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English as a second language: The impact of teacher responsiveness to implementing the  
Sheltered Instruction Observation Protocol model  
Diana Meza

A thesis submitted to the Graduate Faculty of  
JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Master of Science in Education

Learning Technology and Leadership Education

May 2010

## **Dedication**

I dedicate this research to my parents Leoncio and Beatriz for always supporting me from a distance and their encouragement to accomplish my dreams. Also to my boyfriend Felix Wang for sitting by my side and making me tea during all those long hours of writing!

## **Acknowledgements**

I would like to thank my committee chair, Dr. Jane Thall. Aside from being my committee chair, she was also an advisor, mentor, friend, and a mom during my graduate career. Without her constant support, guidance, and motivation, this research would not be possible.

Also, I would like to express my gratitude to Dr. Diane Wilcox and Dr. Ruth Bosch for their advice and knowledge on this study and as readers on my committee. Lastly, I want to thank Jennifer Stollery and Bahar Mikael for their endless feedback and helping me to see the light at the end of the tunnel.

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## **Abstract**

The purpose of this study was to examine teacher attitudes towards and resistance to the implementation of the SIOP model in their classrooms at Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School. Caused by the passing of the No Child Left Behind Act of 2001 which has required school administrators make changes in the curricula and implement a variety of teaching methods to meet student needs and help them to succeed in school. This paper reviews how language, signs, and symbols affect and influence how a person learns and acquires new knowledge. This study is analyzed through the lens of the changing demographic environment, the curriculum change, teacher attitudes toward curriculum change, teacher resistance to change, and Sheltered Instruction Observation Protocol (SIOP) model implementation. The central finding of this study reveals that time is one of the biggest barriers to implementation of the SIOP model.

*Keywords:* English as a second language (ESL), sheltered instruction, Sheltered Instruction Observation Protocol (SIOP), English language learners (ELLs).

## **Introduction**

*“Educational Change depends on what teachers do and think – it’s as simple and as complex as that”*

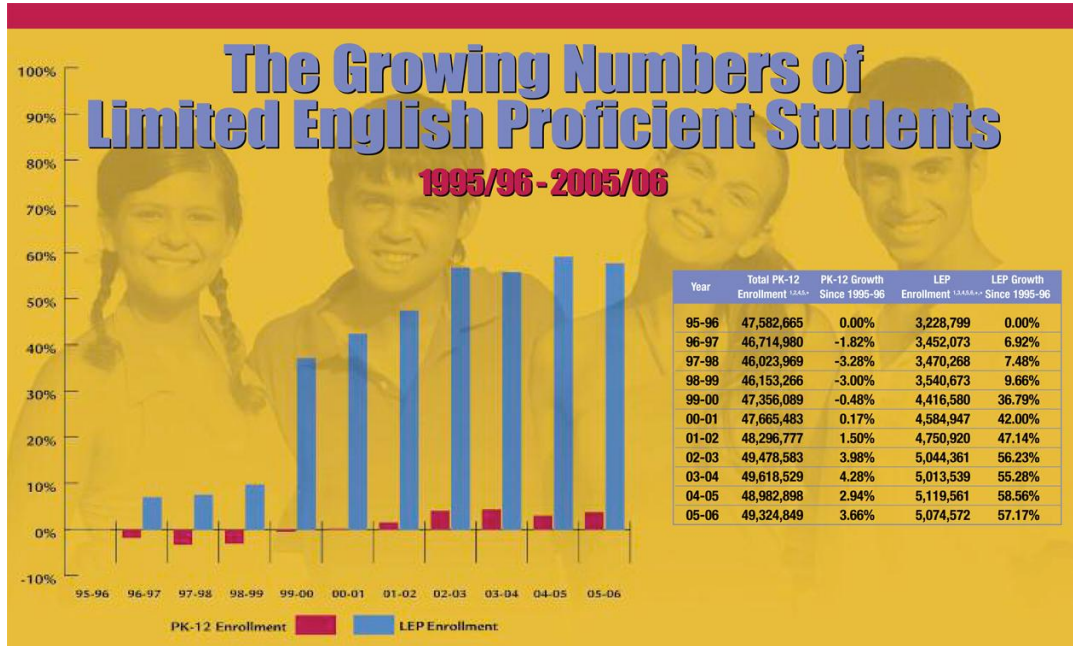
- Fullan (1991)

### **Introduction and Problem Statement**

As the Hispanic population in the United States continues to grow at a fast rate, public school educators must meet the challenges of a diverse classroom to help students succeed in school and perform at the appropriate academic standards level (Echevarria, Short, & Powers, 2006). The National Clearing House for English Language Acquisition (n.d) reports that from the 1995-1996 school year to 2005-2006 the category of Limited English Proficient (LEP) students in the United States increased by 57% (see figure 1). In Virginia there was an increase of 215% (see figure 2). The U.S census data (U.S. Census Bureau, 2007) indicated that 12.54% of the population in 2006 was foreign born. In addition, 19.7% of the foreign born population stated that they speak a language other than English at home, and 8.7% portrayed themselves as speaking English less than “very well.”

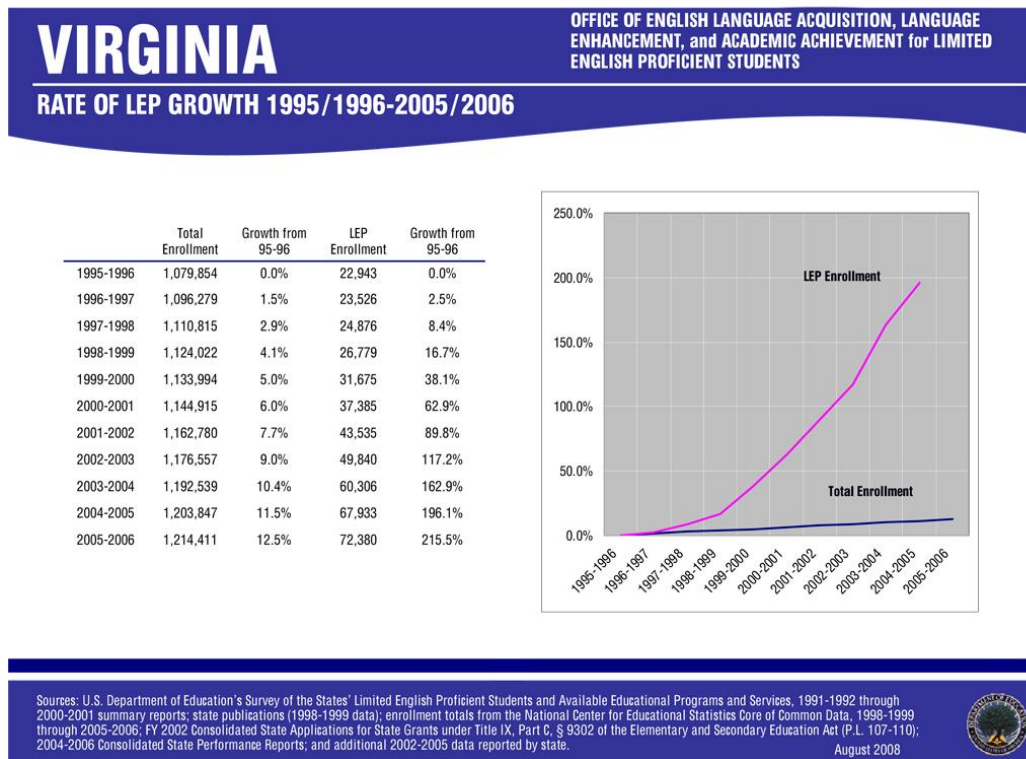
**Figure 1.**

**The growing numbers of Limited English Proficient students' in the United States from 1995/96-2005/06 (National Clearinghouse for English Language Acquisition, retrieved November 13, 2009).**



**Figure 2.**

**The growing numbers of Limited English Proficient students' in Virginia from 1995/96-2005/06 (National Clearinghouse for English Language Acquisition, retrieved November 13, 2009).**



Since the No Child Left Behind (NCLB) Act of 2001 (U.S. Department of Education, 2002; Congress, 2002) was implemented, many states have required that students pass particular subject area tests to obtain a high school diploma. Unfortunately, there are growing numbers of English Language Learners (ELLs) who do not receive high school diplomas because they have failed high stakes standards of learning tests despite fulfilling all other graduation requirements (Snow & Biancarosa, 2003). If no

child is to be left behind in school, regardless of English proficiency level or academic background, significant changes must be made in the way ELLs are educated. The goal of high academic standards for all students is admirable, but the way to achieve that goal must be reviewed because the current achievement of ELLs is very poor (Olson, 2003). The main goals of the NCLB Act of 2001 are to ensure that students who are not fluent in English obtain a quality education and attain the same academic success as their English proficient peers (National Clearing house, 2008).

Some of the various proven instructional methods used to teach ELLs include: The Language Experience Approach (LEA), Cooperative Learning, the Eclectic Approach, ESL pull-out, ESL class period, ESL resource center, and sheltered instruction (Abadiano & Turner, 2002). The LEA and the Cooperative Learning models are mostly use in adult classrooms. Sheltered instruction on the other hand is considered to be the most effective for ELLs. Sheltered Instruction is a method used for teaching subject matter to ELLs in tactical ways that makes the content easier to comprehend and advances English language development.

The SIOP model was chosen for this study, because it is a model that takes features from different successful ESL instructional methods established over the last 20 years. In addition, the SIOP model advances the academic success of ELLs and provides a foundation for adjusting instruction (Short & Echevarria, 2004/2005; Echevarria, 2005). The SIOP model gives teachers flexibility with its implementation, and when implemented constantly it helps ELLs succeed in school (Echevarria & Short, 2007).

SIOP was also designed, used, analyzed and redesigned by researchers and teachers making the model suitable for actual teachers (Echevarria et al., 2006).

At Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School, a new model of instruction, Sheltered Instruction Observation Protocol (SIOP), is being used to teach English to English language learners. According to the Center for Applied Linguistics (2009), the “SIOP model is a research-based and validated instructional model that has proven effective in addressing the academic needs of English learners throughout the United States” (para. 1). The protocol consists of 30 items assembled into eight main components: Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice / Application, Lesson Delivery, and Review / Assessment (Echevarria, Vogt, & Short, 2004; Echevarria et al., 2006; Echevarria, Short & Powers, 2008). These components accentuate the instructional practices that are essential for second language learners, in addition to high quality practices that favor all students (Echevarria et al., 2004; Center for Applied Linguistics, 2009). The SIOP model shares many attributes with other models of effective instruction like plans for reading comprehension, supportive learning, and diversified instruction (Echevarria et al., 2006). In addition, it adds critical features for the academic success of ELLs, like the expansion of background knowledge, the addition of language objectives in every lesson, the prominence on academic literacy practice, and the gaining of content related vocabulary (Echevarria, 2005; Echevarria et al., 2008).

Empirical evidence has shown that students who attend classes with teachers who incorporate the SIOP model perform better than those who attend classes where the SIOP

model is not in use (Echevarria, Short & Powers, 2003; Echevarria et al., 2004; Echevarria et al., 2008). The SIOP model has been tested in a broad range of classroom situations (see Table 1). Further, an initial study of students' writing (using pre-and post-tests), demonstrated that students who engaged in classes taught by teachers educated in the SIOP model notably enhanced their writing skills more than students in classes with teachers who were not trained in the model (Echevarria et al., 2004).

**Table 1.**

**Echevarria et al., (2004) Study of SIOP Implementation in Different Classroom Situations.**

In classrooms with a mix of native and non native English speakers
In classroom where students are all ELLs
In classrooms with students who have been in U.S. schools for several years
In classrooms with students who are recent arrivals
In classrooms with students who have had limited formal schooling
In classrooms with students who have strong academic backgrounds
In classrooms with students at advance levels of English proficiency
In classrooms with students at beginning levels

Results of another study with students from a West Coast school district and an East Coast district showed the SIOP model positively affected student literacy achievement as measured with the Illinois Measurement of Annual Growth in English (IMAGE) writing assessment (Echevarria et al., 2006). Despite the proven success of the



SIOP model, some teachers in schools around the United States are resistant to change and do not use it. The SIOP model has not been used for various reasons: some educators say that it is too much work, while others have said that their job is to teach content and not language or vocabulary.

### **Purpose of Study**

The purpose of this study is to examine teacher attitudes towards and resistance to the implementation of the SIOP model in their classrooms, as well as provide recommendations on how to motivate teachers to use the model. More importantly, the study aims to help ELLs in Harrisonburg, Virginia succeed in school, especially Hispanics, since the Hispanic population in American schools has grown 100% over the last ten years (National Clearing House for English Language Acquisition, 2002). As the preferred instructional approach for teaching English language learners, it is critical for teachers at all levels to implement the SIOP model. Schools must prepare students to achieve high academic standards and to demonstrate English proficiency on high-stakes tests (Pearson Education, 2008). In addition, teachers should engage in culturally receptive teaching, so their instruction is responsive to and builds upon culturally different ways of learning, behaving, and using language (Bartolomé, 1994).

After the United States government passed the NCLB Act of 2001, all public schools are expected to provide education to their entire student audiences, so that everyone can achieve the same academic standards (Zimmerman, 2006; Echevarria et al., 2004; Echevarria et al., 2006). If schools are to provide a quality education for all

children, it is vital that teachers employ sound practices, particularly for ELLs who consistently perform poorly in academic settings (Moss & Puma, 1995; Snow & Biancarosa, 2003; Wainer, 2004). For this reason, the present study will examine the benefits of the SIOP model at both middle schools and the high school and will gather information about teacher responsiveness to the model.

Echevarria et al. (2006) argue that a gap exists in the literature: “Although the SIOP model is effective, it is not a panacea for the challenge of helping English language learner students meet high academic standards” (p.207). Educators still need to scrutinize the interaction between the SIOP model, teacher decision-making, implementation procedures, settings, and student populations. Some teachers identify a gap between English language learners and their English-speaking peers, demanding more research for the implementation of the SIOP model and its success in helping the ELLs (Echevarria et al., 2006). The sheltered lesson approach draws from and balances with methods and strategies supported for both second language and mainstream classrooms (Echevarria et al., 2004).

In order to improve student language acquisition, teachers need to implement and be aware of the benefits of the SIOP model. The demonstrated effectiveness of the SIOP model demands that teachers familiarize themselves with the model and utilize it in their classrooms (Echevarria et al., 2006). Despite knowing the benefits of the model and witnessing an increasing percentage of ELLs in Harrisonburg, public school teachers in the school district are still resisting implementation of SIOP. As a result, the students are at a plateau in the state’s high stakes standards of learning (SOL) tests. For example, in

the school year 2008-2009, the SOL results for LEP students on the reading portion indicated that 68% achieved proficiency and 16% failed. In the writing portion, 68% achieved proficiency and 21% failed compared to the 2007-2008 school year SOL results for LEP students. In the 2007/2008 school year, 68% achieved proficiency and 9% failed on the reading portion; on the writing portion, 78% achieved proficiency and 16% failed (Virginia Department of Education, 2009). These results show that there is plenty of room for improvement and that teachers need to make changes in their teaching methodology.

### **Nature of the Study**

The present study examines the following research problem to gain perspective as to why Harrisonburg City Public Schools teachers at the middle and high school level are not willing to implement the SIOP model:

*English as a second language in Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School: How do teacher attitudes impact teacher responsiveness to implementing the SIOP model?*

### **Research Questions**

1. What are teacher reactions toward change in English language acquisition curriculum design at Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School?
2. In what ways are teachers willing to implement the changes in English language acquisition curriculum design?

3. In what ways do teachers use the SIOP model?
4. In what ways do teachers refrain from using the SIOP model?
5. In what ways do teachers find the SIOP model useful in their classrooms?
6. In what ways do teachers find the SIOP model not useful in their classrooms?
7. What are some of the barriers towards the implementation of the SIOP model?

