

**Teachers' beliefs and classroom practices related to students' heritage language and  
culture**

by

**Liuran Fan**

A dissertation submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Human Development and Family Studies

Program of Study Committee:  
Gayle J. Luze, Co-major Professor  
Carla A. Peterson, Co-major Professor  
Ji Young Choi  
Katherine R. Bruna  
Christine N. Lippard

Iowa State University

Ames, Iowa

2017

Copyright © Liuran Fan, 2017. All rights reserved.

## TABLE OF CONTENTS

LIST OF FIGURES .....	v
LIST OF TABLES .....	vi
ACKNOWLEDGEMENTS .....	viii
ABSTRACT.....	ix
CHAPTER 1. INTRODUCTION .....	1
Structure .....	1
Background and Significance of the Study .....	1
Purpose of this Study.....	5
Overview of the Conceptual Framework for this Study .....	6
Sociocultural Theory and Scaffolding from Vygotsky.....	8
Instructional Approaches to Support HLSs in General Education Classrooms .....	10
The Five Essential Elements of Cultural Proficiency.....	13
Definitions.....	19
CHAPTER 2. LITERATURE REVIEW .....	22
Overview .....	22
Importance of Heritage Language and Culture .....	24
Heritage Language.....	24
Heritage Culture .....	27
Teachers’ Beliefs and Practices about Maintaining Heritage Language and Culture.....	28
Factors Contributing to Teachers’ Beliefs and Practices toward HLSs .....	29
Challenges Schools Face Supporting Students’ Heritage Language and Culture.....	33
Recommended Practices for Maintaining Students’ Heritage Language and Culture.....	37
Involving Families in the School.....	38
Teaching Practices that Support HLSs’ Heritage Language and Culture .....	39
Summary of Literature Review .....	43
CHAPTER 3. METHODOLOGY .....	45
Institutional Approval .....	45
Researcher Background.....	45
School Demographics .....	46
Participants .....	46
Measures.....	49

Teacher Interview about Heritage Language and Culture (TIHLC) .....	49
Observation Instrument on Heritage Language and Culture (OIHLC) .....	51
Survey (Teacher’s Beliefs and Practices toward Heritage Language and Culture) .....	55
Procedure.....	56
Reliability, Validity and Trustworthiness of this Study .....	58
Reliability and Validity .....	58
Trustworthiness .....	58
Analysis Plan.....	60
Naturalistic Qualitative Methodology .....	60
Coding Methodology.....	61
CHAPTER 4. RESULTS .....	63
Research Question 1: What Are Teachers’ Beliefs about Supporting the Maintenance of Students’ Heritage Language and Culture?.....	63
Survey.....	63
Interview .....	67
Theme 1. Teachers’ Beliefs and How They Developed Their Beliefs .....	67
Theme 2. Teachers’ Views about the Needs and Meeting the Needs of HLSs.....	72
Survey .....	78
Interview .....	80
Theme 1. Specific Practices Teachers Carry Out in the Classroom with HLSs.....	80
Theme 2. Schools Provide A Welcoming Environment and Opportunities for HLSs .....	92
Theme 3. Challenges to Help HLS Students .....	94
Observation Instrument on Heritage Language and Culture (OIHLC) .....	96
Research Question 3: What is the Relationship between Teachers’ Beliefs and Classroom Practices toward Supporting the Maintenance of Students’ Heritage Language and Culture? .....	105
Research Question 4: What Factors Associated with Teachers’ Beliefs and Practices toward Maintaining Students’ Heritage Language and Culture? .....	107
CHAPTER 5. DISCUSSION AND CONCLUSION .....	111
The Importance of Maintaining Students’ Heritage Language and Culture .....	112
Factors Influencing Teachers’ Beliefs and Classroom Practices toward Maintaining HLSs’ Heritage Language and Culture.....	113
Strategies Schools and Teachers Use to Support HLSs’ Heritage Language and Culture .....	116
Challenges School Face to Meet the Needs of HLSs.....	121

Limitations .....	126
Future Research.....	128
Conclusion.....	128
REFERENCES .....	132
APPENDIX A. INTERVIEW.....	148
APPENDIX B. OBSERVATION.....	152
APPENDIX C. SURVEY .....	158
APPENDIX D. SURVEY REVISIONS.....	162
APPENDIX E. IRB INITIAL APPROVAL AND LAST MODIFICATION APPROVAL.....	164

**LIST OF FIGURES**

Figure 1. Overview of the Conceptual Framework for this Study.....	7
Figure 2. The Conceptual Framework for Culturally Proficient Practices. ....	15
Figure 3. The Congruence among the Five Essential Elements of Cultural Proficiency and the SIOP Model. ....	18
Figure 4. Distribution of Average Score of Teachers' Classroom Practices. ....	100

## LIST OF TABLES

Table 1. School Information and Participants' Demographic Information .....	48
Table 2. Interview Items Corresponding to the SIOP Model and the Five Essential Elements of Cultural Proficiency.....	50
Table 3. Descriptive Information about Teachers' Beliefs regarding Maintaining Students' Heritage Language and Culture .....	65
Table 4. Themes, Sub-themes, Categories, and Examples of Excerpts from First Research Question: What Are Teachers' Beliefs toward Maintaining Students' Heritage Language and Culture? .....	69
Table 5. Descriptive Information about Teachers' Classroom Practices regarding Maintaining Students' Heritage Language and Culture.....	79
Table 6. Themes, Sub-themes, Categories, and Examples of Excerpts from Second Research Question: What Classroom Practices Do Teachers Use that Support Maintaining Students' Heritage Language and Culture? .....	81
Table 7. Descriptive Information about Classroom Environment on Heritage Language and Culture (CEHLC).....	98
Table 8. Descriptive Information about Teacher Observation on Heritage Language and Culture (TOHLC).....	104
Table 9. Regression Analysis Summary for Teachers' Beliefs and Teachers' Reported and Observed Classroom Practices .....	106
Table 10. Regression Analysis for Teachers' Reported Classroom Practices and Teachers' Observed Classroom Practices .....	106

Table 11. Correlations among Teachers' Demographic Information, Teachers' Beliefs, Teachers' Reported Classroom Practices, and Teachers' Observed Classroom Practices.....	107
Table 12. Regression Analysis Summary for Teachers Speak A Different Language and Teachers' Observed Classroom Practices .....	108
Table 13. Regression Analysis Summary for the Proportion of ELL Students and Teachers' Beliefs and Teachers' Reported Classroom Practices .....	109
Table 14. T-Test Summary about Professional Training on ELL Instruction and Reported Classroom Practices .....	109

## ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisors Drs. Gayle Luze and Carla Peterson for their continued support for my dissertation, whom also encouraged me and guided me through difficulties and frustrations with their patience and immense knowledge during the process. I would like to thank to Drs. Ji Young Choi, Katherine Bruna, and Christine Lippard for being on my dissertation committee and shared their expertise and great insights that helped me complete my dissertation. I also would like to deliver special thanks to Wen Wang, my great friend and colleague, who greatly helped the observation process and being the reliability coder for my observations in local public schools. To my husband, who physically, emotionally, and spiritually supported me throughout this entire journey. In addition, to all the friends, colleagues, the department faculty and staff who encouraged me and supported my dissertation. Most importantly, I would like to thank all the teachers and principals who generously give their time to participate in my study as I could not complete this study without all their participation. Finally, I would like to thank my parents who have constantly provided me endless physical and emotional support back in my home country. This dissertation is dedicated to my parents.



**ABSTRACT**

During the 2013-2014 school year, approximately 5 million students in U.S. public schools (K-12) were heritage language speakers (HLSs), which represented almost 10% of total enrollment. The HLS population is expected to keep growing for the next decade (National Education Association, 2011). Teachers play a critical role in the learning and teaching process of students. Teachers' beliefs and classroom practices toward children's maintenance of heritage language and culture<sup>1</sup> can have a powerful influence on HLSs' beliefs and their performance. Researchers have found several factors can predict teachers' beliefs about students' heritage language maintenance, including teachers' personal beliefs and education background, years of teaching experiences, English as second language (ESL) training, and ability to speak another language (Szecsi et al., 2015; Pettit, 2011; Lee & Oxelson, 2006; Garca-Nevarez et al., 2005, Byrnes, Kiger, & Manning, 1997). This study used interviews, observations, and a survey to explore elementary teacher's beliefs and classroom practices in supporting students' heritage language and culture. Results showed that teachers believed it was important to maintain HLSs' heritage language. Schools and teachers were also implementing different strategies and practices to incorporate students' heritage language and culture in classrooms. However, schools and teachers all faced challenges in meeting the needs of HLSs. Factors that contribute to teachers' beliefs and classroom practices toward maintaining their students' heritage language and culture were also investigated.

---

<sup>1</sup> In this paper, I use the singular term to describe heritage language and culture.

## **CHAPTER 1. INTRODUCTION**

### **Structure**

This dissertation follows a traditional dissertation format. Chapter one is the introduction of the dissertation; chapter two is the literature review; chapter three contains the method, chapter four presents the results, chapter five is the discussion and the conclusion of this paper. References and appendices follow the other parts of this dissertation.

### **Background and Significance of the Study**

During the 2013-2014 school year (2001-2016 Migration Policy Institute, 2016), approximately 5 million K-12 students in U.S. public schools spoke a language other than English in their home. This group of students represents almost 10% of the total public school enrollment. These students, referred to as heritage language speakers (HLSs, Center for Applied Linguistics, 2016), include immigrants, Native Americans, refugees, and those born in the U.S. whose ancestors or families were from another country and speak a language other than English. Valdés (2001, p. 37) also defined HLSs as “individuals who appear in a foreign language classroom, who are raised in homes where a non-English language is spoken; who speak or merely understand the heritage language; and who are to some degree bilingual in English and the heritage language.” According to the 2016 National Center for Education Statistics (2001-2016 Migration Policy Institute, 2016), nine states have 10% or more students who were HLSs, with California the highest, at 23.9%, followed by New Mexico (16.9%), Texas (15.7%), Nevada (15.5%), Colorado (13.5%), Alaska (12.6%), Washington (10.6%), Florida (10.5%), and Kansas (10.4%). The population of HLSs is expected to keep growing for the next decade. By 2020, it is projected that there will be 17.9 million school-aged HLS children in the U.S. (Fry, 2008) and one in four students will be an HLS (National Education Association, 2011). In Iowa, during the

2013-2014 school year, 26,000 HLS students enrolled in Iowa public schools, which constitutes 5.2% of the total state student population (2001-2016 Migration Policy Institute, 2016).

The growing population of students with diverse language and cultural backgrounds make it important for educators to know where these students come from, their backgrounds and experiences, and connections they have between their home and the school (Lee & Oxelson, 2006). However, researchers have shown that heritage language maintenance currently relies almost entirely on informal efforts by individuals and family members (Wiley & Valdés, 2000), even though experts point out these efforts are not sufficient to maintain students' heritage language and culture when English is dominant in the school (Fishman, 2001; Veltman, 1983). In this study, culture implies differences and similarities among ethnicities, languages, geographic locations, and generations (for details of this definition, see Appendix B). Lee and Oxelson (2006) suggested educators need to know that heritage language maintenance is not only the responsibility of students and their families, but is also influenced by the school, educators and the society; therefore, schools, educators and the society should take actions to support the maintenance of heritage language and culture.

What are the benefits of maintaining one's heritage language and culture, and why do teachers need to support students to maintain their heritage language and culture? Researchers have pointed out that proficiency in one's heritage language can not only facilitate English acquisition and contribute to better academic achievement, but can also increase students' cognitive flexibility and ability to deal with abstract concepts (Cummins, 1986; Krashen, 1998). By maintaining one's heritage language and culture, individuals can experience the benefits of two cultures (Cunningham-Andersson & Andersson, 2011). However, the loss of one's heritage language and culture can not only limit an individual's opportunities to experience the world

from different perspectives, but can also create barriers in communicating with family members and alienate them from their own ethnic community networks. For instance, older members who do not speak English cannot understand the younger members who know limited heritage language, and vice versa, which creates barriers in communication and building relationships (Tannenbaum & Howie, 2002; Wong-Fillmore, 2000). Therefore, for heritage language speakers, losing their heritage language is more than just the loss of the language itself; it is also a separation from where they belong, and a removal of their probability of becoming a bilingual and bicultural person (Lee & Oxelson, 2006).

Teachers play a critical role in students' learning. With the increasing number of students who speak languages other than English enrolling in U.S. schools, teachers need to be more sensitive and adaptive to the language and culture of their students to improve students' academic development and learning (García-Nevarez, Stafford, & Arias, 2005). Researchers have pointed out that respecting and using students' heritage language and including elements of their culture are important components for responsive teaching. As well, it can improve HLSs' transfer and comprehension skills to learn a new language (August, Shanahan, & Escamilla, 2009; Chang, 2004). Researchers have shown that teachers' attitudes toward maintaining students' heritage language can affect students' attitudes and also their own teaching practices that support heritage language maintenance. Lee and Oxelson (2006) pointed out that teachers who have knowledge about the benefits of bilingualism and the consequences of heritage language loss are more likely to know about the linguistic needs of HLSs. Teachers who have limited or no knowledge about second language learning are more likely to believe that parents should take sole responsibility for their children's heritage language maintenance. Several factors have been found to contribute to teachers' beliefs and practices toward the maintenance of students' heritage language and

culture: teachers' personal beliefs, teachers' educational background, years of teaching experience, location of schools (Pettit, 2011; Szecsi, Szilagyi, & Giambo, 2015), training in teaching HLSs (Lee & Oxelson, 2006), exposure to language diversity (Byrnes, Kiger, & Manning, 1997; Szecsi et al., 2015), and teacher's ability to speak another language ((Lee & Oxelson, 2006; Szecsi et al., 2015). More specifically, experts have shown that teachers who have training in teaching HLSs, personal experiences with a different language, and can speak a language other than English are more likely to have positive attitudes about and actually implement practices that maintain students' heritage language and culture (Byrnes, Kiger, & Manning, 1997; Lee & Oxelson, 2006).

Recommended practices have been developed to support schools and teachers to help the maintenance of HLSs' heritage language and culture and meet the needs of HLSs. Examples are: involving families in the school, encourage the use of heritage language and culture in the classroom, using Sheltered Instruction, and using culturally relevant teaching in the classroom (Echevarria & Graves, 2015; Graves, Fitzpatrick, 2012; Gersten, & Haager, 2004; Torres-Burgo, Reyes-Wasson, & Brusca-Vega, 1999).

Several studies have examined teachers' beliefs and practices toward heritage language maintenance in U.S. K-12 public schools in the last decade. These studies were conducted using either interviews or survey scales to answer their research questions (García-Nevarez et al., 2005; Gkaintartzi, Kiliari & Tsokalidou, 2015; Lee & Oxelson, 2006; Szecsi et al., 2015). However, some of these studies focused on preservice teacher training rather than in-service training. In addition, only a few studies have used observation as a tool to investigate teachers' practices to support students' heritage language and culture. As the U.S. is becoming more diverse and there are more students who are HLS enrolled in public school, more research needs

to be done to learn about teachers' beliefs and practices toward heritage language maintenance through interviews and observations.

### **Purpose of this Study**

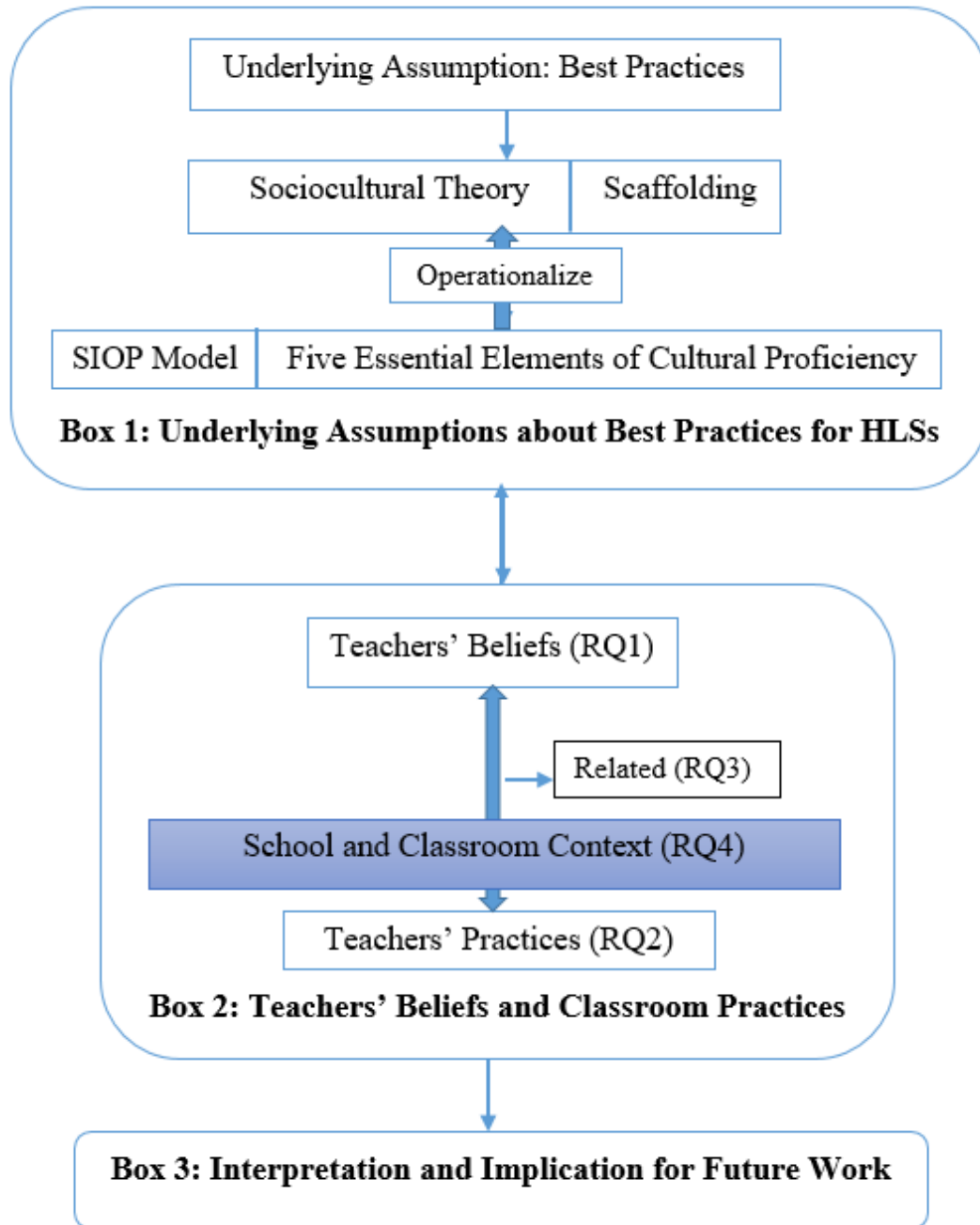
It is important to identify the current practices of teachers and the factors that are associated with teachers' beliefs and classroom practices toward students' heritage language and culture, which will ultimately benefit HLSs' school experiences. Therefore, the purpose of this study was to investigate teachers' beliefs and practices in supporting the maintenance of students' heritage language and culture.

The following research questions were addressed with interviews, observations and a survey:

1. What are teachers' beliefs about supporting the maintenance of students' heritage language and culture?
2. What classroom practices do teachers use that support maintaining students' heritage language and culture?
3. What is the relationship between teachers' beliefs and classroom practices toward supporting the maintenance of students' heritage language and culture?
4. What factors are associated with teachers' beliefs and practices toward supporting the maintenance of students' heritage language and culture?

### **Overview of the Conceptual Framework for this Study**

Figure 1 shows the overview of the conceptual framework for this study, which include Box 1, the underlying assumptions—best practices for HLSs, Box 2, teachers' beliefs and classroom practices, and Box 3, interpretation and implication for future work. Before I conducted this study, I had some underlying assumptions about the best practices teachers can utilize in their classrooms to support the maintenance of students' heritage language and culture. For this study, I see the best practices as being guided by Vygotsky's sociocultural theory and the concept of scaffolding, which explains that because students need to learn within their language and cultural contexts, teachers need to provide the best practices that incorporate students' language and cultural backgrounds to support and scaffold students' learning. I used the Sheltered Instruction Observation Protocol (SIOP) model (Echevarria & Graves, 2015) and the Five Essential Elements of Cultural Proficiency framework (Five Essential Elements; Lindsey, Robins & Terrell, 2009) as the best practices that operationalized Vygotsky's sociocultural theory and the concept of scaffolding to guide the measures for this study. The definitions of the sociocultural theory, scaffolding, the SIOP model and Five Essential Elements are introduced in the following section. Box 1 in Figure 1 shows that sociocultural theory and scaffolding served as the theoretical background for the SIOP model and Five Essential Elements. The SIOP model and Five Essential Elements were used as best practices that guided my measures. Box 1 is reflected in chapter one and part of chapter two (recommended practices for supporting the maintenance of students' heritage language and culture).



*Figure 1.* Overview of the Conceptual Framework for this Study.

Box 2 represents that teachers' beliefs and classroom practices can reflect the underlying assumptions and best practices depicted in Box 1. I used interviews, observations, and a survey to measure teachers' beliefs and practices, as well as the relationship between these two terms. Research has shown that teachers' beliefs about learning and teaching influence their goals,



classroom practices, interaction patterns, and their students (Kuzborska, 2011). Box 2 lays out the four research questions for this study. Within the school and classroom contexts (e.g., classroom and teacher's demographic information; related to research question 4), teachers' beliefs (research question 1) are associated with teacher's classroom practices (research question 2). The association between research question 1 and 2 reflects research question 4, which is the relationship between teachers' beliefs and classroom practices that support maintaining students' heritage language and culture. Box 2 is reflected in chapter 2, the literature review about teachers' beliefs and classroom practices; chapter 3, the method and procedure I conducted about teachers' beliefs and practices, and chapter 4, the findings about teachers' beliefs and practices.

Box 3 is the interpretation and implications for future work based on the findings about teachers' beliefs and classroom practices from Box 2, which is reflected in chapter 5, the discussion of this study.

The following section introduces sociocultural theory and scaffolding from Vygotsky, which guided the best practices for HLSs—SIOP model and Five Essential Elements.

### **Sociocultural Theory and Scaffolding from Vygotsky**

Students need support when learning a new language, content, or skill. The theory that I am using to structure my study is Vygotsky's (1987) sociocultural theory, which recognizes the importance of adult modeling and using language to facilitate learning. It also emphasizes that children learn new knowledge, skills and language through building on their own cultural understandings and language backgrounds. That is to say, children's cultural and linguistic experiences and their language interaction patterns all have an impact on the way they learn new knowledge, language and skills (Dalton, 2007, August & Erickson, 2006). Vygotsky (1962) also indicated that development needs to be connected with its social and cultural context, and

cultural context usually reflects cultural artifacts. Such cultural artifacts include all the things we use; it can be as simple as a pen or table, or more complex concepts such as language, beliefs, traditions, or arts (Vygotsky, 1982). In classroom settings, teachers can explain new concepts, knowledge, or skills within students' cultural contexts to help them apply the new concepts to themselves.

Scaffolding is part of sociocultural theory that puts elements of the theory into practice. Teachers can use scaffolding as a teaching tool to foster the learning and development of their students (American & Mehri, 2014). Scaffolding is "a way of operationalizing Vygotsky's (1987) concept of working in the zone of proximal development (ZPD)" (Wells, 1999, p. 127). ZPD describes the students' ability to accomplish tasks within the developmental range between what the student can accomplish independently and what they can accomplish with assistance (Campbell, 2008). Scaffolding emphasizes the collaboration between students and teachers in constructing knowledge and skills based on what students already know (Mercer & Fisher, 1998). As students learn new concepts and skills, they need teacher assistance to accomplish goals that they cannot accomplish on their own. The concept of scaffolding also applies to specific needs of heritage language speakers: as HLSs learn new vocabulary or skills, teachers can teach HLSs based on their prior knowledge, such as incorporating their heritage language or culture to help them better understand the content.

Both sociocultural theory and the concept of scaffolding served as the theoretical background for my study in the way that, teachers can pay attention to students' languages and cultural experiences. They can even try to incorporate students' heritage language and culture to build on students' prior knowledge when introducing new content, especially to students who speak a language other than English. Vygotsky's sociocultural theory and the concept of

scaffolding were the overarching theoretical perspectives, and the Sheltered Instruction Observation Protocol (SIOP) model and the Five Essential Elements of Cultural Proficiency framework were used to operationalize Vygotsky's theoretical perspective. I used the SIOP model and The Five Essential Elements of Cultural Proficiency framework to develop my measures.

### **Instructional Approaches to Support HLSs in General Education Classrooms**

General education teachers are using different approaches with HLSs, such as the Structured English Immersion (SEI) approach and the Sheltered Instruction (SI) approach. In the Structured English Immersion approach, students are taught by teachers who speak only English with the students. The goal of the SEI approach (Crothers, 2008) is to help students who speak a different language overcome obstacles in learning English and using English fluently in their lives. Students spend time practicing and learning English, through studying different subject areas such as math, social studies, and science that are all taught in English. No subject matter is taught in any language other than English and students are expected to use solely English in the classroom. Researchers (Fredricks & Warriner, 2016) have found that because SEI is solely focused on English language development and lack of content-based instruction that is related to what is taught in regular classrooms, it can have a negative impact on HLSs' learning once they transfer to a regular classroom. Compared to SEI, Sheltered Instruction does not focus entirely on English language development, but uses strategies like content-based instruction, linking the content to students' prior knowledge, and adapting content to meet the needs of HLSs (Echevarria & Graves, 2015). The current study focused on the concepts of the Sheltered Instruction approach.

**Sheltered Instruction.** Herrera and Murry (2011) defined Sheltered Instruction as “a method for combining philosophies, strategies, and techniques that appropriately recognize the many challenges that HLS students confront.” It is meant to make academic content subjects at different grade levels (e.g., literacy, math, science, social studies) more accessible for HLSs. In Sheltered Instruction, teachers incorporate language features and strategies that make the content comprehensible to all learners (McIntyre et al., 2010). Some common features of Sheltered Instruction include: linking students’ prior knowledge to the content, guarded vocabulary (e.g. slow the rate of speech, simplifying vocabularies, repeat new words, clearly enunciate words and phrases), using visuals and supplementary materials, adapting content to meet the needs of HLSs, scaffolding, using cooperative learning and incorporating hands-on activities (Crawford, Schmeister, & Biggs, 2008; Herrera & Murry, 2011). Some of these common features have been shown to also benefit non HLSs. In particular, linking students’ prior knowledge to the content has been found to benefit all students (Marzano, 2004). Sheltered Instruction is an example of Vygotsky’s sociocultural theory because it emphasizes that teachers provide scaffolding support for HLSs to learn new concepts and skills. The sociocultural theory also serves as one of the foundations of Sheltered Instruction. Two well-known methods of applying Sheltered Instruction in schools are the Specially Designed Academic Instruction in English (SDAIE), and the Sheltered Instruction Observation Protocol (SIOP) models.

**Specially Designed Academic Instruction in English (SDAIE) and Sheltered Instruction Observation Protocol (SIOP) models.** The SADIE and SIOP models have been developed to incorporate the main features of Sheltered Instruction and make them more accessible to teachers. SADIE is one popular variation of Sheltered Instruction used frequently in certain regions of the U.S. The primary goal of SADIE is to provide grade-level appropriate

English core curricula for HLSs as they continue to improve speaking, reading, and writing skills in English. SDAIE also emphasizes guarded vocabulary, hands-on activities, comprehensible input and visuals (Herrera & Murry, 2011). However, SDAIE has been used with HLSs who have obtained some intermediate or advanced level of English proficiency, instead of with HLSs who are just beginning to learn a second language.

The SIOP model is another variation of Sheltered Instruction and is the most developed and researched model that can be used with HLSs at any stage of second language acquisition (Herrera & Murry, 2011). I chose the SIOP model as the gold standard for this study as it is a pedagogical strategy that teachers can use with HLSs with any level of English proficiency. The SIOP model guides teachers to implement effective practices systematically as well as providing a tool teachers can use to improve their teaching. As well, it is a supervisory tool to measure whether teachers are consistently incorporating key SI techniques in their lessons (Echevarria & Graves, 2015). The SIOP model is also a research-based model for HLSs that builds on students' linguistic and cultural backgrounds to help them connect the content to their backgrounds, and to use their heritage language to build their English skills (McIntyre et al., 2010). The SIOP model is composed of 30 features grouped into eight components: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review/Assessment (Echevarria & Graves, 2015). I selected components that relate most directly to my research study: Lesson Preparation, Building Background, Comprehensible Input, Strategies, and Interaction. These components were selected because they captured different classroom practices teachers can use to support HLSs learning. They were used to guide development of all study measures, including the survey, observation instrument, and interview.

***Lesson Preparation.*** This SIOP model component emphasizes how teachers prepare lessons to meet the needs of students, such as whether teachers are aware of students' language and culture when planning their lessons, or whether teachers devote equal amounts of time to both English and heritage language/culture when planning lessons.

***Building Background.*** This captures whether teachers build on HLSs' language and cultural background when teaching new content or if teachers incorporate HLSs' heritage language and culture in lessons and activities. For example, when teachers introduce new vocabulary, they can ask HLSs the vocabulary in their heritage language to build the connection between English and their heritage language.

***Comprehensible Input.*** This component refers to teachers using a variety of techniques to make concepts more understandable to HLSs, such as modeling, using pictures, gestures, and body language. For instance, teachers can model for HLSs how to sound out words or use body language to enact certain actions (e.g. jump high/low).

