersion schools' benefits is very limited. It is understandable for parents who do not speak or understand any Chinese to feel confused or worried when choosing a Chinese immersion school because of the lack of specific information. Therefore, I think a website focussed on introducing the benefits of Chinese immersion schools will be very helpful for them.

### **Choice of Method**

I chose to create a website for my project, because firstly, it is easy to access. Nowadays, everybody is relying on the internet when it comes to search for information, and with a smart phone in hand, making it easy to access. Secondly, it is environmentally friendly. I would like to make a colorful brochure to introduce Chinese immersion schools too, but as a teacher, I also want to be a model for students to be environmentally friendly and use less paper. So I think a website is a perfect way to go paperless. Finally, I plan to gather some videos of parents and students who have experience with a Chinese immersion school. I want more people to hear about the benefits of Chinese immersion schools from people who had a first hand experience and I think video links on my website will be perfect to share this information with the public.

### **Audience**

My target audience is parents who are interested in Chinese language and who want to send their children to Chinese immersion schools. With the rapid economic development of China, more and more parents realize the importance of learning Chinese and understanding Chinese culture. But, Chinese is also known as one of the hardest languages in the world, therefore these parents are trying to find out the best way for their

kids to learn it. “Provide content that is engaging, relevant, and appropriate to the audience” (Research-based web design and usability guidelines, 2006, p.2). My website provides information for these parents about the benefit of Chinese immersion schools for Chinese language learning, students’ academic success and the classroom learning environment, these content meet the needs for my audience.

My website can also be a useful tool for teachers who work in Chinese immersion schools around the U.S. From what I understand, besides Minnesota, there are several other states such as North Carolina, California, Georgia, and Colorado that all have a growing number of Chinese immersion schools. I hope this website can be helpful for all of these Chinese teachers when it comes to introducing the benefits of Chinese immersion schools to their students’ parents.

### **Project Description**

Based on the research-based web design and usability guidelines (2006), in order to meet the users expectations, a website should have a format that is well-organized, easy to access and detailed content. My website is specially designed for busy, working parents, so it is important that the resources are easy to find. My research question is *“How can students benefit from Chinese immersion schools?”* My website focuses on this question with explanations from my literature review. Users should be able to find out all of the important information and links to access from the homepage. (Research—based web design and usability guidelines, 2006.) My website homepage has a menu bar to easily navigate each page. There are six major catalogs with drop down labels in the menu.

When there are different topics included in one catalog, new pages should be created for each topic instead of make user keep scrolling down on one long page. (Research-based web design and usability guidelines, 2006). Each label in the menu is a new topic, with links on the label to easily take the user to a new page so they can just focus on the information they are interested in. The first catalog is the introduction there are three labels in the drop down menu: reasons to learn Chinese, the definition of immersion, and an introduction to Chinese immersion schools in Minnesota. The second catalog is about how can Chinese immersion schools encourage better Chinese language skills. The third catalog talks about how Chinese immersion school improves students' academic success. The fourth catalog explains how Chinese immersion school provide effective classroom learning environment. The fifth catalog gathers all the useful resources about Chinese immersion schools.

Use images and graphical displays to help users learn the data (Research-based web design and usability guidelines, 2006). I added tables and figures to explain the research data on this website to help users understand the progress Chinese immersion students made on their language skills, to distinguish the academic difference between immersion and non-immersion students, and to explain the base 10 Chinese number system. The fifth catalog includes useful resources like video links and articles talking about why some parents choose Chinese immersion schools. The sixth catalog is a comment area for people to ask questions and leave comments. According to Research-based web design and usability guidelines (2006) to help users understand information and read it as quickly as they can, the background of the text should be

high-contrast with simple color. Therefore, all the pages on my website are presented in a simple background with black color text.

### **Timeline**

I plan to start my project this fall and finish it this November, 2017. While designing this website, I will keep working to revise my capstone with my peer reviewer and the Hamline writing center, as well as make sure to update my latest research information on this website.

### **Summary**

In this chapter, I provide the answers for my research question: *How can students benefit from Chinese immersion schools?* with my website as a project. I introduced why I chose a website as my form of project, who the audience is, and why it is important to make this website. Then I explained what this website will look like and the steps I will take to make it.

For my next chapter, I will talk about what I learned from making this project by looking at what I planned to do and what actually happened while I created my website.

## Chapter 4

### Conclusion

#### Overview

From my student teaching and volunteering experience in Chinese immersion schools, I was surprised to find how well some first graders can write Chinese characters and how fluently some fourth graders can speak Chinese. I also noticed that the Chinese immersion schools I visited had very high academic scores in Math and English reading in Minnesota. What's more, the respectful classroom-learning environment in some Chinese immersion schools made me feel proud to be a Chinese immersion teacher. From all those observations, I wondered: *How can students benefit from Chinese immersion school* in these three areas: Chinese language, academic success and classroom environment.

While volunteering in a Chinese immersion school, I found out that when parents come to a school tour, they sit in the back of the classroom, and they cannot understand a word of Chinese. I wondered, "How much information can they get simply by staying in a Chinese immersion classroom for 10 minutes?" I know there are a lot of research studies about foreign language immersion, but most of them focused on French and Spanish immersion; not Chinese. That's why I decided to create a website to introduce all the benefits of Chinese immersion school. I want more parents to go on a school tour



and get more information about how their children can benefit from Chinese immersion schools.

Chapter four will include project development, my personal growth, implications of the project, limitations of the project, future research, and a conclusion.

### **Project development**

My website design started with the search for the perfect website creator. I found two free website creators: Wix and Wordpress. After comparing the pros and cons, I found out I needed to download more apps to use Wordpress, therefore I decided to go with Wix, and started to create my very first website.