### **Hypotheses**

- The more resistant teachers are to curriculum changes, the less willing teachers will be to implementing the SIOP model.
- ELLs benefit from classrooms where the SIOP model is implemented.

### **Assumptions, Limitations, and Scope**

In this study, it is assumed that the SIOP model offers significant benefits to the ELLs and that teachers at the Harrisonburg City Public Schools are not implementing it. The study is limited because it only considers the two middle schools (Thomas Harrison and Skyline) and the high school (Harrisonburg High School) and it excludes all five elementary schools in the city. Also, the researcher is an English language learner and comes from a Hispanic background; therefore, the study is focused mostly on Spanish speaking students. The scope of the study includes all teachers in Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School.

### **Significance of the Study**

This research will help the Harrisonburg City Public Schools (HCPS) acquire a better understanding of teacher attitudes towards changes in English language acquisition curriculum design, specifically the implementation of the SIOP model. With the results of this study, HCPS will also be able to gather information of what the teachers think and feel about the SIOP model. HCPS will also be able to identify the barriers to implementing change in the schools. By identifying the flaws and weaknesses of their program, HCPS will be able to better support the teachers and provide them with ample assistance.

Aside from supporting the teachers and helping them more easily implement curriculum change, the study will benefit all the students at the HCPS, not only the ELLs. As a result of teacher implementation of the SIOP model, ELLs' academic achievement would go up, and the schools will start meeting the standards set by the state. For non-ELLs the SIOP model is a proven teaching strategy that will benefit all students (Echevarria, 2005). SIOP has many features such as the inclusion of language objectives in every lesson, the vocabulary related to the lesson, the advance of background knowledge, and the importance of literacy practice (Echevarria, 2005). After all, the mission of the HCPS is to "prepare every student to succeed and to contribute to a better world" (Harrisonburg City Public Schools, 2009). As a result, this research will help increase awareness of the benefits of the SIOP model and provide teachers with a rationale for implementing the model in order to ensure ELL success in the classroom.

## Definition of Terms

- Language: Serves as a mediator for the individual's mental activity (Vygotsky, 1981b). "Language is the product of multiple determinants operating through a number of mediating processes" (Bandura, 1986, p. 500).
- English language learner (ELL): "refers to students whose first language is not English, and encompasses both students who are just beginning to learn English and those who have already developed considerable proficiency" (George Washington University, 2005, p. 1).
- Limited English Proficient (LEP): Students "whose difficulties speaking, reading, writing, or understanding the English language may be sufficient to deny the individual – (i.) The ability to meet the State's proficient level of achievement on State assessments described in section 1111(b)(3); (ii.) the ability to achieve successfully in classrooms where the language of instruction is English; or (iii.) the opportunity to participate fully in society" (Virginia Department of Education, n.d., para. 1).
- English as a Second Language: "Refers to a type of class, instructional program, or curriculum" (Echevarria et al., 2006, p. 195). "The teaching of English to speakers of other languages through a wide variety of methods" (Virginia Department of Education, n.d., para. 1).
- Sheltered Instruction (SI): is an instructional approach that makes grade-level academic content in areas such as social studies, mathematics, and science

accessible for ELLs by incorporating specialized strategies and techniques that accommodate the second-language acquisition process (Genesee, 1999; Echevarria et al., 2006).

- The Sheltered Instruction Observation Protocol (SIOP): is a lesson – planning and delivery approach composed of 30 instructional strategies grouped into eight components: Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review/Assessment (Echevarria et al., 2004). It offers a structure for teachers to teach curricular content to English language learners by using strategies and techniques that make new information understandable to the students. While doing so, students develop student language skills across the domains of reading, writing, listening, and speaking (Echevarria et al., 2006; Echevarria et al., 2008).
- Teacher attitudes: “The effective ... actions employed by teachers ultimately can make a positive difference on the lives of their students” (Gourneau, 2005, p. 1).
- Resistance to change: “Employees who are not wholeheartedly embracing a change that management wants to implement” (Dent & Goldberg, 1999).
- Curriculum change: “The possible use of new or revised *materials* (direct instructional resources such as curriculum materials or technologies), the possible use of new *teaching approaches* (i.e., new teaching strategies or activities), and the possible alteration of *beliefs* (pedagogical assumptions and theories underlying particular new policies or programs” (Fullan, 1991, p. 37).

- Signs: Vygotsky (1986) refers to the term “signs” to the links between stimulus and responses, where they are brought into a situation to replace natural stimulus as the causes of behavior.
- Symbols: Offer the mechanisms of thought; intrinsic illustration of experiences serves as significant determinants for the symbolic constructions that represent the thoughts (Bandura, 1977). For Vygotsky (1986), “symbols master natural forms of individual behavior and cognition. Further, symbols are internally oriented, transforming the natural human abilities and skills into higher mental functions”(p. xxv).

The next section of this paper presents an extensive review of the literature, beginning with Bandura’s social cognitive theory (1977) and Vygotsky’s sociocultural theory (1986). These theories will serve to explain and help to illuminate the process a student goes through in order to learn in a diversified environment and in a non-native language. The section will also explain the change in demographics and its effect on the school system. Finally, teacher attitudes toward curriculum change and teacher resistance to change will also be examined in order to better understand why teachers are not implementing changes that will ultimately help English language learners achieve academic success.



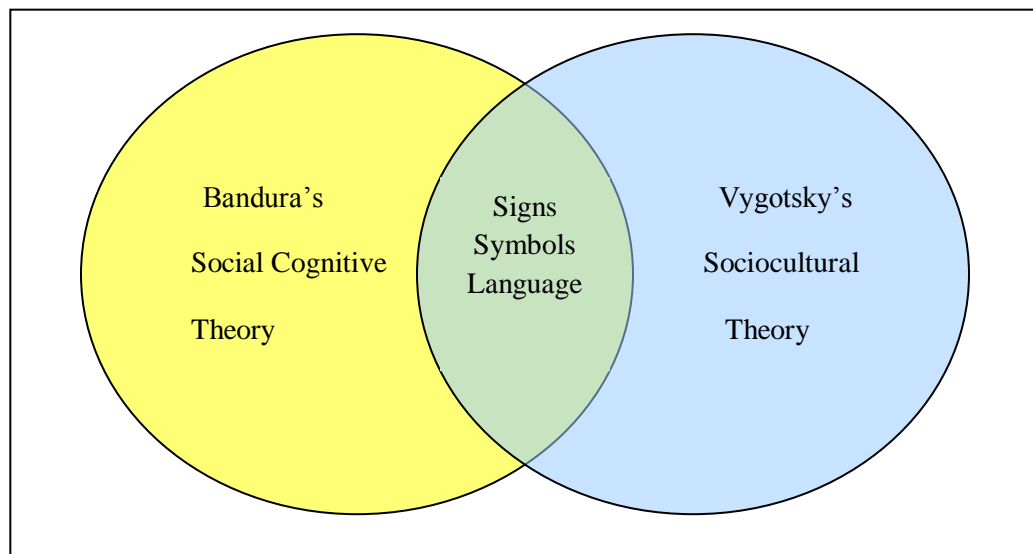
## Review of the Literature

### Learning Theories

This study looks at Albert Bandura's social cognitive theory (1977) and Lev Vygotsky's sociocultural theory (1986) in order to understand how human beings learn in a different environment and in a language other than their native language. These two theories were chosen because they appropriately explain how a person, especially an English language learner, acquires all the new knowledge to which they are exposed. Usually, learners use different instruments and tools to better adapt and comprehend what they have been taught. Figure 3 depicts these theories and the attributes shared by the social cognitive theory and the sociocultural theory in order for a person to grasp, not only the new content, but also to develop their second language acquisition.

#### Figure 3.

**Bandura's Social Cognitive Theory and Vygotsky's Sociocultural Theory. This figure illustrates the elements shared by both theories.**



**Overview of social cognitive theory.** Bandura (1977) explains that the capacity to use symbols equips humans with a powerful way of handling their environment. Through verbal and imagined symbols, people develop and conserve experiences in emblematic forms that help to shape future behavior. Using symbols, people can resolve problems without having to execute all the different alternative solutions; and they can anticipate the probable result of different actions and modify their behavior appropriately. It is critical that learners transform modeled activities into useable verbal symbols to better absorb and retain knowledge (Bandura, 1977). Symbols that correspond to occurrences, cognitive processes, and associations serve as the means of thought. For example, if a student is learning fractions in math and is trying to grasp the concept of three thirds equaling one whole, it is helpful for the teacher to use a symbol to help the learner understand the abstract concept of fractions. In this example, the teacher could demonstrate the concept by cutting a pizza into three equal pieces.

Thinking relies upon language symbols. As a result of controlling symbols that disclose relevant information, one can acquire an understanding of fundamental relationships, generate new knowledge, resolve problems, and infer consequences without taking any actions (Bandura, 1977). For example, if a student is able to recognize important information during a class, he/she would be more capable of building on previous knowledge and learning new concepts.

Symbols that characterize events, cognitive processes, and associations serve as the medium of thought. Thinking relies primarily upon language symbols. Symbols enlarge the flexibility and control of cognitive problem solving. As mechanisms of

thought that illustrate experiences, symbols serve as significant determinants for the symbolic structure that represent the thoughts of a person (Bandura, 1977).

**Overview of sociocultural theory.** Vygotsky's sociocultural theory imparts a descriptive framework for understanding and clarifying our ideas of how learners develop into competent members of a language learning community (Vygotsky, 1986; Schieffelin & Ochs, 1986). Sociocultural theory suggests that appearance of strategies is a procedure directly associated to the practices of cultural groups through which learners develop into competent members of these communities (Vygotsky, 1986; Donato & McCormick, 1994). For example, when ELLs interact with their peers (especially with the English native speakers), they are able to learn, practice the language and be more active in the community.

Mohan and Smith (1992) state that sociocultural theory views language learning tasks and contexts as activities that are constantly under development and influenced by individuals' deliberate orientations to classroom learning. According to Donato and McCormick (1994), "the classroom is a culture with distinctive forms of practice, mediation, and social relations" (p. 454). Therefore, it is very important that teachers take into consideration the diversity within their classrooms and try to teach with different methods so that students can understand the content. Donato and McCormick further advise that sociocultural theory argues that social interaction and cultural institutions, like schools and classrooms, have significant roles in an individual's cognitive growth and development.

Within sociocultural theory, the idea of mediation plays a crucial role in the building of activity and production of advanced mental processes. For Vygotsky (1986), the foundation of mediation was a material tool, or a system of symbols, particularly language, or social interaction between human beings. Mediators, in the form of objects, symbols, and persons, transfer natural, casual impulses into advanced mental processes, along with problem solving skills. For example, children trying to learn the concept of an equilateral triangle may make the mistake of seeing all triangles as having three equal sides. That is to say they may not be able to differentiate one type of triangle from the next. The teacher might use the traffic yield sign as a mediator to teach the concept of equilateral triangles. When learning a language, originally vague learning actions may become suitable and customized based on how the learning of the language is mediated. Therefore, mediation is the tool of cognitive change (Vygotsky, 1986; Donato & McCormick, 1994).

Vygotsky (1986) believes that superior forms of human mental activity are permanently and universally mediated by symbolic means. He also advances his proposals on symbolic mediation based on similarity with the means through which humans mediate their communication with the world of objects through the use of physical tools. Mediation, either physical or symbolic, is the introduction of an assisting device into an activity that then connects humans to the world of objects or to the world of mental behavior.

Vygotsky (1986) infers that symbolic tools, or psychological tools as the author called them, allow humans to systematize and manage such mental practices as voluntary

attention, problem solving, planning and evaluation, voluntary memory, and intentional learning. Integrated amongst symbolic tools are mnemonic devices, algebraic symbols, diagrams and graphs, and, most importantly, language (Lantolf, 1994). Vygotsky (1986) distinguishes such psychological tools as gestures, language and signs systems, mnemonic techniques, and decision-making systems. Vygotsky (1986) argues that psychological tools are oriented within oneself, converting the natural human abilities and skills into advanced mental functions. Therefore, by using the signs mentioned above, one can construct his or her own content understanding. Investigations by Vygotsky (1986) reveal that understanding the relationship between sign and meaning and the transition to function with signs never result from a direct discovery by the child; but rather, need the guidance of an adult or a teacher in a school setting. For example, when a teacher is teaching a math problem, it is very helpful that he/she modeled the problem for the students, so that they can follow a similar pattern.

Vygotsky suggests that with language acquisition, children acquire access to the most dominant of “mental tools,” that children use language to convert the cognitive functions allocated through interpersonal experience into intrapersonal functions (McCafferty, 1994). For example, when a baby calls for his or her mother, he or she uses the term “ma-ma.” By early childhood, the child will make the same reference using “mommy”. When a system of signs, linguistic or other, is missing, only the most archaic and restricted type of communication is feasible (Vygotsky, 1986). It is assumed that the methods of communication were the sign or the word, that through simultaneous

manifestations a sound may possibly become linked with the content of any experience and then help to communicate the same content to other human beings.

Vygotsky (1978) states that what allows us to control psychological processes like perception, attention, and memory is the production and use of signs. Before immediately reacting to the dominant stimulus in the perceptual field, one is capable of establishing links between stimuli and responses, which reduce direct impulses and let complex psychological processes develop in their place. Vygotsky (1986) refers to the term “signs” to the links mentioned above, where they are brought into a situation to replace natural stimuli as the causes of behavior.

In the sociocultural theory developed by Vygotsky, language is considered as a symbolic tool (Vygotsky, 1986). Vygotsky argues that physical tools mediate the affiliation between humans and the world of objects and, as a result, provide us with the authority to systematize, manage, and change the world. In the same way, language, as a symbolic tool, mediates human consciousness and, in consequence, infuses us with the ability to systematize, manage, and change our mental activity (Appel & Lantolf, 1994).

As stated in Vygotsky (1986), speech is established in the connection between a sign and a configuration of superior academic operations, rather than on merely associative connections. The author asserts that in order to learn a foreign language and to develop one’s native language, two completely different processes are involved. While learning a foreign language, one uses word meanings that are formerly well developed in the native language, and simply translates them. After saying this, it is

obvious that the previous knowledge of one's native language plays a significant role in the study of a foreign language (Vygotsky, 1986).

**Summary.** Both Bandura (1977) and Vygotsky (1986) emphasize the use of symbols and signs in order to acquire language. Also, both explain the importance of signs and symbols in the development of one's behavior. It is important to recognize the process and tools used to develop one self. The next section will go into detail about Bandura's social cognitive theory and Vygotsky's sociocultural theory to better explain the use of this tools, the way humans use them and what needs to be done in classrooms to better help children acquire language and develop cognitive skills.

### **Bandura's Social Cognitive Theory**

In the social cognitive view, people are not compelled by internal forces or routinely framed and dominated by external stimulus. Instead, a model of "triadic reciprocity" (p. 23) in which actions, cognitive factors, and environmental factors all work as interrelated elements of each other to describe human operation (see figure 4 on page 25). The influence of each source will vary for different activities and different individuals. The disposition of people is delineated in this aspect in terms of a number of essential capabilities (Bandura, 1986).

**Capabilities.** According to Bandura (1986), the first capability is the symbolizing capability. The ability to use symbols, which encompasses almost every facet of a person's life, offers them a strong way of changing and adapting to their surroundings. Through symbols people process and convert passing experiences into

internal representations that work as leads for future action. Symbols assign denotation, shape, and persistence to the experiences they have lived. When students are learning basic addition and subtraction the teacher might use marbles as a symbolic representation to assist in learning. Children in turn, use the symbolic representation of adding or removing marbles to assist them in addition and subtraction problem solving.

By relying on their knowledge and symbolizing influences, people can create new courses of action. Instead of unfolding problems by executing alternatives and minimizing the outlay of mistakes, people generally test potential results symbolically and cast off or preserve them on the foundation of predictable consequences before plummeting into action. A highly developed cognitive capability fixed with the outstanding flexibility of symbolization allows people to generate ideas that rise above their sensory experiences (Bandura, 1986).