***Strategies.*** This component focuses on teachers' use of scaffolding techniques to assist and support students understand the content, such as using open-ended questions and prompts to encourage students to talk. This also implies teachers use social/affective strategies to guide students to interact with peers effectively.

***Interaction.*** This component focuses on how teachers interact with HLSs, and how HLSs interact with peers, such as if teachers use students' heritage language to interact with HLSs, or if peers are using their heritage language.

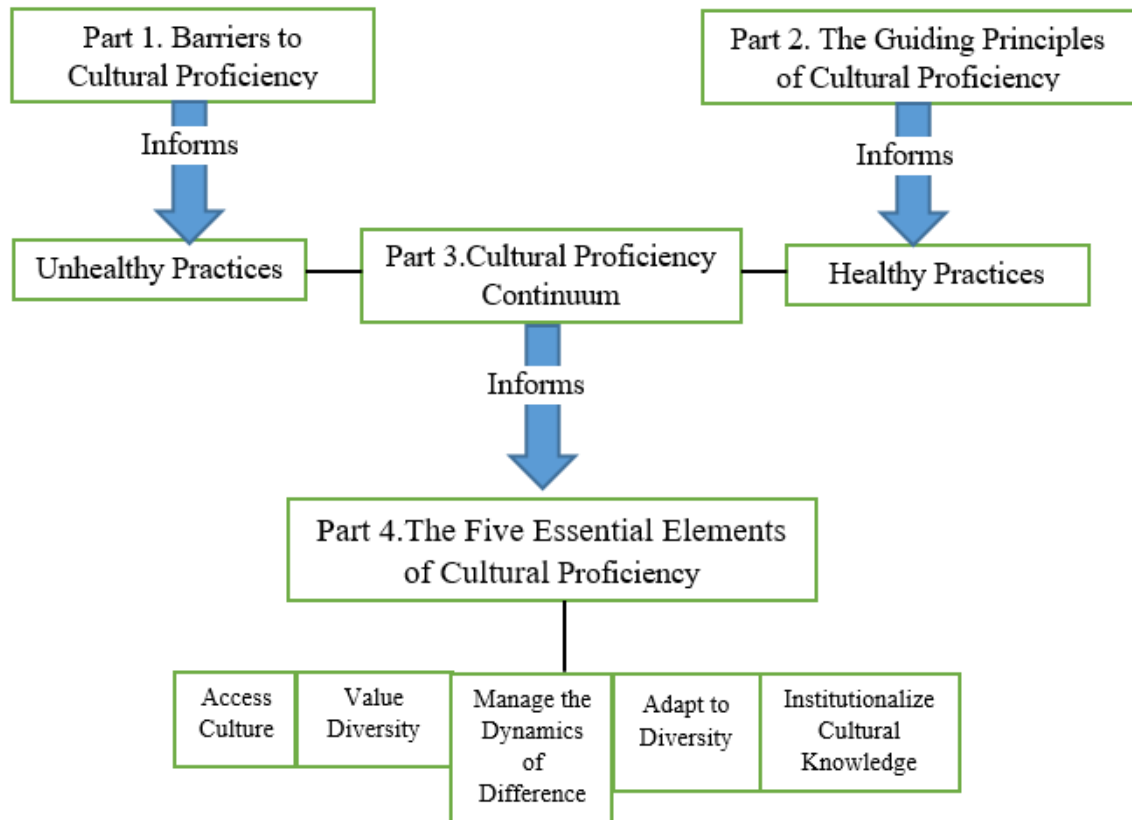
### **The Five Essential Elements of Cultural Proficiency**

The Five Essential Elements of Cultural Proficiency (Lindsey, Robins & Terrell, 2009) is a framework that reflects some features of the SIOP model, and aligns well with the focus of my

study of how to become culturally proficient toward maintaining students' heritage language and culture. In the context of education, cultural proficiency is the ability and capacity an educator from one cultural background can effectively interact, teach, and connect with students from different cultural backgrounds (Lindsey, Robins & Terrell, 2009). The five elements are: Assess Culture, Value Diversity, Manage Dynamics of Difference, Adapt to Diversity, and Institutionalize Cultural Knowledge. The five key elements of cultural proficiency is one of the four parts of The Conceptual Framework for Culturally Proficient Practices. The conceptual framework, developed by Lindsey, Robins and Terrell (2009), aimed to provide practices to guide professionals to become cultural proficient. Figure 2 shows the connection among the four parts of the Conceptual Framework for Culturally Proficient Practices.

The first part is The Barriers to Cultural Proficiency, which explains why people are not culturally proficient. The second part is The Guiding Principles of Cultural Proficiency which guides personal values of being culturally proficient in this diverse environment. These two parts inform the third part, The Cultural Proficiency Continuum, which describes the healthy and unhealthy values and behaviors related to cultural practices. Finally, the third part informs the fourth part, The Five Essential Elements of Cultural Proficiency, which serves as standards that will guide values and behaviors in the professional workplace. The four parts build on one another, and the fourth part is the focus that guided my study. In the context of a school setting, the Five Essential Elements of Cultural Proficiency framework reflects Vygotsky's scaffolding and sociocultural theory as it emphasizes that teachers can recognize students' culture and apply students' culture in their teaching to help students better learn new concepts. The authors describes how the five essential elements of cultural proficiency apply to school leaders such as teachers and school site administrators and what they need to do to be culturally proficient:

**Assess Culture.** Teachers need to assess their own culture, such as understanding their own background and previous experiences, assess the culture of the classroom, and help students discover their own cultural identities. Teachers also need to show awareness of their students' culture. For example, teachers need to know what countries their HLSs come from or the ethnic



*Figure 2.* The Conceptual Framework for Culturally Proficient Practices.

backgrounds of their HLSs. Gay (2005) also indicated that teachers need to be aware of their own cultural beliefs and values, and how their beliefs can affect their expectations towards students from diverse ethnic groups. School site administrators need to know the culture of the school and be able to show cultural understanding students and their families. For example, some families might need to walk with their children to the classroom when they drop them off at the school. Schools can show understand and respect for their culture.



**Value Diversity.** Teachers need to teach subjects in a culturally inclusive way, as well as have positive attitude toward students' heritage language and culture, and value culture differences in the classroom. Teachers can show they value their students' language and culture by asking questions related to their language and culture, or incorporating students' heritage language and culture in lessons and activities. School site administrators need to create a culturally proficient environment for the school, and work with teachers and staff in the building to make everyone accountable. For instance, schools can respect students' and their families' cultural norms, such as their customs or rituals for certain holidays or events.

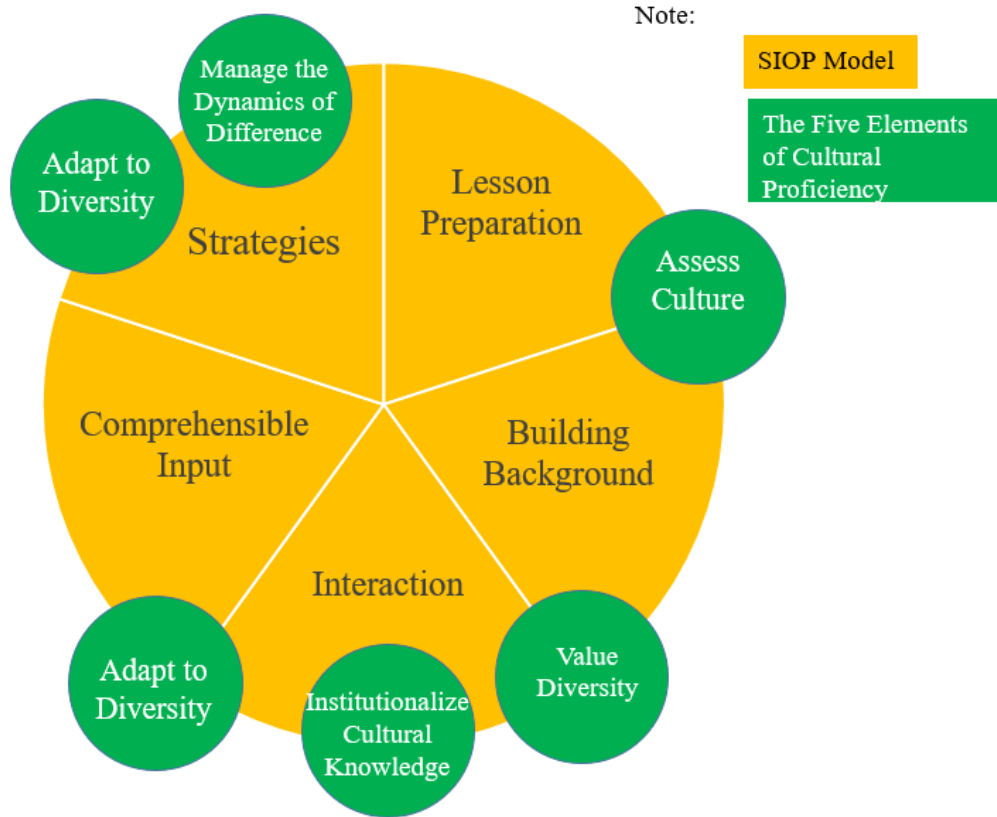
**Manage Dynamics of Difference.** Teachers need to teach students to solve conflicts in a variety of possible ways, especially to embrace differences and treat conflicts as lessons. For example, teachers can help explain the cultural differences when there are cultural conflicts among students, especially with older students. School site administrators need to provide support about conflict management for teachers and staff, and help them distinguish between cultural differences and behavioral problems.

**Adapt to Diversity.** Teachers need to develop their own skills and knowledge to meet the needs of the students, as well as help students understand the differences among different cultures. Teachers can seek opportunities to learn their HLSs' language and culture by attending workshops, trainings, or cultural events to help them better understand their students' language and culture. School site administrators need to examine policies and practices for potential discrimination and adapt practices if needed. For instance, schools can examine if there are discriminations or inappropriate language in their school policies or practices that might harm HLSs and/or their families. If such inappropriateness exists, schools need to change and adapt their policies or practices.

**Institutionalize Cultural Knowledge.** Teachers need to teach students how to appropriately ask questions about other people's culture and share their own culture with others. Teachers can also develop his or her knowledge about their HLSs' heritage language and culture and share what he or she have learned or known with the class. School site administrators need to monitor cultural practices both in classrooms and school wide. Schools need to make sure teachers and staff members are culturally proficient in meeting the needs of students, and provide trainings or guidance on a regular basis.

These Five Elements of Cultural Proficiency reflect some key features of the SIOP model, including Lesson Preparation, Building Background, Comprehensible Input, Strategies, and Interaction. I explained the connection between the Five Elements of Cultural Proficiency and the SIOP model in the next paragraph. Figure 3 presents how the five essential elements fits with the SIOP model.

*Assess Culture:* teachers need to assess their own culture as well as their students' culture to prepare lessons and build background based on students' experiences and prior knowledge. Sometimes teachers need to adapt the teaching content based on students' background knowledge (Building Background). Through building on the background of the students, teachers can plan content and teaching that involve students' home and families (Lesson Preparation). *Value Diversity:* by building a connection to students' background, culture and families, teachers can demonstrate that they value diverse culture in the classroom (Building Background). By allowing students to use their heritage language to express themselves through interactions among students or with teachers, teachers can also show they value the cultural diversity of the students (Interaction). *Manage the Dynamics of Difference:* teachers can use



*Figure 3.* The Congruence among the Five Essential Elements of Cultural Proficiency and the SIOPI Model.

social/affective strategies to facilitate students' interactions with each other when they have conflicts and to teach students to embrace differences (Strategies). *Adapt to Diversity*: teacher-student interaction is important for students to acquire a second language as well as enable teachers to know more about students' culture (Interaction). Teachers can use techniques to make content comprehensible to students, such as using visuals and modeling, as well as applying scaffolding techniques to support the learning of HLSs (Comprehensible Input). When students are interacting with each other, teachers can also help them with understanding differences among different culture by joining their conversation and asking what they have learned from each other's culture and how they are different from their own (Strategies). *Institutionalize Cultural Knowledge*: teachers can encourage interaction among students and provide guidance

when students share their culture and/or ask questions regarding each other's culture (Interaction).

The SIOP model and the Five Essential Elements of Cultural Proficiency model guided this study as both reflect Vygotsky's sociocultural theory and scaffolding. Both models also encompass educators' values, behaviors and practices in cultural proficiency in their workplace. The SIOP model mainly applies to classroom teachers; however, the Five Essential Elements of Cultural Proficiency apply to both teachers and school site administrators.

### **Definitions**

Following are definitions of various terms used in this study.

**Cultural Proficiency:** In the context of education, cultural proficiency is the ability and capacity an educator from one cultural background can effectively interact, teach, and connect with students from different cultural backgrounds (Lindsey, Robins & Terrell, 2009).

**Culturally Relevant Teaching:** Culturally relevant teaching is "a pedagogy that empowers students intellectually, socially, emotionally, and politically, by using cultural referents to impart knowledge, skills, and attitudes. These cultural references are not merely vehicles for bridging or explaining the dominant culture; they are aspects of the curriculum in their own right" (Ladson-Billings, 1994, p. 17).

**Culture:** Culture is symbolic communication and reflects a group of people's particular way of life (Rothman, 2014). Damen described culture as shared and learned human patterns on a daily basis that infuse human interaction (Damen, 1987).

**Heritage Culture:** Heritage culture is an explanation of the ways of living developed by a group of people and passed on by generations, including their customs, practices, beliefs, values, traditions and lifestyles (ICOMOS, 2002).

**Heritage Language:** In the context of U.S., heritage language refers to a language other than English that is frequently used by immigrant families and their children, and can be also referred to as “mother tongue,” “native language,” and “home language (Lee & Shin, 2008).” The term “heritage language” was used in this study.

**Heritage:** Heritage means things “belong to the culture of a particular society, such as traditions, languages, or buildings, which come from the past and are still important” (Cambridge University Press, 2016).

**Parallel Talk:** Strategy a teacher uses to describe to a student what the student is currently doing (Pianta, La Paro, & Hamre, 2008).

**Scaffolding:** Scaffolding was introduced by Wells (1999) as "a way of operationalising Vygotsky's (1978) concept of working in the zone of proximal development (ZPD)" (p.127). The ZPD is the distance between what a student can do with and without help (Vygotsky, 1978).

**Self-talk:** Strategy a teacher uses to describe to students what he or she is currently doing (Pianta, La Paro, & Hamre, 2008).

**Sheltered Instruction Observation Protocol (SIOP):** SIOP is a research-based model of instruction for English language learners that builds on their linguistic and cultural backgrounds to support them in connecting the content to their backgrounds, and to use their heritage language to build their English skills (McIntyre et al., 2010).

**Sheltered Instruction:** “Sheltered Instruction is a method for combining philosophies, strategies, and techniques that appropriately recognize the many challenges that HLS students confront” (Herrera & Murry, 2011, p. 271).

**Specially Designed Academic Instruction in English (SADIE):** SADIE is a teaching approach designed to make the content comprehensible and relevant for English language

learners who have intermediate English fluency (California Department of Education, 1993). It is one popular variation of Sheltered Instruction that is used in certain regions of the United States.

**Teachers' Beliefs:** Teachers' beliefs are an important part of their prior knowledge in a way teachers process, perceive, and act in the classroom (Clark & Peterson, 1986). In this study, teachers' beliefs refer to teachers' perceptions about supporting the maintenance of students' heritage language and culture.

**Trustworthiness:** Trustworthiness determines "whether or not research findings seem accurate or reasonable to the people who were studied" (LeCompte, 2000, p. 152).

## CHAPTER 2. LITERATURE REVIEW

### Overview

During the 2013-2014 school year, approximately 5 million students in U.S. public schools (K-12) were heritage language speakers (HLSs), which represented almost 10% of the total public school enrollment. The HLS population is expected to keep growing for the next decade. By 2020, it is projected there will be 17.9 million school-aged children of immigrants in the U.S. (Fry, 2008) and one in four students will be an HLS (National Education Association, 2011). In Iowa, during the 2014-2015 school year, the number of minority students in public schools continued to increase and reached 104,052, which makes up 21.8% of the student population. During that same period, the number of HLSs also increased to 5.7% of the student population, with the majority of these students speaking Spanish (Iowa Department of Education, 2015).

The needs for instruction and language support for students who speak languages other than English and are enrolled in general education classrooms have typically not been met adequately (Szecsi, 2015). HLS students' knowledge of their heritage language has been viewed by the society as an obstacle to learning English and other academic subjects (Shin, 2012). Teachers also tend to discourage students from speaking their heritage languages in the classroom. As a consequence, HLSs usually abandon their heritage language during the primary grade years. They might have the chance to learn the language as a foreign language later in secondary school or college; however, this is not a good practice for learning and maintaining heritage language. It would be more effective to support HLSs to maintain their heritage languages during their formative school years than to lose it and try to pick it up later (Shin, 2012). Researchers have shown that bilingual children perform better than monolingual children

on certain cognitive tasks (Grosjean, 2012). For example, in a 2004 study, bilingual and monolingual preschoolers were given the task of sorting blue circles and red squares into two digital bins on a computer. Even though both groups performed similarly on sorting colors, the bilingual children were faster than the monolingual children on sorting shapes (Bialystok & Martin, 2004). As Cummins (2000) states, conceptual knowledge developed in one language can support a child to comprehend the same concept in another language.

Compton (2001) points out that teachers need to raise their awareness of the need for heritage language maintenance as the solid foundation of heritage language can significantly influence second language development (Cummins, 1986). Multicultural education researchers indicate that teachers who are knowledgeable about and accepting of the culture of their students can improve school success of the students (Grant, Elsbree, & Fondrie, 2004; Irvine, 2003). As teachers, they can choose to acknowledge and appreciate the diversity and richness of the different cultures that their students bring to the classroom or to ignore them. Teachers need to recognize that all students have their own culture, and they belong to a certain cultural group. Experts point out that all students need to be taught in a way that considers their personal identity and their past experiences (Fitzpatrick, 2012). In order to be culturally proficient, researchers suggest that teachers need to be aware of cultural differences among their students, be culturally sensitive and be able to respond appropriately to these cultural differences (García-Nevarez, Stafford, & Arias, 2005).

Culture may be defined in a number of ways. Culture is symbolic communication and reflects a group of people's particular way of life (Rothman, 2014). According to Damen, culture is defined as the "learned and shared human patterns or models for living; day-to-day living patterns. These patterns and models pervade all aspects of human social interaction. Culture is



mankind's primary adaptive mechanism" (Damen, 1987, p. 367). In this study, I define culture as the differences and similarities among ethnicities, language, geographic locations, and generations (Hofstede, 1997). Encyclopædia Britannica (2016) presents the relationship between culture and language: As culture covers a wide range of human behavior, and language is considered a part of culture and probably plays the most important aspect of culture. Language cannot exist apart from culture (Sapir, 1970). Salzman, Stanlaw, and Adachi (2014) call language 'a key to the cultural past of a society' (p. 41). Wardhaugh (2010) also indicates that people's culture can be reflected in their language since the language they use and the way they interact can reflect what they do and what they value. This literature review examines the topics related to my dissertation, including the importance of heritage language and culture, teachers' beliefs and practices about maintaining heritage language and culture, challenges schools face that prevent heritage language and culture maintenance, and recommended practices for maintaining students' heritage language and culture.

### **Importance of Heritage Language and Culture**

#### **Heritage Language**

According to Lee and Shin (2008), in the United States, heritage language means a language other than English that is frequently used by immigrant families and their children, and also can be called "mother tongue," "native language," or "home language." A professional group that advocates for maintaining heritage language indicates that heritage language speakers include immigrants, Native Americans, refugees, and those who were born in the U.S. whose ancestors or families were from another country and speak a language other than English (Center for Applied Linguistics, 2016).

The word “heritage” has many meanings and is explained in the following sentences. According to the definition of the Cambridge Dictionary (Cambridge University Press, 2016), heritage means things that “belong to the culture of a particular society, such as traditions, languages, or buildings, which come from the past and are still important.” Simply put, heritage is what people value today that was also valued in the past. Heritage is also a gift that we have accepted from previous generations and our ancestors, such as language, culture, inheritance of land, ecosystems, and knowledge (Welch & IPinCH Project, 2014). Heritage is a way humans maintain connections with our past, tell our differences and similarities from one another, and tell other people, especially our offspring, what part/s from the “heritage” are important and deserve to be carried on to the future. Heritage guides each of us on a daily basis, in terms of what to eat, what to wear, and how to behave. Our heritage influences our values and preferences (Welch & IPinCH Project, 2014). I chose “heritage language” instead of other terms because heritage language is not just about the language itself, but about one’s heritage and culture; it covers who the person is and where the person’s roots are. Most general education classrooms use the term English Language Learner (ELL) to describe the students that are enrolled in the program that supports their English language skills. However, to match the term “heritage language” that I chose for my study, I use the term “heritage language speakers” (HLSs) when describing students who speak a language other than English at home. I still used the term “ELL teacher” to describe teachers who teach HLSs as it is the term most commonly used at public elementary schools.

Brecht and Ingold (2002) make the point that knowing one’s heritage language is not only gaining a language as a skill, but also as a national resource. They mention that the United States has an incredible need for individuals to not only be highly proficient in English, but also

in many other languages. For example, more than 70 government agencies indicated a shortage of people with foreign language expertise (Brecht & Ingold, 2002). The authors mentioned that individuals who are bilingual have more cognitive flexibility and can acquire a new language faster than people who are monolingual. In addition, when bilingual individuals learn a new concept in English, if they already know the concept in their heritage language, it will be easier for them to learn this word in English. Therefore, their heritage language skills are important for them to acquire English language skills (Galambos & Goldin-Meadow, 1990; Cho, Rios, Trent, & Mayfield, 2012; Cummins, 2005). Researchers have further highlighted the fact that children who learn words in their heritage language are able to transfer this knowledge to a second language (Collier & Thomas, 1989; Cummins, 1981). One longitudinal study demonstrated that compared to English-only programs, quality dual language programs benefit both heritage language speakers' English and heritage language skills, as well as promoting overall academic achievement (Thomas & Collier, 2012; Collier & Thomas, 2004; Thomas & Collier, 2002).

The United States also has a critical need for people who are proficient in English and other languages to serve such fields as foreign relations, business, marketing, public relations, education, engineering, and service professions; therefore, educational programs must prepare all students to be linguistically and culturally proficient to communicate successfully in this diverse American society. In order to achieve this goal, Americans whose heritage language is not English should maintain and develop that language while they are learning English; Americans who only know English should study another language (Center for Applied Linguistics, 2016).

A professional organization that advocates the importance of heritage language development stresses that heritage language speakers need to improve their heritage language skills so that they can function professionally in both English and their heritage language (Center

for Applied Linguistics, 2016). The idea this organization shares supports the importance of my study, which indicates that maintaining one's heritage language not only benefits the individual, but can also contribute to the richness in language and culture for the U.S. society. This organization emphasizes the importance of maintaining one's heritage language (Center for Applied Linguistics, 2016) and what educators need to do to support students' heritage language which also aligns with my study focus. Their principles, which relate to the organization's mission, indicate that maintaining heritage language can contribute to the United States' richness in language and culture and is important for family connections and self-identity development.

### **Heritage Culture**

When we think of culture, it can mean many things, such as food, clothing, language, beliefs, and religion. Culture also reflects a group of people's particular way of life, such as how people interact, live and behave (Rothman, 2014). Heritage culture is an explanation of the ways of living developed by a group of people and passed on by generations, including their customs, practices, beliefs, values, traditions and lifestyles (ICOMOS, 2002). Heritage culture can provide us a sense of unity and belonging within a group, leading people to the history and places we come from, as well as the experiences of previous generations (Cultivating Culture, 2017). Thurley (2005) created a heritage cycle model to explain the process of incorporating culture from the past into our lives, which means that people need to preserve the heritage culture from our ancestors so that more people can enjoy and maintain it. This heritage cycle model supports the importance of my study which is to preserve heritage language and culture. It also connects with some features of the SIOP model (e.g. Lesson Preparation and Building Background) that suggest what educators can do to support the maintenance of students' heritage language and culture. While preparing lessons, educators can support students to maintain their heritage

culture by appreciating different cultural elements that students bring into the classroom, as well as incorporating students' culture into lessons.

### **Teachers' Beliefs and Practices about Maintaining Heritage Language and Culture**

Teachers' attitudes and beliefs can have a powerful influence on HLS students in their classrooms (Pettit, 2011). Not only do teachers' beliefs have an effect on their expectations for HLS students, but their actions and practices in the classroom also reflect their beliefs, which will affect the way they think about their teaching and the way they teach (Richardson, 1996). The beliefs and attitudes teachers bring into the classroom can either positively or negatively affect their teaching (Lacorte & Canabel, 2005). Rueda and Garcia (1996) found that teachers' attitudes toward HLSs can affect students' behaviors in the classroom, which can also affect teachers' and students' interactions in the classroom. For example, if teachers indicate to their students that they can use only English at school, students can infer that their heritage language and culture are not important. This may have a negative effect on their communication and relationships with teachers (Lanehart, 1998). Zheng (2009) also mentioned that teachers' knowledge about second language learning and their assumptions about the impact of heritage language on children's language development can determine their behaviors, actions, teaching, and communication with their students and students' parents in either positive or negative ways.

Teacher knowledge about the importance of maintaining a heritage language is related to their knowledge of the linguistic needs of HLSs. Researchers have found that teachers who have knowledge about the benefits of bilingualism and the consequence of heritage language loss are more likely to be knowledgeable about the linguistic needs of HLSs. By contrast, teachers who have limited or no knowledge about second language learning are likely to believe that parents should take the sole responsibility for their children's heritage language maintenance (Lee &

Oxelson, 2006). Teachers who think that students' heritage language skills might interfere with their second language learning might not encourage students and their families to continue using their heritage language (De Angelis & Dewaele, 2009). We need to know the extent to which teachers' classroom practices are a reflection of their beliefs. There is not enough research regarding what specific activities teachers have been using in the classroom to support students' heritage language and culture. We also need to know if teachers' observed classroom practices reflect beliefs. The current study investigated factors associated with teachers' beliefs and classroom practices toward maintaining students' heritage language and culture.

### **Factors Contributing to Teachers' Beliefs and Practices toward HLSs**

Several factors can predict teacher's beliefs and practices about students' heritage language maintenance, including teachers personal beliefs (Pettit, 2011), years of teaching (Pettit, 2011), training to teach HLSs (Lee & Oxelson, 2006), exposure to language diversity (Byrnes, Kiger, & Manning, 1997; Szecsi et al., 2015), professional development on Sheltered Instruction (Crawford, Schemeister, and Biggs, 2008), and teacher's ability to speak another language (Lee & Oxelson, 2006; Szecsi et al., 2015). In particular, training to teach HLSs, exposure to language diversity, professional development on Sheltered Instruction, and teacher's ability to speak another language were found to affect teacher's beliefs and practices regarding heritage language maintenance significantly (Byrnes, Kiger, & Manning, 1997; Crawford, Schemeister, and Biggs, 2008; Lee & Oxelson, 2006; Szecsi et al., 2015).

**Experience with other languages.** Byrnes, Kiger, and Manning (1997) found that classroom teachers who participated in formal ESL training, had a graduate degree, or came from regions that contain more diverse populations of students in public schools had the most positive attitudes toward students' heritage language and culture maintenance. This study suggests that

obtaining ESL training could provide teachers knowledge and skills to work with HLS students. In addition, teachers who earned a graduate degree may have had more opportunity to get involved in more sophisticated thinking regarding language diversity (Byrnes, Kiger, & Manning, 1997).

Lee and Oxelson (2006) examined K-12 teachers' attitudes and classroom practices toward their students' heritage language maintenance. These authors found that neither the teachers' years of teaching experience nor the percentage of HLS students in the classroom were predictors for teachers' attitudes toward HLSs. The reason that teacher's years of teaching experience was not a factor in this study might be due to the small sample size in this study. Rather, teachers' previous ESL training and personal experiences with language were significant predictors of their attitudes toward students' heritage language maintenance. Teachers with ESL training strongly agreed that students' proficiency in their heritage language positively affects their academic performance; these teachers also believed that schools could take an active role in maintaining students' heritage language. Teachers with formal ESL training also reported using more strategies in their classrooms to value students' heritage language and culture. These strategies include sharing students' language and culture in class, visiting students' homes to learn about their language and culture, and praising students publicly for knowing other languages. However, teachers without ESL training expressed neutral or negative attitudes toward heritage language maintenance. They believed that the main role of schools and teachers was to teach English and to assist HLS students with their English proficiency. This group of teachers stated that English must be the top priority for the school, parents, and community. They also reported rarely implementing practices that support students' heritage language and culture maintenance, and they were not in favor of the school promoting heritage language maintenance.

These teachers also suggested that parents should try to speak as much English as possible with their children at home. Such advice for parents may not only contribute to heritage language loss, but can also lead to a less language-rich environment for the students when their parents have limited English proficiency. Lee and Oxelson (2006) mentioned that these attitudes are in contrast to current research about language development, which suggests that children need to live in a language-rich environment whether they are in the school or at home. This shows that teachers need to understand the importance of heritage language learning, and use ways to support them rather than discourage heritage language learning. Lee and Oxelson (2006) also found that teachers who report being proficient in language other than English felt more strongly than monolingual teachers that schools should implement practices to promote students' heritage language maintenance in the classrooms.