After watching a 10 minute introduction video of how to build a website on Wix, I felt very confident and started to create my own account and start my brand new website. Then I met my first problem, I could not change the background of the home page. It was so easy in the introduction video, but I just repeated the same mistake again and again. I finally gave up, and went back to watch 90 minutes video about how to use all the tools on Wix to create my own website. But, apparently my memory is not as good as I thought. Two days later, I stuck with how to make the drop down page again. Accidentally, I found the secret to using this website creator, there is editor help. You just type in your question and they will have instructions about how to add, change and move things around with pictures and videos. After some trial and error, and a lot of video self-study, I finally made the big structure of my website.

When parents visit my website, the first thing they will see on the homepage is a simple phrase of welcome to my website. All my categories are on the top of my heading

arranged in the horizontal menu. There are six categories in the menu bar: home, introduction, Chinese language, academic success, classroom environment and resources. Besides home and resource pages, there is a drop down list for all the four main categories. Under introduction, there are three labels: Why learn Chinese, What is immersion, and Chinese immersion in MN. Under Chinese language, there are three labels: the nature of Chinese, study one and study two. Under academic success, there are three labels: Math, Chinese and research comparison. Under classroom environment, there are three labels: Chinese classroom cultural, culture bridge and the limitation. If you click each label, the website will go to the matching page. I also created buttons on each main pages, so dropping down or clicking the button will both bring people to the information page.

Through the experience of designing this website, I have become interested in website design and feel confident using Wix as a tool to create more websites for my future professional use.

I plan to publish this website in August, 2018 giving information about the future Chinese immersion school I will be working with. I hope I can put the link of my website on my school home page. If not, I would like to put the link of my website on my classroom teacher page of the school website.

### **Personal growth**

While designing my website, I went back to study my literature review, and learned a few new things about my study about Chinese immersion school. First, I noticed that when I discussed Chinese language skills, it was easy for me as a Chinese

native speaker to understand the process of acquiring the Chinese language skills, but for people who know nothing about Chinese, it is a very complex language to learn. This is due to the fact that the Chinese language has its own systems. Compared to learning other European languages, the process of learning Chinese language is more complicated due to the combination of its character based writing system, Pinyin pronunciation system and tones. (Jacobson, 2013)

I grew up in a Chinese- speaking environment, so I never thought about the challenges non-Chinese native speakers will face, which also reassures me that Chinese immersion is the best way to learn Chinese. I know Chinese immersion is an effective way to learn Chinese, but from the research conducted by Lindholm-Leary (2011), I also realized that Chinese can be learned by all students from different backgrounds. Second, I learned that for students in Chinese immersion, their English will not be affected negatively. Moreover, according to Tara Fortune (2012), when it comes to standard tests, Chinese immersion students whose first language is English, can reach their grade level or even outscore their non-immersion peers in English reading and math tests. I also learned that Chinese language is a very helpful tool for students when learning math concepts; not only because of the linguistic clarity in base 10 number system, but also because of the short span to pronounce the numbers. Third, I always wondered about how the environment of Chinese classroom affects students directly, because all the resources I have found are about how Chinese teachers' teaching style is too traditional and did not fit American cultural expectations. But then I found a research about Chinese teachers having very high expectation of their American students, and because of that, students

have high self-expectations too. As Jacobson (2013) said, the “core cultural impact of the Chinese immersion program was that the teachers set high expectations for all and provided support for the improvement, and the students took their teachers’ high expectations as the norm and strived for the success.” (P. 177) I also learned from a research interview with Chinese immersion teachers that because of the culture difference, some Chinese immersion teachers transformed from traditional teacher-centered to student-centered pedagogy. This adds more proof about my statement that Chinese immersion schools provide effective classroom learning environments. These new findings also helped me become more confident about being a Chinese immersion teacher.

### **The implication of the project**

My website is about how students can benefit from Chinese immersion schools. I meant this website to be an open resource to the public. Not only can parents who are interested in Chinese immersion schools use it, but other Chinese educators like me can use this website as a tool to introduce the benefit of Chinese immersion schools.

### **The limitation of the project**

The limitation of the project is that I chose to use the free Wix version to build my website, so once my website published online, there will be advertisement pop ups on my websites. Also, I do not have a proper URL name for my website, due to the fact that I have no membership. This website cannot be named “How can Chinese students benefit from Chinese immersion school”, instead must be named

“lzheng01chineseimmersionwix.com”. This is another reason I want to wait to publish it until I have a job. I hope maybe I can use the school’s domain to embed my website on the school’s website.

### **Future research**

From revisiting my literature review to putting information on my website, I found some areas more research should be done. For example, the data based studies about Chinese immersion students’ English performance, the diversity of students who learn in Chinese immersion programs, the standard Chinese language skills assessment materials for comparison, the classroom learning environments study about the positive influence of Chinese culture, and Chinese teachers’ student-centered teaching strategy.

### **Conclusion**

My research question is *How can students benefit from Chinese immersion schools?* The goal of my capstone project is to create a website and share all the benefits of Chinese immersion schools to the public; my target audience is parents who are interested in Chinese immersion school. To answer my research question, I gathered a collection of research studies focused on Chinese immersion within the three areas: Chinese immersion schools encourage better Chinese language skills, Chinese immersion schools improve students academic success, and Chinese immersion schools provide effective classroom learning environment. In the future, I will keep an eye on all the new research studies focused on Chinese immersion and update more information about the benefits of Chinese immersion schools. I hope this website can help parents have a better

understanding of Chinese immersion schools, and I also wish this website to assist other Chinese educators to advocate for Chinese immersion schools in the future.

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