The second capability is the forethought capability (Bandura, 1986). People do not plainly respond to their environment, nor are they guided by notions from their past. The majority of their deliberated behavior is controlled by forethought. Through use of forethought, people encourage themselves and conduct their behaviors anticipatorily. The ability for deliberate and intentional behavior is ingrained in symbolic commotion. The cognitive illustration can have a powerful impact on present behavior, but future events cannot determine behavior. By delineating predictable results symbolically, people can change future effects into existing motivators and regulators of foresightful conduct.



Another capability is the vicarious one (Bandura, 1986). In reality, almost all learning development, resulting from direct experience, can happen vicariously by watching other people's actions and their consequences. The ability to learn by watching allows people to obtain rules for producing and managing behavioral methods without forming them by trial and error. The acquisition of behavioral rules and patterns is faster because of observational learning, which is imperative for both growth and continuance. The outlook for future behaviors would be slim if one could gain knowledge only from the results of trial and error. This is due to the costly consequences mistakes can have (Bandura, 1977, 1986).

**Human behavior.** The majority of human behavior is attained by observation through modeling (Bandura, 1986). By observing others, one creates courses of behavior, and, on forthcoming moments, this coded information would lead to action. The ability to learn by observation helps people to develop their knowledge and skills based on the information disclosed and created by others. Observers can obtain cognitive skills and new ways of behavior by observing the behaviors of others. Learning may take different forms, "including new behavior patterns, judgmental standards, cognitive competencies, and generative rules for creating behaviors" (Bandura 1986, p. 47).

Further, a unique characteristic of social cognitive theory is the role it allocates to self-regulatory functions. People do not act just to please others. A great deal of their behavior is aggravated and regulated by internal principles and self-evaluative responses to their own actions. Subsequent to personal standards being embraced, differences

between performance and the norm trigger evaluative self-reactions, which persuade future behavior (Bandura, 1986).

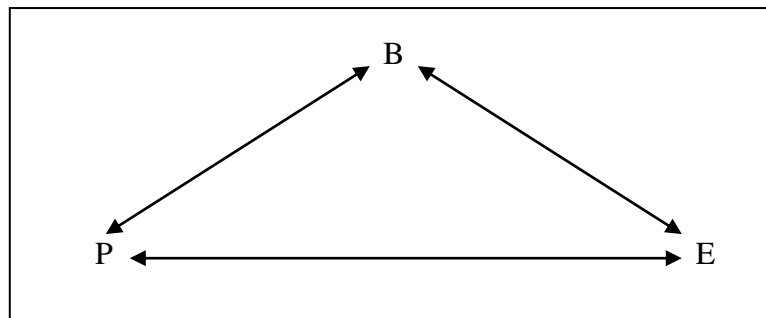
**Learning.** Bandura (1986) believes that “learning is characterized as the acquisition of knowledge and cognitive directives for how to do something” (p. 107). One must differentiate among knowledge and skill. Building learning in terms of truthful and technical knowledge is appropriate for cognitive problem solving. However, there are many fields of activity that entail extra procedures to get from knowledge structures to talented action. For successful performance, knowledge and cognitive skills are essential but not enough (Bandura, 1986). The improvement of skills involves a matching method for converting knowledge into action. Physical performance serves as the means for decoding. The information presented by previous experiences is employed to make remedial modifications in existing and fleeting characteristics of action awaiting a close match between internal formation and performance (Carroll & Bandura, 1985).

Bandura (2001) found that consciousness is the essence of intellectual life that not only makes life individually controllable but worth living. Specifically, “a functional consciousness involves purposive accessing and deliberative processing of information for selecting, constructing, and evaluating courses of action” (p. 3). Additionally, other views of learning connoted a one-dimensional relationship relating the individual to the environment. By way of explanation, either the environment or the individual is a predominant factor in learning (Gredler, 2009). Consequently, Bandura (1977, 1978) included behavior (B), the environment (E), and the cognitive and internal events that influence perception and actions (P) in his explanation of human behavior. Therefore,

from the social learning perspective, mental functioning involves a lasting communication among behavioral, cognitive, and environmental influences (see Figure 4).

**Figure 4.**

**Bandura's triadic reciprocity. Schematization of the relations between the three classes of determinants in triadic reciprocal causation. B signifies behavior, E the environment, and P human behavior (Bandura, 1986, p.24).**



In the social cognitive perception (Bandura, 1986), environmental pressures influence behavior through a symbolization procedure, meaning that passing incidents have permanent effects because the information they suggest is treated and changed into symbols. People gain and confirm their ideas of proper behavior, instead of learning precise responses based on the effects of their actions. The cognitions identify how to mix elements into suitable patterns and what to do at different times and determination points in the implementation of behavior. Consequently, a skill is described primarily by rules for making required patterns and series of actions. Learning must be produced in

nature, because proficient activities are hardly ever performed in precisely the same way; they must digress to fit different circumstances.

**Modeling.** Bandura (1977) explains that according to social cognitive theory (sometimes referred to as social learning theory), modeling influences create learning mainly through their revealing function. During exposure, observers obtain primarily symbolic representations of the modeled activities, which help to develop proper behaviors. Observational learning is governed by four component processes: 1) attentional processes, 2) retention processes, 3) motor production processes, and 4) motivational processes.

Attentional processes, part one of Bandura's observational learning processes, decide what is observed in the modeling behaviors to which one is exposed and what is derived from such exposures. The capacity in which observers' process information determines the benefits gained from observed experiences. During the recollection processes, the response patterns must be embodied in memory in symbolic mode, especially for observers to benefit from the behavior of models when they are no longer there to offer guidance. By the use of symbols, temporary modeling experiences can be preserved in permanent memory. What allows humans to learn much of their behavior by observation is the advanced capacity for symbolization (Bandura, 1977).

The third constituent of modeling (Bandura, 1986), motor reproduction processes, engage changing symbolic representations into appropriate actions. Behavioral replication is reached by organizing one's responses in harmony with the modeled

behaviors. In the motivational processes, social cognitive theory differentiates between acquisition and performance because people do not perform entirely what they learn. They are more likely to accept modeled behavior if the results are something they value than if the modeled behavior results in unsatisfactory effects. Those behaviors that appear to be successful for others are favored over behaviors that are seen to have unsuccessful consequences.

Cognitive processes are critical in the process of learning (Bandura, 1971b). The learner's capability to cipher and save momentary experiences in symbolic form and to embody future consequences in thought is critical to the attainment and adjustment of human behavior. The cognitive processing of actions and possible consequences funnel the learner's behavior. For example, a person does not wait until they have a car accident to buy insurance. Instead, knowing the possible consequences of not having insurance serves as the stimulus to make a person invest in car insurance.

Self-efficacy pertains to a belief in one's competencies to arrange and carry out the actions needed to generate particular accomplishments (Bandura, 1997). Such decisions usually apply to circumstances that may include new, impulsive, or stressful factors (Bandura, 1986; Bandura & Schunk, 1981). Recognized self-efficacy plays an essential role in people's lives (Bandura, 2001). Efficacy beliefs are influential in the actions and circumstances that people choose, and these beliefs can have an effect on the course of personal development.

According to Gredler (2009), in Bandura's social cognitive theory "the essential components of learning are a behavioral model, reinforcement to the model, and the learner's cognitive processing of the modeled behaviors" (p.372). It is important to consider these elements of learning in order to provide the learner with easier ways to learn the content. The constituents of instruction, consequently, are (a) recognizing suitable models in the classroom, (b) determining the practical value of behaviors, and (c) leading the learner's sense of self-efficacy. An important factor to consider when selecting a model is the selection of behavior to be modeled. The behaviors should be interesting to the learner and represented at a level of difficulty that can be understood by the learner.

In the classroom, teachers and students act as live models for an array of academic and social behaviors. For teenagers, the persuasion of peer models is often highlighted. Nevertheless, the teacher is in charge of the classroom, and the teacher's role as an authority figure is imperative to ensure accountability, veracity, honesty, and caring for the individual and the group welfare of the students (Brophy & Putnam, 1979). Live and symbolic models can edify conceptual cognitive rules, problem-solving strategies, and sequences of integrated motor behaviors (Rosenthal & Bandura, 1978; Rosenthal & Zimmerman, 1978; Carroll & Bandura, 1982).

**Language acquisition.** The formation of the linguistic scheme in children produces a complicated bidirectional affect between cognitive development and language acquisition (Bandura, 1986). Language acquisition is based on a substantial amount of semantic and linguistic input information modified to children's cognitive capabilities.

The pace of language acquisition is determined by alterations in the caliber of the verbal environment. Linguistic expertise is a difficult skill that compels wide knowledge “in which children’s cognitive capabilities, linguistic input, and semantically aidful contexts are coordinated in ways conducive to learning” (p. 499).

Language is the result of numerous determinants working through many mediating processes. One set of determinants relates to the cognitive skills that children require to process linguistic information. This involves competencies to recognize the basic elements of speech, to identify and recall sequential structures, to extract rules from patterns, and to choose the right words and construction rules to produce comprehensible statements. The second set of determinants of language acquisition is relevant to children’s support of nonlinguistic awareness in diverse areas of conversation. Unless ideas about words and formations are deemed necessary and then put to public test, linguistic knowledge is difficult to come by. The difficulty of linguistic input and semantic attributes represent the third set of factors prevailing language acquisition. The speech to children must be strategic in order to facilitate effective language acquisition. Relations between people significantly shape the pragmatics of speech and serve as an additional supply of affect on language development (Bandura, 1986).

In learning to communicate symbolically, children have to obtain suitable verbal symbols for items and events and grammatical rules for displaying relationships between them (Bandura, 1986). The process of attaining language engrosses not only learning grammatical associations between words but also connecting the linguistic forms with the

occurrences to which they apply. “This requires integrating two relational systems—linguistic and perceptual—both relying on a common base for understanding” (p. 505).

The density of the model’s language in relation to the children’s cognitive capabilities influences the pace of language acquisition (Bandura, 1986). If the modeled speech goes above the children’s ability to process what they hear, their retention is going to be very poor. Linguistic rules should be at first modeled at basic level for beginners. Rules for systematizing words into sentences are discovered more easily from short, simple expressions than when they are hidden by heavy repetition.

### **Vygotsky’s Sociocultural Theory**

Vygotsky (1987) states that two completely different processes are used to learn a foreign language. While learning a foreign language, one utilizes word meanings that are already well refined in the native language and one only needs to translate them. The high level of knowledge of one’s own language also plays an important role in the study of foreign language, “as well as those inner and outer relations that are characteristic only in the study of a foreign language” (p. 159). Some children come to the United States with poor fluency in their native language and teachers expect them to perform satisfactorily in school in the target language. For this reason, it is important that the classroom setting recognize that learning a target language is affected by each child’s ability in his or her native language.

Vygotsky (1987) argues that a clear understanding of interfunctional relations is very important to the study of thought and language. In order for a child to think and use



the language at hand, he/she has to understand the content that is being taught by the instructor. According to Vygotsky, the meanings of words are dynamic and not static. The meaning changes as the child reaches each step in the development of the word meaning, and they mirror an association between thought and speech. The internalization of obvious action creates thought; and the internalization of external conversations brings the powerful tool of language to stand upon our flow of thought.

**Zone of proximal development.** Vygotsky (1987) claims that one cannot teach children scholarly language by false explanations, obsessive memorization and repetition. What a child really needs is exposure to new concepts and words from the common linguistic context. With appropriate input, a child can be expected to perform much more proficiently than the child's current level shows. In the majority of settings adults and children ought to work together to bring each child up from a child's first level of mastery progressively to the higher level of independent activity that each child can achieve. The purpose of education was to present children with experiences that are within their respective Zone(s) of Proximal Development (ZPD); activities that defy children but with some adult assistance, can be accomplished by children. The teacher's job is to maintain each child's learning tasks focused to some extent above each respective child's ZPD. A teacher should encourage students to solve problems on their own and provide them with the necessary guidance to do it by themselves. For example, in a science class, teachers should provide the students with the tools necessary to explain a biology process, but not all of them to encourage their input into the process. Vygotsky (1987) defines the Zone of Proximal Development as the difference between a child's

actual mental age and the level that a child may reach, with assistance, in solving problems.

The sociocultural theory created by Vygotsky and his colleagues (Vygotsky, 1978) suggests that human thoughts occur in social interactions. As it has been used in classroom studies, sociocultural theory centers mainly on peer interactions in small groups (Le, 2007). According to Yildirim (2008), Vygotsky's sociocultural theory, in essence, proposes to understand learning and development as a process rather than a product. That is to say, a Vygotskian approach to language assessment recommends that "process of development" should be seen as a forecaster of the individual's or group's future performance.

From Vygotsky's (1934/1987a) perspective, "the term *collaboration* in the school setting refers to collaboration between teacher and student. Specifically, 'the teacher, working with the school child on a given question, explains, informs, inquires, corrects, and forces the child himself to explain; [and] when the child solves a problem, although the teacher is not present, he or she must make independent use of the earlier collaboration'" (p. 216). In addition, the method of teaching is consistently completed in the form of a child's collaboration with adults (Vygotsky, 1930-1931/1998g). Vygotsky (1934/1987a) states that learning in the classroom needs teacher modeling, clarifying, and inquiring the student for explanations for the reason that these articulations by the teacher are the foundation for student's self-questioning and disclosing of concepts when studying. By having the students involved in the learning process, the content will actually stay and develop in their brain.

At age two, children's concentration is tied up with their perception. They usually do what the environment around them is influencing them to do. The school age child frequently responds to questions that involve thinking by remembering an actual example (Vygotsky, 1930-1931/1998b). Consequently, it is very important that teachers use different teaching methods to target everyone's learning style and at the same time help them develop knowledge and language acquisition.

**Psychological tools.** Instead of being plain tools of work Vygotsky (1960/1997q) explains that psychological tools (e.g. signs and symbols) bring about the conversion of human consciousness. These psychological tools control the brain and alter the course of thinking. Vygotsky integrated the signs and symbols of a culture and the methods they used in thinking. As a result of cultural symbols such as language, students have the capability for the self-regulation of cognition and, consequently, the alteration of behavior (van der Veer & Valsiner, 1991).

Signs are the fake stimulus launched into psychological tasks that transform the nature of the mental activity (Vygotsky, 1960/1997s). The Vygotskian experiment recognized four distinct phases in learning to employ signs to master one's thinking. In the first phase, the child depends on his/her usual mental processes, but fails (naïve or primitive stage). Next, in the naïve psychology phase the child tries to use supplementary stimulus, but is not conscious of his or her psychological job. External sign use is the third phase in which the school age child generates verbal associations between the supplementary stimulus and the object at hand. Lastly, at the maximum level of development, individuals build internal verbal stimulus to master their thinking.

The first rule of sign use sanctifies the conversion in mastering one's thinking in the course of the integration of signs into achievement of cognitive tasks (Vygotsky, 1930-1931/1998g). This rule points out that the use of the symbols of one's culture is not merely an addition to current mental processes. Incorporating signs into one's thinking is pivotal to developing superior forms of cognition. The other rule accentuates the reform in thinking that takes place in the conversion from dependence on external signs to internal verbal thinking.

According to Vygotsky (1934/1987a) "instruction is not limited to trailing after development or moving stride for stride along with it. It can move ahead of development, pushing it further and eliciting new formations" (p. 198). Consequently, he considers natural development and education as a joined combination. Vygotsky (1934/1962, 1934/1987a) explains how instruction induces development. Good learning antecedes and directs development. The cognitive tasks that a child can achieve in association with the teacher today, he can accomplish without help tomorrow (Vygotsky, 1934/1962). That is to say, that both teaching and imitation play a major role in a child's development. Subsequently, school is essential for the learner's cognitive development (Vygotsky, 1934/1987a).