Szecsí and her colleagues (2015) explored teacher candidates' beliefs and attitudes about heritage language maintenance. The majority of these candidates were elementary education majors with some majoring in early childhood education or secondary education. After sampling 270 teacher candidates regarding their beliefs and attitudes about heritage language maintenance, they found that teacher candidates' level of preparation in bilingual and multicultural education was a predictor of their views about their practices in heritage language maintenance. The study also showed that the ability to speak more than one language predicted teacher candidates' attitudes about the benefits of heritage language at school. Less than 10% of the teacher candidates were proficient in a language other than English, which led the authors to suggest that teacher candidates should gain more experience with knowing more than one language. The authors also mentioned that schools in European countries, Australia, Canada, and Africa have provided opportunities for even their youngest children to learn a second language and expect



that teachers have some skills in a second language (Peck, 1993). However, monolingual teachers can still support students' heritage language and culture. Research shows that even teachers with limited knowledge of their students' heritage language can provide high quality teaching to HLSs in English when they use clear instructions based on their students' prior knowledge, including elements of students' heritage language and culture (Hopkins, 2013, Lee & Oxelsen, 2006). Regardless of whether or not teachers can speak their students' heritage language, their positive attitudes toward students' heritage language and culture can support students' desire to maintain their language and culture (Lee & Oxelsen, 2006). These researchers also found that teacher candidates' experiences with diverse languages and culture in another country can affect their beliefs about bilingualism. The authors suggested that teacher education programs should provide preservice teachers strategies for heritage language maintenance, encourage them to learn another language, and promote their experiences with diverse cultures and languages. Teacher candidates' supervisors and cooperating teachers need to make sure that they can implement these skills during their practica (Szecsi et al., 2015).

**Professional development about Sheltered Instruction.** Researchers have shown that through attending professional development on Sheltered Instruction, especially by focusing on specific teaching practices, teachers can increase use of these practices in their classrooms (Desimone et al., 2002). Crawford, Schemeister, and Biggs (2008) found that teachers who participated in a two-year professional development program on Sheltered Instruction increased their knowledge and classroom use of Sheltered Instruction. Before attending the professional development, teachers tried to use what resources they had to meet the needs of the HLSs, but also expressed a desire to learn more about effective teaching practices for HLSs. After the professional development, teachers reported that they implemented a number of Sheltered

Instructional strategies, such as vocabulary instruction, visual support, modeling, and active learning. During the first year of this study, the theme was that the teachers did not know what to do and wanted to learn more. By attending the professional development sessions, the teachers in the second year felt they knew what they should do and just needed more time to refine what they had learned. McIntyre and her colleagues (2010) also studied the effects of professional development on teachers' in-class instructional practices through implementing the SIOP model. Results showed that on their post-observation, all 23 teachers implemented more appropriate SIOP strategies compared to their pre-observation after over 18 months of professional development. In addition, HLS students of the seven classroom teachers who fully implemented the SIOP model had better achievement compared to HLS students of the teachers who did not attend the professional development.

These findings show that teachers need trainings and supported opportunities to implement effective practices that support HLSs' heritage language and culture in their classrooms. More studies need to explore factors that influence teachers' beliefs and classroom practices that support students' heritage language and culture maintenance. My study explored several factors that might influence teachers' beliefs and classroom practices regarding maintaining students' heritage language and culture, including years of teaching, the proportion of HLSs in the classroom, ability to speak a different language, and training to teach HLSs.

### **Challenges Schools Face Supporting Students' Heritage Language and Culture**

Despite research that indicates the importance of being bilingual, subtractive approaches about heritage language learning are frequently used in classrooms (Salomone, 2010). To better understand the term subtractive approaches, introducing its opposite term—additive bilingualism might be helpful for understanding the meaning of subtractive approaches. Cummins (1994)

explains the distinction between additive and subtractive bilingualism. Additive bilingualism is when the heritage language and culture continue to be developed and valued when the second language is added, whereas subtractive approaches mean that the heritage language and culture tend to be diminished as the second language is added. Schools usually focus only on students' English language development; as a result, students can gradually lose their heritage language (U.S. English, 2014).

Similar to the subtractive approach, there have been initiatives such as the English Only initiatives that enforce English language instruction and restrict bilingual education programs (Bondy, 2016) in California, Arizona, and Massachusetts (Proposition 203, 2000; Proposition 227, 1998; Question 2, 2002). Arizona House Bill 2064 established a statewide Structured English Immersion model that required all HLS students to be placed in an English language development classroom to receive English only in the classroom for a minimum of four hours per day (Fredricks & Warriner, 2016). Because this model is unrelated to the academic content happening in the regular classroom, the English-only instruction was criticized by researchers as it had a negative impact on HLSs' academic achievement and their access to quality instruction (Gándara & Orfield, 2012). Results of the National Assessment of Education Progress (NAEP) reading assessment also showed there is an achievement gap between HLSs and native speakers of English. In 2013, on average, non-HLS students at the 4<sup>th</sup> grade level scored 38 points higher in reading than HLS students; and at the 8<sup>th</sup> grade level, non-HLS students scored 45 points higher in reading, on average, than HLS students (National Center for Education Statistics, 2013). In addition, HLSs had higher dropout rates in high school and low college enrollment rates than non-HLSs. The above information demonstrates that without considering students' cultural and linguistic backgrounds, the education system can be ineffective in supporting

student learning. My study explored whether or not subtractive approaches are happening in the classroom, and if teachers were showing consideration of students' heritage language and culture in their curriculum.

Teachers expressed the need for more resources, support, effective strategies and professional development for meeting the needs of HLSs. Researchers found that although the majority of teachers felt HLSs have a positive effect on school culture, less than a third of the teachers were satisfied with the quality of instructions for HLSs at their schools (Crawford et al., 2005). Another research team showed that teachers felt significantly less confident to teach HLSs due to their lack of knowledge of second language acquisition and instructional strategies for HLSs (Karabenick & Clemens-Noda, 2004). Even teachers who acknowledged HSL students' educational needs and knew how to use Sheltered Instructional strategies with them, felt restricted due to the demands of the other students. In one study (Cho, 2014) conducted in a teacher preparation program designed for preparing bilingual speakers to become educators in Hawaii, a preservice teacher who was already working in a community-based Korean Language School while enrolled in the teacher preparation program mentioned that Heritage Language Schools emphasize cultural identity as part of the curriculum. The teacher thought that no place but Korean Language Schools can help students whose heritage language is Korean recognize and appreciate their identities as Korean, and knowing one's identity is a part of knowing one's culture. This teacher's statement led me to question whether public schools can help HLSs with knowing their identities, as well as supporting their heritage language and culture. What the Korean teacher said sounds like public schools are not helping students with their heritage language and culture, and in fact they should be doing that. These studies showed that teachers are not learning enough about effective strategies to meet the needs of HLSs, such as

implementing the SIOP model. My study investigated what effective strategies and supports teachers receive and implement, as well as what resources and supports they still need to meet the needs of HLSs.

In today's schools, educators are often either passionate about cultural proficiency or unwilling to add cultural proficiency to their agenda (Lindsey, Robins, & Terrell, 2009). Cultural proficiency should not be an add-on program, but rather an inside-out approach to emphasize diversity in classrooms, schools, and communities. The inside-out approach means that educators need to first develop their own cultural proficiency and be able to apply it in their surroundings. For example, teachers can develop their cultural proficiency by learning about the culture and language of their HLS students, and being able to share what they learned with their students. Cultural proficiency should be integrated within the daily practices of the school because it can support students' learning and enhance their engagement. However, culturally proficient leaders have pointed out that schools and organizations are not valuing cultural differences and diversity.

Lindsey, Robins, and Terrell (2009) summarized three barriers to cultural proficiency that exist in today's society: resistance to change and unawareness of the need to adapt, systems of oppression and privilege, and a sense of entitlement and unearned privilege. The first barrier means that people do not want to change and/or do not think that they need to adapt themselves according to diversity and cultural differences. The second barrier means that people do not recognize that racism, sexism, and ethnocentrism exist in the society. The third barrier is that people do not acknowledge their own rights and privileges, and when a person with a different sex, race, or ethnicity experiences oppression from the society, people with rights and privileges will fail to see that other people do not have such rights. To overcome these barriers, Lindsey and colleagues mentioned that people need to recognize that each individual has their own

identity and culture, as well as diversity within a culture. Although these are barriers in society, these can also be barriers that educators try to overcome when working with students from diverse backgrounds. The SIOP model and The Five Essential Elements of Cultural Proficiency model can provide teachers guidance on how to prepare lessons and build on the backgrounds of their students. These two models can also offer strategies teachers can use to adapt their values and practices according to the students' needs, as well as how to use strategies with HLSs and demonstrate valuing students' heritage language and their culture through interaction. The next section covers classroom practices recommended by professionals to support students' heritage language and culture.

### **Recommended Practices for Maintaining Students' Heritage Language and Culture**

There has been little research that shows how schools and teachers can effectively promote students' heritage language and culture; in particular, classroom practices that can be implemented to support HLSs' heritage language and culture. Some recommended practices have been developed to support schools and teachers to promote cultural proficiency and meet the needs of the HLSs. Collaboration among schools, students and their families is needed to accomplish the goal of maintaining heritage language. Effective policies, strategies, and resources that support heritage language maintenance and development can be implemented (Center for Applied Linguistics, 2016). The following recommended practices describe how schools can involve families to support students' heritage language and culture. Also, these cover specific teaching practices classroom teachers can implement to support maintenance of HLSs' heritage language and culture.

### **Involving Families in the School**

Researchers point out that due to the lack of school support on heritage language maintenance, immigrant parents are taking sole responsibility for their children's heritage language development. Even though parents are using their heritage language at home with their children, and they have positive attitudes toward their children's heritage language maintenance, and even get support from the community, it may still not be sufficient for their children's heritage language maintenance because children spend a significant amount of their day at school (Cummins, 2001b; Hinton, 1999; Kondo, 1998). It is recommended in the Sheltered Instruction approach that teachers should establish relationships with family members and invite them to serve in the classroom, as family members can support students learning about other culture in the classroom (Torres-Burgo, Reyes-Wasson, & Brusca-Vega, 1999). Kondo (1998) emphasizes that when schools, ethnic communities, children's peers, and home all work together, children's heritage language maintenance is supported more strongly. Experts also stress that schools should establish positive environments for HLSs by recognizing the value of their heritage language skills and the importance of the language they speak when it is used by school in official and public ways (Tse, 2001).

Researchers indicated that one principle of cultural proficiency is that the school system should integrate cultural knowledge into school practice and policymaking (Lindsey, Robins, & Terrell, 2009). They mentioned that since the educators teach students and their families about the cultural expectations of the classroom and school, educators need to know about the cultural backgrounds of their students. Educators might think it is impossible for them to learn about all the cultural groups in their district; but they can make a start by engaging in their community with people who have the same culture as the students in the classroom and school. Educators

can also use their own expertise, share what they learned with others, and understand that individual knowledge can eventually become institutional knowledge. Researchers also shared an example from an elementary school in California, in which the school once had some families that immigrated from Ukraine and Russia. The educators started to learn about Ukrainian and Russian culture from their professional development sessions. In addition, they devoted a day to visit local businesses and churches in the community. Not only did the educators gain knowledge about the Ukrainian and Russian immigrants, but they showed the community that they were willing to learn and ready to serve the new immigrant families in their school. This example shows that teachers can enrich their personal knowledge about their students' culture by attending professional development sessions and personally visiting the local community to support and value their students' heritage language and culture.

### **Teaching Practices that Support HLSs' Heritage Language and Culture**

Soto, Smrekar, and Nekkovei (1999) described practical strategies that classroom teachers can use to preserve heritage language and culture. These authors mentioned that teachers need to acknowledge that heritage language speakers are from diverse families and that this diversity brings the gifts of language, culture, and unique types of knowledge to the classroom. Teachers should consistently observe and make notes about HLS's language capabilities, both in their heritage language and English. Teachers should encourage students to use their heritage language as well as English, and accept their errors in attempts to communicate as errors are also part of language learning. Teachers can also infuse lessons and activities with authentic information related to students' language and culture, so that students can appreciate and value their identities. Moreover, teachers can advocate for diverse language and cultural learning by writing letters to newspapers, organizations, and leaders who support culturally and



linguistically diverse learners. The Sheltered Instruction approach also suggests that even when teachers do not speak HLSs' heritage language, they can use bilingual dictionaries and library books in students' heritage language to incorporate HLSs' heritage language into the classroom (Graves, Gersten, & Haager, 2004). Teachers can also let students who speak the same language help each other talk and write in their heritage language (Lucas & Katz, 1994). The Sheltered Instruction approach emphasizes the importance of parents as advocates and teachers with other parents, as parents can communicate with other parents in their heritage language and encourage other parents to read to their children in the heritage language, as well as serve in the classroom to offer heritage language interaction and support (Echevarria & Graves, 2015).

Another example comes from Fitzpatrick (2012), who used the music classroom to illustrate how to foster cultural diversity and identity. If music teachers have an understanding about their students' cultural backgrounds, and also recognize their own culture, it can promote more respect, clearer understanding, and better connections among students and teachers in the music classroom. Fitzpatrick (2012) emphasized that since many students come from varied cultural backgrounds in terms of race, ethnicity, religion, and socioeconomic status, these differences will affect students' abilities to connect their own personal identities with the school music curriculum. The impact of students' cultural differences also applies to the general school curriculum, not only to the music curriculum. As students begin their formal education, they are starting to form their opinions and concerns regarding their abilities and how well they can adapt their culture into the school environment. Therefore, the cultural messages that students receive from teachers and staff can seriously affect their personal identities and school achievement. It is important to consider the cultural norms and expectations in the school, as these will affect whether students can find their own personal identity in the school, and whether or not students

will experience cultural and identity conflicts between the classroom and home. Fitzpatrick (2012), with an example from the music classroom, suggests that if a student enjoys and values a type of music at home but if this is ignored or unvalued in the classroom, it can create cultural conflicts. These cultural conflicts can occur in all classroom settings, in addition to a music classroom. If a student's culture is not recognized or valued in the classroom, not only will the student's feelings be hurt, but it can affect the student's personal identity. Teachers need to learn to address cultural boundaries between students' different cultures, as well as address the needs of students from different cultural backgrounds.

Fitzpatrick (2012) mentioned that teachers' cultural proficiency may be affected primarily by their own experiences with and prior knowledge to diversity, as well as learned attitudes and their level of education. Researchers have shown that teachers who differ from their students in terms of race, ethnicity, or socioeconomic status will consider their own behaviors to be "normal," but treat their students' behaviors as "abnormal" (Delpit, 2006). Benedict (2006), a music education professor also stated that music teachers usually expect their students to behave in a certain way, assuming they come from similar home environments, and even expect them to be in need of certain music skills and experiences that will prepare them for the music curriculum. Like music teachers, most teachers show the same expectations for all their students regardless of where they come from and what their needs are. Researchers have shown that this can result in more students becoming alienated from traditional education, and experiencing disconnections between their home lives and school (Hayes, 1993).

To best support students' learning in a culturally beneficial and sensitive way, culturally relevant teaching is often used by teachers as a way to connect students' school experiences and

home lives, as well as reduce culture conflicts (Ensign, 2003). The definition of culturally relevant teaching is

“A pedagogy that empowers students intellectually, socially, emotionally, and politically, by using cultural referents to impart knowledge, skills, and attitudes. These cultural references are not merely vehicles for bridging or explaining the dominant culture; they are aspects of the curriculum in their own right” (Ladson-Billings, 1994, pp.17-18).

It reflects some key features of the SIOP model such as Building Background and Interaction as culturally relevant teaching emphasizes making connecting between students’ school experiences and their home, as well as building relationships and connecting with students and their families. Researchers have found that teachers who are culturally sensitive and use culturally relevant teaching can foster better achievement for students and create genuinely empathic relationships with students who come from different cultures (Ladson-Billings, 1994; Howard, 2001; Gay, 2010).

What does this look like in real practice? Fitzpatrick (2012) recommends that teachers can pay more attention to students’ social interactions and promote positive peer interactions among different cultures, and consider students’ cultural backgrounds when grouping them for assignments and projects. Teachers can also incorporate content that aligns students’ cultural backgrounds with the curriculum and let students share their own cultural experiences in the classroom according to the content they teach. For instance, if the topic is food, students can share with the class what foods they normally eat at home. In addition, educators can invite guest speakers or visitors into their classrooms to share cultural stories and subjects. Culturally relevant teaching asks teachers to create an environment where students are encouraged to speak, ask questions, and seek assistance appropriately when they experience a problem. In addition, the

subject matter can build on students' prior experiences and knowledge so they will be better able to understand and study. Culturally relevant teaching should also occur during informal conversations with students, such as discussions in the hallway and after-class discussions. All should be considered parts of the curriculum. Through these actions, teachers can show their students that they value their cultural identity and embrace different perspectives and cultural differences in the classroom (Fitzpatrick, 2012).

### **Summary of Literature Review**

Maintaining HLSs' heritage language and culture is important. Knowing one's heritage language can not only support second language learning and enhance cognitive skills in critical thinking and problem solving, but can provide more career opportunities. Also, knowing about their heritage culture can help HLSs develop a healthy cultural identity and build connections with their family members. Students spend most of their time at school; therefore, teachers' beliefs and classroom practices toward heritage language and culture can have a powerful influence on HLSs' beliefs and their performance. However, the above research and recommended practices show that even though teachers can recognize the importance of maintaining students' heritage language and culture, teachers are not implementing enough classroom practices to promote students' heritage language and cultural learning. Schools need support to make them feel prepared to teach HLSs and meet their needs. Researchers examined above used either surveys or interviews to explore teachers' beliefs and classroom practices in supporting students' heritage language and culture, and only a few studies focused on currently employed teachers. In addition, little research has involved observing teachers' actual classroom practices. The current study used interviews, observations and a survey to explore teachers'

beliefs and their classroom practices regarding supporting students' heritage language and culture and how they actually interacted with students in the classroom.

## CHAPTER 3. METHODOLOGY

### **Institutional Approval**

This study, including the interview instrument, observation instrument, survey, and the consent form for the participants, was approved by the Iowa State University Institutional Review Board (IRB). The IRB approval is shown in Appendix E.

### **Researcher Background**

In qualitative inquiry, it is important to narrate the background of the researcher and the purpose for conducting this study (Clandinin & Connelly, 2004). As a Chinese and a heritage language speaker, I am interested in learning how HLSs learn and maintain their heritage language and culture while living in the U.S. I have conducted a study about how Chinese parents view and maintain their children's heritage language and culture while living in the U.S. I have learned that Chinese parents are doing as much as they can to support the maintenance of their children's language and culture. However, due to the pressure from the mainstream American society, parents point out it is difficult for their children to maintain their language as they do not need their heritage language at school, thus lose the interest in learning it.

As a graduate student with the background of early childhood education, I believe teachers play a very important role in students' learning. Students' linguistic and cultural backgrounds contribute to their learning and academic success, I would like to know if teachers and public schools consider students' background knowledge in constructing lessons. Specifically, I wonder if the public schools in the U.S. value HLSs' heritage language and culture, what are teachers' views about supporting the maintenance of HLSs' heritage language and culture, as well as the school and classroom practices teachers and staff members perform that support HLSs' heritage language and culture. Therefore, I conducted interviews and

observations in local public schools to investigate teachers' beliefs and classroom practices in supporting the maintenance of HLSs' heritage language and culture.

### **School Demographics**

This study involved three elementary schools, which will be identified by letters to maintain the privacy of participating teachers: Elementary School A, Elementary School B, and Elementary School C. Elementary School A is part of a large urban district that has a diverse population with 20% HLS students. Elementary School B is part of a medium-sized rural district that has 37% HLS students. Elementary School C is part of a small rural district that has 2.6% HLS students (Iowa Department of Education, 2015). During the 2016-2017 school year, there were 336 students at Elementary School A; 153 students are African American, 105 students are Hispanic, and 40 students are Asian. At Elementary School B, with a total of 245 students, 117 are Hispanic, 37 are Asian and nine are African American. Among the 710 students at Elementary School C, only 22 students are HLSs and they all speak Spanish (Iowa Department of Education, 2017).

### **Participants**

To be included in this study, teachers had to have at least one year of teaching experience and have at least one HLS student in their classroom. The rationale for needing at least one year of teaching experience was that those just starting their careers are adjusting to teaching in their own classroom and might not have enough experience teaching HLS students (Cajkler & Hall, 2012). There were a total of 43 participants in this study, including three principals, 39 classroom teachers and one school counselor. Principals were included in this study because they set the tone for education in the building. Principals and the school counselor participated only in the interview portion of the study. The school counselor from Elementary School A was not in the

initial recruitment plan; however, after the principal from Elementary School A sent my recruitment letter to all teachers, the school counselor contacted me and said they <sup>2</sup>would like me to have a different point of view knowing a school counselor's beliefs and practices toward maintaining students' heritage language and culture. Fifteen participants, including the principal and school counselor were from Elementary School A. Fourteen participants came from Elementary School B and 14 were from Elementary School C.

Thirty-nine classroom teachers included one preschool teacher, 32 kindergarten to 5<sup>th</sup> grade teachers, and six ELL teachers (see Table 1 for demographic details). Thirty-seven teachers are female and only three are male. The principals from three elementary schools are all male. Among all the teachers, including the principals, the average years of teaching experience was 13.53 ( $SD=9.38$ , range 2-36 years). About 50% of teachers had more than 10 years of teaching experience, and 10 teachers had taught for more than 20 years. All ELL teachers had ELL endorsement; four classroom teachers also had ELL endorsement. Each classroom teacher had, on average, 21 students in their classroom ( $SD=2.17$ ). On average, teachers had eight HLS students in their classrooms ( $SD=6.05$ ). At Elementary School A, five teachers had 7-9 HLS students and three teachers had 11-13. The majority of these HLS students were Hispanic or of African descent. Elementary School B's district has a large Hispanic population; almost half the teachers had 9-13 HLS students in their classrooms, and 50% of the teachers had 14-19 HLSs. The majority (68%) of these students were Hispanic, 26% were Asian and only a few were of African descent. In Elementary School C, 50% of the teachers only had one HLS student, and only one teacher had four HLS students in her classroom. All these HLS students were Hispanic and spoke Spanish. Among all participants, 11 were fluent in a language other than English.

---

<sup>2</sup> The term "they" is used instead of a gender pronoun to protect the privacy of the participants.



Table 1

*School Information and Participants' Demographic Information*

Variables	N	%	M	SD	Range
<b>Number of Participants per School</b>					
Elementary School A	15	34.9			
Elementary School B	14	32.6			
Elementary School C	14	32.6			
<b>School Demographics</b>					
Elementary School A					
Total Number of Students	336				
White	38	11.3			
African	153	45.5			
Hispanic	105	31.3			
Asian	40	11.9			
Elementary School B					
Total number of students	245				
White	82	33.5			
African	37	15.1			
Hispanic	117	47.8			
Asian	9	3.7			
Elementary School C					
Total number of students	710				
White	688	96.9			
Hispanic	22	3.1			
<b>Number of Grades Teachers Taught</b>					
Pre-Kindergarten	8	18.6			
1 <sup>st</sup> -3 <sup>rd</sup> grade	18	41.9			
4 <sup>th</sup> -5 <sup>th</sup> grade	3	7.0			
ELL classroom	6	14.0			
<b>Class Size per Classroom</b>					
All students			21.70	2.17	17-25
HLS students			8.23	6.10	1-19
<b>Ethnic/geographic origins of HLSs per Classroom</b>					
Hispanic			5.45	4.01	1-14
African			1.03	1.52	0-4
Asian			1.71	1.88	0-6
<b>Years of Overall Teaching Experience</b>					
<b>Years of Teaching Experience at the Current School</b>					
			13.54	9.45	2-36
			5.13	4.29	1-15

## Measures

Original interview and observation instruments were developed for this study. The interview instrument was named the Teacher Interview about Heritage Language and Culture (TIHLC). There are two similar versions of the interview: one for teachers and one for principals. The observation instrument was named Observation Instrument on Heritage Language and Culture (OIHLC). It captures the classroom environment and teacher behaviors related to heritage language and culture. A survey, named as Survey (Teacher's Beliefs and Practices toward Heritage Language and Culture) used a 7-point Likert scale and contains 33 items about teacher's beliefs and practices toward maintaining students' heritage language and culture all were designed for this study based on previously published instruments.

### **Teacher Interview about Heritage Language and Culture (TIHLC)**

The TIHLC contains questions about teachers' beliefs and their current classroom practices toward maintaining students' heritage language and culture. This measure contains 28 items with five questions about teacher and classroom demographic information, 13 guided interview questions, nine multiple choice questions and one short answer question (see Appendix A). To make TIHLC questions clear to the respondents, 13 guided interview questions were named Short Answer Questions and were analyzed using qualitative methods. The nine multiple choice questions and one short answer question were named Interview Questionnaire, and were analyzed using descriptive, quantitative methods. I developed the Short Answer Questions based on a literature review and my own previous experiences interacting with HLSs, teaching in an early childhood classroom and my knowledge of HLS students. I adapted Bateman's (2010) survey, which was about the instruction of Spanish-speaking students when developing the Interview Questionnaire. Most of the TIHLC items align with the SIOP model (Echevarria &

Graves, 2015) and The Five Essential Elements of Cultural Proficiency (Lindsey, Robins, & Terrell, 2009). As the Five Essential Elements reflect some key features of the SIOP model, they were integrated to guide development of TIHLC. Some interview items reflect only one element of cultural proficiency or one key feature of the SIOP model, whereas some items reflect multiple elements of cultural proficiency or multiple key features of the SIOP model. For instance, six items reflect *building background* from the SIOP model and the first of the Five Essential Elements: assess culture, which means that teachers need to assess their own culture and also identify their students' language and cultural background. Eleven items reflected *lesson preparation, building background* and the second element: value diversity, which means that teachers need to value cultural differences in the classroom and teach subjects in a culturally inclusive way. Eleven items reflected *building background, interaction, comprehensible input, strategies* and the third element: adapt to diversity, which means that teachers need to develop their own skills and knowledge to meet the needs of the students. Item No.10 reflects *interaction* and the fifth element: institutionalize cultural knowledge, which means that teachers need to show students how to ask questions about other people's culture and share their own culture with others appropriately. No interview questions reflect the fourth element: manage dynamics of difference as I did not look for how teachers handle conflicts among students with different backgrounds (see Table 2).

Table 2

*Interview Items Corresponding to the SIOP Model and the Five Essential Elements of Cultural*

*Proficiency*

The Five Essential Elements of Cultural Proficiency	The SIOP Model	TIHLC Items Corresponding to Five Essential Elements of Cultural Proficiency and the SIOP Model
1. Access Culture	Building Background	1, 2, 3, 4, 11, 12

Table 2 continued

The Five Essential Elements of Cultural Proficiency	The SIOP Model	TIHLC Items Corresponding to Five Essential Elements of Cultural Proficiency and the SIOP Model
1. Value Diversity	Lesson Preparation, Building Background	5, 6, 7, 8, 9, 18, 19, 20, 21, 22, 23
2. Adapt to Diversity	Building Background, Interaction, Comprehensible Input, Strategies	7, 9, 10, 14, 15, 16, 17, 18, 19, 20, 21
3. Manage Dynamics of Difference	None	None
4. Institutionalize Cultural Knowledge	Interaction	10

I first piloted the interview at a Child Development Laboratory School (Lab School) where I interviewed teachers of 3-5 year old children. Feedback from the teachers was used to make slight modifications to my interview instrument. After I conducted interviews at one of the participating elementary schools, I reordered some of the Short Answer Questions since the previous order might have biased teachers' answers. I also changed the wording of some questions to let teachers comment rather than answering yes/no questions.

### **Observation Instrument on Heritage Language and Culture (OIHLC)**

The OIHLC has two sections: Classroom Environment on Heritage Language and Culture (CEHLC) and Teacher Observation on Heritage Language and Culture (TOHLC). This measure captures teachers' classroom practices that support students' heritage language and culture through their classroom displays, student-teacher communications and lessons across disciplines. CEHLC and TOHLC were analyzed using descriptive quantitative statistics. However, notes from OIHLC that were specific examples about either the classroom

environment or teachers' classroom practices, were considered to be qualitative data and were included as anecdotal notes.

I developed OLHLC based on the items from the TIHLC. Therefore, the observation items reflected all the key features of the SIOP model and some of the five elements of cultural proficiency, such as the second and fourth elements of the five elements of cultural proficiency: Value Diversity and Adapt to Diversity. Items were developed by looking at a variety of resources. Items for CEHLC came from the Office of Head Start Early Childhood Learning and Knowledge Center (ECLKC) website, which promotes the development and school readiness of young children (U.S. Department of Health & Human Services, 2016). I also used Tabors' (1998) recommended practices developed for the National Association for the Education of Young Children (NAEYC) and the Sheltered Instruction Observation Protocol adapted for preschool and kindergarten aged children (Echevarria, Short, & Peterson, 2012) to guide me through creating items for TOHLC. I also piloted the OLHLC at the Lab School where I observed teachers who had classrooms of children aged 3-5 years old. For example, I included items to address teachers' use of self-talk or parallel talk with HLSs after I saw a teacher using self-talk and parallel talk with a 4-year-old child in the Lab School. Using the observation notes I took while observing in the Lab School, I made some changes to OLHLC.

**Classroom Environment on Heritage Language and Culture (CEHLC).** The CEHLC observation tool is composed of seven items that look at the physical classroom environment, such as messages and information posted both inside and outside the classroom (e.g., classroom has welcome signs, messages are written in other languages), the diversity of books (e.g., in various languages) and items (e.g., reflect diversity) in the classroom, and the presentation of student work and portfolios. All seven items were assessed based on a Yes/No rating (see

Appendix B). In addition, anecdotal notes about what I saw in the classroom for each item were recorded.