**Learning.** All superior mental functions first emerge as communications between an educated member of society and the child. Transfer of learning stated by Vygotsky (1978), is the consecutive move between inter-individual behaviors and the internalization of these behaviors as multilevel intellectual processes. This process consists of three major steps: (a) the utilization of the symbol system as communication,

(b) use of the symbol system to direct emergent mental processes, and (c) the growth of internal cues and signs to supervise and control one's remembering and thinking (Gredler, 2009).

Two characteristics of the social setting establish the nature and scope of the child's cognitive development. The first characteristic is the past developments instilled in the child as part of a particular culture. The nature of the symbol system passed down to the child from the culture sets extensive limitations on the superior cognitive functions the child can develop. The second characteristic is the way the child interacts with educated members of society. Only through these interactions does the child obtain both meaning and ways to use symbols to aid thinking. The problem is that the culture that educates its children just in symbols as communication is leaving out the main function of fake signs, which is developing and mastering one's thought processes (Gredler, 2009). Teachers have to make sure they encourage students to solve problems and come to conclusions on their own to make sure the student understands the content and is able to walk through the learning process.

### **Synthesis of Learning Theories**

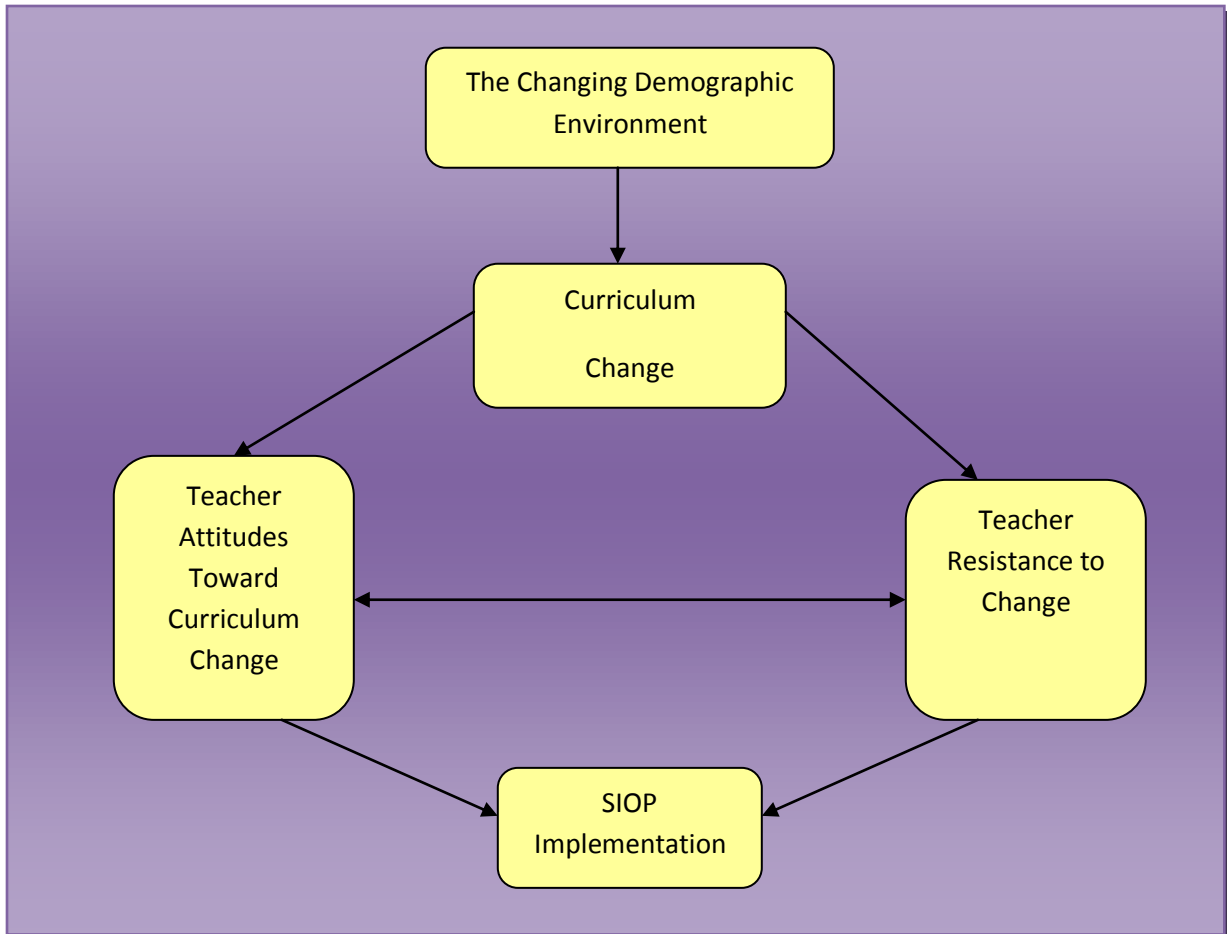
After discussing Bandura and Vygotsky's theories, one can see the importance of attitudes from both the learner and the teacher. When learning a language, it is critical that the teacher provides the correct interaction for each student to develop his/her language skills, as well as facilitate the learning and mastering of mainstream content. In today's society, learners are experiencing many changes. Therefore, educators need to

evaluate the needs of society and make the necessary changes to accommodate everyone's learning needs.

## Theoretical Framework

Figure 5.

Theoretical Framework. This figure illustrates the conceptual framework for this study.



Bandura (1977) and Vygotsky (1986) set the stage for the theoretical framework for this study, which is based on the swiftly changing environment due to shifting demographics in the Harrisonburg City Public Schools, specifically the increase of Latinos. This change in demographics, in addition to the passing of the No Child Left Behind Act of 2001, has caused the policy makers and school administrators to make

changes in the curricula and to implement different teaching methods in order to target student needs, help them achieve content knowledge and be successful in the high stakes tests set by the state.

Figure 5 shows how teachers have been affected by demographics and curriculum decisions to address these changes. A change in demographics within the classroom has wakened the need to change the way teachers teach because the curriculum has change and to that change teachers' attitudes are affected by their resistance to change and vice versa. These two variables influence whether or not teachers implement the SIOP model into their classroom. This study focuses on how teacher's attitudes affect their willingness to change and why teachers are resisting or embracing the implementation of the SIOP model in their classrooms.

### **Demographics**

Hispanics encompass the largest and fastest-growing minority group in the U.S., mounting from 12% of the population in 2000 to 14% of the total U.S. population in 2004 (U.S. Census Bureau, 2006). Latino children under 18 years of age are the second largest group of students after Whites. Latino school-aged children are also among the fastest-growing student populations (Kohler & Lazarín, 2007). Latinos are a considerable and rising proportion of the United States student population, specifically, 32.1% (U.S. Census Bureau, 2005).

The increase of the Latino student population has considerably exceeded that of other ethnic groups (Kohler & Lazarín, 2007). More than half of all the immigrant



population in the U.S. are Hispanic immigrant children (Fix & Passel, 2003). ELL students account for a significant portion of the Latino student population (Kohler & Lazarín, 2007). According to the National Clearing House for English Language Acquisition (2002), “nearly four-fifths of ELL students are Hispanic native Spanish-speakers” (para.1). Moreover, almost half of all Latino children are ELL students in our nation’s public schools (Lazarín, 2006). One of the biggest challenges of our nation’s public schools and universities is to improve their capacity to effectively support Latino students, as well as immigrants and English language learners (Kohler & Lazarín, 2007).

Each year the United States develops into a more ethnically and linguistically diverse country. Schools reflect this development since the students from non-English speaking backgrounds embody the fastest growing subset of the K-12 student population (Short & Echevarria, 2004/2005). As ELLs try to meet high academic standards, they encounter the extra challenge of learning, understanding, and applying scholarly English through which teachers and textbooks deliver critical information (Short & Echevarria, 2004/2005). Incorporated into mainstream subject matter classrooms, ELLs are expected to use refined English language and literacy skills to be proficient in academic content (Genesee, 1993; Carrasquillo & Rodriguez, 1996; Dong, 2002, 2004a, 2004b). Those who educate these students must take into consideration their unique language acquisition needs (Short & Echevarria, 2004/2005).

ELLs come from various backgrounds, speak different languages, and have different education profiles. Some read and write above grade level in their own language; others have had limited schooling. Some go into school highly motivated to

learn because of family support or a natural drive to succeed; others have had negative school experiences that suppress their motivation (Short & Echevarria, 2004/2005).

Informal fluency in a new language develops inside and outside the classroom, and students can achieve it in one to three years (Collier & Thomas, 1989). The complicated academic language that is critical for school success develops more slowly and methodically in school settings (Cummins, 2000). Another factor that has an effect on ELLs academic learning is the quality of education they receive (Short & Echevarria, 2004/2005). Teachers need to be aware of who the students are and what their previous education and experiences were like. In addition, teachers need to know how to deliver sheltered instruction to teach content to English language learners in ways that make the concepts clear while promoting the students' academic English language growth (Short & Echevarria, 2004/2005). Without efficient language development, many students never achieve the academic level to be successful in mainstream classes, to reach content standards, and to pass standardized tests (Short & Echevarria, 2004/2005).

Dong (2004/2005) describes that when teaching practices include strategies for language learning, English language learners can more easily master content. Through the implementation of harder high school graduation standards and standardized achievement tests, subject matter teachers in schools are curious of how they can effectively teach students with limited English language skills. Research in second language acquisition has revealed that altering classroom discussion, textbook reading, and written activities to the language proficiencies of English language learners activates English language acquisition in subject matter classrooms (Kidd, 1996; Swain, 1996;

Dong, 2002, 2004a, 2004b). Much discussion has centered on making subject matter teachers more attentive of students' linguistic and cultural backgrounds, but there has been little debate centered on methods that teachers might use to incorporate language and content in mainstream subject matter classes to ease English language achievement (Swain, 1996).

According to Ruiz-de-Velasco and Fix (2000), 12% of all LEP students at the middle school level and 20% of LEP students at the high school level have missed two or more years of schooling. Newly arrived teenagers who are non-native English speakers face a serious challenge in the educational system. At the same time they enter a school in the U.S. with poor academic literacy, the schools are stressing thorough standards-based curricula and high stakes tests for all the students (Short, 2002). To compensate for the gap between newcomers' needs and standard language support programs, a new model has been established and its use has been spreading across the United States (Short, 2002).

**Harrisonburg demographics.** Nesselrodt (2007) reported that the Harrisonburg City Public Schools hosts the largest diverse student population in the Shenandoah Valley, in addition to the highest percentage of ELLs of any district in the Commonwealth of Virginia. When the study was conducted, the student population of the Harrisonburg City Public Schools contained students from 55 different countries, who spoke 37 different languages. Spanish speakers accounted for 72 % of the ELL population enrolled in the school district by September 2004 (Nesselrodt, 2007). In the 1993-1994 school year a total of 160 LEP students were enrolled district wide,

representing 5% of the total school population. As shown in Table 2 (Harrisonburg City Public Schools, 2009), the numbers increased progressively over a ten-year period to bring the total LEP enrollment within the Harrisonburg City Public Schools to 32% of the entire school population in 2004.

**Table 2.**

**Limited English Proficient (LEP) Student Enrollment Summary 1993-2004  
(Harrisonburg City Public Schools, 2009).**

Academic Year	Number of LEP Students	%LEP
1993-1994	160	5%
1997-1998	353	10%
1999-2000	535	15%
2001-2002	850	22%
2003-2004	1285	32%

**Curriculum Change**

At the high school level, one of the changes included changing the writing rubric used for scoring, as it was no longer in line with their program. Teachers at the high school wrote their own rubric to match up with the “English 11 End of Course Standards of Learning Writing test rubric” as stated by B. Eye (personal communication, December 9, 2009). After changing the rubric, teachers at the high school worked on their writing curriculum. They wrote a curriculum guide that included skills to be taught at each level, and provided student-friendly rubrics and checklists based on English SOL materials.

This past summer, the high school examined the resources they already had and took lessons that could be used to teach each of the skills on their curriculum guide.

According to B. Eye “the net effect of these changes is that our students are writing better (personal communication, December 9, 2009).

At the middle schools, K. Oxley (personal communication, December 10, 2009) explained that when she arrived at her job position there were frameworks developed for Language Enrichment for Academic Progress (LEAP) curriculum, but there were no contents in the curriculum. Since that, she created LEAP Language Arts curriculum with teams of teachers and have identified and started using instructional materials to use with the Language Arts curriculum. The intention of LEAP is to learn language through the grade level content area. LEAP classes also follow the state content specific SOL. Social Studies and Science LEAP curriculums have not been developed yet, but instructional materials have been identified. Due to budget constraints, the material cannot be obtained yet (K. Oxley, personal communication, December 10, 2009).

### **Sheltered Instruction Observation Protocol (SIOP)**

Teacher attitudes and resistance to change will be discussed in the following section to determine if the SIOP model will be implemented in their classrooms. Hence, even though many schools in the United States use English as the standard of instruction, teachers struggle with successful teaching methods for the non-English speaking population (Echevarria et al., 2008). If schools are responsible for providing quality education for all children, it is essential that teachers employ sound practices, in

particular for English language learners who constantly perform under the standards in academic settings (Moss & Puma, 1995; Snow & Biancarosa, 2003; Wainer, 2004). Numerous English language learners obtain a large amount of their instruction from content area teachers who have not had proper preparation or professional development to deal with their second language development needs or to make content instruction understandable. This situation holds back their academic achievement. Not only do teachers need more training in working with ELLs, they have to know the kind of teaching that is most effective for these students, a population whose rising numbers entail that we take a serious look at their instructional programs (Echevarria et al., 2008).

For ELLs to do well in school, they have to be proficient, not only in English vocabulary and grammar, but also in the way English is used in educational subjects. In their many content classes, ELLs must pull together their developed knowledge of the English language with the content knowledge they are studying in order to achieve the academic tasks linked with the content area (Echevarria et al., 2008). The methods that teachers usually use, particularly in the upper elementary and secondary schools, have a tendency not to smooth the progress of learning or literacy instruction for ELLs (Tharp, Estrada, Dalton & Yamuchi, 2000). Dependence on oral instruction through lecture makes the comprehension of the information difficult (Echevarria et al., 2008).

**Sheltered instruction.** One path that educators have used to accommodate the need for teaching more academic content to ELLs as they are still learning English has been to integrate more sheltered instruction (SI) in their educational programs. Sheltered instruction is an instructional method that makes grade level academic content reachable

for ELLs by including specialized strategies and techniques that adapt the second language acquisition process (Genesee, 1999). Sheltered instruction teachers employ the usual core curriculum and adjust their teaching to make the content comprehensible for ELLs while at the same time encouraging their English language development (Echevarria et al., 2008). Some of the methods that distinguish sheltered instruction consist of slower speech and clear enunciation, utilization of visuals and demonstrations, scaffolded instruction, targeted vocabulary expansion, connections to student experiences, student-to-student communication, adaptation of materials, and use of supplementary materials (Short, 1991; Echevarria, 1995; Kauffman, et al., 1995; Addison, 1998; Genesee, 1999; Vogt, 2000; Echevarria & Graves, 2003).

**SIOP model guidelines.** The SIOP model suggests a structure for teachers to use curricular content concepts to ELLs through strategies and techniques that make new content understandable to the students. Teachers expand student language skills across the four areas, reading, writing, listening, and speaking (Echevarria et al., 2008). Figure 6 shows the eight components of the SIOP model. These components do not have to follow a sequence (Echevarria et al., 2006), making a flexible model that can be adapted by the teacher to accommodate their pedagogical needs and the needs of their students (Echevarria et al., 2004).

**Figure 6.**

**The Sheltered Instruction Observational Protocol (SIOP). This figure illustrates the eight components of the model.**





The first component is *preparation*, which has six attributes: 1) Clearly defined content objectives for students, 2) clearly defined language objectives for students, 3) content concepts appropriate for age and educational background level of students, 4) supplementary materials used to a high degree, making the lesson clear and meaningful, 5) adaptation of content to all levels of student proficiency, and 6) meaningful activities that integrate lesson concepts with language practice opportunities for reading, writing, listening, and/or speaking. The second component is *building background*, which centers on making associations with the following elements: 1) students' background experiences, 2) previous learning and developing their academic tasks; and 3) using different techniques to increase comprehension.

The third component *comprehensible input* considers the following: 1) modifying teacher speech, 2) modeling academic tasks, and 3) utilizing multimodal methods to increase understanding. The fourth component *strategies* emphasizes precise teaching of learning strategies to students in order for them to know how to do the following: 1) to attain and recall information, 2) scaffold instruction, and 3) develop higher order thinking skills. The fifth component *interaction* prompts teachers to promote elaborated speech and to group students properly for language and content development.

The sixth component *practice and application* asks for activities to expand language and content learning while the next component *lesson delivery* guarantees teachers will provide a lesson that meets the planned objectives. Component six and seven pave the way for component eight. Finally, the *review and assessment* component, examines if teachers have reviewed the key language and content concepts, if they have

evaluated student learning, and if they offered feedback to students on their productivity (Echevarria et al., 2004).

The SIOP model has many features that parallel the components suggested for high quality instruction for all students, such as connecting lesson objectives to content standards. It also adds essential elements for the academic success of students learning through a second language. For instance, the addition of language objectives in every content lesson and the growth of previous knowledge among the students is an example of how teachers can help students succeed (Echevarria et al., 2008). One strength of the SIOP model highlighted by Echevarria et al. (2008) is that “it allows natural variation in classroom implementation, while at the same time, provides teachers with specific lesson features that, when implemented constantly and to a high degree, are likely to lead to better academic outcomes for ELLs” (p. 44). Another strength of SIOP is that it offers a rating scale that allows for the lesson observations to be scored. This is an important element for teachers’ personal professional growth and development (Echevarria et al., 2008).

The SIOP model is a method for making grade level academic content approachable to English learners while at the same time supporting their language and literacy development (Chen, Kyle, & McIntyre, 2008). Research on the model has shown that it offers a reliable and valid method to measure sheltered instruction (Guarino et al., 2001). Additional research has demonstrated that English learners prosper when their teachers have been trained to implement SIOP and put it into practice enthusiastically (Chen, Kyle, & McIntyre, 2008). In a study reported by Echevarria et al. (2006), English

language learners in classrooms where the SIOP model was implemented improved their writing skills, and outperformed students in control classrooms where teachers had not received SIOP preparation. The SIOP model is currently being used in school districts and has been adopted in university teacher preparation programs in almost all 50 states across the U.S. (Echevarria & Short, 2007).

### **Teacher Resistance to Change**

Due to the constant reforms and restructuring activities that people in schools across the United States experience, educators are swamped by staggering messages about change (Rusch & Perry, 1993). A study by Perry (1993) shows that teachers perceived personal growth as the highest factor influencing a person's thoughts toward change. However, the teachers being studied classified older teachers close to retirement as most likely to resist change. Huberman (1988) argues that older, experienced teachers who participated in a renewal or have gone through an experimental period in their career are inclined to draw back and turn inward rather than participate in new school improvement efforts.

Sherry Keith (1991) identifies three main hurdles for the implementation of change in schools: 1) organizational, 2) managerial, and 3) teachers. Organizational hurdles can be theoretical and structural. The theoretical hurdles are situated by the values and beliefs of the management whereas the structural hurdles associate to incentive and retribution systems that allow or discourage people to communicate their opinions regarding change. Managerial hurdles come from insufficient training or from

the fear of losing power. Keith (1991) also argues that teachers might view change as extra work or feel they are not properly trained to carry out the new tasks. Corbett, Firestone, and Rossman's (1987), found that the resistance from educators depends on the culture and the proposed change and equally depends on the resistance from educators. Duttweiler and Mutchler's (1990) survey of educational practitioners determined eight traits that might be considered as resistance to change: 1) fear of taking risk, 2) fear of losing power, 3) resistance to changing roles and responsibilities, 4) lack of trust, 5) lack of definition and clarity, 6) inadequate or poor resources, 7) lack of skills, and 8) lack of hierarchical support.

In Duttweiler and Mutchler's (1990) survey, 19% of the survey participants, reported a fear of change and fear of the unknown. Therefore, teachers who are resistant to change are not risk takers. When the decision-making models are changed from traditional to non-traditional, teachers in decision-making positions experience a fear of losing power. Teachers also identified the resistance to changing roles and responsibilities due to the reluctance to take on responsibilities different from the ones they already have. The lack of trust is due to the fact that when changing methods and taking new roles, relationships have to be build in order to have allies. Lack of definition and clarity of roles, may create conflicts within the teachers and school administrators leading to a failure of goal achievement. The participants responded that due to the lack of resources it was very hard to implement changes. One of the biggest challenges is to find time to plan for the changes. In the lack of skills trait, it was reported that the lack of

experience was an issue. In the final barrier to change, respondents found lack of support from the superior staff, not enough teachers and poor communication.

It is crucial for the administration to recognize that each teacher views innovations from different perspectives in order to recognize the reasons of change in an educational culture (De Lano, Riley, & Crookes, 1994). Schools that are going through change such as, curriculum change, it is very important that teachers personally understand the meanings of the change (De Lano et al., 1994). Teachers would be more likely to support a change when they recognize that the benefits (such as incentives) are higher than the cost of their efforts (Brindley & Hood, 1990). Additionally, Chirichello (2008) discussed that when teachers recognize the need for change, they start accommodating new programs. But unless teachers can reach consensus on why things must be improved or done differently, they will continue to resist change.

Since schools in the United States are urged to restructure by federal and state mandates, and resistance is a huge factor in the restructuring failure, it is vital for principals to find out why teachers are resisting change (Zimmerman, 2006). One of the barriers to change is the attitude teachers have toward change. This attitude has been associated with teachers' acceptance of new procedures. One of the barriers that has been documented in the literature for both individuals and organizations is failure to identify the need for change. If teachers recognize the need for change in their schools, their willingness to implement the change will increase immensely (Clawson, 1999; Greenberg & Baron, 2000; Robbins, 2000; Calabrese, 2002; Duke, 2004; Zimmerman, 2006).

Teachers who have a sense of security and familiarity in the way they are doing things fear the unknown. Therefore, they resist change (Fullan, 2001; Greenberg & Baron, 2000). Teachers might also feel endangered by the possible change. Teachers' willingness to change is associated with an attendant risk to their expertise and abilities, including the idea of not possessing the necessary skills and/or knowledge to implement the changes successfully (Duttweiler and Mutchler's, 1990; Fullan, 2001; Greenberg & Baron, 2000).

Lortie (1975) describes a culture of teaching that has profound roots in history and is resistant to change, he also foresees that "change in the education climate [will] point up need for greater adaptability, more effective colleague relationships, and more sharing in issues of knowledge and expertise" (p.221). Certainly, since the initiation of standards-based responsibility and the NCLB Act of 2001 teachers face new and exigent demands for student achievement. Their professional performance plays a huge role in deciding whether their schools make Adequate Yearly Progress (AYP). As a result, new accountability measures have distorted both the work and the optional power of teachers in many schools today (Costigan & Crocco, 2004; Goodson & Hargreaves, 1996).

When the decision to make changes always come up from the top of the organization, it affects teachers' aptitudes to set goals, build up skills, react to feedback, and become interested in improving their practice. Instead, what it does is to support teachers to become dependent on the newest innovation, taking them further from a sense of their own proficiency and professionalism (Fullan, 1993). The idea of implementing changes and teaching teachers new teaching methodologies is usually based on the

speculation that the teachers are no longer able or sufficient in their teaching (Thiessen, 1992). When mandated change connotes an attack of what teachers are currently doing, the stage is set for teacher resistance (Bailey, 2000).

### **Teacher Attitudes Toward Curriculum Change**

Even though teachers play a central role in education, conventionally, teachers have not had a voice in educational change (Cohn & Kottkamp, 1993). The teacher is frequently seen as a compliant receiver of a change product or as a reactor to change. The teacher has been affirmed the “missing voice” in academic change in that teacher’s work roles and demands, principles, and personal experiences are often disregarded (Johnson, 1990; Kilbourn, 1991; Prawat, 1991; Sprague, 1992; Romanish, 1993; Cohn & Kottkamp, 1993; Apple & Jungck, 1993). The change approach that is set in motion is one cause that teachers may be regarded as the missing voice in education (Montgomery & Way, 1995).

Wexler (2002), points out two difficult facets of continuing educational reforms for teachers. The first is the varying definition of professional performance, which can clash with the every day practices and professional orientations of teachers. The second is the amount of time and energy that the reforms entail, and the consequential influence on the emotional lives of teachers.

Educational change initiatives affect an entire network of important and significant relationships that create the work of schools, as well as an effect on teachers’ knowledge, skill and problem-solving capacity. Hargreaves (2005) found that the way

teachers felt regarding the structures in which they work, was altered by whether they felt these structures would benefit their students or not. He also states “educational change efforts affect teachers’ relationships with their students, the parents of those students, and each other. Teachers make heavy emotional investments in these relationships. Their sense of success and satisfaction depends on them” (p. 280).

Teachers’ attitudes toward professional development and training are an area that has not received much attention (Sparks, 1988). Teachers' age and experience have shown to have a negative influence in change (Berman & McLaughlin, 1978). This is unfortunate because in a school everyone should be willing to make changes if overall the ones benefiting from it are the students. The students should not be the ones paying the price for teachers’ attitudes. The attributes of interest in Sparks (1988) study were teachers' attitudes toward conducting changes in their teaching. Three specific attitudes were scrutinized in relation to observed behavior change: theoretical acceptance of a novelty, alleged cost of utilizing a new practice, and self-efficacy. Therefore, if a teacher sees a considered teaching practice as hard or difficult and he or she is not assured that it is worth the endeavor to use it, the practice will not be accepted. Ashton (1984) discovered that teachers' efficiency correlated positively to students' success and suggested that this variable is used as a structure for teacher education programs. When teachers have a high degree of self-efficacy, they are more likely to take risks. Consequently, they are more likely to advance.

In Sparks (1988) study, when teachers perceived a new practice as significant, they were more likely to use it. Moreover, teachers who enhanced their teaching gave



most valuable recommendations about the practices than the non-improving teachers. These findings indicate that personnel makers and in-service leaders might want to contemplate teachers' theoretical openness to new practices when giving workshops. When teachers evidently fail to make out the significance of a specific strategy, the leaders may try to soften this resistance. Another finding from this research sympathized with teachers' expectations for themselves and their students. Improving teachers contrasted from non-improving teachers in their readiness to try out the suggested practices and in their self-efficacy. These teachers were more certain that they could make improvements in their classes. On the contrary, the non-improving teachers were inclined to shield their "natural" style of teaching, to try fewer changes, and to have inferior expectations for themselves and their students (Sparks, 1988).

The literature review provides background information on how children acquire knowledge, highlighted the importance of signs and symbols when acquiring language, discusses the demographics, reviews the SIOP model, pointed out some of the reasons for teacher resistance to change, and explains teacher attitudes toward curriculum change. In the following sections the methodology and the analysis of the data will reinforce what the literature explained and will help in the understanding of why teachers are not implementing the SIOP model.

## **Methodology**

### **Research Formulation**

On February 26, 2009, the researcher met with the Harrisonburg City Public School superintendent to explain her research and ask for guidance on how to obtain approval for the study and to whom to send the site coordinator letter of permission (see appendix A). The superintendent was very supportive and informed the researcher that the assistant superintendent was the person who approves and/or denies research that involves the HCPS. The researcher then met with the assistant superintendent and explained the study and the procedures required by James Madison University's Institutional Review Board (IRB) when conducting a study. The researcher also asked for permission to send all the paperwork electronically to speed up the process. The assistant superintendent agreed to the preliminary research plan and suggested a meeting with the supervisor of ESL and Language Arts, Foreign Language, Title I to explain the study and make sure that what the researcher was investigating would be useful for the schools. The supervisor of ESL shared some ideas and offered different routes the study could take to make it more beneficial for the HCPS and avoid including children in the study.

After meeting various staff members from the HCPS, the researcher was able to narrow down the topic and start putting together the proposal for the IRB. Thanks to the meetings conducted early in the spring of 2009, the researcher was able to meet with everyone, choose a meaningful topic for the HCPS, and be informed of all the steps

needed to attain approval from the participating school division. These steps provided the foundation for this study.

### **Methodology Exploration**

The researcher became interested in this study after reviewing a paper for one of her classes at James Madison University's English language learner services with the resident English for Speakers of Other Languages Specialist, Kristen Shrewsbury. She suggested it would be a good idea to study the SIOP model since it is something new and the schools are trying to implement it. Therefore, the study would provide an assessment of what is happening with the model and HCPS would be more likely to accept the study.

At first, the study was going to examine the impact of the SIOP model on students' academic achievement. After talking to the supervisor of ESL and listening to her ideas, the decision to study the barriers of implementing the SIOP model by the teachers became more compelling. The students would not be a part of the study and the researcher would only be in contact with the teachers reducing all the risks involved when conducting research with children.

### **Research Design**

This study was reviewed and approved by James Madison University's IRB (see appendix B). The researcher submitted the proposal to the IRB on September 11, 2009 and on the 21<sup>st</sup> received communication that some modifications needed to be made in order to obtain approval. The changes consisted of stating how long the data will be stored in the researcher's home, and to specify who will have access to the secure

location she stated in her proposal for both her qualitative and quantitative data. The research proposal was changed to reflect that all data collected in the study would be maintained in a locked file cabinet on the third floor of Memorial Hall at James Madison University and controlled only by Dr. Diane Foucar-Szocki. The researcher made these changes to ensure adequate safeguarding of the data, sent the proposal back to the IRB on September 23, 2009, and received approval on the 24<sup>th</sup> of September.

After receiving formal approval from the IRB, the researcher contacted the Supervisor for Research, Planning and Operations for the Harrisonburg City Public Schools in order to receive formal permission to conduct the research at Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School. The researcher sent the proposal to the Supervisor for Research, Planning and Operations, to whom the assistant superintendent directed her to after a personnel change. The research was approved by the HCPS on October 2, 2009. Once central office approved the research, the researcher set up a meeting with the ESL specialist for both middle schools, Mrs. Kimberly Oxley, who was the main contact person for this study at the schools. The meeting took place at her office at Skyline Middle School on October 9, 2009. After discussing the research and the data collection plan, Mrs. Oxley asked to see the survey and suggested that it would be beneficial for the study to add another question to the survey. Before submitting the proposal to the IRB, the researcher sent the survey to Mrs. Oxley for her review. However, since no response was received, the researcher submitted the proposal to the IRB without any feedback from the ESL specialist. Following the meeting with Mrs. Oxley, the researcher made the addition that same day

of the meeting, and resubmitted to the IRB. The final IRB approval was received on October 15, 2009.

Based on the suggestions from both ESL specialists that worked with the three schools involved in this study, the email consisting of the consent form and the link to the survey were sent out by the Supervisor for Research, Planning and Operations on October 20, 2009. This suggestion was taken into consideration because it was believed that if the request to participate in the study and take the survey came from the central office, the probability of getting responses would be higher than if it came from either of the ESL specialists. The supervisor for Research, Planning and Operations sent out a reminder every week during the month the survey was open to all the teachers at the three schools included in this study.

An interview protocol was also used in order to validate the study. Each ESL specialist provided the researcher with five different names of teachers to contact and ask to participate in the study. The researcher then contacted one teacher via email from each school with explanations of the purpose of the study, what was needed of them, and time availability. The first wave of email requests for the interview went out on October 21, 2009. Only one teacher responded and an interview was scheduled and conducted on October 30, 2009. Another email was sent out on October 27, 2009 to two teachers different from the previous ones. Of those two teachers, one responded right away and the interview was scheduled and conducted on November 4, 2009. The other teacher did not respond so the researcher sent out a reminder of the interview request and an answer

was received with an agreement to participate. The last interview was conducted on November 6, 2009.