**Teacher Observation on Heritage Language and Culture (TOHLC).** The TOHLC assesses teacher's practices toward students' heritage language and culture, and contains 16 items about classroom activities and daily routines. All items are rated NA for No opportunity to observe, 2 for Clearly, 1 for Barely, and 0 for None. This rating scale was adapted from a parent-child observation measure called Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013). NA meant there was no opportunity for me to observe in the classroom. Clearly meant the desired behavior happened more than once, or it lasted for a long time. Barely meant the behavior happened just once. None meant the behavior did not happen. Each classroom was observed twice (except for one 5<sup>th</sup> grade classroom that was observed only once) during my two days of observation. Since I was only in each classroom for 45-60 minutes on two different days, I picked the highest score obtained across the two days to capture the best performance of each teacher. Therefore, if during my first observation I scored an item 2, and on the second observation that item was scored as 1 or 0, the final score for that item would be 2. If an item was scored as NA during the first observation, and scored as 1 on my second observation, the final score for that item would be 1 because I did have the opportunity to observe that behavior so that item cannot be NA. If the item was scored as 1 on both days, the final score for that item would be 2. The reason is because even though the behavior only happened once on both days, the teacher was doing it consistently, which can be moved to a score of 2 to capture the teacher's best performance. Thus, each teacher had one final observation score based on the two observation days.

Five of 16 items indicated that they need to be observed during a typical small or large group lesson. The other 11 items were observed at any time during observations. Anecdotal notes were also collected for each item (see Appendix B). Among all 16 items of TOHLC, some items were not available for observation during the two times I observed in the classrooms, and those were marked as NA. For instance, items 1, 4, 5, and 6 required students to speak in their heritage language in the classroom. Among all 39 observations, I was able to hear students talk in their heritage language in only eight classrooms; therefore, the rest of the 31 teachers' classrooms were marked as NA for items 1, 4, 5, and 6. Item 16 (teacher uses strategies to re-engage HLSs when they are not fully engaged or interrupting the class) was also marked as NA for all classrooms since I was not able to see teachers using different strategies with HLSs versus non-HLS students when they are not engaged or interrupting the classroom. For the eight teachers where I heard students talking in their heritage language in the classroom, 15 items were observed on two different days with 45-60 minutes each time. The possible highest total score for each of these eight teacher was 30, with 2 being the highest score multiplied by 15 items; for the remaining 31 teachers, 11 items were observed, and the possible highest total score for each teacher was 22 (2 multiplied by 11 items). The range of the total actual observed score for each of the eight teachers was 13-26; the range for each of the 31 teachers was 2-11.

*Inter-rater reliability.* Among 39 teacher observations, eight (21%) of these were observed by another trained observer to determine interrater reliability of the observations. This observer was trained by me on how to use this measure before the first observation. Inter-rater reliability was calculated using Cohen's Kappa. There was substantial agreement between the second observer and me,  $\kappa = .804, p < .001$ .

### **Survey (Teacher's Beliefs and Practices toward Heritage Language and Culture)**

This Survey was modified from a tool developed by Lee and Oxelson (2006) regarding K-12 classroom teachers' attitudes and practices toward students' heritage language maintenance. These authors developed a survey of 35 statements using a 7-point Likert scale, where 1 is strongly disagree and 7 is strongly agree. After conducting a Varimax Principal Component Factor Analysis, the authors removed five items from the survey because the factor loadings were below .400. The Varimax Principal Component Factor Analysis also divided the 35 items into 8 constructs. All 8 constructs had reliability above .5, and 6 constructs above .7, as measured by Cronbach's alpha. I included all 30 remaining items but changed the wording by adding heritage culture for some items in my Survey. For instance, for original items such as "teachers should encourage students to maintain their heritage language," I changed to "teachers should encourage students to maintain their heritage language and culture" by adding culture in the statement. I also adapted three items from De Angelis's (2011) survey, which was a modification of Lee and Oxelson (2006)'s survey. De Angelis modified and deleted items from Lee and Oxelson's survey to focus more on immigrant students and fit better with the European educational context.

My Survey used a 7-point Likert scale that contained a total of 33 questions, 22 questions about teachers' beliefs and 11 questions about teacher's practices regarding supporting HLSs' heritage language and culture. Each item is rated 1 (strongly disagree) to 7 (strongly agree). All 33 questions were described statistically in the results section in chapter four. However, items 1, 11, 13, 14, and 21 from Survey were not included when calculating the mean of teacher beliefs because they were either controversial items or did not measure teachers' beliefs (see Appendix D for details). The authors of the original survey used to develop the Survey for this study (Lee &



Oxelson, 2006) did not test the reliability of the scale. For this study, I calculated the reliability of the scale with 37 participants, four items were reverse-coded (see Appendix D for details); Cronbach's  $\alpha=.89$  (95% confidence interval: .83 to .94) indicates the Survey scale was reliable. The Survey also reflects three key features of the SIOP model: Lesson Preparation, Building Background, and Interaction, as well as three elements of cultural proficiency: Assess Culture, Value Diversity, and Adapt to Diversity (see Appendix C). The Survey contained quantitative data and was analyzed using descriptive statistics.

### **Procedure**

Data collection first started with Elementary School A, then Elementary School B, and last with Elementary School C. I used the OIHLC to observe classrooms, with the goal of observing in at least one classroom per grade level. Eventually 33 classrooms across preschool to fifth grade were observed; each classroom was observed two times with each observation lasting 45-60 minutes. The only fifth-grade classroom was observed once because the head teacher of that classroom teaches math, and she told me during our interview (before my observation) that students in her classroom do not use their heritage language and I would not see the content of culture in her math class. Therefore, I only observed that classroom once. The other 32 classrooms were observed twice across different subjects and during small group, large group or center time. The ELL classrooms from three schools were also observed twice among six individual teachers. Elementary School A had one ELL classroom, which was shared by three ELL teachers. Elementary School B also had one ELL classroom and was shared by two ELL teachers. At Elementary School C, there was only one ELL teacher and she had her own ELL classroom.

In-person interviews, which lasted for 6-30 minutes, were conducted at a time convenient with 27 participations (24 teachers and three principals). All interviews were audio-recorded and transcribed. At Elementary School A, interviews were conducted either before, between observations, or after all observations were finished. However, at both Elementary Schools B and C, I only interviewed a few teachers. The interviews were conducted after observations with those teachers were completed. I interviewed teachers with the lowest and highest observation scores at Elementary Schools B and C as they represented teachers who use the most and least strategies to support heritage language or culture in their classrooms. I did not interview all teachers at Elementary Schools B and C due to the fact that I had already identified patterns of responses in the interviews I conducted at Elementary School A with teachers that were not at either the high and low ends of observation scores. Overall, teachers' reported use of heritage language with their students was consistent with my classroom observation. For example, when teachers said they do not integrate students' heritage language or culture into lessons and activities that was also reflected in my observation. An additional five teachers who scored in the middle range of observation scores were interviewed in each elementary school (B and C) to ensure these same response patterns persisted.

In addition to observations and interviews, thirty-seven classroom teachers completed the Survey. Teachers from Elementary Schools B and C completed the Survey on a hard copy. I created an online version of the Survey through Qualtrics, a university supported survey system, and sent the link to teachers from Elementary School A. Teachers who received the link completed the Survey online and I downloaded the data from Qualtrics in SPSS format.

### **Reliability, Validity and Trustworthiness of this Study**

This was a mixed method study. The quantitative data included descriptive information from Interview Questionnaire, OIHLC, and the Survey. Qualitative data included the Short Answer Questions, text descriptions from Interview Questionnaire, and anecdotal notes from OIHLC. It is important to consider the reliability and validity of the quantitative data, as well as trustworthiness of the qualitative data.

#### **Reliability and Validity**

In quantitative research, reliability refers to whether the assessment produces consistent and stable results (Laursen, Little, & Card, 2012), which were reflected in my observation instrument. Inter-rater reliability was calculated using Cohen's Kappa. I conducted a total of 39 observations and the second observer conducted eight observations. There were rules the second observer and I followed while observing, including either standing or sitting three or more feet apart, and not sharing thoughts or questions about what was observed. There was substantial agreement between the second observer and me,  $\kappa = .804, p < .001$ . Validity means a measure is valid if it measures what is supposed to measure (Laursen, Little, & Card, 2012), and this was reflected in my Survey scale. In my study, I used both TOHLC and the Survey to measure teachers' classroom practices that support HLSs' heritage language and culture. The result I got from the Survey was consistent with that in the observation. Therefore, I considered my measures to be valid for this study and measured what they were designed to measure.

#### **Trustworthiness**

Trustworthiness is an important aspect of qualitative research as it is a measure about the quality of the study, which ensures the results are believable and trustworthy (DeCuir-Gunby & Schutz, 2016). It has been divided into four criteria: credibility, dependability, transferability,

and confirmability (Gunawan, 2015). This study has addressed all four criteria. *Credibility*. Credibility measures the internal validity of this study, which ensures the study measures what it is supposed to measure (Shenton, 2004). This study used triangulation as a technique to reduce the effect of bias from investigators. Different types of triangulation were used in this study: data triangulation, informant triangulation, and site triangulation (Denzin & Lincoln, 2011; Shenton, 2004). *Data triangulation*. I used different measures to gather teachers' attitudes and classroom practices toward maintaining students' heritage language and culture, such as interview, observation and the Survey. *Informant triangulation*. Different personnel including classroom teachers, ELL teachers, principals and the school counselor were interviewed for this study to ensure that multiple voices of the personnel were considered and included. *Site triangulation*. This study incorporated three different elementary schools across three school districts to reduce the effect of the local factor on the study. Elementary School A belongs to a large urban district, Elementary School B belongs to a medium-sized rural district, and Elementary School C belongs to a small rural district. *Dependability*. Dependability refers to reliability of this study, which means that this study could be repeated in the future, with the same methods and in the same contexts, but not necessarily to gain the same results (Graneheim & Lundman, 2004). To make all my measures (interview, observation, Survey) reliable, I developed the measures based on the theoretical background of my study and evidence-based literature. Therefore, the measures of this study can be used over time in the classroom to assess teachers' beliefs and classroom practices toward supporting students' heritage language and culture. *Transferability*. Transferability refers to whether the findings of this study can be transferred to other settings or situations (Graneheim & Lundman, 2004). This study measured teachers' attitudes and practices in a classroom setting that has students with linguistic and cultural backgrounds. Therefore, the

findings could be used in similar situation or settings. *Confirmability*. Confirmability ensures that the findings of the study are focused on participants' experiences, rather than researcher's subjectivity. Triangulation is one of the criteria emphasized in confirmability. I have addressed the role of triangulation in my study under *credibility*.

### **Analysis Plan**

This study used both qualitative and quantitative methods. OIHLC, Survey and Interview Questionnaire were analyzed using quantitative strategies such as descriptive analysis, correlation, and regression analyses. Naturalistic qualitative methods were used to analyze the TIHLC data gathered from teachers, principals, and the school counselor. I used MAXQDA, a qualitative analysis software to analyze the Short Answer Questions from TIHLC. Short Answer Questions were transcribed using a professional transcribing service, and codes were developed from transcripts. Using the transcripts, I generated categories, sub-themes and themes from the interview responses.

### **Naturalistic Qualitative Methodology**

Naturalistic qualitative methodology was used with the qualitative data in this study, including Short Answer Questions and Interview Questionnaire from TIHLC and anecdotal notes from OIHLC. I chose this method because it focuses on people's behaviors in real life experiences in natural settings (Frey, Botan, & Kreps, 1999). In my study, OIHLC examined teachers' classroom practices toward students' heritage language and culture, which happened in the classroom-a natural setting. TIHLC was the reflection of teachers' beliefs and classroom practices toward supporting students' heritage language and culture, which also happened in the classroom. I recorded what I saw or heard from the teachers regarding their beliefs and classroom practices toward maintaining students' heritage language and culture, without

interpreting on my own what was observed or what was heard. The naturalistic qualitative method has three general assumptions: naturalism, phenomenology, interpretive nature (Frey, Botan, & Kreps, 1999). *Naturalism* is the belief that the phenomena is studied in context. In my study, the assumption of naturalism was based on my study being conducted in natural school settings, and I observed teachers in their own classrooms. *Phenomenology* refers to the belief that the target behavior is examined without preconceived expectations. In the current study, I did not have any preconceived notions or expectations before I observed in the classroom; although I had planned to use observation and interview instruments, I did not expect teachers to act or answer my questions in a certain way. The third assumption, *interpretive native*, is the belief that the researcher cannot completely forego his or her own perspective while focusing on the views of those studied. This was also demonstrated in this study as even though I recorded what I saw or hear from the teachers, when I analyzed the data, I still used some of my own perspectives to interpret the data to reflect on what I learned from observations and interviews.

### **Coding Methodology**

**Descriptive coding.** Descriptive coding was used to analyze the qualitative data from this study. Wolcott (1994) mentioned that descriptive coding is the foundation for qualitative inquiry, with its main goal to assist the reader to see what I saw and to hear what I heard. Descriptive coding method is an approach to analyze the data's basic topics to help answer questions such as "What is this study about?" or "What is going on here?" (Saldaña, 2015). This study was about exploring teachers' beliefs and classroom practices regarding maintaining their students' heritage language and culture. I chose descriptive coding because I wanted to describe teachers' beliefs and their teaching practices in the classroom with details and examples, as well as the challenges

they had meeting the needs of HLS students. Descriptive coding best fits my goal of exploring my topic and to describe what I saw and heard.

**In Vivo coding.** In Vivo Coding was also used in this study to analyze the Short Answer Questions from TIHLC. In Vivo Coding is also called Verbatim Coding which refers to what the participants actually say in the qualitative data record, as well as an approach that honors and prioritizes participants' voice (Saldaña, 2015). I used In Vivo Coding in my qualitative analysis because I captured teachers' real voice in their beliefs, classroom practices and challenges in supporting students' heritage language and culture.

## CHAPTER 4. RESULTS

Results of this study are organized by the four research questions: (1) What are teachers' beliefs about supporting the maintenance of students' heritage language and culture? (2) What classroom practices do teachers use that support maintaining students' heritage language and culture? (3) What is the relationship between teachers' beliefs and classroom practices toward supporting the maintenance of students' heritage language and culture? (4) What factors are associated with teachers' beliefs and practices toward supporting the maintenance of students' heritage language and culture?

### **Research Question 1: What Are Teachers' Beliefs about Supporting the Maintenance of Students' Heritage Language and Culture?**

Teacher's beliefs about supporting the maintenance of students' heritage language and culture were captured by the Survey and TIHLC (interview instrument). Thirty-seven teachers completed the Survey and 27 teachers and principals participated in TIHLC. Both the Survey and TIHLC examined teachers' beliefs regarding supporting HLSs' heritage language and culture, as well as what they report they do to support the maintenance of their students' heritage language and culture. The Survey, included items about teacher beliefs and structured questions that allowed me to get consistent results from teachers, whereas the TIHLC contained open-ended questions that allowed participants to expand their thoughts regarding their beliefs and how they put their beliefs into practice.

#### **Survey**

The Survey, that consisted of 22 items, examined teachers' beliefs about supporting the maintenance of students' heritage language and culture, using a 7 point Likert scale. Some items



were reverse-coded, for details, see Appendix D. Detailed responses for each item are presented in Table 3.

On average, across all items (items 1, 11, 13, 14, and 21 were deleted when calculating the mean of teachers' beliefs, see Appendix D for details), teachers' responses were 5.1 ( $SD=.70$ ) on the scale, which means that they somewhat agree that they value students' heritage language and culture. Items with a mean above 5 were reported as agreed or believed with relevant statements. The majority of teachers agreed that proficiency in the heritage language can help students make academic progress and in their social development, as well as support their English language development and provide benefits to their future careers. More than 80% of teachers agreed the maintenance of the heritage language is important for students' self-identity development, key to strengthening family ties, and essential to keep communication open with parents. Half of the teachers strongly agreed they should encourage students to maintain their heritage language and culture. To support the students' maintenance of their heritage language, 40% of teachers believed they need to have some basic knowledge of their language. In terms of whether or not schools should be invested in providing support for students to maintain their heritage language, teachers had various opinions. Around 30% of teachers believed schools should not invest in helping students to maintain their heritage language. The majority of the teachers agreed teachers, parents and schools need to work together to help students learn English and maintain their heritage language (see Table 3).

Table 3

*Descriptive Information about Teachers' Beliefs regarding Maintaining Students' Heritage Language and Culture*

Survey Item (Teacher believes that) <sup>a</sup>	Percentage of respondents (%)							<i>M</i>	<i>SD</i>
	1	2	3	4	5	6	7		
1. heritage language maintenance is the responsibility of the parents	5.4	2.7	8.1	18.9	35.1	13.5	16.2	4.81	1.6
2. frequent use of the heritage language deters students from learning English.	48.6	16.2	18.9	13.5	2.7	0	0	5.95*	1.22
3. proficiency in the heritage language helps students in their academic progress.	0	0	2.7	21.6	13.5	27.0	35.1	5.70	1.24
4. proficiency in the heritage language helps students in their social development	2.7	0	5.4	29.7	18.9	16.2	27.0	5.19	1.49
5. the maintenance of the heritage language and culture is important for the student's development of his or her identity.	0	0	2.7	0	16.2	18.9	62.2	6.38	.95
6. the maintenance of the heritage language and culture is the key to strengthening family ties.	0	0	2.7	5.4	18.9	27.0	45.9	6.08	1.06
7. the maintenance of the heritage language and culture is essential in keeping channels of communication open with parents.	0	0	8.1	13.5	16.2	24.3	37.8	5.70	1.33
8. schools should be invested in helping students maintain their heritage language and culture.	2.7	5.4	21.6	18.9	13.5	16.2	21.6	4.70	1.73
9. ideally schools should provide heritage language and culture maintenance.	0	13.5	21.6	21.6	18.9	5.4	18.9	4.38	1.67
10. teachers should encourage students to maintain their heritage language and culture.	0	0	5.4	8.1	16.2	13.5	56.8	6.08	1.26
11. children do value their heritage language and culture.	0	5.4	5.4	24.3	18.9	21.6	24.3	5.19	1.47

Table 3 continued

	Percentage of respondents (%)							<i>M</i>	<i>SD</i>
12. heritage language instruction is beneficial for students' English language development.	0	0	2.7	27.0	18.9	18.9	32.4	5.51	1.28
13. parents are not doing enough to support their children in their heritage language.	13.5	16.2	18.9	40.5	5.4	2.7	2.7	3.27	1.41
14. parents do not seem to care about their children's maintenance of the heritage language and culture	21.6	405	13.5	21.6	2.7	0	0	2.43	1.14
15. students can maintain their home culture even without maintaining the heritage language.	10.8	8.1	27.0	35.1	5.4	10.8	2.7	4.41*	.24
16. it is a great idea that students go to heritage language schools (i.e. weekend language school).	0	8.1	10.8	32.4	10.8	21.6	16.2	4.76	1.54
17. it is valuable to be multilingual in our society.	0	5.4	0	0	10.8	16.2	67.6	6.35	1.25
18. schools should give credit to students who are attending Saturday schools.	2.7	2.7	8.1	43.2	10.8	13.5	16.2	4.67	1.49
19. children who maintain their heritage language have a better chance of succeeding in the future.	0	8.1	5.4	13.5	13.5	27.0	32.4	5.43	1.59
20. it is important that children are highly literate and fluent in both English and their heritage language.	0	0	10.8	16.2	18.9	24.3	29.7	5.46	1.37
21. to help students maintain their heritage language, the teacher must have some basic knowledge of their language.	8.1	16.2	8.1	27.0	13.5	16.2	10.8	4.14	1.81
22. teachers, parents, and schools need to work together to help students learn English and maintain their heritage language and culture.	0	8.1	5.4	13.5	13.5	24.3	35.1	5.46	1.61

<sup>a</sup> Survey was adapted from Lee and Oxelson (2006) and Angelis (2011).

\* Mean of the items were reverse-coded.

## **Interview**

TIHLC consisted of 13 Short Answer Questions and the 10 Interview Questionnaire, of which, five questions were related to teacher's beliefs. Two themes about teachers' beliefs emerged from interviews: (1) Teachers' beliefs and how they developed their beliefs and (2) Teachers' views about the needs and meeting the needs of ELL. Table 4 presents themes, sub-themes, categories and examples of excerpts generated from the interviews. The examples of excerpts in the table overlapped what is mentioned in the text. I selected some representative examples from the table to include them in the text.

### **Theme 1. Teachers' Beliefs and How They Developed Their Beliefs**

This theme described teachers' beliefs toward heritage language and culture, as well as how they developed their beliefs and their personal feelings toward language and cultural differences. Half of the 27 participants reported that they have received special preparation for teaching HLSs through taking methods classes in college, attending professional development classes or workshops, and discussing ways to teach HLSs with colleagues. Four ELL teachers and two classroom teachers also mentioned they have ELL endorsement, and one of these two have taught ELL previously. Two classroom teachers mentioned they have had previous professional training related to serving HLS students, such as using the SIOP model and learning about other cultures. Teachers shared that they feel empathy for HLS students who are learning English as a second language and experiencing cultural differences in the U.S. One ELL teacher who studied French in France said, "It's a very humbling experience, and I had to learn a second language while I lived in France. I knew how hard it could be learning a second language." Another ELL teacher, who was also an HLS student, mentioned that while learning English, she still kept her language, including reading and writing, and her culture. These two ELL teachers

reported they can show more understanding toward HLS students because they have had real-life practice learning a new language and experiencing a different culture.

The majority of teachers, and all three principals, claimed that it is important for HLSs to maintain their heritage language and culture. Some teachers mentioned that maintaining one's culture and language can give students a sense of self and students can make connections to their culture and families. One teacher indicated that HLSs are expected to learn new things and a new culture after moving to the U.S.; however, they also need to know their own background and not to forget their roots. Eleven participants (41%) mentioned that they allow HLSs to use their heritage language in the classroom, as one principal mentioned, "Sometimes kids need to communicate in another language to figure out what's going on or figure out what they need to be doing to be successful." Almost half the teachers believed that maintaining one's heritage language and culture can bring benefits to students' lives, such as promoting communication between generations and providing more job opportunities. One ELL teacher said, "In the long run it can help them academically because it helps the brain to grow, and it also can help them into a better job." One principal also mentioned,

"It is so rich to make sure that they continue to grow their own language as well. It's a skill. I look at it, like I said before, 10, 15 years down the line, that's a skill that not everybody has."

Seventy percent of teachers ( $N=19$ ) who completed the Interview Questionnaire believed that heritage language learning can facilitate the learning of English. A principal mentioned that teachers can use students' heritage language as a bridge to help students understand what they need to learn in English with the common core standards that the school is using. One ELL

Table 4

*Themes, Sub-themes, Categories, and Examples of Excerpts from First Research Question: What Are Teachers' Beliefs toward Maintaining Students' Heritage Language and Culture?*

Themes	Sub-themes	Categories	Examples of Excerpts
Teachers' beliefs and how they developed their belief	Teachers' personal background with HLSs	ELL background/training	I have been through SIOP training, so I've been through some training on how to use strategies when dealing with ELL students.  I'm certified K through 12 ESL, K through 12 Latin.
		Empathy for language/culture differences	I lived in France for a while. I knew how hard it could be learning a second language. It's just understanding their culture. Yes. I think, as an ELL teacher, I'm much more empathetic to an ELL student who is doing something, versus a regular student.
	Teachers' beliefs toward heritage language and culture	Teachers claim that maintaining heritage language and culture is important	I think that they're always going to be learning new things and new culture with even part of our education, but they need to know about their own background and their own family and not lose sight of that when they're learning other things as well.
		Teachers are fine with students using their heritage language	If they're speaking a different language in my classroom I do not stop them. They can continue that.
		Benefits of maintaining heritage language and culture	The kids that I've had in the past that can read and write in Spanish make a lot better growth in English. I had a newcomer student in fourth grade last year, and she could read and write in Spanish, and she learned English much more quickly.  In a long run it can help them academically because it helps the brain to grow, and it also can them into a better job.

Table 4 continued

Themes	Sub-themes	Categories	Examples of Excerpts
Teachers' views about the needs and meeting the needs of ELL	HLSS' academic performance	Performance high	On my list of ELL students in the class, three could be my highest achieving students.
		Performance low	I would say the non-ELL is probably a little bit higher, but it's not based on academic performance. Sometimes it's just based on language barrier and the culture and how we do things that are a little bit different.
	Challenges of meeting the needs of HLSS	Aspects of students and family	I noticed that in 5th grade, some students are almost embarrassed to sometimes talk in their native languages.  I think most of that, maintaining their language, I wouldn't say I do a ton. I think most of that comes from home.
		Aspects of teacher	I wasn't able to communicate with him as much. Using the bathroom appropriately, or how to walk in the hallway. They just didn't understand that. He just didn't understand it, so that was one of the most difficult things.  We're kind of thrown in and trying to figure out how do we help them learn the language and learn to read in English? There's not a lot of time or training or education on the things that exist outside of here because our focus is so narrow. It's not that we don't want to, it's we're not given the tools to know how or what.
	Aspects of school	We have so many different backgrounds. We have four different languages spoken this year and only one Spanish that I'm even remotely familiar with.	

Table 4 continued

Themes	Sub-themes	Categories	Examples of Excerpts
	How teachers view the ELL program	Advantage of the ELL program	<p>I think it's important that they still get pulled. Especially what I've found is that the higher, the better their reading skills, their fluency and comprehension, the more they get to work on things such as vocabulary and things like that.</p> <p>When those kids get to go into another room for a short amount of time, then it's quiet and it's very focused and they're not missing what's going on in here because when they leave it is independent practice in this room.</p>
		Challenges of ELL program	<p>We are supposed to be aligning with what the classroom teachers do in their room, but right now there isn't a lot of collaboration, and there isn't a lot of communication.</p> <p>I don't think it's helping the kids at all. They're not excelling.</p>



teacher mentioned that the HLSs she teaches who can read and write in Spanish make better growth in English and learn English more quickly. One classroom teacher indicated that even though the English vocabulary of the HLS students is about the same as the non-HLS students, HLS students learn faster than non-HLS students since they have linked the new English language to their heritage language. Most of the participants reported that they think HLSs' heritage language and culture should be embraced in the school environment; as one ELL teacher mentioned, "It should be more of a biculturalism we're trying to create, instead of a separation." A principal indicated although it is not an easy task, it is their obligation to embrace students' culture and language in the building,

"We don't want our students to lose their culture, who they are. I feel it is very important that we don't do that, because being bicultural is in essence, not necessarily something we need to look at that as a deficiency. So it's figuring out ways to elaborate those things in order to help our students and schools, and that's something that's not easy, but we have an obligation to work at it."

## **Theme 2. Teachers' Views about the Needs and Meeting the Needs of HLSs**

This theme incorporates how teachers view the needs of HLSs to maintain their heritage language, as well as learning academic English, and how the school helped HLSs with their heritage language and culture. In particular, this theme described teachers' perspectives regarding academic needs of HLSs, their challenges in meeting these needs, as well as their views of how well the ELL school program meets the needs of HLSs. Each of these topics is described in detail in the following paragraphs.

In describing the academic needs of the HLSs, participants reported that vocabulary and reading are the skills that HLSs have the greatest need to develop. Eight participants indicated

that HLSs were generally lower than non-HLS students in academic performance due to the language and culture barrier. However, five teachers mentioned that in their classrooms, some of the HLS students had high academic performance, such as in reading. One teacher noticed that some of her HLSs' scores were not high when they first learned English; however, they achieved high scores very quickly after they became fluent in their second language.

Different groups of people (e.g. HLS students, HLSs' families, teachers, school) trying to meet the needs of HLSs experienced different challenges. First, almost all teachers mentioned that it was not common for HLSs to use their heritage language in the classroom because they were embarrassed. One fifth grade classroom teacher said, "I noticed that in 5<sup>th</sup> grade, some students are almost embarrassed to sometimes talk in their native languages." Only one kindergarten teacher mentioned that her HLS students speak their heritage language a lot in the classroom. Teachers indicated that to maintain HLSs' heritage language, families need to support their children; however, since many of the families in their schools do not read or write well in their heritage language, they probably cannot support their children to read and write in their heritage language. In addition, two teachers mentioned that some of their HLSs do not know about their home country because they were either born in U.S. or immigrated to the U.S. when they were very young, which can make it difficult to even understand let alone to maintain their home culture.

Second, teachers mentioned that they lack training in teaching and supporting HLSs. Fewer than half the participants felt somewhat prepared to meet the needs of HLSs. Thirty-three percent reported they were adequately prepared and only one teacher responded "very well prepared." Five teachers reported that they had not received any special preparation for teaching HLSs. Teachers mentioned that they need more professional development on how to plan lessons

that integrate different cultures and how to work with students and families with diverse linguistic and cultural backgrounds. Even though schools have provided in-service training through which teachers could learn more about a specific culture; teachers reported that the training did not show them how to apply the information to support HLSs. One teacher mentioned that they were thrown in and trying to figure out how to support the students to learn English:

“I don't really know how to do that. I really don't. We've never had any guidance on what can we do. I've been here my whole life. We've never had any sort of training or any sort of guidance whatsoever on how we can do that. They don't give us a whole lot of help on that, especially because we have so many things that we have to do. It's not that we don't want to help, it's just we don't have the tools to help. We aren't given training or explanation, ‘This is what you can do.’”

Teachers reported that not being able to speak HLSs' heritage language and being uninformed about the different cultural backgrounds were also barriers to supporting HLSs' success at school. Teachers mentioned that they were not informed about which country each HLS came from, all they knew was that they came from Africa or Southeast Asia. They wished they had more information about HLSs' background other than which continent or country they came from.

Another challenge for teachers was that addressing all the curriculum and assessment requirements in the classroom did not give them enough time to incorporate HLSs' heritage language and culture into the curriculum and to build HLSs' cultural and linguistic background. Due to heavy curriculum needs in the classroom, there was little opportunity for HLSs to use their heritage language. As one teacher said,

“Yeah, ideally (to incorporate students' heritage language and culture), but the standards I have to go through is what I legally have to get through. There's just not a lot of time to have those conversations and build background. There is not a lot of opportunities for them to use their heritage language.”

Third, participants from Elementary Schools A and B mentioned that there are so many languages and cultural backgrounds in the buildings that it would be impossible to learn all of them. Also, participants mentioned that schools need more translators for parents and students who speak a language other than English. One preschool teacher also indicated the needs of ELL support in the preschool classroom as school policies do not allow the ELL teachers to support preschool classrooms.

Participants also mentioned how the English language learning (ELL) program in their individual schools meet the needs of HLSs. The ELL program, which is also known as English as a second language (ESL), is available most frequently in schools with HLS students. The goal of ELL programs is to provide HLSs extra English language support to make their English skills function well in the academic setting (Stufft & Brogadir, 2011). According to policies of the three schools, every new student needs to take a home language survey when they enroll in the school system. If the parents put a language other than English on the survey, the student is eligible to receive ELL services. These students will then take a test to determine their English level and the amount of ELL services they need. In all three elementary schools, students were pulled out of regular classrooms by the ELL teachers to gain extra support in the ELL classroom. In Elementary School A, other than teaching in their ELL classroom, the ELL teachers also go to regular classrooms to provide lessons. However, in Elementary Schools B and C, ELL teachers only teach in their ELL classrooms. Participants mentioned benefits of having the ELL

classroom, such as to improve HLSs' English skills and as a place for HLS to speak their heritage language. Both the teachers and the principal in Elementary School C appreciated the benefits of having the ELL teacher in their building since the teacher has been a great resource for the students, teachers and family members,

“She (ELL teacher) is such a resource, not only as I said, to the kids, but also to the families. She can provide outside resources and just that language barrier. Without her we would be in big trouble. Somebody would have to learn Spanish just to break that language barrier.”

In addition to the benefits of having the ELL program, participants discussed challenges that ELL programs face. Teachers mentioned that there are disconnects between the ELL classroom and the regular classroom in terms of the content covered. One ELL teacher mentioned, “We are supposed to be aligning with what the classroom teachers do in their room, but right now there isn't a lot of collaboration, and there isn't a lot of communication.” This indicates that the general classroom and the ELL classroom all have their own standards and focus, so there is not a lot of collaboration. Additionally, two classroom teachers mentioned that HLSs would miss the core content in the regular classroom when they went to the ELL classroom for support. Related to this, one teacher mentioned that she thinks the assessments used to determine the level of ELL services students need are not reflective of their actual needs, so they miss out on classroom instruction time to receive ELL services. As she said,

“They go by a test and it was a test that the teachers, their kindergarten teachers just did a checklist. So I feel like it's not accurate, because my kids are considered as beginners, to me a beginner is not knowing any English. Whereas my kids know English, can write,

they don't need that much time in ELL for forty five minutes. That's a huge chunk that they miss out on.”

One classroom teacher thought the ELL program did not help her HLSs improve their academic skills. An ELL teacher also claimed that the ELL program is a “super flawed system” because some parents refuse the ELL service as they think if their HLS children receive this service they will be labeled or flagged as ELL. Parents will think that their children need additional English language support and are different from non-ELL children; therefore they do not want their children to stand out in a negative way. One ELL teacher mentioned,

“Sometimes when you're tagged, or flagged for something, there's a negative stigma with it, a negative connotation that's given, and a lot of families will just put English, English, English, English, English on their home language survey. They won't really admit if they speak a different language at home. I know we have 161 ELL students that are flagged ELL, but we should have more than that.”

This ELL teacher also mentioned the goal of the ELL program and her explanation to resolve parents' misunderstanding about the ELL, as she said,

“We really try to present it as this is a service, not a sentence. This isn't a punishment. This isn't flagging them or anything like that. This is an opportunity that your students might benefit from because, just because you speak English, colloquial English, does not mean that academic English will come easily, because it's longer words, more complex ideas, that sometimes just need help fleshing out. Vocabulary and context. That's the root of ELL. For anyone to think that ELL is just 30 minutes, 60 minutes a day is wrong. It really is thinking of how we can accommodate but also how we can celebrate these students and their culture all day long. Kind of use their resources and their knowledge

and their background to really kind of flesh out and create more context for the materials that we learn.”

## **Research Question 2: What Classroom Practices Do Teachers Use that Support Maintaining Students’ Heritage Language and Culture?**

Information about classroom teachers’ practices that support maintaining students’ heritage language and culture were gathered using the Survey, TIHLC, and OIHLC. The three different instruments all investigated what classroom practices teachers have been using in the classroom regarding implementing students’ heritage language and culture. The Survey and TIHLC covered teachers’ reported classroom practices. The Survey explored teachers’ classroom practices in a structured and consistent way. Whereas the TIHLC contained open-ended questions that allowed participants to explore their thoughts and talk about their specific classroom practices they use to support students’ heritage language and culture. The OIHLC was about teachers’ actual classroom practices which provided evidence of how teachers implemented students’ heritage language and culture in their classrooms.

### **Survey**

The Survey scale about teachers’ classroom practices toward supporting students’ heritage language and culture consisted of 11 items reported using a Likert scale of 1 – 7. Some items were reverse-coded, for details, see Appendix D. Table 5 provided detailed responses for each item. On average, teachers’ reported classroom practices was 4.45 ( $SD=.93$ ), which meant that teachers had neutral opinions about incorporating students’ heritage language and culture in their classrooms. Items with mean above 5 were reported as agreeing with relevant statements. The majority of the teachers reported that they allow students to speak their heritage language in class. Half the teachers agreed that they talk to them about how important maintaining their

Table 5

*Descriptive Information about Teachers' Classroom Practices regarding Maintaining Students' Heritage Language and Culture*

Survey Item (Teacher's practices)	Percentage of respondents (%)							<i>M</i>	<i>SD</i>
	1	2	3	4	5	6	7		
23. I tell my students that their heritage language is important and valuable, but at school we must use English.	24.3	18.9	10.8	10.8	13.5	10.8	8.1	4.64*	2.00
24. I allow my students to speak in their heritage language in class.	2.7	0	8.1	13.5	10.8	13.5	51.4	5.76	1.60
25. I talk to my students about how important maintaining their heritage language and culture is.	5.4	5.4	2.7	29.7	8.1	16.2	32.4	5.08	1.80
26. In class, I have my students share their heritage language and culture every chance I get.	2.7	16.2	2.7	24.3	27	5.4	21.6	4.59	1.76
27. I talk with parents to strategize on how we can help their children learn English and maintain their heritage language and culture	8.1	21.6	16.2	24.3	8.1	10.8	8.1	3.69	1.75
28. I visit students' homes to find out more about their home culture and language.	54.1	29.7	5.4	2.7	0	2.7	5.4	1.95	1.60
29. I advise parents to help their children learn to speak English faster by speaking English in the home.	62.2	21.6	5.4	5.4	5.4	0	0	6.30*	1.15
30. I praise the children for knowing another language and culture.	0	2.7	8.1	5.4	16.2	18.9	48.6	5.86	1.44
31. I allow students to use their heritage language in completing class work or assignments.	18.9	21.6	8.1	13.5	13.5	5.4	16.2	3.64	2.14
32. I make an effort to learn my students' heritage languages.	5.4	13.5	13.5	32.4	27	2.7	5.4	3.92	1.44

<sup>a</sup> Survey was adapted from Lee and Oxelson (2006) and Angelis (2011).

\*The mean of the items were reverse-coded



heritage language is; however, 30% of the teachers were neutral about this statement. Almost 90% of the teachers agreed they praise their students for knowing another language and culture. Over half of the teachers agreed they let students share their heritage language and culture every chance they get; however, 20% of the teachers disagreed with putting this into practice. Teachers (90%) disagreed that they advise parents to speak English at home to help their children learn English faster. However, less than 30% of the teachers agreed they talk with parents to strategize on how they can help their children learn English and maintain their heritage language and culture. Less than half of the teachers agreed they make an effort to learn their students' heritage language and place equal importance and value on knowing both English and the heritage language in their teaching.

### **Interview**

Three themes emerged from qualitative analysis of the interview data: specific practices teachers carry out in the classroom with HLSs, schools provide a welcoming environment and opportunities for HLSs, challenges to help HLSs. Table 6 presents themes, sub-themes, categories, and examples of excerpts from the interview related to teacher's classroom practices.

#### **Theme 1. Specific Practices Teachers Carry Out in the Classroom with HLSs.**

This theme describes the specific practices teachers reported using to support the maintenance of HLSs' heritage language and culture. Broad categories of strategies included showing interest in HLSs' heritage language and culture, encouraging HLSs to use their heritage language and learn about their home country, incorporating students' heritage language and culture into the classroom, using different strategies and making accommodations for HLSs, implementing Sheltered Instruction, and encouraging parents' involvement in supporting their

Table 6

*Themes, Sub-themes, Categories, and Examples of Excerpts from Second Research Question: What Classroom Practices Do Teachers Use that Support Maintaining Students' Heritage Language and Culture?*

Themes	Sub-themes	Categories	Examples of Excerpts
Specific practices teachers carry out in the classroom with HLS students	Showing interest in HLSs' heritage language and culture		Whether it'd be home or the soccer field or the little league, but if their parents have a business or works some place that I can go to, that's huge to see me outside of school. And I learn a lot that way too. You just feel more connected.
			My teaching partner and I picked to learn a little bit more about the Burmese culture. It's still not enough information in an hour and a half. We need more.
			You do whatever you want to succeed. So if that means to speak in your home language, then we can work some that out.
	Encouraging HLSs to use their heritage language and find their roots		You want to know your roots as much as possible. You want to know about your family.
	Incorporating students' heritage language and culture		Once in large group we read a "teeky teeky tempo" you don't know if you know that book, it's a Chinese folktale. So we talked about what a folktale is, and the author he has a short name because the first author usually have a great long name, anyways we talk about a little bit.
			We've actually taught lessons in Spanish, so that the kids got a perspective of how the student in our classroom feels when they don't speak your language.

Table 6 continued

Themes	Sub-themes	Categories	Examples of Excerpts
	Involving parents		<p>I tell them (parents) that's it important to keep talking to their student in Spanish because this is going to be their second language and it's a good opportunity for when they grow up, for jobs.</p> <p>At conferences, we try to explain what we're working on and how they could help. We're counting, but you can still count in Spanish with them. That would be good to practice at home.</p>
	Making accommodations for HLSs		<p>I usually putting them in partners where they could continue to speak their home language.</p> <p>When I work on comprehension, that's when I go over a lot of the words that they don't understand. We'll stop and talk about the meaning and I'll show them pictures.</p> <p>One of the things we try to do as part of the Sheltered Instruction protocol is tap into kids' background knowledge.</p>
	No difference in ways to reengage students		<p>I wouldn't do differently because when I re-direct it is usually a nonverbal anyway, I will use proximity I will go toward them and so if I'm teaching a whole group, I would just go, whether they are English speaker or not. I would just go and just like make a nonverbal, tap on the shoulder, you know, eyes up here, trying to getting eye contact from them, so I think it's the same for any of them.</p>

Table 6 continued

Themes	Sub-themes	Categories	Examples of Excerpts
Schools provide a welcoming environment and opportunities for HLSs	HLS students help with other people		We have a new student coming in to the building, and if they do not speak the English language, we try to connect the students in their class, or at lunch, or at any common places, that they can't connect with someone that does speak their languages. So we've had the students are doing very good at that, being willing to help someone to speak their language, it's almost a sense of pride that you see.
	School provide support for HLSs	Collaboration between family and school	Coffee Tea with Elementary School A is a learning experience for both sides. It's about teaching the families about American schools and our school in general, and then us learning about the different families and different cultures and how can we bring those things in the building, and how can we have culture nights and those different things to come in to provide that opportunity to all of our students to be exposed to the different cultures that we have, different cultures and languages that we have in the building.
Challenges to help HLS students	School mission, expectation	Professional development Provides translators	After school one day where we had a lot of people from the community who worked in the Des Moines schools teach us about their culture We have translators in Mandarin, Karenni, Spanish.
			In our school, we do not maintain the home language because we're not set up to do that. Children in our school district who choose to maintain Spanish as their native or home language request to attend Woodbury. We don't do anything formally to do that. That's not the mission of our school.  Here we are so in tune like we would with reading for a young child that comes in speaks English, we're so in tune in making sure they understand the English language that it's not that we don't want them to use their cultural language, it's just that sometimes we don't put into play enough.

Table 6 continued

Themes	Sub-themes	Categories	Examples of Excerpts
	Don't use students HL or culture to help HLSs better understand the content		ELL teacher: Not typically no. I mean I'll read stories and books about their cultures sometimes, typically I don't have time.
	Don't communicate with parents about heritage language		No, it's usually the ELL teacher who does that, not me.
	Allow HL use with classmates, not with teacher		When they're speaking with another student they can speak their language, but if we're (HLSs and teacher) interacting with learning no.

children's heritage language and culture. Specific strategies were grouped into subthemes presented below.

**Showing interest in HLSs' heritage language and culture.** Teachers reported that they show an interest in HLSs' heritage language and culture by asking questions about them and their families. Examples included, "What do you do in your family?" or "What does that mean in your culture?" Some teachers said they think it is amazing that the children can speak several different languages and they want them to keep using their heritage language in the classrooms. One teacher also mentioned that she loves to learn about their students' culture by visiting local businesses that are run by their families. As she said,

"Whether it'd be home or the soccer field or the little league, but if their parents have a business or work some place that I can go to, that's huge to see me outside of school. And I learn a lot that way too. You just feel more connected."

Some teachers were aware that they need to learn more about HLSs' culture and language to meet their needs, as one ELL teacher said,

"I would probably do it (use students' heritage language) more with Spanish than with other languages, that's something I would like to learn more on because we do have other languages and cultures here besides Spanish. We have a lot of Africans; they are mostly from Liberia, and we have our students that are from Burma, and Nepal. We have some Somali students that beginning the Arabic and Somalian languages as well, that would be something I want to work on."

Some even spend their own time to learn about a different culture or a different language, such as by attending professional training. One teacher mentioned "while attending the

professional training, my teaching partner and I picked to learn a little bit more about the Burmese culture. It's still not enough information in an hour and a half. We need more.”

**Encouraging HLSs to use their heritage language and find their roots.** The majority of the teachers reported they do encourage HLSs to use their heritage language in the classroom to make them feel comfortable and enhance academic learning. The ELL teacher from Elementary School C also mentioned that when she placed HLSs in regular classrooms, she makes sure that the teachers will support the students’ heritage language. As she said,

“I make sure they're with a teacher, if I can help it, with a teacher who supports using the home language. I know that not all teachers are comfortable with that, and I think that's wrong, so I try to make sure they're with a teacher who is supportive of their first language when I place them.”

Teachers also reported encouraging students to find their roots such as their home country and their heritage. For example, some teachers will make assignments for HLSs to ask their parents how to say a specific word in their heritage language, or find out about their home country. As one preschool school teacher mentioned,

“Yesterday we talked about our families and we talked about grandmas and grandpas, and I'm actually going to send home a survey about their grandparents and where they live, and what's something they like to do. It will be neat to figure out where their heritages are.”

**Incorporating students’ heritage language and culture.** All teachers mentioned that they try to use different ways to incorporate HLSs’ heritage language and culture in teaching, as well as using their background knowledge to support their learning. Teachers reported they would read books that represent diverse cultures with students to let all students learn about

different cultures. Sometimes they will talk about holidays that are specific to the home countries of HLS students. Teachers who can speak some or a lot of HLSs' heritage language would use their language for interaction. One ELL teacher who is fluent in Spanish mentioned that she uses Spanish with HLSs everywhere in the building,

“I use it in the hallways with them. I interpret with other teachers in the school if they're confused. If they have to talk to the counselor I will go with them and interpret. They talk with each other, they talk with me. We use it all the time.”

Another classroom teacher also mentioned that she collaborated with the ELL teacher to teach lessons in Spanish in the regular classroom, as she mentioned, “We've actually taught lessons in Spanish, so that the kids got a perspective of how the students in our classroom feel when they don't speak your language.”

Teachers also let HLSs make connections between their heritage language and English that could support the learning process. One teacher mentioned that she would like to see if her HLSs can find the meaning of an English word or phrase in their native language. Some teachers would also have HLSs teach some of their heritage language in the classroom, as one third grade teacher mentioned, “Last year most of my students in this room were Hispanic and so we would have like 10 minutes a day where we would have like a Spanish lesson and they would all teach Miss X. different things to speak.”

The ELL teacher from Elementary School A mentioned that in her ELL classroom, they have 4<sup>th</sup> grade students work on a research project about their native country, which made a connection to their culture and lives as they find out where their family came from and what their culture looks like; as she mentioned,



“That's one thing that we're trying to work on in fourth grade. We're having them do a project working on main idea, details, text features, but we're doing it through a research project on their native country. Either where they came from, or where their family came from.”

Teachers also reported that they incorporate different activities that involve HLSs' culture in their daily routine, such as making flags of their own country, talking about different foods that people eat at home. One teacher mentioned that she would check out books that are in the HLSs' heritage language from the local library for them to read. One ELL teacher also said that she would have online recorded books in her ELL classroom for HLSs to listen to books in Spanish. She mentioned that she would not let students who were not fluent in reading English read lower level English books, but rather to read books in their heritage language that are at higher levels, as she said,

“I have programs in the computer so that they can listen to books in Spanish, for their independent reading. So, basically, if you have a fourth grader who doesn't speak English, I don't want them just reading Kindergarten level English books all the time, so I make sure that they're able to listen to books in Spanish that are at a higher level.”

**Involving parents.** Teachers reported that they encourage parents to support their children's heritage language and culture by talking with parents during conferences regarding the importance of maintaining their children's heritage language and culture, as well as encouraging parents to use heritage language with their children. One kindergarten teacher shared that she invited the father of one of her HLS students into the classroom to teach all students some Spanish. They read Spanish books and learned some Spanish songs. Here are some quotes from

one principal and a classroom teacher about how they encourage parents to get involved in supporting their children's heritage language:

“I always tell parents, we're not trying to teach you English to take place of what you're doing. We're trying to teach you English to be on top of what you already have. What you have is that skill that knowledge of being able to speak Spanish or any other languages, that's going to be very, very helpful down the line, and it's going to help you in a profession, it's going to help you in everything that you're going to do.”

“I don't ever push parents' need to talk English at home. I just say they need to keep it, they'll be better learners in the end, even though it's going to be hard for them in the beginning, but that the parents just need to keep speaking their native language at home and they need to help them with that. So I guess encouraging the parents to keep it and not to be forced into speaking English.”

**Making accommodations for HLSs.** Half of the teachers reported in the Interview Questionnaire that they would adapt activities and assessments for HLSs, such as lessen the work, reword the question, modify time allotted for assessment, or translate part of the math or science assessment to Spanish. Teachers also mentioned in the Short Answer Questions that they use different strategies and make accommodations for HLSs in classroom, such as pairing students who have limited English with peers that speak the same language, using visuals to guide HLSs learning, and some teachers would allow students to complete their work in their heritage language. Eight teachers mentioned that they often use visuals when HLSs are having trouble understanding the content. One ELL teacher mentioned,

“When I'm starting a new unit with my ELLs, I try to build background. We watch a short video about it and talk about it to build background. I have vocabulary Power Points

that we read that goes through all the vocabulary with images to go with it and we spend more time talking about it.”

Another third grade teacher also indicated how pictures can help HLSs with comprehension. As she said, “When I work on comprehension, that's when I go over a lot of the words that they don't understand. We'll stop and talk about the meaning and I'll show them pictures.” One ELL teacher also reported she would slow down her speech when working with HLSs. When she placed HLSs in the regular classroom, she looked for teachers who could also slow down their speech when interacting with HLSs, as she mentioned, “When I place them in classrooms, I try to look for teachers who do those things because if they're in a classroom where the teacher talks really, really fast, and doesn't use any visuals, they're just sitting there and they don't know what's going on. It makes a difference for them when they're in those kinds of classrooms.” One third grade teacher reported that when assignments had multiple parts, he would let HLSs focus on one part of the task at a time.

At Elementary School B, the principal and teachers indicated that the school is incorporating Sheltered Instruction into the curriculum. The principal mentioned that they try to use Sheltered Instruction as a guide to build upon HLSs' background knowledge so that they can connect the English content to the knowledge that they already have; as the principal said, “It's very hard for English-only teachers to tap into the background knowledge of another language that is unfamiliar. It's hard to hire teachers with that background knowledge, but we do try to work with kids and their background knowledge and try to build upon that.” A teacher also indicated the effectiveness of using the SIOP model, one of the variations of Sheltered Instruction. She learned how to use visuals and explaining things in different ways with not only

the HLSs, but with her whole class. She indicated that she treats every student as HLS, and therefore all her students can benefit from the SIOP model.

**No difference in ways to re-engage students.** Almost half of the teachers reported they don't use different ways to reengage HLSs versus non-HLS students when HLSs are not engaged. Since most HLSs speak good English, teachers would use nonverbal cues or talk to them directly, the same as they do with all students. One teacher reported, "I really haven't had an issue with that I feel. I have pictures around the room so I think it's helpful, and they all speak pretty good English, so I haven't had any issue of them not being engaged." Another teacher said,

"I wouldn't do it differently because when I re-direct it is usually a nonverbal anyway. I will use proximity. I will go toward them, whether they are an English speaker or a non-English speaker, I would make a nonverbal, tap on the shoulder, eyes up here, trying to get eye contact from them, so I think it's the same for any of them."

In summary, this theme indicated that teachers use different practices with HLSs in the classroom. Teachers use different ways to show their interest in HLSs' heritage language and culture which also shows HLSs that their heritage language and culture are valued at school. Teachers also encourage HLSs to use their heritage language in the classroom, as well as use class activities to let them learn about their home country. One ELL teacher even made sure to place HLSs in classrooms with teachers who were supportive of their heritage language. Teachers mentioned that sometimes they incorporated students' heritage language and culture in lessons and activities. Some teachers also made accommodations for HLSs and implemented Sheltered Instruction in the curriculum. Teachers also reported that they encourage parents to get involved with supporting their children's use of their heritage language and knowledge about their culture.

## **Theme 2. Schools Provide A Welcoming Environment and Opportunities for HLSs**

Both principals and classroom teachers reported that schools use multiple ways to welcome HLSs and support their learning, such as collaborating with families, providing resources in different languages for students and families, offering Spanish class for students, as well as providing professional training opportunities for teachers to learn about other cultures. The principal from Elementary School A mentioned that the school is trying to collaborate with families to learn about each other's culture and meet their needs as best as they can. For example, there is a family program at Elementary School A for which families come to the school in the morning or evening to learn about different culture. As the principal said,

“It's a learning experience for both sides. It's about teaching the families about American schools and our school in general, and then us learning about the different families and different cultures. It's about how we can bring those things into the building, and how we can have culture nights and those different things to provide that opportunity to all of our students to be exposed to the different cultures and languages that we have in the building. We also do assessment to find out from the family what they want and what is their need, and we can try to meet their needs as best as we can.”

The principal from Elementary School C mentioned that their ELL bilingual teacher is a great resource for the families as she communicates with the families weekly and makes sure they are feeling connected to the school, as he said, “She's (ELL teacher) also a really good bridge to the families when she communicates weekly with those families and makes sure that they're feeling connected and there's no misconceptions.” Teachers from Elementary Schools B and C also mentioned that the schools provide after school tutors and Spanish classes for HLSs. All three schools also provided translators that speak different languages and dialects during

parent-teacher conferences. Teachers reported schools provide newsletters or important messages for sending home in Spanish and sometimes in other languages. Students' reports that go home to parents are usually available in both English and Spanish. In addition, teachers from Elementary School A mentioned that the school provides professional development after school to invite people from different cultures to share information about their culture. One of the teachers also said she reported to her students about what they have done, "We had a meeting where different people came from different cultures, and we brought it to the kids, and told them what we had done, and they thought it was kind of cool."

Other than providing different resources for HLSs, schools also provide opportunities for HLSs to help other people through translation and welcoming new students. Fifteen (55%) teachers reported in the Interview Questionnaire that they would use HLSs as the "native informants" on language in classroom, which means to have them teach or share their heritage language with other students in the classroom. Eleven teachers reported they would use HLSs as "native informants" on culture in the classroom, which implies that HLSs will share their culture and support other students to learn about a different culture. According to Elementary School A's welcome plan, the principal mentioned in the Short Answer Questions that HLSs can help new students who speak the same language to get acclimated to the new environment by showing them around the building, connecting them with HLSs who speak the same language in classes, at lunch, or at other common places. Teachers mentioned that they would have HLSs translate for other HLSs when they have trouble understanding English. The students were also willing to help newcomers with their learning at school, which can also give them a sense of pride. As teachers said,

“More often than not they're a huge resource for me, and they're becoming the teacher. If they're talking in their language, or helping another student, they're either translating for me or helping me.”

“We have a new student coming in to the building, and if they do not speak the English language, we try to connect the students in their class, or at lunch, or at any common places where they can be connected with someone that does speak their language. So the students are very good at that, and being willing to help someone to speak their language, it's almost a sense of pride that you see.”

The above theme showed that all three schools were using different ways to welcome HLSs, meet their language and cultural needs, and even use HLSs as a resource to help other students and teachers as “native informants” on language or culture. These all indicated that schools valued HLSs’ heritage language and culture, were eager to make HLSs successful, and loved to have different languages and cultures in the building.

### **Theme 3. Challenges to Help HLS Students**

Although school personnel are trying to meet the needs of HLSs and incorporate their heritage language and culture in the classrooms, schools also face challenges to supporting HLSs to maintain their heritage language and culture. Two principals explained that although they see the importance and value of maintaining HLSs’ heritage language and culture, the mission of the school is to teach students English, not to maintain their heritage language. One principal mentioned,

“In our school, we do not maintain the heritage language because we're not set up to do that. Children in our school district who choose to maintain Spanish as their native or heritage language request to attend Elementary School H (a combined English/Spanish

elementary school). We don't do anything formally to do that. That's not the mission of our school.”

This principal also reported in the Interview Questionnaire when answering if heritage language should be taught at school, he mentioned,

“I want to say to support their heritage language but the reality is sad. Our mission is for kids to learn English, we can't cut off their learning time. If they do ELL one day and English one day, they're just going to get 50% of the content.”

Similar to comments that several principals made, one teacher also mentioned, “We don't do anything at school to support them but we encourage the kids to be proud of their first language.” There was only one teacher who said in the Short Answer Questions that students can use their heritage language, but it should be at home; at school they should speak English. This teacher allows students to speak their heritage language to each other, not with the teacher since she cannot understand them. One teacher mentioned that she does not do anything to support HLSs to maintain their heritage language because that would be the ELL teachers' responsibility. Three teachers reported that they do not use students' heritage language or their culture to support their teaching as they typically do not have time. Even though the majority of the teachers reported they encourage parents to try to maintain their heritage language and culture with their children, nine teachers mentioned that they do not communicate with parents about HLSs' heritage language as that is the ELL teachers' job. However, one ELL teacher reported that she does not communicate with parents about HLSs' heritage language development.

Ten teachers mentioned, in the Interview Questionnaire, that they often make accommodations to instruction for HLSs, but five teachers said they rarely or never made accommodations for HLSs' assessment. Eight teachers reported that they do not make



accommodations in the textbooks and materials for HLSs. Even though half the teachers indicated, in the Interview Questionnaire, that they would provide HLSs the role of being either “cultural informants” or “language informants” in the classroom, eight teachers reported that they do not assign any special role to HLSs in their classrooms to inform peers or teachers about their language or culture.

### **Observation Instrument on Heritage Language and Culture (OIHLC)**

Observation of the school and classroom environment, as well as teacher performance in the classroom, were conducted. The goal of the OIHLC was to examine how the school and each classroom demonstrate how they value different languages and cultures in the environment, as well as how teachers implement strategies to demonstrate valuing of students’ heritage language and culture in their classrooms. All three schools displayed diversity in culture and/or language throughout the building. At Elementary School A, there are pictures and displays on the walls that present information about culture from various countries. At Elementary Schools B and C, there are messages in English and Spanish posted on the wall, such as expectations for students in the building and in the lunchroom, and flyers about information for families who may need help with food, shelter, or education for their children. In addition, there are pictures and art displays on walls that represent people and children with different ethnicities.

**Classroom Environment on Heritage Language and Culture (CEHLC).** The classroom environment of 36 classrooms, including 33 general classrooms and three ELL classrooms were observed. Detailed information about CEHLC are presented in Table 7. Three classrooms had welcome signs or messages in languages other than English either inside or outside the classroom for parents to read: One classrooms had “hello” in different languages outside the classroom; one ELL classroom had “ELL classroom” in Spanish on the door; another

classroom had “we are bucket fillers, we fill buckets, no dipping” sign, to show a behavioral rule for the classroom, in Spanish on the door with picture illustrations. Two classrooms had signs and labels in Spanish that were understood by HLSs who spoke Spanish: One classroom had the job stations posted on the wall for children who spoke Spanish. The ELL classroom in Elementary School C had different objects labeled in both English and Spanish throughout the classroom for words such as table, white board, telephone, chair, window, etc. About half of the classrooms had books in other languages, mostly Spanish. Most of the classrooms in Elementary School B had Spanish books. Some classrooms had several Spanish books that HLSs can take home whereas some classrooms had only a few Spanish books and there were used seldom by HLS students. I also noticed some age-appropriate Spanish books or chapter books in upper grade level elementary classrooms. All classrooms I observed collected books that reflected diversity and different cultures, such as books about African Americans, South America, children of color, and nonfiction books about other countries. Among all the classrooms, 26 classrooms had items and/or displays that showed diversity and culture, such as displays about children of color, world maps, maps or flags for different countries, globes, puzzles showing families of different cultures, etc. One ELL classroom also had maps of Mexico and Central America.