The researcher's purpose is to identify whether teachers' resistance to change affects the extent to which teachers will implement the SIOP model and whether ELLs benefit from classrooms where the SIOP model is implemented. As mentioned earlier, the research consisted of a mixed methodology data collection approach using both qualitative and quantitative data. Qualitative data collection consisted of a semi-structured interview conducted with three teachers. Each interview was tape recorded and transcribed to ensure accuracy. Quantitative data was obtained through the use of an electronic online survey (consisting of Likert scaled and open ended questions) through the James Madison University sponsored Qualtrics (2008) online survey database system to create and distribute the survey. The online survey was emailed to all teachers at Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School on October 20, 2009 and was closed on November 13, 2009 at midnight.

This study has been analyzed using descriptive statistics and analytical techniques for both qualitative and quantitative data, which will be discussed in the next section. Although no questions were asked that revealed the participants identity (name or title), the Supervisor for Research, Planning and Operations distributed the survey to keep the survey completely anonymous. Prior to accessing the online survey, each participant received an email including the cover letter requesting voluntary consent to participate in the survey. Once the participant agreed to the cover letter, they accessed the survey by clicking the link at the end of the letter. The consent form for the interview process was

given to the teachers before each interview took place. Once the interviewee agreed to the consent form, the researcher moved on to the interview. The survey was completely anonymous and the interviews were strictly confidential. The survey was also piloted in the researcher's Reading and Research class, in which all are graduate students.

Data collected from the interviews was kept in the strictest confidence. A numeric coding system was employed (vice name or title) to mask the identity of each participant (i.e., Sally Smith = A1); this technique will be discussed in more detail in the next chapter. The codes used to mask the identity of the interviewees in this study were TH1, HH2, and SK3.

At the conclusion of each interview session, all interview data collected on site at the three schools was immediately secured in a locked file cabinet in a closet in 3345A Memorial Hall. All true name data collected to include consent forms, researcher notes, the tape-recorded interview sessions, and transcriptions were stored in the above mentioned location. Survey materials and actual surveys were stored electronically in a password protected word document file and in the password protected Qualtrics (2008) database. The survey given to the teachers is listed in Appendix C and the semi-structured interview questions are listed in Appendix D.

The survey asked teachers a series of questions pertaining to the grades they teach, the number of ELLs in their classrooms, English language curriculum and their perceptions of the SIOP model. The interview asked the same questions to obtain more detail, verbalize information and better support the survey responses. Both methods

started with an easy and friendly question such as the grades that they teach, to encourage participants to continue the survey and to build a relationship with the interviewee as suggested by the Survey Design Chapter from the Survey System's Tutorial (Creative Research Systems, 2009). More complex questions were asked towards the end of both protocols as recommended by Creative Research Systems (2009).

### **Sample**

The sample for this study consisted of all teachers at Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School. All teachers were asked to take the survey and 52 responded. Five teachers were asked to participate in the interview protocol, but only three were interviewed. The grades taught varied from fifth to twelfth and from having only ELL classes to a regular class, where ELLs and English native speakers are mixed in the same classroom.

### **Instrumentation**

This study consists of a fourteen-question survey and a semi-structured interview of twelve structured questions. The researcher asked questions for clarification based on interviewee responses. Each interview took approximately 25 minutes. The survey was distributed through Qualtrics and the interviews took place at each school in each teacher's respective classroom. The purpose of both protocols is to identify how teacher attitudes impact teacher responsiveness to implementing the SIOP model.



## **Data Analysis and results**

### **Overview**

The qualitative data collected for this study consisted of a semi-structured interview given to three teachers, one teacher from each school. The duration of each interview was approximately 25 minutes. The quantitative data acquired for this study was collected using Qualtrics (2008), an online survey database system. Out of the 260 teachers asked to participate, 52 completed the survey. No surveys were abandoned and all surveys were completed in their entirety. The response rate was 20%. The survey consisted of fourteen questions pertaining to the grades the teachers taught, the number of ELLs they have in their classroom, English language curriculum, and perceptions of the SIOP model.

### **Procedure**

In order to establish validity, the researcher designed a mixed method data collection framework, which employed two different data collection methodologies: a qualitative interview protocol given to three teachers and a quantitative survey administered to 52 teachers. The use of triangulation by different data collection methods to study the research questions reduced bias (Patton, 2002; Fraenkel & Wallen, 2009). Lincoln and Guba (1985) state that the technique of triangulation increases the probability that results and analysis are credible. Qualitative methods were used to add depth and detail to the quantitative data and were also transcribed in order to assure accuracy as suggested by Patton (2002). The quantitative results were analyzed using descriptive statistics, while the qualitative results were analyzed using coding, member

checks, and external audit to cross check the study (Lincoln & Guba, 1985). Both qualitative and quantitative data were analyzed separately and combined in the results section.

### **Qualitative Data Analysis**

**Coding.** The researcher coded the qualitative data and asked a classmate to conduct an internal audit of the raw interview data using a blind coding methodology. Both the researcher and her classmate coded the data separately and then the coded results were analyzed and compared as suggested by Patton (2002). Comparative data analysis revealed that the blind coder did not find any additional codes beyond those that the researcher found. The coding consisted of establishing categories, themes, codes and sub-codes based on the questions and then the participant responses were assigned under each category to analyze the patterns and consistency of the responses. See appendix E for codes. Having two people code the same data adds reliability to the study (Miles & Huberman, 1994).

**Member checks.** This technique is considered by Lincoln and Guba (1985) to be “the most crucial technique for establishing credibility” (p. 314). It consists of asking the interviewees to review the interpretations of the researcher in order to determine the credibility and accuracy of the results (Creswell, 1998). After the data collection, Stake (1995) also recommends the researcher ask the participants to check the transcripts of the interview. He also mentions that generally the participants never provide the researcher with feedback during this process.

For this study, transcriptions of the interviews were sent to each interviewee in order to add credibility to this study. Each interviewee was asked to review their interview transcript and add and/or clarify any ideas. All of the interviewees replied to the researcher with minor changes. Two of them only asked to remove the “ums” and the other made some clarifications of acronyms and also requested to remove the “ums.” All of the requests were taken into consideration and each transcription was modified.

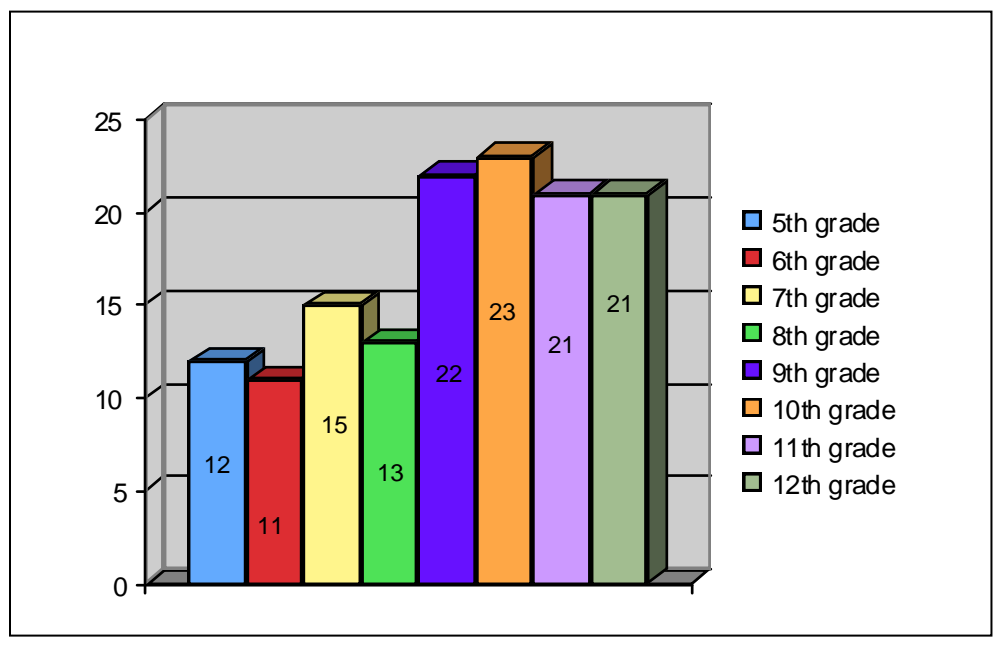
**External audits.** The researcher asked another classmate (auditor) to examine the study and the results to evaluate the accuracy of the data collected and the researcher’s interpretation of that data. By evaluating the results, the auditor scrutinizes the findings, analysis, and conclusions to ensure they are supported by the data (Creswell, 1998). The external auditor was identified and secured while the data collection was taking place. She also has some familiarity with this study since she was in the same class as the researcher and the papers were shared within the class.

### **Results of Qualitative and Quantitative Data**

**Grades teachers teach.** The first question of the survey asked teachers to select the grade levels they teach in which could have more than one answer. The grades varied from fifth to twelfth with the following distribution: twelve teachers teach in 5<sup>th</sup> grade, eleven teach in 6<sup>th</sup> grade, fifteen teach in 7<sup>th</sup> grade, thirteen teach in 8<sup>th</sup> grade, twenty two teach in 9<sup>th</sup> grade, twenty three teach in 10<sup>th</sup> grade, and twenty one teach in 11<sup>th</sup> and 12<sup>th</sup> grade (see figure 7).

**Figure 7.**

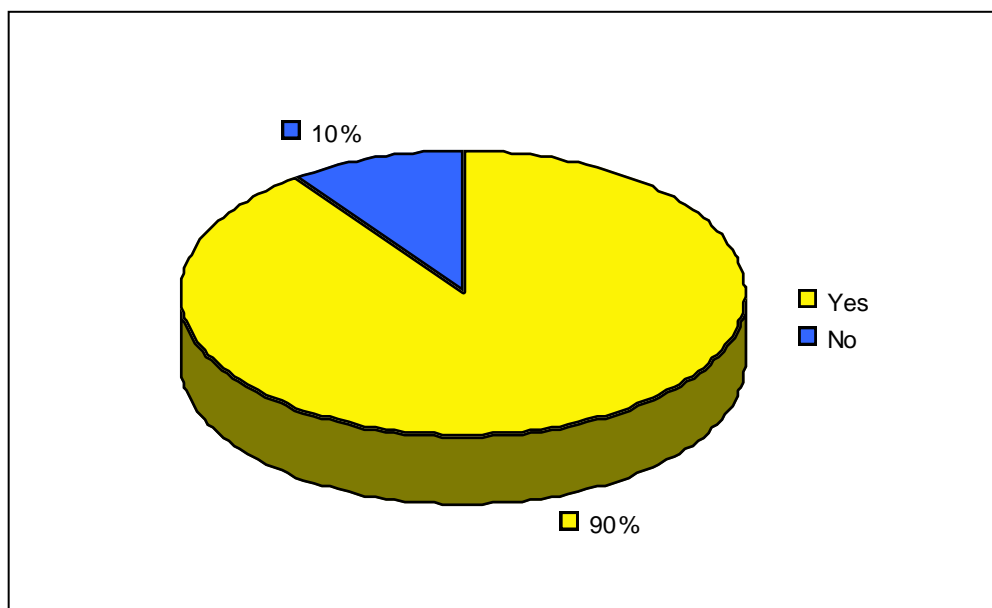
**Grades teachers teach.** This figure shows the grades in which teachers teach.



**English language learners in the classrooms.** The second survey question asked the teachers if they have English language learners in their classroom. Out of the 52 responses, 90% of the teachers responded that they have English language learners in their classroom and 10% responded that they do not have English language learners in their classroom (see figure 8).

**Figure 8.**

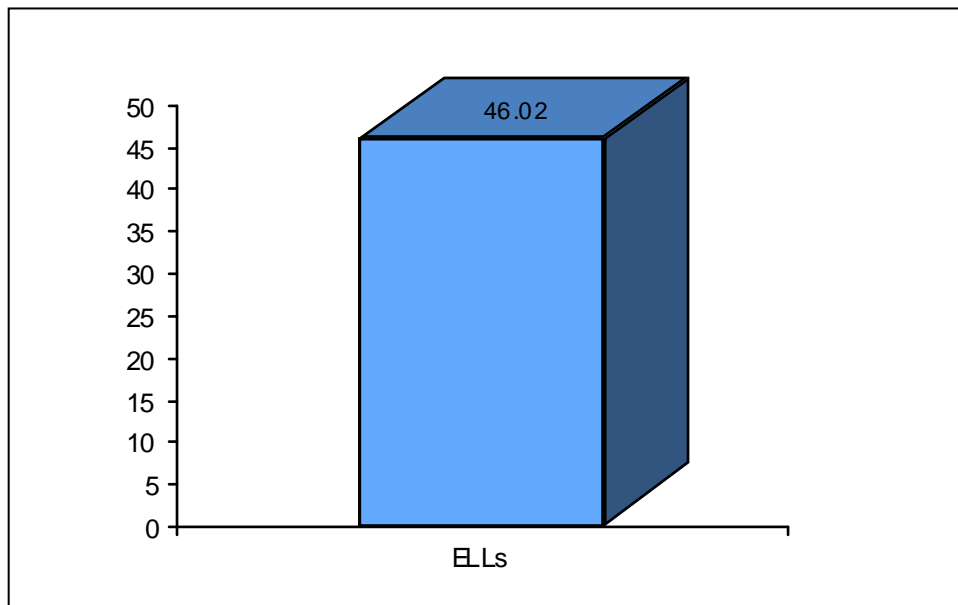
**English language learners. This figure represents if teachers have English language learners in their classroom.**



The third survey question asked teachers to give a percentage of ELLs in their classrooms. On average, 46% of students in all classrooms are ELLs (see figure 9).

**Figure 9.**

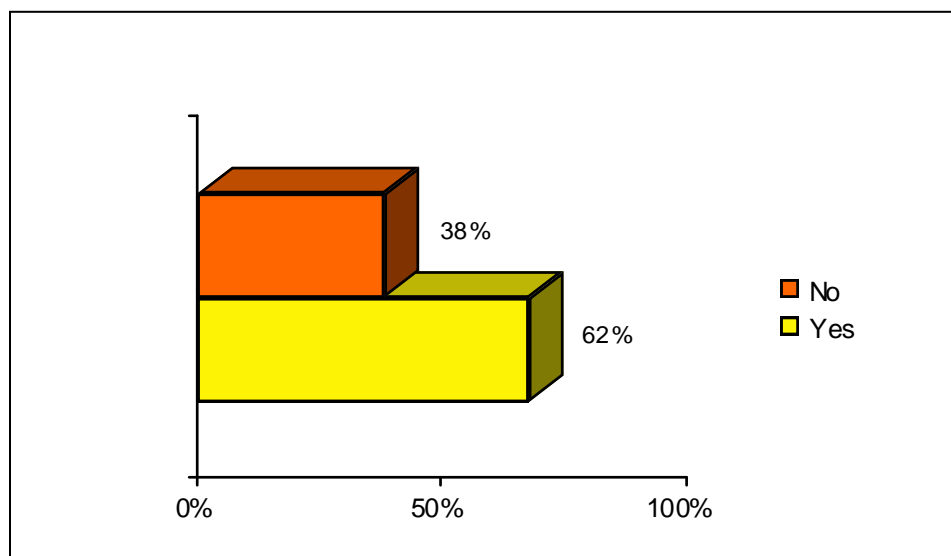
**Number of English language learners in classrooms. This figure illustrates the mean of English language learners.**



**English language curriculum.** The fourth survey question asked the teachers if they have experienced any change in English language acquisition curriculum design during their time teaching at HCPS. 62% of the teachers indicated that they have experienced change in the curriculum, while 38% indicated that they have not experienced any change (see figure 10).

**Figure 10.**

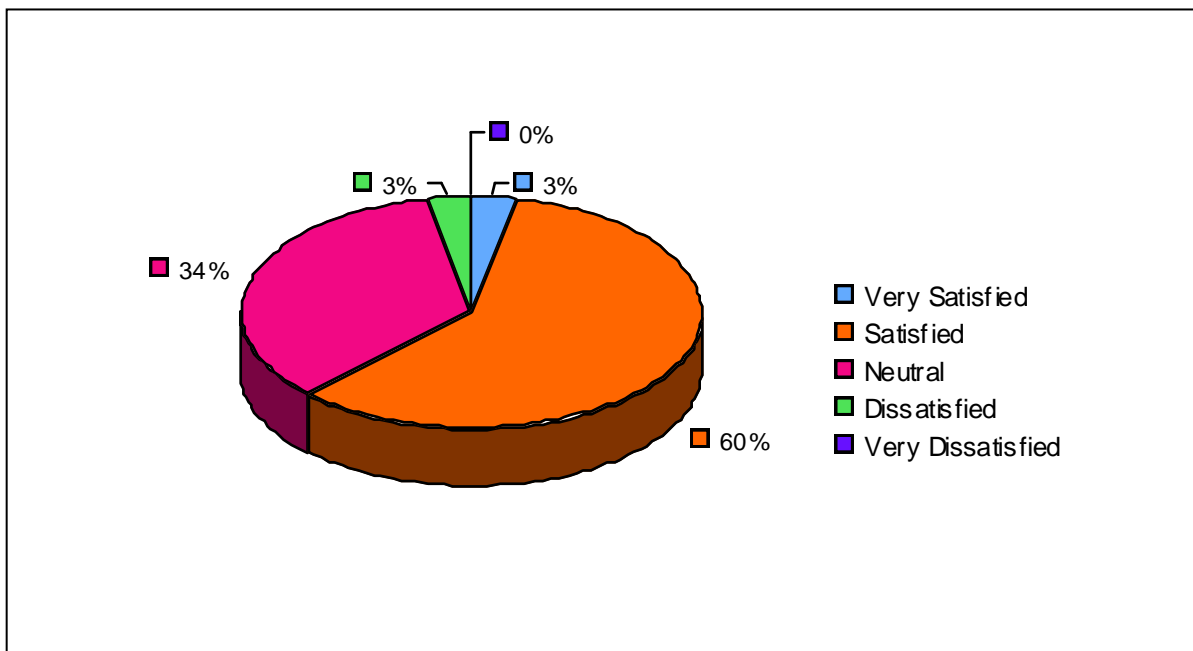
**Change in English language curriculum design. This figure shows if teachers have experience change in curriculum design.**



The fifth survey question asked: What was your reaction regarding those changes? The term reaction was used in this question instead of attitudes because it was a better fit for the survey design. According to the Merriam-Webster's dictionary (2010) reaction is "resistance or opposition to a force, influence, or movement" and attitude is "a feeling or emotion toward a fact or state." Since both words are similar in their definitions, reaction was used interchangeably with attitudes in this question. The majority of teachers representing 59% of the responses responded that they were satisfied with the changes. Only 3% were very satisfied and 34% were neutral to the changes. None of the teachers were very dissatisfied and 3% were dissatisfied (see figure 11).

**Figure 11.**

**Teacher reactions to change. This figure illustrates the teachers' reaction to the changes they have experienced.**

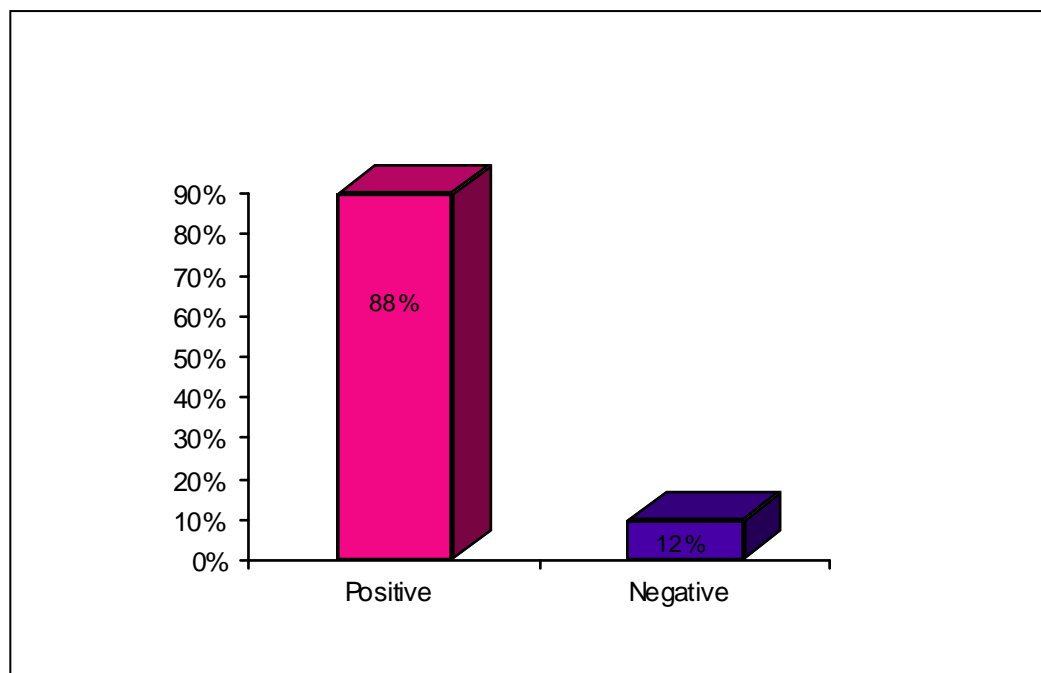


Survey question six asked teachers if their attitudes were positive or negative regarding the change in English language acquisition curriculum design. From the responses gathered, 88% of the teachers responded that their attitudes were positive and 12% responded that their attitudes toward the change in curriculum design were negative (see figure 12).



**Figure 12.**

**Teacher Attitudes.** This figure shows teacher attitudes toward changes in curriculum design.



These two questions (number 5 and 6), answer the first research question, which asked about teacher reactions toward change in English language acquisition curriculum design in the HCPS. From the results, the researcher can infer that overall, teachers' reaction to change and their attitudes toward those changes were positive. In both questions, teachers showed a very strong advocate position.

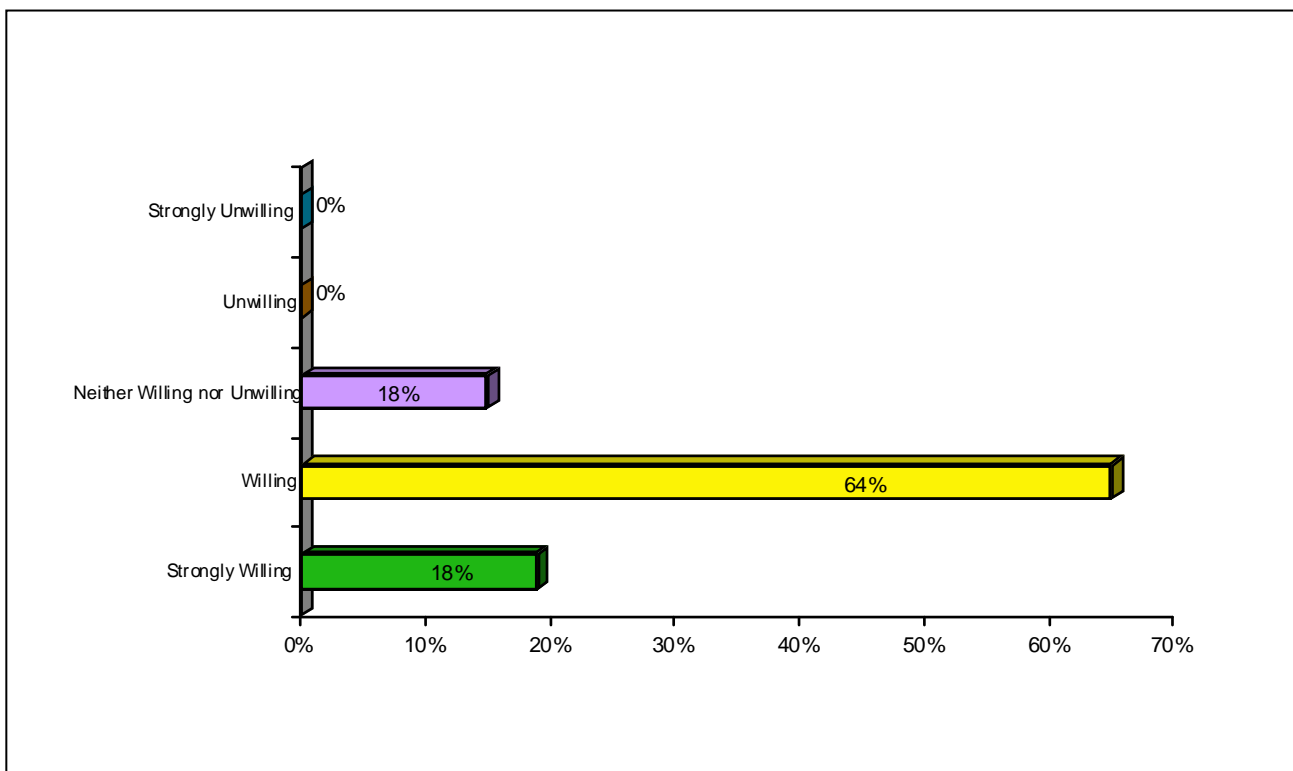
Some of the curriculum changes that teachers expressed in the interviews consisted of having to teach something different from what they have been teaching in the past, and/or going from having no curriculum at all to creating one. The interviews

also showed a positive attitude toward these changes, but of course it has a downside to it as well. Interviewee #2 mentioned, “the negative would have been all the meetings that we had to have after school.” In general, teacher attitudes toward changes in curriculum design were mostly positive.

Survey question seven asked teachers about their willingness to implement the changes in English language acquisition curriculum design and the responses were 18% strongly willing, 64% willing, 18% neither willing nor unwilling, and 0% were unwilling and strongly unwilling (see figure 13).

**Figure 13.**

**Teachers’ willingness to implement changes. This figure illustrates the willingness of the teachers to implement changes.**

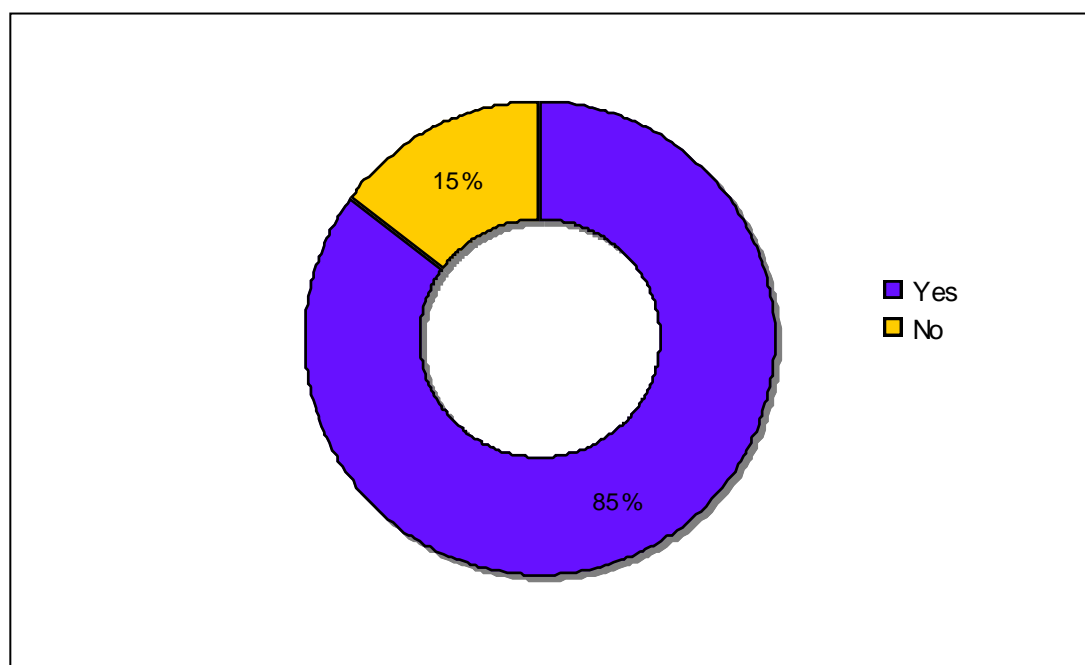


Question seven answers the research question about teachers' willingness to implement changes in English language acquisition curriculum design. Teachers' willingness to implement curriculum change was very high, indicating that it is possible to make a change within the school district. If there is a positive and enthusiastic attitude from teachers, it is good sign that changes can occur.

**Perceptions of the SIOP model.** Survey question eight asked teachers if they have heard about the SIOP model. The results revealed that 85% of the teachers responded that they have heard of the SIOP model, while 15% responded they have not heard of the SIOP model (see figure 14).

**Figure 14.**

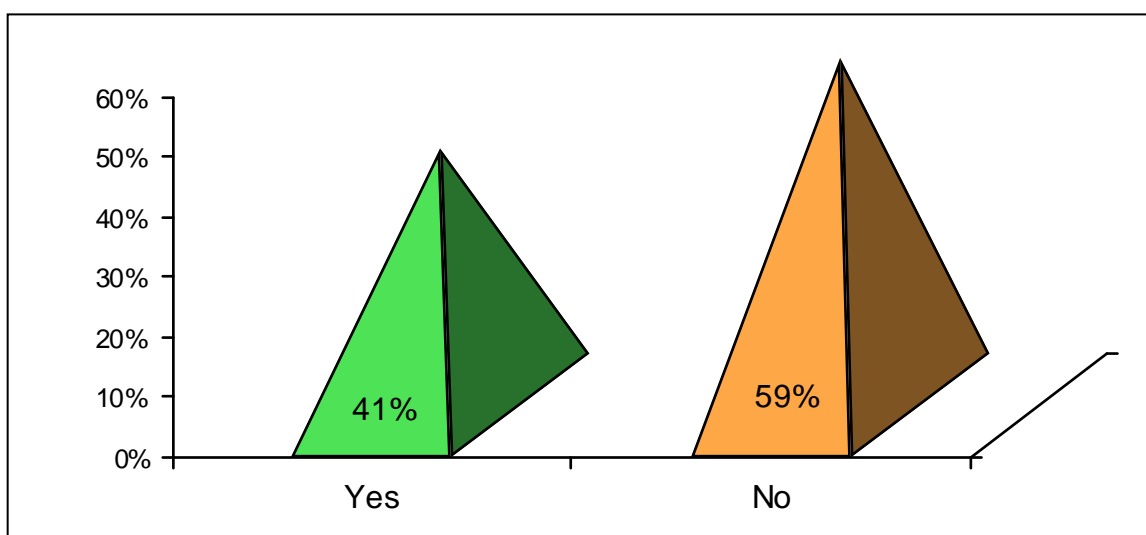
**Teachers' awareness of the SIOP model. This figure shows if the teachers have heard of the model.**



Survey question nine asked teachers if they use the SIOP model in their classrooms and 41% responded that they use the model and 59% said they do not use it (see figure 15).