All the three schools provide students records and portfolios in easy to read languages for parents. At Elementary School A, the school provides newsletters in both English and Spanish. However, students’ reports for parents are all in easy to read English, but not in other languages. The records can be translated through an interpreter during parent-teacher conferences. Only one kindergarten teacher reported she also has her students’ records in Spanish. At Elementary School B, students’ records are provided in both English and Spanish. Newsletters can be

translated into other languages for parents to read. However, at Elementary School C, students' reports and newsletters are all provided in English. The ELL teacher can verbally translate any information in Spanish to parents (see Table 7).

Table 7

*Descriptive Information about Classroom Environment on Heritage Language and Culture (CEHLC)*

Observation Item	Yes		No	
	N	%	N	%
1. The classroom has welcome signs and brochures in a variety of languages. Signs are easy for children and parents to recognize and understand	4	10.8	33	89.2
2. Messages (both inside and outside the classroom) are easy to read for parents; written in other languages for diverse parents to understand	2	5.4	35	94.6
3. Classroom has signs (e.g., pictures that show diversity) and labels that are understood by children. For example, the shelf is labeled in both English and Spanish.	2	5.4	35	94.6
4. Presence of books in various languages	17	45.9	20	54.1
5. Presence of books reflect diversity and different cultures	37	100	0	0
6. Presence of toys/items in diversity and cultures (e.g. baby dolls in black and white)	27	73.0	10	27.0
7. Student records/portfolios are written in easy to read languages for parents, especially for parents who have heritage language students	24	64.9	13	35.1

**Teacher Observation on Heritage Language and Culture (TOHLC).** In addition to the TIHLC and Survey, 39 teachers were observed in their classrooms during small group, large group, or students' independent study time. Among all 16 items of the TOHLC, some items were not available for observation during the two times I observed in the classrooms, and those were

marked as “NA.” For instance, items 1, 4, 5, and 6 required students to speak in their heritage language in the classroom. Among all 39 observations, I was able to hear students talk in their heritage language in only eight classrooms; therefore, the other 31 teachers’ classrooms were marked as NA for items 1, 4, 5, and 6. Item 16 (teacher uses strategies to re-engage HLSs when they are not fully engaged or interrupting the class) was also marked as NA for all classrooms since I was not able to see teachers using different strategies with HLSs versus non-HLS students when they are not engaged or interrupting the classroom. An average observation score was calculated for each teacher, with a range from .18 to 1.73 (possible range: 0-2). On average, across all items, teachers scored .74, which did not meet the “barely” rating criteria, which meant teachers rarely implemented students’ heritage language and culture in their classrooms on the two observation days. Almost 80% of the teachers scored below 1. Among the eight teachers who scored as 1 or above, three of them were ELL teachers or had ELL endorsement. Five teachers scored between 1 and 1.2. Two ELL teachers scored 1.73, which was also the highest score. Figure 4 presents the distribution for the average scores about teachers’ classroom practices on the observation measure.

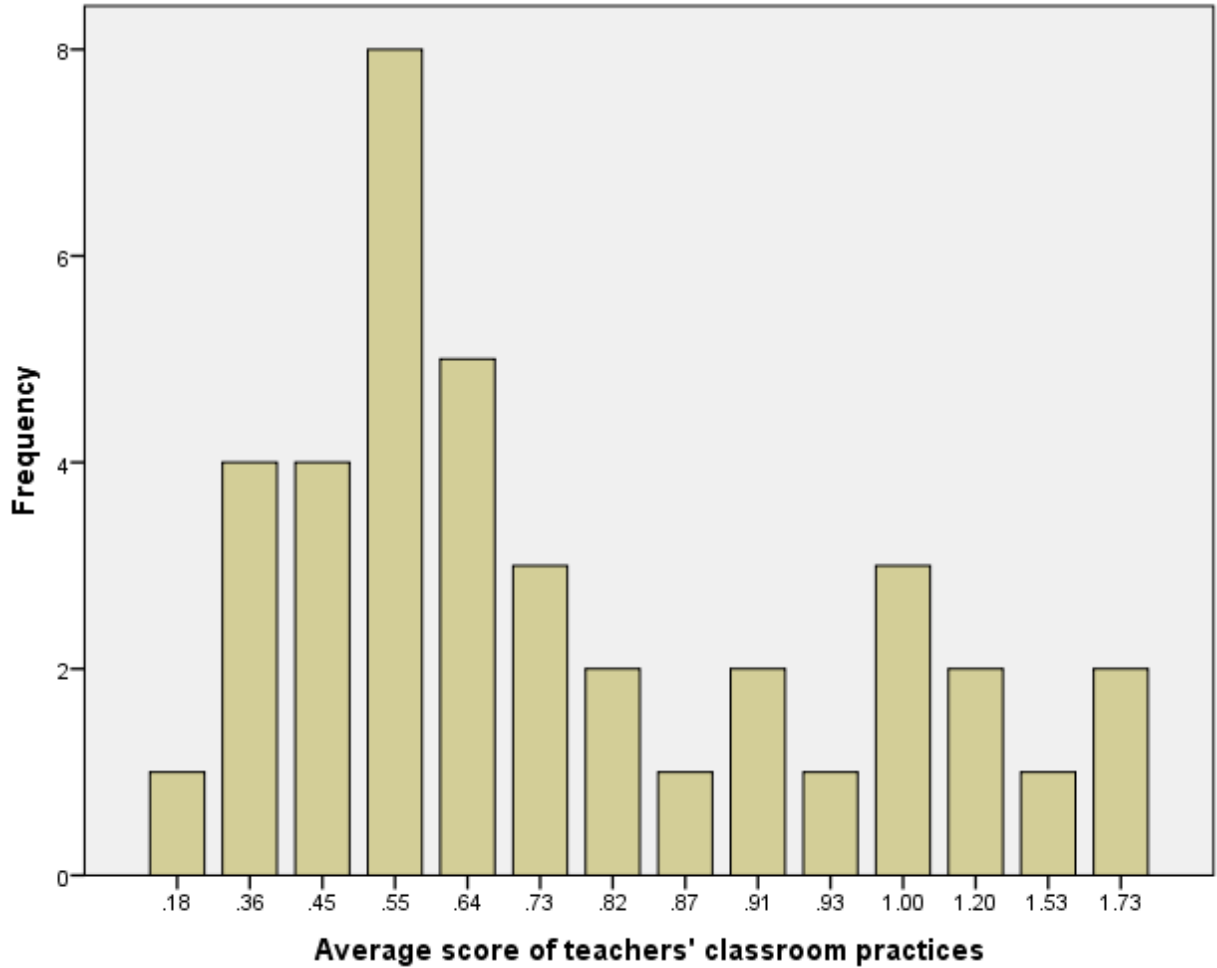


Figure 4. Distribution of Average Score of Teachers' Classroom Practices.

In addition to the overall results of the classroom observation, each individual observation item was analyzed and reported (see Table 8). Since my study contained six ELL teachers and 33 non-ELL teachers, I conducted an independent t-test to determine if there was a difference between these two groups of teachers on the observed classroom practices. Results showed that ELL teachers ( $M = 1.10$ ,  $SD = .55$ ) and non-ELL teachers ( $M = .67$ ,  $SD = .28$ ) did not differ significantly on their observed classroom practices,  $t(5.474) = 1.828$ ,  $p = n.s.$  Therefore, I did not run separate analyses for ELL and non-ELL teachers. For eight teachers I was able to observe all 15 items; among five of these teachers, it was clear that they allowed their students to use their heritage language (e.g., not interrupting students when they talk

appropriately in their heritage language). If teachers themselves were talking or having conversations with HLSs in their heritage language for a long period of time, the score would also be 2. The following are observation examples: I saw a teacher use both Spanish and English to lead word study. An ELL teacher read a book about a Mayan castle with a HLS; the teacher and the HLS student all read the word “the castle” in Spanish which was written in the book. The ELL teacher also let the student help her read a city name in Spanish that was shown in the book. Three teachers sometimes allowed students to use their heritage language, which meant the behavior only happened on one of the two observation days and did not last very long. For example, a student said “chili” in Spanish, the teacher said, “That’s what it says in Spanish? Say it again!” Out of eight teachers who presented the opportunity to be observed allowing their students to use a heritage language, three teachers met the “barely” criteria about responding in students’ heritage language in a positive way, which meant teachers gave a simple response on one of the two observation days. For example, when a student said a word in Spanish, the teacher said, “Is that \_\_\_\_\_ (in Spanish)?” Four teachers clearly responded to students’ heritage language in a positive way by either giving simple responses on either of the two observation days, or providing a complex, multiple sentence response. For example, when working with a HLS, the teacher talked in both Spanish and English with the student; an ELL teacher spoke Spanish to her group of students during the entire session. Four out of eight teachers were able to reinforce students who used their heritage language, which meant engaging in a back and forth conversation with the students, and to connect the content with students’ heritage language. For example, one preschool teacher was using English and Spanish back and forth with a HLS to help her understand the content. The teacher also asked the student how to say different items in Spanish when working on sorting colors and items.

Among all 39 teachers, seven teachers clearly used students' heritage language in the classrooms, such as modeling for HLSs how to read in both English and Spanish, or saying some Spanish words to explain a concept to a HLS in Math class. Teachers who used students' heritage language all knew some Spanish. During my observation, no teacher was using self-talk with HLS students, and only one preschool teacher used parallel talk once with one HLS student.

Teachers did not use different strategies to re-engage HLSs when they were not fully engaged or interrupting the classroom; teachers used the same strategies with all students, such as verbal prompts or using nonverbal cues. In terms of using different strategies when teaching content, 20 teachers clearly used different strategies such as modeling, using gestures or body language, using visuals, or using hands-on activities with HLSs. For example, a teacher modeled for a HLS how to write "x" in math when he was struggling with how to write the symbol. A teacher used HLSs' prior knowledge to find the meaning of a new word, and modeled for the student how to sound out the word. Twelve teachers used clear gestures or body language with HLSs to help them understand word meanings in English. For instance, one ELL teacher acted out "bloom" when talking about a flower blooming; she also used facial expression to explain the appearance of a bird. Another teacher used gestures to sound out letters with all students by pointing to different body parts; she also let a HLS act out "jumping" to explain to another HLS the meaning of "jump high" and "jump low." To some extent, the majority of the teachers used pictures or real objects to explain concepts to students, especially to HLSs. One teacher used small, soft balls in math to help students solve addition and subtraction problems. One teacher used a picture to help a HLS to understand the word "swim."

When looking at how teachers incorporated HLSs' heritage language and culture into their lessons, results showed that teachers tended to incorporate students' culture rather than their

heritage language in a typical small group or large group lesson. Only eight teachers integrated students' heritage language in group activities, either clearly or barely. For example, a teacher asked a student to translate the content in Spanish to another HLS in a small group. A HLS shared his reading in large group; the teacher modeled for him to read in both Spanish and English to the whole class. One teacher said, "Chicken", in Spanish to help HLSs who have Hispanic background understand the content. Compared to incorporating students' heritage language, 21 teachers taught lessons that reflected different culture or highlighted students' culture. For instance, a teacher read a book, "My name is Yum", about a girl from South Korea to talk about the topic of immigration. The teacher also showed the location of South Korea on the map. Another teacher showed students a video about a Japanese-American in a detention camp during World War II, and later read a fiction story about the experience in the camp as a Japanese-American. Fewer than 10 teachers clearly let students make connections between their language/culture/cultural background and the content. For example, a teacher lets students relate to the countries they came from, and asked students what language they speak at home. One teacher let students say "dinner" in their own languages (Spanish and Chin<sup>3</sup>), as well as asking students whether they use the word "dinner" or "supper" at home to demonstrate cultural differences. With all my observations, all teachers include all students with positive attitudes, and paid attention to HLSs. Teachers praised both HLSs and non-HLSs when they did a good job. For example, while students were working on sight words in a small group, one teacher paid attention to an HLS who could not read some sight words by separating the word into phonetic units. Detailed information for each observation item is presented in Table 8.

---

<sup>3</sup> Chin is the language spoken by people in the Chin State of Myanmar (Burma).



Table 8

*Descriptive Information about Teacher Observation on Heritage Language and Culture (TOHLC)*

Observation Item	Number of respondents			Mean of observed score
1. Teacher allows students to use their heritage language	0	3	5	1.63
2. Teacher uses students' heritage language	30	2	7	.41
3. Teacher uses languages other than English with students	29	3	7	.44
4. Teacher responds to students' heritage language	1	3	4	1.38
5. Teacher responds positively to students when they use a language other than English in an appropriate way	1	3	4	1.38
6. Teacher reinforces students when they talk in their heritage language	2	2	4	1.25
7. Teacher uses self-talk with HLS students	39	0	0	0
8. Teacher uses parallel talk with HLS students	37	0	0	0
9. Teacher uses total physical response technique to help HLSs understand meanings in English	19	8	12	.82
10. Teacher uses a different teaching strategy when working with HLS students (e.g. modeling, visuals, hands-on activities, demonstrations, gestures, body language)	7	12	20	1.33
11. Teacher uses pictures or real objects to explain to students, especially to HLS students	14	9	16	1.05
*12. Teacher uses students' heritage language to help them understand the content during a typical lesson	31	3	5	.33
*13. Teacher teaches a lesson that reflects multiple culture/within authentic culture contexts	18	5	16	.95

Table 8 continued

Observation Item	Number of respondents			Mean of observed score
*14. Teacher let students make connections between their heritage language/culture/cultural background (experiences) and the content	26	4	9	.56
*15. Teacher displays positive attitude toward all students, and pays attention to HLSs	0	0	39	2.00

*Note.* Questions 1, 4, 5, 6 were only observed among eight classrooms

\*Has to happen during a typical small/large group lesson

### **Research Question 3: What is the Relationship between Teachers' Beliefs and Classroom Practices toward Supporting the Maintenance of Students' Heritage Language and Culture?**

The Survey and TOHLC were used to answer this question. Survey items were submitted to correlation analysis to examine relations between the mean score of teacher beliefs and the mean score of teacher reported practices. I also used correlation analysis between Survey items of the mean score of teacher beliefs and the average score from TOHLC to examine if there was a relationship between teachers' beliefs and their observed classroom practices. Results showed that teachers' beliefs and classroom practices from the Survey were correlated,  $r = .66, p < .001$ . A regression analysis was also performed to examine if teachers' beliefs were related to their observed classroom practices (see Table 9). Results indicated teachers' beliefs accounted for 42.4% of the variance of teachers' reported classroom practices. Results showed that teachers' beliefs were significantly relate to their reported classroom practices, which meant that how well teachers support students' heritage language and culture was related to their attitudes toward students' heritage language and culture. Teachers' beliefs from the Survey and the average score from teachers' observed classroom practices were also significantly correlated,  $r = .43, p = .009$ .

Regression analysis was also performed between these two variables (see Table 9). Teachers' beliefs were significantly related to teachers' observed classroom practices. Teachers' classroom practices from the Survey and the average score from teacher observation were also significantly correlated,  $r = .47$ ,  $p = .003$ , which showed that the more teachers reported they support students' heritage language, the more likely they would implement in their classrooms. Regression analysis was also performed between these two variables (see Table 10). The results showed that teachers' reported classroom practices were significantly related to their observed classroom practices.

Table 9

*Regression Analysis Summary for Teachers' Beliefs and Teachers' Reported and Observed Classroom Practices*

Dependent Variable	$\beta$	$SE$	$t$	$df$	$F$	$p$	$adj. R^2$
Teachers' Reported Classroom Practices	.70	.13	5.25	35	27.52	<.001	.42
Teachers' Observed Classroom Practice	.16	.06	2.79	35	7.77	.009	.16

Table 10

*Regression Analysis for Teachers' Reported Classroom Practices and Teachers' Observed Classroom Practices*

Variable	$\beta$	$SE$	$t$	$df$	$F$	$p$	$adj. R^2$
Teachers' Reported Classroom Practices	.17	.06	3.15	35	9.91	.003	.20

**Research Question 4: What Factors Associated with Teachers' Beliefs and Practices  
toward Maintaining Students' Heritage Language and Culture?**

The last research question examined the relations among teachers' demographic information and their beliefs and classroom practices toward supporting students' heritage language and culture. Correlations were used to examine relations among variables about teacher's demographic information, teachers' beliefs and practices reported on the Survey, and teachers' observed classroom practices (see Table 11). Teachers' demographic information included teachers' years of teaching experience, grade level taught, the proportion of HLSs in the classroom, whether or not teachers have ESL endorsement, whether teachers have ever attend professional classes or workshops, and whether or not they can speak a language other than English. Results showed that only teachers being able to speak a different language was correlated significantly with teachers' observed classroom practices,  $r = .6, p < .001$ . The proportion of HLSs in the classroom was positively correlated with teachers' reported beliefs and classroom practices. In addition, whether or not teachers have attended professional development classes or workshops related to teaching HLSs was positively correlated with teachers' reported classroom practices, but not with teachers' observed classroom practices (see Table 11).

Table 11

*Correlations among Teachers' Demographic Information, Teachers' Beliefs, Teachers' Reported Classroom Practices, and Teachers' Observed Classroom Practices*

Variables	1	2	3	4	5	6	7	8
1. Year of Experience	--							
2. Grade Level	-.38*	--						
3. Proportion of ELL Students	.03	-.33	--					

Table 11 continued

Variables	1	2	3	4	5	6	7	8
4. ELL Endorsement	-.29	.30	-.06	--				
5. Professional Training on ELL Instruction	.06	.42*	.34	.15	--			
6. Speak a Different Language	-.39*	.53**	-.07	.52**	.26	--		
7. Teachers' Beliefs	-.25	-.03	.59**	.08	.14	.21	--	
8. Teachers' Reported Classroom Practices	-.09	.13	.61***	.25	.53*	.29	.66***	--
9. Teachers' Observed Classroom Practices	-.20	.14	.34	.21	.07	.60***	.43**	.47**

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Regression results showed that whether or not a teacher can speak a different language accounted for 16.1% of the variance of teachers' actual classroom practices. It was found that whether or not teachers can speak a different language was significantly related to teachers' actual classroom practices, which meant that a teacher who can speak a language other than English has better observed classroom practices scores, and is more likely to implement strategies to support students' maintenance of heritage language and culture in his or her classroom (see Table 12).

Table 12

*Regression Analysis Summary for Teachers Speak A Different Language and Teachers'*

*Observed Classroom Practices*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>	<i>F</i>	<i>p</i>	<i>adj. R<sup>2</sup></i>
Speak a Different Language	.51	.11	4.56	37	20.77	<.001	.34

Regression analysis was performed between the proportion of HLSs and teachers' reported beliefs and practices (see Table 13). Results indicated that the proportion of HLSs in the classroom was related to teachers' beliefs and classroom practices. This pointed out that the more HLS students teachers have in their classroom, the more likely they have positive attitudes toward students' heritage language and culture, and the more likely they are to implement strategies to support HLSs' language and culture in their classrooms.

Table 13

*Regression Analysis Summary for the Proportion of ELL Students and Teachers' Beliefs and Teachers' Reported Classroom Practices*

Dependent Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>	<i>F</i>	<i>p</i>	<i>adj. R<sup>2</sup></i>
Teachers' Beliefs	1.74	.45	3.89	28	15.15	.001	.33
Teachers' Reported Classroom Practices	2.0	.49	4.10	28	16.84	<.001	.38

Statistical analyses were performed to determine if attending professional development was related to teachers' classroom practices. Independent T-test was performed between teachers who have received professional development on HLS instruction and those who did not receive on teachers' reported classroom practices (see Table 14). Results revealed that teachers who have received professional development on HLS instruction are more likely to support students' heritage language and culture in the classroom than teachers who never attended professional training classes or workshops on teaching HLSs.

Table 14

*T-Test Summary about Professional Training on ELL Instruction and Reported Classroom*

*Practices*

Professional Development on ELL Instruction	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>F</i>	<i>t</i>	<i>df</i>	<i>p</i>
Yes	11	4.88	.86	2.5	2.75	19	.013
No	10	4.04	.47				

## CHAPTER 5. DISCUSSION AND CONCLUSION

As the U.S. becomes more diverse with the increasing numbers of linguistically and culturally diverse students enroll in public schools, it becomes more important for educators to understand and affirm that students' diverse language and cultural background can have an effect on their development and learning. The maintenance of heritage language and culture is worth for educators' consideration and investment. Educators need to realize that heritage language and culture maintenance is not just the responsibility of HLS students and their families, but can be related to multiple factors, such as the teachers, schools and the society. However, little attention has been paid to investigating the role that teachers and schools play in supporting HLSs' heritage language and culture (Lee & Oxelson, 2006; Szecsi et. al, 2015).

This study used observation, interview and survey methods to explore teachers' beliefs and classroom practices toward maintaining and supporting students' heritage language and culture, as well as factors that influence teachers' beliefs and classroom practices. Thirty-nine teachers, three principals and one school counselor across three elementary schools in Iowa participated in this study. Observations were conducted in all 39 teachers' classrooms. Twenty-seven participants took part in interviews and 37 teachers completed the Survey regarding their beliefs and practices. Results from this study indicate that teachers feel inhibited in helping students maintain their language and culture because they have limited knowledge of their HLSs' language and culture, have limited time with children in the classroom, and feel the school mission prioritizes English acquisition. Based on the result, several key topics were generated through TIHLC, OIHLC and the Survey. First, it is important to talk about why HLSs need to maintain their heritage language and culture. Then I would like to discuss factors in the school and classroom context that can influence teachers' beliefs and practices regarding maintaining



students' heritage language and culture. I also want to discuss what schools and teachers have been doing to support HLSs' heritage language and culture, as well as the challenges to meet the needs of HLSs that brought up by teachers and principals. We want to know their current practices and challenges so further actions can be made to support schools and teachers to meet the needs of HLSs. This discussion is organized around four topics in the following order: (1) the importance of maintaining students' heritage language and culture, (2) factors contributing to teachers' beliefs and classroom practices toward maintaining HLSs' heritage language and culture, (3) strategies schools and teachers use to support HLSs' heritage language and culture, and (4) challenges to meet the needs of HLSs.

### **The Importance of Maintaining Students' Heritage Language and Culture**

The majority of the teachers believed (as shown in data from both the TIHLC and the Survey results) there are benefits for students to maintaining their heritage language, such as supporting their academic progress, English language development and social development, as well as benefiting their future careers. Several teachers mentioned that knowing another language is not a skill that everybody has, and that is why they should keep it. In addition, several teachers in this study also indicated during the interview that HLS students learn new vocabulary in English faster than non-HLS students because HLSs can link their prior knowledge in their heritage language to their new English language skills. Experts suggest that knowing one's heritage language can facilitate the process of learning English (Cho, Rios, Trent, & Mayfield, 2012; Cummins, 2005; Ovando & Combs, 2011). As well, bilingual individuals have more cognitive flexibility and can acquire a new language faster than monolingual people (Grosjean, 2012).

Almost all teachers who completed the Survey believed that it is valuable to be multilingual in our society. A few participants also indicated in the interview that school should embrace students' heritage language and culture as they are realizing the importance of maintaining one's heritage language. As one of the principals said, schools do not want students to lose their culture and their self-identity. Thus, schools need to find out ways to elaborate different language and culture in the building, which is not only a task for schools to work on "when they have time," but an obligation for schools to incorporate students' language and culture. Teachers and principals indicated in the interview that be able to speak another language can lead to more job opportunities in the future, which aligned with what researchers have addressed (Gabszewicz, Ginsburgh & Weber, 2011). Results from this study also indicate that teachers and administrators value children maintaining their heritage language and culture, thus they must work together to identify strategies to enact these values within the school and the already crowded curriculum.

### **Factors Influencing Teachers' Beliefs and Classroom Practices toward Maintaining HLSs' Heritage Language and Culture**

This study examined the relations between teachers' beliefs and their classroom practices toward supporting students' heritage language and culture, and factors that influenced teachers' beliefs and classroom practices. Previous research has shown that teachers' beliefs can either positively or negatively affect their teaching; as well, teachers' actions and classrooms are the reflections of their beliefs (Lacorte & Canabel, 2005; Richardson, 1996). Results from the current study showed a moderate positive relationship between teachers' beliefs and reported classroom practices. Teachers' beliefs were positively related to their reported classroom practices. Related research has showed that teachers who had positive attitudes toward HLSs'

heritage language were more receptive to use HLSs' heritage language in the classrooms; whereas teachers who had negative attitudes toward HLSs' heritage language were generally against the use of HLSs' heritage language in the classroom (Garca-Nevarez et al., 2005). Even though beliefs are resistant to change, it is still possible for teachers to change their beliefs about HLSs through effective professional development or coursework which can benefit HLSs' learning (Pettit, 2011). Therefore, teachers can change their beliefs regarding supporting HLSs' heritage language through professional development or training. The findings also indicated that teachers' reported classroom practices were significantly related to their observed classroom practices, which implies that teachers' reported classroom practices to support HLSs' heritage language and culture are consistent with their actual classroom practices. Thus, teachers could be provided with a self-reflective tool to help them self-assess their practices regarding how they implement HLSs' language and culture in the curriculum.

Findings of this study also showed that teachers who can speak a language other than English are more likely to incorporate students' heritage language and culture in their classroom. The reason might be that teachers who are familiar with students' heritage language have more opportunities or are more likely to communicate with HLSs in their heritage language. Since language and culture are connected, people's culture can be reflected in their languages (Wardhaugh, 2010), and teachers who speak students' heritage language are more likely to know the culture and incorporate students' culture in lessons and activities. If preservice teachers and practicing classroom teachers seek opportunities to learn other languages, even just simple words or phrases, they may better understand their HLS students and change their teaching. Results also showed that teachers are more likely to have positive attitudes and classroom practices to support students' heritage language and culture when they have larger numbers of HLS students in their

classrooms. It is true that when the population of HLSs is higher in the classroom, teachers might view the needs of HLSs as a higher priority in the classroom, and they need to implement more strategies to meet their needs. In Elementary School C, there were only 20 HLS students in the building and most classrooms only had a few HLSs. However, some teachers were using strategies to incorporate HLSs' heritage language and culture in classroom activities even if they only had two to four HLSs. Therefore, no matter how many HLSs in the classroom, students benefit when teachers value and support HLSs' heritage language and culture. In order to accomplish this, teachers need more resources and training to support them meet the needs of HLSs regardless of the number of HLSs in their classrooms.

This study also illustrates that there was a relationship between professional training received about teaching HLSs and teachers' reported classroom practices. Through attending professional development about Sheltered Instruction, especially by providing specific teaching practices, teachers can increase their uses of these teaching practices in their classrooms (Desimone et al., 2002). Sheltered Instruction provides strategies for mentoring HLS students, which aligned with my finding that teachers who have received professional training on HLS instruction are more likely to implement students' heritage language and culture in the classroom. Teachers also indicated in the interview they needed more professional training to learn about how to implement specific strategies to support HLSs' heritage language and culture in the classroom. Therefore, schools can provide professional development or training opportunities that target teaching HLSs for teachers to attend to improve their classroom practices related to students' heritage language and culture (Karabenick & Clemens-Noda, 2004). In addition, even though previous researchers (Lee & Oxelson, 2006; Garca-Nevarez et al., 2005, Byrnes, Kiger, & Manning, 1997) have found that teachers with formal ESL training

have more positive attitudes toward the maintenance of heritage language and will provide more positive support for HLSs, my data did not show that there is a relationship between teachers' beliefs/practices and whether or not they have an ESL endorsement. The reason might be due to the small sample size of teachers with ESL endorsement ( $N=10$ ).

### **Strategies Schools and Teachers Use to Support HLSs' Heritage Language and Culture**

The current study found that schools and teachers used multiple ways to value students' heritage language and culture and support HLSs' heritage language and culture in the classroom. Observations showed that all three schools posted materials displaying diversity in culture and/or language throughout the building. Two elementary schools even had messages in Spanish posted on the wall in the building. All the classrooms had books that represented different cultures and people of different colors. The majority of the classrooms also had items that demonstrate different cultures. All the schools had translators who could translate different languages during parent-teacher conference. One school even provided newsletters and students' reports in Spanish, as there was a large population of Spanish-speaking students in the building. Schools used different ways to welcome students' heritage language and culture, incorporate their language and culture, and even used them as a resource (language or culture informants) for students, teachers and family members, is a great way to recognize the importance of HLSs, and provide HLSs with a sense of self and sense of pride when their heritage language and culture are valued and understood. Peterson and Heywood (2007, p.518) indicated that HLSs "develop a stronger sense of self and are more likely to apply themselves academically when teachers show them that their language and culture are welcomed in school."

In addition to welcoming and valuing HLSs' heritage language and culture, the ELL program in three schools also directly supported HLSs' learning. Participants mentioned that the

ELL program was a good place for HLSs to learn and strengthen their English skills, as well as being a place they could speak their heritage language. Participants from Elementary School C also considered their only ELL teacher as a great resource for not only the students, but for the teachers, principal and family members. One ELL teacher also said she made sure students are placed in regular classrooms where classroom teachers could support their heritage language and culture. Therefore, schools need to make sure the ELL program in the building uses current and effective strategies to support HLSs' learn English. As well, when placing HLSs in the regular classrooms, the school or the ELL teachers need to make sure that classroom teachers can value and be supportive of students' heritage language and culture, such as encouraging HLSs to use their heritage language in the classroom, or even incorporating HLSs' heritage language and/or culture in lessons and activities.

Teachers in the current study described implementing a variety of strategies to support HLSs' heritage language and culture. Teachers indicated in the interview and Survey that they express interest in students' heritage language and culture and encourage their students to use their heritage language and find their roots. Teachers who were interested in learning their students' heritage language indicated in the interview that when deciding which subject to attend during in-service training, they picked learning about a different culture or different language over other subjects such as reading, writing, or math. Since attending professional development on teaching HLSs can increase teachers' use of effective practices in their classroom and change their beliefs about HLSs (Desimone et al., 2002; Pettit, 2011), schools can encourage teachers to attend professional development or trainings that are related to instructions for teaching HLSs, or learning about different languages and/or cultures. Based on the findings from the interview which one teacher recommended that if teachers want to learn another culture, one way to do it is

to visit some local restaurant that are unique to that culture. For example, teachers can take pictures of the food they like or find interesting, then bring the photos to the classroom and share with all students. In this way, it could make a connection to HLSs' culture and lives, which can also make HLSs feel that their teachers value and are interested in their culture.

Teachers also mentioned in the interview that they use different ways to incorporate HLSs' heritage language and culture in teaching, as well as using their background knowledge to support their learning, such as making connections between their heritage language/culture and the content, which aligns with the SIOP model. The SIOP model is the theoretical framework that guided this study. It is a research-based model that build on students' background and connects the content to their background to support their English skills (McIntyre et al., 2010). However, during my observations, only a few teachers used students' heritage language to help them understand the content and let students make connections between their heritage language/culture and the content. The reason that teachers infrequently used students' heritage language and culture in teaching might be because teachers did not see that heritage language and culture are central to who people really are, thus their identity cannot be left out of their learning. Teachers could just focus on students' vocabulary, reading comprehension, or writing skills, rather than mentioning different language or culture. Therefore, teachers need help to see how to weave HLSs' heritage language and culture into all aspects of the curriculum. One of the components of the SIOP model is building on students' background while introducing new content. Cummins (1989) also indicated that students, especially HLSs, need prior knowledge and experience to understand new information. Ovando and Combs (2011) suggested that teachers can support students' heritage language by teaching the academic content in their heritage language. Teachers can also prepare lessons that incorporate HLSs' heritage language in

a meaningful way, such as having HLSs write journals in their heritage language, or creating environmental print (e.g. posters, large prints, students' works) in HLSs' heritage language. Therefore, teachers can try to implement students' language and cultural in lessons and activities as much as they can. For example, when going through a vocabulary list, teachers can ask students what they would call some specific words in their heritage language to have them make that connection.

Teachers reported in the interview that they involve parents to support their children's heritage language and culture by informing parents of the importance of maintaining heritage language and culture and encourage parents to use heritage language with their children. Teachers reported in the Survey that they do not advise parents to speak English at home to help their children learn English faster; however, only a small percentage of teachers reported they would give parents advice how to learn English and at the same time maintain their heritage language and culture. The reason might be that it is true that teachers would not recommended parents to speak more English with their children at home; however, they probably do not have the chance or the knowledge to advice parents how to maintain their children's heritage language and culture. As most of the teachers mentioned that they are not prepared to teach HLSs and meet their needs, perhaps they also do not know how to advise parents about it. Also, how to maintain HLSs heritage language and culture is not likely to be the focus of any teacher-parent conversation if it is not the focus of the school mission. Researchers recommend that teachers should establish relationships with family members and invite them to serve in the classroom, as they can support students learn about other language and culture (Torres-Burgo, Reyes-Wasson, & Brusca-Vega, 1999; Ovando & Combs, 2011), even though teachers might not have the knowledge on how to strategize parents in supporting their children's heritage language and



culture. Teachers agreed in the Survey that teachers, parents and schools need to work together to help students learn English and maintain their heritage language and culture, as emphasized by Kondo (1998) that the combined effort of school, community, and home can provide more support for students' heritage language maintenance.

Teachers mentioned in the interview that they make accommodations for HLSs in the classroom, such as using a different strategy when working with HLS students. During my observation, about half of the teachers used strategies such as modeling, visuals, hands-on activities, demonstrations, or gestures when working with HLSs students. This matches findings from previous research that shows modeling can give students a more concrete understanding of the task or the content from a direct experience (Rea & Mercuri, 2006). Experts also suggest that when teachers use visuals in instruction, lessons and activities can be more engaging. It can help HLS students create visual images and retrieve information or knowledge they have known (Miller, 2002; Rea & Mercuri, 2006). During my observations, no teachers were using self-talk and only one preschool teacher used parallel talk with one HLS student who had limited English language proficiency. The reason might be teachers were lack of willingness to use these two strategies as the majority of their students had adequate English language skills. Researchers (Pianta, La Paro, & Hamre, 2008) have suggested that self-talk or parallel talk can be effective strategies to use with individuals with limited language, especially with HLSs as it can build their receptive language. Teachers can use these two strategies to model language, give attention to HLSs, as well as build relationship with them. Even teachers are unfamiliar with the language of the students, they can still use self-talk and parallel talk. Therefore, teachers are encouraged to use self-talk and parallel talk with students who have limited English skills, regardless of their ages.

Most of the teachers indicated that HLSs are generally lower in their academic performance than non-HLSs due to language and culture barriers. Some teachers mentioned that they incorporated Sheltered Instruction and/or the SIOP model to guide their teaching of HLSs in order to overcome language and culture barriers. One feature of the Sheltered Instruction is to use guarded vocabulary with HLSs, which means teachers need to make accommodation with HLSs such as slow the rate of their speech, simplify vocabularies, repeat new words frequently, as well as to pay attention to clearly enunciate words and phrases (Herrera & Murry, 2011; Crawford, Schmeister, & Biggs, 2008). I observed some teachers used some of the above features of guarded vocabulary with HLSs, but not all the features. Therefore, teachers can implement Sheltered Instruction, and/or the variations such as the SIOP model in their teaching (Thar, Estrada, Dalteen, & Yamauchi, 2000), which has been found to not only benefit HLSs, but also non-HLSs (Marzono, 2004).

Through the interview, Survey and teacher observation, teachers used multiple ways to demonstrate how they value HLSs' heritage language and culture, and how they implement different language and culture in their classroom practices. However, teachers used the strategies less often than I expected or would like to see. The following is the discussion about challenges school face to meet the needs of HLSs.

### **Challenges School Face to Meet the Needs of HLSs**

Although schools and teachers are trying to support students' heritage language and culture, schools experience challenges to actually doing so. According to my observations, only a few classrooms had messages or displays, or labels in a language other than English. Only about 10 teachers reported using students' heritage language in the classroom. Teachers' observed classroom practices score was low on average, which meant teachers rarely implemented HLSs'

heritage language and culture in the classroom on two observation days. These observations all proved what two of the principals said about the mission of the school, which is for students to learn English, instead of maintaining their heritage language. A third of teachers also agreed that schools should not invest in helping students to maintain their heritage language. However, even though the mission of public schools is to teach students English, it does not mean schools and teachers cannot value HLSs' heritage language and culture, and incorporate their language and culture in the classroom. I also noticed in my interviews teachers mentioned that they seldom support students' heritage language and culture. However, during my observation, I noticed teachers were using different classroom practices that demonstrated they were supporting HLSs' heritage language and culture. Therefore, teachers need to realize supporting HLSs' heritage language is not that complicated or difficult, even a small change to classroom practices that involve HLSs' language or culture can make students feel their language and culture are valued, which can support the development of their heritage language and culture (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers, 2007; Jiménez, 2003).

Teachers described that another challenge to support HLSs' heritage language and culture is that HLS students do not use their heritage language in the classroom. I also noticed in my observation that students rarely used their heritage language in their classroom, unless promoted by teachers. The reason might be students are embarrassed to use their heritage language as reported by a few teachers. Researchers (Robinson & Diaz, 2005) also pointed out that HLSs feel ashamed and embarrassed to speak in their heritage language because they view their language as a minority language in the classroom, therefore are not confident to speak in their heritage language. It could also be that HLSs are so skilled in English that they do not have a need to use their heritage language. As mentioned by Robinson and Diaz (2005), once HLSs find out

communicate in English is more successful in the classroom, they tend to drop their heritage language in that setting. In fact, most teachers, especially the schools in Elementary School A and B also told me that most of their HLSs are proficient in English, and some are even higher than non-HLSs on their academic performance. However, being proficient in using spoken English does not mean HLSs are proficient in all the areas of English, such as reading, writing, and comprehension.

Previous research showed that teachers expressed the need for more support, resources, and professional development for meeting the needs of HLSs (Crawford et al., 2005); teachers in the current study also reported that they need support to meet the needs of HLSs as they lack of training to educate HLSs and they do not know how to support them. More than half of the teachers in the current study reported that they are not prepared to meet the needs of HLSs, which supports what Karabenick and Clemens-Noda (2004) found in their study where teachers felt significantly less confident to provide instructions for HLSs. This result points to a need for teachers to be trained to work with HLSs. This training should start at the preservice level and continue as in-service training. Teachers mentioned in their interviews that even though the school provided in-service training, they believed that they needed more information about specific cultures and how they could implement the information in their classrooms. It may be that teachers are looking for more examples of specific strategies that they can use. Therefore, in-service professional training can focus on training teachers to use practical strategies such as providing specific lesson plans and/or activities that incorporate different culture for teachers to take home. Recommended practices (Hansen-Thomas, 2008) also pointed out that staff professional development that focus on effective instruction for HLS students should be held for all teachers, not just for ELL teachers. This is to ensure that all teachers understand the

challenges that HLSs are encountering, so that they can work as team to provide effective strategies and instruction for HLSs.

Not be able to speak HLSs' heritage language and being uninformed about the students' culture were also barriers for teachers to support HLS students. Teachers indicated in the current study that teachers need to have some basic knowledge of HLSs' heritage language in order to support their language. Researchers (Szecsi et al., 2015) found that the ability to speak more than one language can predict teacher candidates' attitudes toward students' heritage language; therefore, preservice teachers should gain more experiences with knowing more than one language. Teachers who do not know other languages can also learn simple vocabularies of their HLSs' heritage language, and to interact with HLSs using their language to show that their heritage language are valued. Schools can also provide teachers with information about HLSs' home country so that they know where their students all come from. However, it is not saying in order to support HLSs' heritage language and culture, teachers need to speak students' language. The experience of learning a second language can open teachers' eyes to what the students are experiencing. The current study showed that teachers who can speak another language are more likely to implement students' heritage language and culture in the classroom. Through my observations, teachers who cannot speak students' language were also able to implement students' language and culture in their teaching. For example, during my observations, a teacher was talking about plants in a science class. While the students indicated that they want to find out different types of plants in different country, the teacher gave a group of students who come from Africa a map of Africa and joined their conversation about where they come from and what plants they have seen in their countries. The teacher did not plan to incorporate students' culture in his science lesson; however, he followed the students' lead to unexpectedly implement their

culture in the lesson, which gave the opportunity for both teacher and students to learn different countries and share their culture. Teachers also reported preparing books in HLSs' heritage language for HLSs to use both at school and at home. Sheltered Instruction approach also recommended that teachers can use bilingual dictionaries and library books in students' heritage language to incorporate HLSs' heritage language in the classroom (Graves, Gersten, & Haager, 2004). Teachers also reported that they would let students who speak the same heritage language help each other, and explain class content and assignment in their heritage language, which aligned with what Sheltered Instruction approach suggested (Lucas & Katz, 1994). These can be ways teachers implement students' heritage language and culture in the classroom even if teachers are not familiar with the language or culture.

Teachers mentioned in the interview that they do not have time to incorporate students' heritage language and culture as they always have heavy curriculum and assessment to cover in the classroom. Perhaps the school can release some burden of the teachers, also listen to teachers' voices regarding their needs and their students' needs, as well as giving advice or referring them to professional development or trainings about how to incorporate HLSs language and culture in the classroom. In addition, school can hire more teachers and translators that can speak more languages, especially languages that are spoken by small populations, such as Karen, English Creole, Somali, Dinka, Kirundi, and Burmese.

In addition to the challenges regular classroom teachers were experiencing to meet the needs of HLSs, the ELL program also faced dilemmas. Teachers and principals demonstrated in the interview that they rely on ELL teachers to support HLSs' heritage language and culture, as well as communicate with parents about HLSs' heritage language development. Whereas, one ELL teacher mentioned that they (ELL teachers) do not talk with parents about HLSs' heritage

language. Pettit (2011) indicated that classroom teachers need to take responsibility for HLSs' learning in their classrooms, instead of relying on ELL teachers to take this role. To relate to the current study, supporting HLSs' heritage language and culture is not just ELL teachers' responsibility, but is for all classroom teachers to promote and support HLSs' language and culture every day in the classroom. Even though teachers are busy with what is already going on in the classroom, with recognizing the benefits of maintaining students' heritage language and culture, classroom teachers can take the responsibility to support the maintenance of their students' heritage language and culture. Just as one ELL teacher said, "ELL is just 30 minutes, 60 minutes a day is wrong. It really is thinking of how we can accommodate but also how we can celebrate these students and their culture all day long." In addition, the curriculum in the regular classroom and the ELL classroom can be connected so that they know what is happening in each classroom, and the ELL teacher also focus on what has been taught in the regular classroom and strengthen HLS's skills and knowledge in the ELL classroom. Furthermore, school needs to work closely with HLSs family members when referring them to the ELL program, to explain that the ELL program is not a punishment or judgement to label their children as HLS, but a service that can benefit their children. As the ELL teacher mentioned, the root of ELL is not just to teach HLSs conversation language, but also the academic language. Rea and Mercuri (2006) also suggested that students need to know both languages to be successful. Academic language is usually used in textbooks, classroom settings and formal writing, which HLSs can learn more in the ELL classroom.

### **Limitations**

This study has some limitations. Because there is little research examining how K-12 teachers support students' heritage language and culture, there is no existing interview or

observation instruments. Therefore, I created my own interview and observation instruments using my personal experience and existing literature on what teachers can do to support students' heritage language and culture. Another limitation is related to the observation results. The findings showed that teachers implemented few classroom practices to support students' heritage language and culture. However, I only spent a maximum of two hours in each classroom on two different days to observe teachers' classroom practice, which might not be reflective of their typical classroom performance. Unexpected situations occurred in my observations such as: it was not a typical day, teachers' teaching schedule got delayed, or most of the time students were doing testing. In addition, during my observation at Elementary School A, incorporating students' heritage language and culture were not common in math class; and due to limited observation time I had, I did not particularly observe math classes in Elementary Schools B and C unless the teacher only taught math. Therefore, ideally researcher should spend two entire non-consecutive days in the classroom to observe teachers' classroom practices across different subjects, to capture a thorough perspective on how teachers value and support students' heritage language and culture.

Another limitation of the study is the small sample size from a limited geographic area. Even though the reliability of the Survey scale was high, the sample size was very small ( $N=37$ ). The results from observations, interviews, and the Survey may not be reflective of practices in other classrooms or schools. With a larger sample size the research measures could be submitted to explore the technical adequacy (such as factor analysis). Also, only teachers who participated in the face-to-face interview completed the Interview Questionnaire. If it was completed by all 39 teachers, I could get more information about teachers' classroom practices and how they prepared to tutor HLS students.



### **Future Research**

More classroom teachers from public elementary schools can be included for future research to examine their beliefs and classroom practices toward maintaining students' heritage language and culture using multiple measure. Future research can have a large sample ( $N \geq 100$ ) of teachers to fill out the Survey, so that factor analysis can be performed and the relationship between teachers' beliefs and classroom practices can be more strong. Future research can also involve spending more time in the classrooms to observe teachers' classroom practice, or spend fewer days but long period of time each day in the classroom to observe teachers' classroom practices across different subject areas. Participants of this study included teachers, principals and one school counselor. Future studies can also include HLS students, regarding their opinions on maintaining their heritage language and culture, how much they know about their heritage language and culture, and how school has supported their heritage language and culture, which can be conducted through either interview or questionnaire. If quantitative data are gathered from HLS students, researchers can also get students' English testing score and examine if there is a relationship between HLSs' reported heritage language skills and their academic performance. Future research can also examine other types of schools, such as schools who have dual language program or language immersion school, on how these schools support students learn both English and their heritage language, as well as how well the academic performance compared to regular public schools.

### **Conclusion**

This study explored classroom teachers' beliefs and classroom practices toward maintaining students' heritage language and culture using interviews, observations and a survey. A total of 43 participants were included in this study, including 39 classroom teachers, three

principals and one school counselor. Classroom observations were conducted among 39 teachers. Twenty-seven participants, including the principal and school counselor took part in the interview, and 37 teachers completed the Survey. The majority of the teachers believed HLSs need to maintain their heritage language and culture, and there is a variety of benefits to keep their heritage language. Schools also used different ways to welcome HLSs, appreciate different language and culture in the building, as well as meeting their different needs. Teachers and the principals illustrated different ways and strategies that schools are using to value and support HLSs' heritage language and culture, such as incorporating their language and culture in lessons and activities, involving family members to participate cultural activities, encouraging family members to support their children's heritage language and culture in the home setting, as well as making accommodations for HLSs such as incorporating Sheltered Instruction. The SIOP model and the Five Essential Elements of Cultural Proficiency guided by Vygotsky's theory served as the theoretical framework for this study. Both models guided teachers and principals' beliefs, behaviors and classroom/school practices to support and implement students' heritage language and culture in the building. Teachers demonstrated how they valued students' heritage language and culture, and how they implemented HLSs' language and culture through key features of the theoretical framework, including: lesson preparation on incorporating students' heritage language and culture, building on students' background knowledge, value diversity in the classroom, adapt diversity, using different strategies with HLSs, as well as using students' heritage language to interact with HLSs.

Findings of this study also showed that only some teachers were incorporating students' heritage language and culture during lessons and activities. As the majority of teachers mentioned that they are not prepared to teach HLSs, teachers need support, training, and

resources to guide them with specific classroom practices and strategies to meet the needs of HLSs. Only one school is incorporating the SIOP model, and the SIOP model can guide teachers to teach HLSs; therefore, more schools should use the SIOP model and train teachers to use this model with not only HLSs, but all students in the classroom. The ELL classroom is also a good place for students to learn extra academic English, and should also be a place HLSs can speak in their heritage language. The school should communicate with HLSs' family members about the benefits of having their children enrolled in the ELL classroom, so they will not refuse their children to take the ELL service.

This study also suggests that teachers should keep encouraging students to speak their heritage language in the classroom, and use ways to show them that their heritage language and culture are valued at school. Teachers mentioned that families need to support HLSs to maintain their heritage language. This study, along with previous research, demonstrate that teachers also need to perform actions at school to show that HLSs' heritage language and culture are welcomed in echo with the support they recommend that should be provided by family members. In addition, whether or not teacher can speak a different language can also affect how teachers support HLSs' heritage language and culture in the classroom. Therefore, teachers can find opportunities to learn another language and/or culture to help them better understand their HLS students and guide their teaching. School should also provide more professional training opportunities for teachers on how to teach HLSs, as it can relate to teachers' classroom practices on supporting students' heritage language and culture.

With approximately 1,000 new immigrant students enrolling in schools in the U.S. each day, schools' ability to accommodate the needs of HLSs population can have a great effect on the future of education in the U.S. Therefore, more research needs to be done examining

teachers' attitudes and classroom practices in supporting HLSs' heritage language and culture. It is also important that preservice training includes instruction about strategies to use with HLSs. It is valuable to be multilingual in our society. Schools should collaborate with teachers, HLS students and their family members to invest in helping students maintain their heritage language and culture.

## REFERENCES

- 2001-2016 Migration Policy Institute. (2016). ELL information center. Retrieved from <http://www.migrationpolicy.org/programs/ell-information-center>
- Amerian, M., & Mehri, E. (2014). Scaffolding: Definition, Steps, Features, Conditions, Tools, and Effective Considerations. *Scientific Journal of Review*, 3(7), 756-765.
- August, D., & Erickson, F. (2006). Qualitative studies of classrooms and school practices. In D. August & T. Shanahan (Eds.). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth* (pp. 489–522). Mahwah, NJ: Lawrence Erlbaum Associates.
- August, D., Shanahan, T., & Escamilla, K. (2009). English language learners: Developing literacy in second-language learners—Report of the National Literacy Panel on Language-Minority Children and Youth. *Journal of Literacy Research*, 41(4), 432-452.
- Bateman, B. E., & Wilkinson, S. L. (2010). Spanish for heritage speakers: A statewide survey of secondary school teachers. *Foreign Language Annals*, 43(2), 324-353.
- Benedict, C. (2006). Defining ourselves as other: Envisioning transformative possibilities. *Teaching Music in the Urban Classroom*, 1, 20-35.
- Bialystok, E., & Martin, M. M. (2004). Attention and inhibition in bilingual children: Evidence from the dimensional change card sort task. *Developmental Science*, 7(3), 325-339.
- Bondy, J. M. (2016). Negotiating domination and resistance: English language learners and Foucault's care of the self in the context of English-only education. *Race Ethnicity and Education*, 19(4), 763-783.
- Brecht, R. D., & Ingold, C. W. (2002). *Tapping a National Resource: Heritage Languages in the United States*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.

- Byrnes, D. A., Kiger, G., & Manning, M. L. (1997). Teachers' attitudes about language diversity. *Teaching and Teacher Education, 13*(6), 637-644.
- Cajkler, W., & Hall, B. (2012). Multilingual primary classrooms: An investigation of first year teachers' learning and responsive teaching. *European Journal of Teacher Education, 35*(2), 213-228.
- California Department of Education (1993). *A report on specially designed academic instruction in English (SDAIE)*. Sacramento, CA: Prepared by the work group of the Commission on Teacher Credentialing and the California Department of Education.
- Cambridge University Press. (2016). *Heritage*. Retrieved from <http://dictionary.cambridge.org/us/dictionary/english/heritage>
- Campbell, D. J. (2008). *The learning theory podcast. Episode 4*. Retrieved from [http://www.dancampbell.us/podcast/LTP-4\\_Vygotsky\\_ZPD.pdf](http://www.dancampbell.us/podcast/LTP-4_Vygotsky_ZPD.pdf)
- Center for Applied Linguistics. (2016). Core principles of the Alliance. *Alliance for the Advancement of Heritage language*. Retrieved from <http://www.cal.org/heritage/about/principles.html>
- Chang, J. M. (2004). *Family literacy nights: Building the circle of supporters within and beyond school for middle school English language learners* (Educational Practice Report No.11). Santa Cruz, CA and Washington, DC: Center for Research on Education, Diversity & Excellence.
- Cho, H. (2014). 'It's very complicated' exploring heritage language identity with heritage language teachers in a teacher preparation program. *Language and Education, 28*(2), 181-195.

- Cho, J., Rios, F., Trent, A., & Mayfield, K. (2012). Integrating language diversity into teacher education curricula in a rural context: Candidates' developmental perspectives and understandings. *Teacher Education Quarterly*, 39(2), 63-85.
- Clandinin, D. J., & Connelly, F. M. (2004). *Narrative inquiry: Experience and story in qualitative research*. CA: Jossey-Bass
- Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 255-296). New York: Macmillan.
- Collier, V., & Thomas, W. (2004). The astounding effectiveness of dual language education for all. *NABE Journal of Research and Practice*, 2(1), 1-20
- Collier, V.P., & Thomas, W.P. (1989). How quickly can immigrants become proficient in school English? *Journal of Educational Issues of Language Minority Students*, 5, 26-38.
- Compton, C. (2001). Heritage language communities and schools: Challenges and recommendations. In Peyton, J.K., Ranard, D.A., & McGinnis, S. (eds.), *Heritage language in America: Preserving A National Resource* (pp. 145-165). McHenry, IL: Center for Applied Linguistics and Delta Systems.
- Crawford, L., McDonald, M., Chesney, G. & Garza, A. V. (2005). *ELL survey: Colorado teachers*. University of Colorado, Colorado Springs.
- Crawford, L., Schmeister, M., & Biggs, A. (2008). Impact of intensive professional development on teachers' use of Sheltered Instruction with students who are English language learners. *Journal of In-service Education*, 34(3), 327-342.
- Crothers, K. (2008). Structured English Immersion in ESL Instruction. *Research Starters Education*, 1-10.

- Cultivating Culture. (2017). *The importance of cultural heritage*. Retrieved from <http://www.cal.org/heritage/about/principles.html>
- Cummins, J. (1981). *Bilingualism and minority-language children. (Language and literacy series)*. Toronto: OISE Press.
- Cummins, J. (1989). *Empowering minority students*. Covina: California Association for Bilingual Education.
- Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56(1), 18-36
- Cummins, J. (1994). The Acquisition of English as a Second Language, in Spangenberg-Urbschat, K. and Pritchard, R. (eds). *Reading Instruction for ESL Students*. Delaware: International Reading Association.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon: Multilingual Matters.
- Cummins, J. (2001b). Heritage language teaching in Canadian schools. In C. Baker and N.H. Hornberger (eds) *An Introductory Reader to the Writings of Jim Cummins* (pp. 252–257). Clevedon: Multilingual Matters.
- Cummins, J. (2005). A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. *The Modern Language Journal*, 89(4), 585-592.
- Cunningham-Andersson, U. & Andersson, S. (2011). *Growing up with two languages: a practical guide for the bilingual family*. New York, NY: Routledge.
- Dalton, S. S. (2007). *Five standards for effective teaching: How to succeed with all learners*. San Francisco: Jossey-Bass.



- Damen, L. (1987). *Culture learning: The fifth dimension on the language classroom*. MA: Addison-Wesley.
- De Angelis, G., & Dewaele, J. M. (2009). The development of psycholinguistic research on cross-linguistic influence. In L. Aronin & B. Hufeisen (Eds.), *The Exploration of Multilingualism* (pp. 63-77). Amsterdam: John Benjamins.
- De Angelis, G. (2011). Teachers' beliefs about the role of prior language knowledge in learning and how these influence teaching practices. *International Journal of Multilingualism*, 8(3), 216-234.
- DeCuir-Gunby, J. T. & Schutz, P. A. (2016). Chapter 7. The heart of the mixed methods research plan. *Developing a mixed methods proposal: A practical guide for beginning researchers*. Thousand Oaks, CA: Sage.
- Delpit, L. D. (2006). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.
- Denzin, N. K., & Lincoln, Y. S. (2011). *Handbook of qualitative research*. CA: Sage.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112.
- Echevarria, J., Short, D. J., Peteron, C. (2012). *Using the SIOP model with pre-k and kindergarten English learners*. Boston, MA: Pearson.
- Echevarria, J., & Graves, A. W. (2015). *Sheltered content instruction: Teaching English language learners with diverse abilities*. Los Angeles, CA: Pearson Allyn and Bacon.
- Encyclopædia Britannica, Inc.. (2016). *Language*. Retrieved from <http://www.britannica.com/topic/language/Language-and-culture>

- Ensign, J. (2003). Including culturally relevant math in an urban school. *Educational Studies* 34, 414-23.
- Fishman, J. A. (Ed.). (2001). Can threatened languages be saved?: reversing language shift, revisited: a 21st century perspective (Vol. 116). *Multilingual Matters*.
- Fitzpatrick, K. R. (2012). Cultural Diversity and the Formation of Identity Our Role as Music Teachers. *Music Educators Journal*, 98(4), 53-59.
- Fredricks, D. E., & Warriner, S. D. (2016). "We speak English in here and English only!": Teacher and ELL youth perspectives on restrictive language education. *Bilingual Research Journal*, 39(3-4), 309-323.
- Frey, L., Botan, C., & Kreps, G. (1999). Chapter 10: Naturalistic Research. *Investigating communication: An introduction to research methods*. (2nd ed.). Boston: Allyn & Bacon.
- Fry, R. (2008). *The role of schools in the English language learner achievement gap*. Washington, DC: Pew Hispanic Center.
- Gabszewicz, J., Ginsburgh, V., & Weber, S. (2011). Bilingualism and communicative benefits. *Annals of Economics and Statistics*, 271-286.
- Galambos, J. S., & Goldin-Meadow, S. (1990). The effects of learning two languages on levels of metalinguistic awareness. *Cognition*, 34(1), 1-56.
- Gándara, P., & Orfield. G. (2012). Segregating Arizona's English learners: A return to the 'Mexican Room'? *Teachers College Record*, 114(9), 1-27.
- García-Nevarez, A. G., Stafford, M. E., & Arias, B. (2005). Arizona elementary teachers' attitudes toward English language learners and the use of Spanish in classroom instruction. *Bilingual Research Journal*, 29(2), 295-317.

- Gay, G. (2005). Educational equality for students of color. In J.A. Banks & C.A.M. Banks (Eds.), *Multicultural Education: Issues and Perspectives* (pp. 211-241). Hoboken, NJ: John Wiley.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.
- Gkaintartzi, A., Kiliari, A., & Tsokalidou, R. (2015). 'Invisible' bilingualism—'invisible' language ideologies: Greek teachers' attitudes towards immigrant pupils' heritage languages. *International Journal of Bilingual Education and Bilingualism*, 18(1), 60-72.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112.
- Grant, C. A., Elsbree, A. R., & Fondrie, S. (2004). A decade of research on the changing terrain of multicultural education research. *Handbook of Research on Multicultural Education*, 2, 184-207.
- Graves, A. W., Gersten, R., & Haager, D. (2004). Literacy instruction in multiple-language first-grade classrooms: Linking student outcomes to observed instructional practice. *Learning Disabilities Research & Practice*, 19(4), 262-272.
- Grosjean, F. (2012). *Bilinguals in the United States*. Retrieved from <http://www.psychologytoday.com/blog/life-bilingual/201205/bilinguals-in-the-united-states>
- Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, 1(1), 10-11.
- Hansen-Thomas, H. (2008). Sheltered Instruction: Best practices for ELLs in the mainstream. *Kappa Delta Pi Record*, 44(4), 165-169.

- Hayes, D. W. (1993). Educating the hip-hop generation: Communication barriers offset efforts to reach young minds. *Black Issues in Higher Education*, 10(14), 30-33.
- Herrera, S. G., & Murry, K. G. (2010). *Mastering ESL and Bilingual Methods: Differentiated Instruction for Culturally and Linguistically Diverse (CLD) Students*. Boston: Pearson Allyn and Bacon.
- Hinton, L. (1999). *Involuntary language loss among immigrants: Asian-American linguistic autobiographies*. Washington, DC: Office of Educational Research and Improvement.
- Hofstede, G. (1997). *Cultures and organizations: Software of the mind*. New York: McGraw Hill.
- Hopkins, M. (2013). Building on our teaching assets: The unique pedagogical contributions of bilingual educators. *Bilingual Research Journal*, 36(3), 350-370.
- Howard, T. C. (2001). Powerful pedagogy for African American students: Conceptions of culturally relevant pedagogy. *Urban Education*, 36(2), 179-202.
- Howard, E. R., Lindholm-Leary, K. J., Sugarman, J., Christian, D., & Rogers, D. (2007). *Guiding principles for dual language education*. Washington, DC: U.S. Department of Education and National Clearinghouse for English Language Acquisition.
- ICOMOS. (2002). *International cultural tourism charter. Principles and guidelines for managing tourism at places of cultural and heritage significance*. ICOMOS International Cultural Tourism Committee.
- LeCompte, M. D. (2000). Analyzing qualitative data. *Theory into Practice*, 39(3), 146-154.
- Iowa Department of Education. (2015). *2015-2016 Iowa public school K-12 limited English proficient students (LEP) by district and grade*. Retrieved from

<https://www.educateiowa.gov/documents/english-language-learner-ell/2015/12/2015-2016-iowa-public-school-k-12-limited-english>

Iowa Department of Education. (2015). *The annual condition of education report 2015*.

Retrieved from

<https://www.educateiowa.gov/sites/files/ed/documents/2015ConditionOfEducation.pdf>

Iowa Department of Education. (2017). *2016-2017 Iowa public school building prek-12*

*enrollments by school, grade, race and gender*. Retrieved from

<https://www.educateiowa.gov/documents/public-buildings-public/2017/01/2016-2017-iowa-public-school-building-prek-12-enrollments>

Irvine, J. J. (2003). *Educating teachers for diversity: Seeing with a cultural eye*. New York: Teachers College Press.

Jiménez, R. T. (2003). Literacy and Latino students in the United States: Some considerations, questions, and new directions. *Reading Research Quarterly*, 38(1), 122-128.

Karabenick, S. A., & Noda, P. A. C. (2004). Professional development implications of teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal*, 28(1), 55-75.

Kondo, K. (1998) Social-psychological factors affecting language maintenance: Interviews with Shin Nisei university students in Hawaii. *Linguistics and Education* 9 (4), 369–408.

Krashen, S. (1998). *Condemned without a trial: Bogus arguments against bilingual education*. Portsmouth, NH: Heinemann.

Kuzborska, I. (2011). Links between teachers' beliefs and practices and research on reading. *Reading in a Foreign Language*, 23(1), 102.

- Lacorte, M., & Canabal, E. (2005). Teacher Beliefs and Practices in Advanced Spanish Classrooms. *Heritage Language Journal*, 3(1), 83-107.
- Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco: Jossey-Bass.
- Lanehart, S. (1998). African American vernacular English and education. *Journal of English Linguistics*, 26, 122-136.
- Laursen, B., Little, T. D., & Card, N. A. (Eds.). (2012). *Handbook of developmental research methods*. Guilford Press.
- Lee, J. S., & Oxelson, E. (2006). "It's not my job": K-12 teacher attitudes toward students' heritage language maintenance. *Bilingual Research Journal*, 30(2), 453-477.
- Lee, J. S., & Shin, S. J. (2008). Korean heritage language education in the United States: The current state, opportunities, and possibilities. *Heritage Language Journal*, 6(2), 1-20.
- Lindsey, R. B., Robins, K. N., & Terrell, R. D. (2009). *Cultural proficiency: A manual for school leaders*. Corwin Press.
- Lucas, T., & Katz, A. (1994). Reframing the debate: The roles of native languages in English-only programs for language minority students. *Tesol Quarterly*, 28(3), 537-561.
- Marzano, R. J. (2004). *Building background knowledge for academic achievement: Research on what works in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McIntyre, E., Kyle, D., Chen, C. T., Muñoz, M., & Beldon, S. (2010). Teacher learning and ELL reading achievement in Sheltered Instruction classrooms: Linking professional development to student development. *Literacy Research and Instruction*, 49(4), 334-351.
- Mercer, N. and Fisher, E. (1998). How do teachers help children to learn? An analysis of teachers' interventions in computer-based activities. In D. Faulkener, K. Littleton and M.

- Woodhead (Eds.), *Learning Relationships in the Classroom*, (pp.111-130). London: Routledge.
- Miller, D. (2002). *Reading with meaning: Teaching comprehension in the primary grades*. Portland, ME: Stenhouse.
- National Center for Education Statistics (2013). *Average National Assessment of Educational Progress (NAEP) reading scale score, by grade and selected student and school characteristics: Selected years, 1992 through 2013*. Retrieved from [http://nces.ed.gov/programs/digest/d13/tables/dt13\\_221.10.asp](http://nces.ed.gov/programs/digest/d13/tables/dt13_221.10.asp)
- National Center for Education Statistics. (2016). *English language learners in public schools*. Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_cgf.asp](http://nces.ed.gov/programs/coe/indicator_cgf.asp)
- National Education Association. (2011). *Professional development for general education teachers of English language learners*. Retrieved from [http://www.nea.org/assets/docs/PB32\\_ELL11.pdf](http://www.nea.org/assets/docs/PB32_ELL11.pdf)
- Ovando, C. J., & Combs, M. C. (2011). *Bilingual and ESL classrooms: Teaching in multicultural contexts*. New York: McGrawHill.
- Peck, B. (1993). The language explosion: Europe starts it early. *Phi Delta Kappan*, 9, 91-92
- Peterson, S. S., & Heywood, D. (2007). Contributions of families' linguistic, social, and cultural capital to minority-language children's literacy: Parents', teachers', and principals' perspectives. *Canadian Modern Language Review*, 63(4), 517-538.
- Pettit, S. K. (2011). Teachers' beliefs about English language learners in the mainstream classroom: A review of the literature. *International Multilingual Research Journal*, 5(2), 123-147.

- Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008) *Classroom assessment scoring system manual pre-k*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Rea, D. M., & Mercuri, S. P. (2006). *Research-based strategies for English language learners*. Portsmouth, NH: Heinemann.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. *Handbook of Research on Teacher Education*, 2, 102-119. New York, NY: Macmillan.
- Proposition 203. (2000). *English language education for children in public schools*. Retrieved from <http://www.ade.state.az.us/oelas/proposition203.pdf>. T. Pac/PGDT 11 (2012) 192-210 209
- Proposition 227. (1998). *English language education for children in public schools*. Retrieved from <http://www.onenation.org/fulltext.html>
- Robinson, K., & Diaz, C. J. (2005). *Diversity and difference in early childhood education: Issues for theory and practice*. Milton Keynes, United Kingdom: Open University Press.
- Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V., & Christiansen, K. (2013). Parenting interactions with children: Checklist of observations linked to outcomes (PICCOLO) in diverse ethnic groups. *Infant Mental Health Journal*, 34(4), 290-306.
- Rothman, J. (2014). The meaning of “culture”. *The New Yorker*. Retrieved from <http://www.newyorker.com/books/joshua-rothman/meaning-culture>
- Rueda, R., & Garcia, E. (1996). *Teachers' beliefs about reading assessment with Latino language minority students*. Washington, DC: Office of Education Research and Improvement.



- Question 2. (2002). Law proposed by initiative petition in the official Massachusetts information for voters: *The 2002 Ballot Questions*. Retrieved from <https://www.sec.state.ma.us/ele/elepdf/ifv02.pdf>
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. CA: Sage.
- Salomone, R. (2010). *True American: Language, identity, and education of immigrant children*. Cambridge, MA: Harvard University Press.
- Salzmann, Z., Stanlaw, J., & Adachi, N. (2014). *Language, culture, and society: An introduction to linguistic anthropology*. Westview Press.
- Sapir, E. (1970). *Selected writings in language, culture, and personality*. University of California Press.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63-75.
- Shin, S. J. (2012). *Bilingualism in schools and society: Language, identity, and policy*. Routledge.
- Soto, L. D., Smrekar, J. L., & Nekkovei, D. L. (1999). Preserving home languages and culture in the classroom: Challenges and opportunities. *Directions in Language and Education*. No.13.
- Stuft, D. L., & Brogadir, R. (2011). Urban principals' facilitation of English language learning in public schools. *Education and Urban Society, 43*(5), 560-575.
- Szececi, T., Szilagyi, J., & Giambo, D. A. (2015). Attitudes and beliefs of teacher candidates regarding heritage language maintenance. *Heritage Language Journal, 12*(1), 75-99

- Tabors, P. O. (1998). What early childhood educators need to know: Developing effective programs for linguistically and culturally diverse children and families. *Young Children, 53*(6).
- Tannenbaum, M., & Howie, P. (2002). The Association between language maintenance and family relations: Chinese immigrant children in Australia. *Journal of Multilingual and Multicultural Development, 23*, 408-424
- Thar, R. G., Estrada, P., Dalteen, S. S., and Yamauchi, L. (2000). *Teaching transformed: Achieving excellence, fairness, inclusion and harmony*. Boulder, CO: Westview Press.
- Thomas, W., & Collier, V. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. *Center for Research on Education, Diversity & Excellence*. Retrieved from <http://files.eric.ed.gov/fulltext/ED475048.pdf>.
- Thomas, W., & Collier, V. (2012). *Dual language education for a transformed world*. Albuquerque, NM: Fuente Press.
- Thurley, S. (2005). Into the future. Our strategy for 2005-2010. *Conservation Bulletin, 49*(2).
- Torres-Burgo, N., Reyes-Wasson, P., & Brusca-Vega, R. (1999). Perceptions and needs of Hispanic and non-Hispanic parents of children receiving learning disabilities services. *Bilingual Research Journal, 23*(4), 373-387.
- Tse, L. (2001). Resisting and reversing language shift: Heritage language resilience among U.S. native biliterates. *Harvard Educational Review, 71*(4), 676-706.
- U.S. Department of Health & Human Services (2016). *Strategies for supporting all dual language learners*. Retrieved from <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic>

- U.S. English (2014). *Official English*. Retrieved from <http://www.us-english.org/view/11>
- Valdés, G. (2001). Heritage Language Students: Profiles and possibilities. In J. K. Peyton, D. A. Ranard & S. McGinnis (Eds.), *Heritage language in America: Preserving a national resource* (pp. 37-77). Washington, DC: Center for Applied Linguistics/Delta Systems.
- Veltman, C. J. (1983). *Language shift in the United States* (No. 34). Walter de Gruyter.
- Vygotsky, L. (1962). *Thought and language* (E. Hanf-mann & G. Vakar, Trans.). Cambridge, MA: MIT Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. (1982). Vosprijatie i ego razvitije v detskom vozraste. In Vygotsky, L.S. *Collected works*. In 6 volumes. Vol.2, pp.363-81. Moscow: Pedagogica.
- Vygotsky, L. S. (1987). *The collected works of LS Vygotsky: Vol. 1, Problems of general psychology* (RW Rieber & AS Carton, Eds., N. Minick, trans.). New York: Plenum.
- Wardhaugh, R. (2010). *An introduction to sociolinguistics*. John Wiley & Sons.
- Welch and the IPinCH Project. (2014). *Cultural heritage*. Retrieved from [http://www.sfu.ca/ipinch/sites/default/files/resources/fact\\_sheets/ipinch\\_chfactsheet\\_final.pdf](http://www.sfu.ca/ipinch/sites/default/files/resources/fact_sheets/ipinch_chfactsheet_final.pdf)
- Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education*. New York: Cambridge University Press.
- Wiley, T. G., & Valdés, G. (2000). Editors' introduction: Heritage language instruction in the United States: A time for renewal. *Bilingual Research Journal*, 24(4), i-v.
- Wolcott, H. F. (1994). *Transforming qualitative data: Descriptive, analysis, and interpretation*. Thousand Oaks, CA: Sage.

Wong-Fillmore, L. (2000). Loss of family languages: Should educators be concerned? *Theory Into Practice*, 39(4), 203-210

Zheng, H. (2009). A review of research on EFL preservice teachers' beliefs and practices. *Journal of Cambridge Studies*, 4(1), 73-81.

**APPENDIX A. INTERVIEW**

## Teacher Interview about Student Heritage Language and Culture

Grade level: \_\_\_\_\_ Teacher ID: \_\_\_\_\_

## Definition of Heritage Language

In the context of United States, heritage language means a language other than English that is frequently used by immigrant families and their children, and can be also called as “mother tongue,” “native language,” and “home language.”

## Definition of Heritage Culture

Heritage culture is an explanation of the ways of living that developed by a group of people and passed on by generations, including their customs, practices, beliefs, values, traditions and lifestyles

## Teacher/classroom demographic questions:

1. Number of students in your classroom \_\_\_\_\_
2. Number of ELL students in your classroom \_\_\_\_\_
3. Tell me about your education background
4. How long have you been teaching overall and at this school?
5. Are you fluent in any other language than English?

## Short Answer Questions

1. Tell me about your perspective regarding maintaining one’s heritage language?
2. When a student talks in his or her heritage language in the classroom, tell me about your usual response/s?

3. Tell me about when and how you allow students to use their heritage languages in your classroom.
4. Describe how and when you use students' heritage languages to communicate with them
5. Describe what you do to support/help your students to maintain their heritage languages?
6. How (and when) do you communicate with parents about their children's heritage language development?
7. Describe how you make connections of students' heritage languages/cultures to the content you about to teach.
8. Describe different ways/strategies you use to re-engage students, when they are not engaged or interrupting the classroom? Describe how strategies may differ when working with English-speaking vs. heritage-speaking students.
9. Think of a time that you use students' heritage languages/culture to help them better understand the content during a typical lesson/activity.
10. How do you talk with both heritage language learners and English speakers about language use?
11. What are the ethnic backgrounds of heritage language students in your classroom?
12. What heritage languages do your students speak in your classroom?

13. Describe reasons why heritage language students are referred to and/or placed in the ELL class? Do you like this idea? How same or different regarding academic performance between ELL and non-ELL students?

#### Interview Questionnaire

14. What do you believe are the three skills that the heritage language speakers in your classroom have the greatest need to develop?
- Vocabulary
  - Grammar
  - Reading
  - Writing
  - Listening comprehension
15. In terms of your own professional training and experience, how prepared do you feel to address the special needs of heritage language students?
- Not at all prepared
  - Poorly prepared
  - Somewhat prepared
  - Adequately prepared
  - Very well prepared
16. If you received special preparation for teaching heritage language students, how did you receive it? Check all that apply.
- I have not received special preparation for teaching heritage language students
  - Methods classes in college
  - Professional development classes or workshops
  - Discussion with colleagues
  - Personal research
  - Other (please specify)
17. What areas you would like to receive professional development?
18. What special roles are heritage language students assigned to in your class (check all that apply)
- None
  - “native” informant on language
  - “native ” informant on culture
  - Other (please specify)

19. What accommodations are made for heritage language students in textbooks and materials for your class? Check all that apply
- Suggestions for how to adapt activities
  - Suggestions for how to adapt assessments
  - Special workbooks for heritage language students
  - Separate assessments for heritage language students
  - No accommodations are made in the textbooks and materials
  - Other (please specify)
20. How often do you make accommodations to instruction for your heritage language students
- Never
  - Rarely
  - Sometimes
  - Often
  - Almost always
21. How often do you make accommodations for heritage language students' assessment
- Never
  - Rarely
  - Sometimes
  - Often
  - Almost always
22. When students know and speak their heritage language, do you think that,
- It hinders the effective and rapid learning of English
  - It can facilitate the learning of English
  - It does not interfere with English learning
  - It depends on the heritage language
  - Other answers
23. Do you think that heritage language of the students should be taught at school? If yes, explain how it can be taught; If no, do you think who should support young children's heritage language learning?
- Teachers
  - Family members who speak the child's heritage language
  - a&b
  - others
  - don't know



## **APPENDIX B. OBSERVATION**

### Teacher's Practices Toward Students' Heritage Language And Culture

#### Clarification about “culture”

In this observational measure, “culture” includes differences and similarities among ethnicities, languages, geographic locations, and generations. Here are some examples for each category:

Ethnicity: culture differences and similarities among ethnic groups, such as African American and Asian

Language: differences and similarities among languages people speak

Geographic location: even living in the same country, life might be different in different regions. E.g., life in Florida might be different than life in New York City

Generation: differences between different generations, such as grandparents and parents, parents and children, grandparents and children

Classroom Environment on Heritage Language and Culture (CEHLC)

	Yes/No	Notes
1. The classroom has welcome signs and brochures in a variety of languages. Signs are easy for children and parents to recognize and understand		
2. Messages (both inside and outside the classroom) are easy to read for parents; written in other languages for diverse parents to understand		
3. Classroom has signs (e.g., pictures that show diversity) and labels that are understood by children. For example, the shelf is labeled in both English and Spanish.		
4. Presence of books in various languages		
5. Presence of books reflect diversity and different culture		
6. Presence of toys/items in diversity and culture (e.g. baby dolls in black and white)		
7. Student records/portfolios are written in easy to read languages for parents, especially for parents who have heritage language students		

Teacher’s Observation on Heritage Language and Culture (TOHLC)

Clearly: it happens more than once, or the behavior lasts for a long time-2 pts

Barely: it happens just once-1 pt

None: it doesn’t happen-0 pt

NA: no opportunity to observe

Items	Description	Clearly	Barely	None	Notes
1. Teacher allows students to use their heritage language	When a student talks in his or her heritage language, the teacher does not say “please speak English.” The teacher does not need to respond to the student, but allow this behavior to happen in the classroom				
2. Teacher uses students’ heritage language	Teacher talks to students in their heritage language, for example, teacher may say “gracias” to a student who speaks Spanish or “Ni Hao” to a student who speaks Mandarin				
3. Teacher uses languages other than English with students	When teacher is working with an HLS or non-HLS student, teacher says a different language, it doesn't have to be the language the HLS student speaks. For example, teacher may say "Bravo" in Spanish to praise any student				
4. Teacher responds to students’ heritage language	When a student talks in his or her heritage language, the teacher responds to the student either by saying the student’s				

Items	Description	Clearly	Barely	None	Notes
	heritage language or asking questions such as “what does that mean?”				
5. Teacher responds positively to students when they use a language other than English in an appropriate way	When a student uses a language other than English (it doesn’t have to be his or her heritage language), the teacher responds positively by either responding back to the student or asking the student “what do you mean.” The teacher does not show negativity when student uses another language.				
6. Teacher reinforces students when they talk in their heritage language	Teacher uses back and forth conversations with a student when he or she talks in their heritage language. Teacher can connect the students’ heritage language to their lives. For example, a student says “book” in Chinese, the teacher responds “wow that sounds interesting in Chinese, do you have any books in Chinese at home?”				
7. Teacher uses self-talk with HLS students	Teacher talks to heritage language student/s about what she/he is currently doing. Example: the teacher says “I’m cutting the paper through a line” as an heritage language student is watching				
8. Teacher uses parallel talk with HLS students	Teacher talks to heritage language student/s what the student is currently doing. Example: teacher says “You are drawing a butterfly!” to an HLS student.				
9. Teacher uses total physical response technique to help HLSs understand meanings in English	Teacher uses gestures or body languages to help heritage language students understand meanings in English. Example: teacher acts like an airplane when teaches students about the word “airplane.”				

Items	Description	Clearly	Barely	None	Notes
10. Teacher uses a different teaching strategy when working with HLS students (e.g. modeling, visuals, hands-on activities, demonstrations, gestures, body language)	Teacher uses a different teaching strategy when working with HLS students during small/large group or with individual HLS student. For example, teacher may use pictures to guide HLS students to read				
11. Teacher uses pictures or real objects to explain to students, especially to HLS students	When learning a new or an unfamiliar content, teacher may use a picture or a real object to explain to students about the content. Teacher may pay attention to HLS students to make sure they understand.				
*12. Teacher uses students' heritage language to help them understand the content during a typical lesson	Teacher mentions students' heritage language during a lesson; or if a student does not understand an English word, the teacher helps the student to understand by speaking the student's heritage language or asking other children to translate				
*13. Teacher teaches a lesson that reflects multiple culture/within authentic culture contexts	Teacher talks about different culture during a lesson, the content about the culture/s is authentic and easy for students to understand				
*14. Teacher let students make connections between their heritage language/culture/cultural background (experiences) and the content	Teacher mentions students' heritage language and/or culture, letting students connect their culture/languages to the content				

Items	Description	Clearly	Barely	None	Notes
*15. Teacher displays positive attitude toward all students, and pays attention to HLSs	Teacher asks questions and/or responds to individual heritage language students, not just to English-speaking children. When an heritage language student does not understand the content, the teacher is able to explain to the student and help his or her to re-engage with the lesson				
*16. Teacher uses strategies to re-engage HLSs when they are not fully engaged or interrupting the class	This item aims to discover if the teacher uses different ways to re-engage heritage language students, compare to English-speaking students, when they are not engaged or interrupting others during a typical lesson. For example, the teacher can say differently to heritage language students and non-heritage language students. (hint: write down what the teacher says and compare)				

\*Has to happen during a typical small/large group lesson

## APPENDIX C. SURVEY

### Teacher Survey

Instructions: This survey is about your beliefs and practices toward maintaining your students' heritage language and culture. Please read the statements carefully and rate to what extent you agree or disagree with the statement. We really appreciate your time.

I believe that...	Strongly disagree						Strongly agree
1. heritage language maintenance is the reasonability of the parents	1	2	3	4	5	6	7
2. frequent use of the heritage language deters students from learning English.	1	2	3	4	5	6	7
3. proficiency in the heritage language helps students in their academic progress.	1	2	3	4	5	6	7
4. proficiency in the heritage language helps students in their social development	1	2	3	4	5	6	7
5. the maintenance of the heritage language and culture is important for the student's development of his or her identity.	1	2	3	4	5	6	7
6. the maintenance of the heritage language and culture is the key to strengthening family ties.	1	2	3	4	5	6	7
7. the maintenance of the heritage language and culture is essential in keeping channels of communication open with parents.	1	2	3	4	5	6	7
8. schools should be invested in helping students maintain their heritage language and culture.	1	2	3	4	5	6	7

I believe that...	Strongly disagree						Strongly agree	
9. ideally schools should provide heritage language and culture maintenance.	1	2	3	4	5	6	7	
10. teachers should encourage students to maintain their heritage language and culture.	1	2	3	4	5	6	7	
11. students do value their heritage language and culture.	1	2	3	4	5	6	7	
12. heritage language instruction is beneficial for students' English language development.	1	2	3	4	5	6	7	
13. parents are not doing enough to support their children in their heritage language.	1	2	3	4	5	6	7	
14. parents do not seem to care about their children's maintenance of the heritage language and culture	1	2	3	4	5	6	7	
15. students can maintain their home culture even without maintaining the heritage language.	1	2	3	4	5	6	7	
16. it is a great idea that students go to heritage language schools (i.e. weekend language school).	1	2	3	4	5	6	7	
17. it is valuable to be multilingual in our society.	1	2	3	4	5	6	7	
18. schools should give credit to students who are attending Saturday schools.	1	2	3	4	5	6	7	
19. students who maintain their heritage language have a better chance of succeeding in the future.	1	2	3	4	5	6	7	
20. it is important that students are highly literate and fluent in both	1	2	3	4	5	6	7	



I believe that...	Strongly disagree						Strongly agree	
English and their heritage language.								
21. to help students maintain their heritage language, the teacher must have some basic knowledge of their language.	1	2	3	4	5	6	7	
22. teachers, parents, and schools need to work together to help students learn English and maintain their heritage language and culture.	1	2	3	4	5	6	7	
Practice								
23. I tell my students that their heritage language is important and valuable, but at school we must use English.	1	2	3	4	5	6	7	
24. I allow my students to speak in their heritage language in class.	1	2	3	4	5	6	7	
25. I talk to my students about how important maintaining their heritage language and culture is.	1	2	3	4	5	6	7	
26. In class, I have my students share their heritage language and culture every chance I get.	1	2	3	4	5	6	7	
27. I talk with parents to strategize on how we can help their children learn English and maintain their heritage language and culture	1	2	3	4	5	6	7	
28. I visit students' homes to find out more about their home culture and language.	1	2	3	4	5	6	7	
29. I advise parents to help their children learn to speak English faster by speaking English in the home.	1	2	3	4	5	6	7	

I believe that...	Strongly disagree						Strongly agree
30. I praise the students for knowing another language and culture.	1	2	3	4	5	6	7
31. I allow students to use their heritage language in completing class work or assignments.	1	2	3	4	5	6	7
32. I make an effort to learn my students' heritage language.	1	2	3	4	5	6	7
33. In my teaching, I plan equal importance and value on knowing both English and the heritage language.	1	2	3	4	5	6	7

#### **APPENDIX D. SURVEY REVISIONS**

The original survey was developed by Lee and Oxelson (2006) contained 35 items. After conducting a Varimax Principal Component Factor Analysis, the authors removed five items from the survey because the factor loadings were below .400. Twenty-eight items were included in the final correlation and regress. Therefore, I used all the remaining 30 items and added and adapted three items in Angelis's (2011) survey, which was a modification of Lee and Oxelson (2006)'s survey. Thus, my Survey was consisted of 33 items. To perform correlation analyses, items 1, 11, 13, 14, 21 were deleted since they were not measuring teachers' beliefs that support students' heritage language and culture. For example, if teachers picked higher scales (5-7), it does not mean that they had more positive attitudes toward supporting students' heritage language than those who picked lower scales (1-3). Item 1 is asking the teacher if they believe that heritage language maintenance is the responsibility of the parents, which can be a controversial since teachers can hold both beliefs that it is both of the parents' and teachers' responsibility. Item 11 was about teachers' beliefs regarding if children value their heritage language and culture, which was not related to their beliefs and classroom practices toward students' heritage language and culture. Items 13 and 14 were about teachers' beliefs regarding parents' involvement in maintaining their children's heritage language and culture, which were not about what they believe and how they implement students' heritage language and culture in their classroom. Item 21 was about if teachers think they need to have some basic knowledge of students' heritage language to support students maintain their heritage language. Almost one third of the teachers were neutral about this statement, 32% of teachers believed they did not need to have basic knowledge of students' heritage language in order to support them; 39% of teachers believed the opposite. Research also showed that monolingual teachers can still show

interests and support their students to maintain their students' heritage language (Gutierrez, 2002; Hopkins, 2013, Lee & Oxelsen, 2006). Therefore, I did not include this item in the final analysis since if teachers were disagree with this statement, it cannot indicate that they would have a negative attitude toward students' heritage language and culture.

Items 2, 15, 23, 29 were reverse-coded as they were negatively correlated with all other items, which meant they went with the opposite direction. Eventually, Twenty-eight items were included in the final correlation and regression analysis.

## APPENDIX E. IRB INITIAL APPROVAL AND LAST MODIFICATION APPROVAL

IOWA STATE UNIVERSITY  
OF SCIENCE AND TECHNOLOGY

Institutional Review Board  
Office for Responsible Research  
Vice President for Research  
1138 Pearson Hall  
Ames, Iowa 50011-2207  
515-294-4366  
FAX 515-294-4267

**Date:** 1/26/2016

**To:** Liuran Fan  
73 LeBaron

**CC:** Dr. Gayle Luze  
51B LeBaron Hall

**From:** Office for Responsible Research

**Title:** Teacher's Understanding and Practices Toward Students' Heritage Languages and Culture

**IRB ID:** 15-656

**Approval Date:** 1/26/2016

**Date for Continuing Review:** 11/30/2017

**Submission Type:** New

**Review Type:** Full Committee

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- **Retain signed informed consent documents for 3 years after the close of the study**, when documented consent is required.
- **Obtain IRB approval prior to implementing any changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- **Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or [IRB@iastate.edu](mailto:IRB@iastate.edu).

**IOWA STATE UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

Institutional Review Board  
Office for Responsible Research  
Vice President for Research  
2420 Lincoln Way, Suite 202  
Ames, Iowa 50014  
515 294-4566

**Date:** 1/3/2017

**To:** Liuran Fan  
73 LeBaron

**CC:** Dr. Gayle Luze  
51B LeBaron Hall

**From:** Office for Responsible Research

**Title:** Teacher's Understanding and Practices Toward Students' Heritage Languages and Culture

**IRB ID:** 15-656

**Approval Date:** 1/3/2017

**Date for Continuing Review:** 11/30/2017

**Submission Type:** Modification

**Review Type:** Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.