**Figure 15.**

**Teacher use of the SIOP model. This figure illustrated whether or not teachers use the model.**

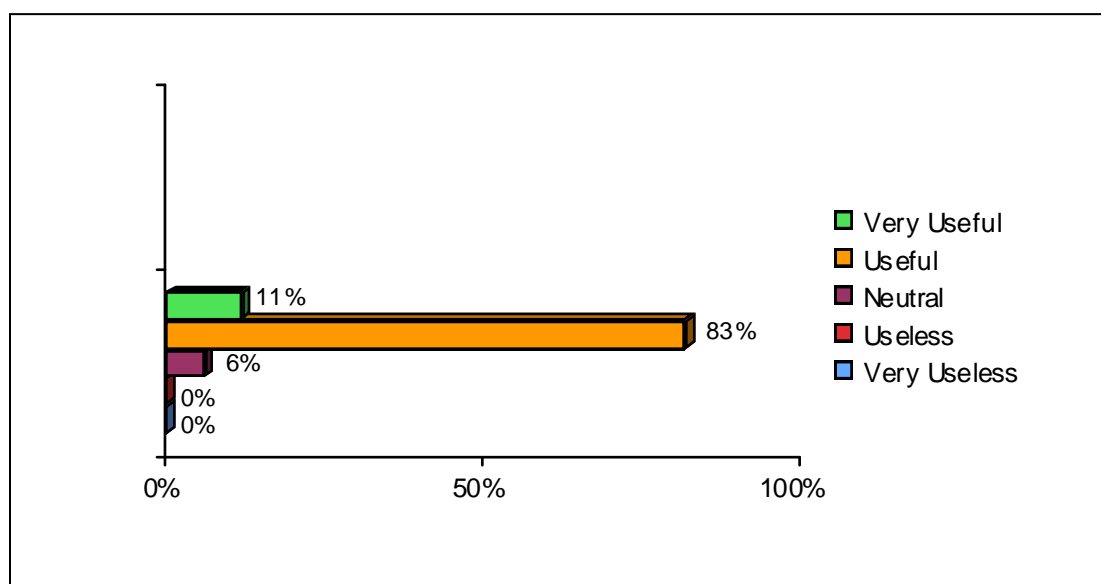


Questions eight and nine answer the research questions about the ways that teachers use the SIOP model and ways that teachers do not use it. A majority of teachers have heard about the model but on the other hand, many do not implement the model in their classroom. Some implement parts of it as was discovered in the interviews. Interviewee #1 stated the following: “I recognize that I don’t do it 100% but the things like content, language objectives, I implement those aspects of the SIOP.”

Survey question ten asked the teachers who use the SIOP model in their classrooms if they find it useful. Out of the 17 teachers that use the model, 11% found it very useful, 83% found it useful, 6% were neutral, and 0% found it useless and/or very useless (see figure 16).

**Figure 16.**

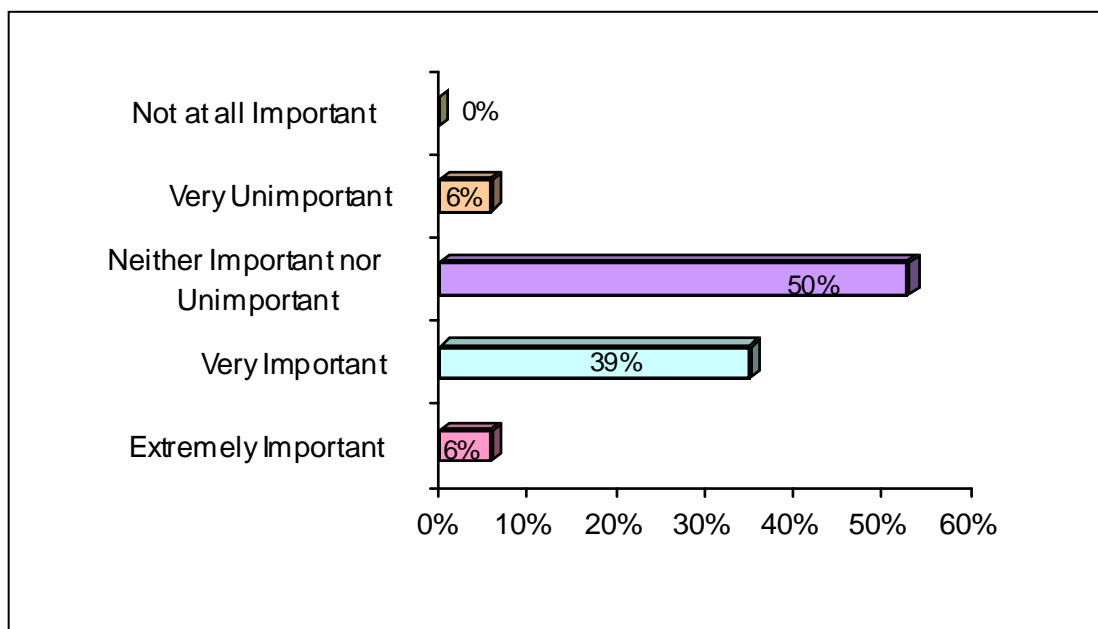
**SIOP usefulness in the classrooms. This figure shows how useful teachers feel the model is.**



Survey question eleven asked teachers to identify if the SIOP model is an important aspect of their teaching methodology. The results showed that 6% answered that the model was extremely important for their methodology, 39% indicated it was very important, 50% said it was neither important nor unimportant, 6% considered the model very unimportant, and 0% responded that it was not at all important (see figure 17).

**Figure 17.**

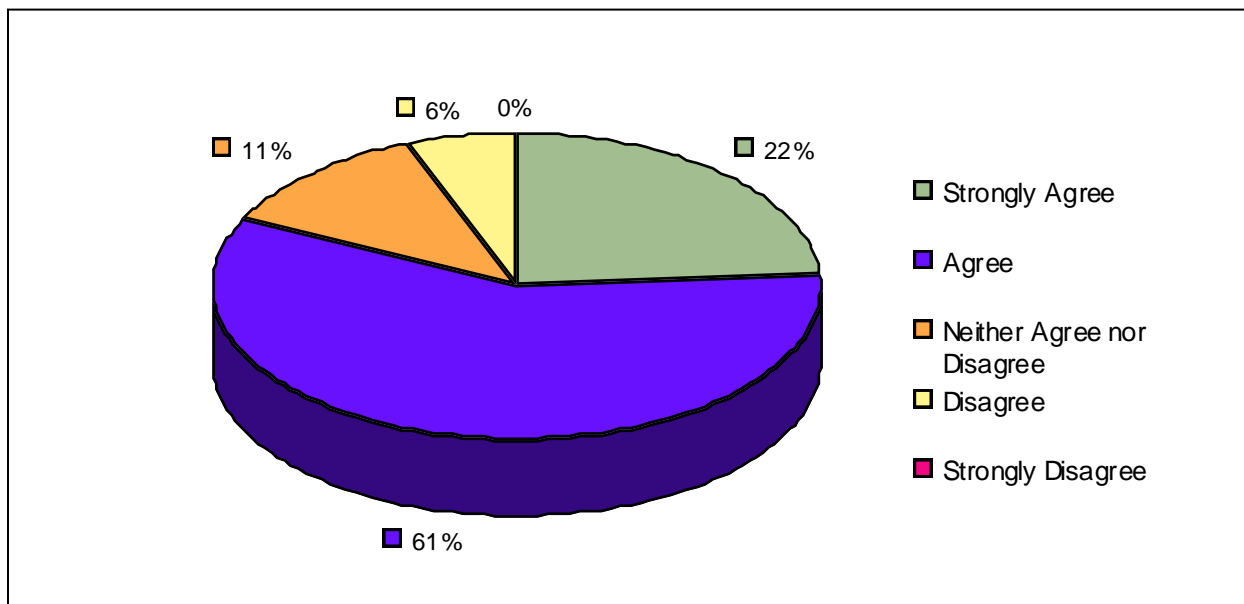
**Importance of the SIOP model in teaching methodology. This figure illustrates how important teachers think the model is for their teaching.**



Survey question twelve asked if the SIOP model methodology of teaching helps ELL students achieve academic success. From the responses received, 22% strongly agree with this question, 61% agree with it, 11% neither agree nor disagree, 6% disagree, and 0% strongly disagree with this question (see figure 18).

**Figure 18.**

**SIOP methodology helps ELLs achieve academic success. This figure illustrates the belief of teachers that the model helps ELLs.**



Questions ten, eleven and twelve answer the research questions regarding the ways in which teachers find the SIOP model useful or not useful in the classroom. Based on the survey results, it can be implied that teachers have an inclination towards the usefulness of the model. According to interviewee #2 the SIOP model “let’s me know what they (the students) know and what they don’t know.” Also, interviewee #3 declared “if you are doing good teaching, you should be using that for all your kids. It’s just good teaching.” It is clear that the ones who use the model find it useful, think it is an important aspect of their teaching, and most importantly it helps ELLs achieve academic success (see figure 18).

Lastly, the qualitative data answers the last research question concerning the barriers towards the implementation of the SIOP model. It was clear that most of the respondents thought the implementation of the SIOP model was easy and that the more a teacher uses and practices the model, the easier it becomes to implement. One person mentioned that the model could be a little tricky, another person mentioned that it is easier to implement in lower levels. But in general, the responses suggested it was an easy model to implement.

Definitively the biggest and most repeated barrier for the SIOP implementation was time. One participant mentioned, “not having adequate planning time” and that “total implementation can take a great deal of re-working lessons.” Another participant stated “time is the biggest barrier,” and another one expressed “more expectations with less support/time” when speaking of barriers to implementation. These are all proof that time constraint is the main issue of teachers not implementing the SIOP model.

Another common response was the fact of having many other responsibilities. One person mentioned that one of the barriers was due to being “overburdened with extraneous responsibilities unrelated to classroom instruction.” Others mentioned being accountable for different models/programs. Further, the fact of not having follow-up workshops and support were some of the barriers mentioned as well.

### **Conclusion of Results**

From the results, it is clear that there are many ELLs in the classrooms and that a majority of the teachers have experienced changes in English language acquisition



curriculum design. It could also be inferred that teachers' reactions and attitudes were positive to those particular changes and their willingness to change was very high. Many teachers have heard about the SIOP model, but there are more teachers who do not implement it than those who implement it. It was also found that teachers believe that the SIOP model help ELLs achieve academic success and that it is a useful model, but at the same time, they are not using it.

This finding is very interesting, because even though teachers know the benefits of the SIOP model, they are still not implementing it or are only implementing parts of it. It is dismaying that teachers know the SIOP model is beneficial for the students, but they do not consider it an important part of their teaching methodology. Maybe if more teachers saw a greater importance in their teaching methodology, they would implement the SIOP model to a greater degree. It is obvious that if teachers had more time, were accountable for only one model instead of three, had more support to implement the model through in-service seminars and workshops, and were able to observe the SIOP model being modeled, their attitudes toward the implementation of the SIOP model will become more positive. Research suggests that modeled behavior has a greater impact on the observer and, as a result, learning will be enhanced (Bandura, 1986).

The next section will provide the reader with an overview of how and why the study was done, the questions addressed, and a summary of the findings. It will also include conclusions in reference to all of the research questions, recommendations for future action, and recommendations for further study. The reader will be able to discover if the hypotheses were true and if the research questions were answered by this study.

## **Conclusions and Recommendations for Future Research**

### **Overview**

This study was carried out to gain insight into how teacher attitudes impact teacher responsiveness to implement the Sheltered Instruction Observation Protocol (SIOP) model at Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School in Harrisonburg, Virginia. The study consisted of quantitative and qualitative data collected over the course of several months. The author also conducted research on English language learner demographics, English as second language teaching methodologies, the SIOP model, teacher attitudes and resistance to change in order to better explain the different elements that affect the implementation of the SIOP model. A review of the findings, recommendations for action, recommendations for future research, limitations of the study and the researcher's experience will be discussed next.

### **Interpretation of Findings**

From the results of the study, it is clear that 90% of the study participants have English language learners in their classrooms and that the percentage of ELLs in the classrooms is significant and growing as shown in figures 1 and 2 and in figures 8 and 9. The findings of this study indicate that teacher reactions toward change and willingness to implement the changes in English language acquisition curriculum design in the two middle schools and the high school is positive. The study also shows that teachers are willing to make the changes necessary in order to implement the SIOP model in the classroom provided they are given the time and training as shown in figures 11 and 13.

The results showed that teachers have heard about SIOP, that many do not use it in their classroom because they do not have the time nor the appropriate training, and some teachers use parts of the model in their teaching methodology. Of the few teachers who use the model, the results revealed that a majority of those who use it, found the SIOP model beneficial to the ELL students in their classroom, a few were neutral, and no one found the model useless, as shown in figure 16. Interviewees revealed ways in which they thought the model was useful in their classroom. Lastly, the study showed that the main barrier to implementing the SIOP model is time.

Other barriers include: the complexity of the model and having to be responsible for many other duties not necessarily related to classroom instruction as supported by the qualitative data results in chapter four. For example, interviewee SK3 said “a lot of the Harrisonburg City kids that are ELLs are also VGLA and those add hours and hours and hours of time (...)” When asked if they consider the implementation of the SIOP model easy or hard, a participant responded, “SIOP takes time, preparation, and practice to implement effectively.” When teachers were asked some of the barriers to SIOP program implementation in their classroom, a participant said “lack of time to prepare. Overburdened with extraneous responsibilities unrelated to classroom instruction.” Another responded, “time to make appropriate lessons.” Another response was “not having adequate planning time,” and another response was “being asked to use the 5 E's lesson plan.”

Overall, the findings show positive attitudes toward the SIOP model and usefulness of the model. But sadly, it is clear that due to time constraints teachers are

resistant to implement the model. This resistance to change by teachers can be attributed to the fact that teachers view this change as additional work that takes away from their classroom responsibilities and, as a result, they do not have the time to put in the extra work (Keith, 1991). Moreover, teachers have many other responsibilities outside the classroom in addition to teaching that also impacts teacher resistance to change.

### **Recommendations for Action**

Since the change in demographics is growing in the United States and ELLs are present in the classroom, the need to help them succeed academically is growing as well. Because of this demographic shift, schools have the responsibility to offer ELLs quality instruction and help them obtain academic success. The ELL population in the HCPS is significant, which implies that teachers and school administrators need to make changes and accommodate these new language learners by making changes in both their curricula and teaching methodologies.

This study was conducted at Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School. Therefore, HCPS administrators should analyze the results to have a better understanding of teachers' perspectives about change, the SIOP model, reactions and willingness to implement changes, and barriers to implement changes. In order to be successful and better help the ELLs, it is necessary for HCPS administrators to decide on an instructional model to implement, and then support the model chosen. The researcher chose the SIOP model not only because it has been shown

to be one of the most successful models for ELLs, but also because it is the ESL model most often cited by practitioners in the field as the best curriculum design for ELLs.

Based on the data collected, it was apparent that some teachers were responsible for using different models. Because they were managing several models simultaneously, teachers were not to be able to perform at 100% on any of the models. This was noted by some of the participants in the study. Once it is decided that the SIOP model will be the one to use across the schools, it would be beneficial to offer teachers some incentives, certificates, benefits, support, collaboration within teaching community, and most importantly, time to plan classes and be able to comply with their other duties as teachers. It is also crucial to make sure that teachers know that the proposed changes are not due to their teaching negligence, but because of the need for change and to benefit the students.

Teacher change takes time and change may be harder or easier for some teachers than others. Therefore, it is important to have support from the schools and also collaboration among teachers. Moreover, teachers' ability to undertake change varies because some teachers have experience with ESL while others have more experience with content areas. Regardless of teacher ability/willingness to fully embrace curriculum change, the case for change is paramount and is only exacerbated by the growing number of ELLs and the need to accommodate them. Commitment from teachers is another factor that comes into play when implementing changes. Teachers need to take part in and implement changes to school and classroom structures (Leithwood, Menzies, & Jantzi, 1994). Motivation is also a key factor in incenting teachers to change. Kennedy

(1988) argued that when teachers are able to have concrete incentives and rewards for their endeavors and time, they are more willing to implement changes.

In order to ease the implementation of change in schools, administrators need to ensure that teachers understand the need for change. Van Veen and Slegers (2006) suggested that teachers should be involved in the design facet of the changes as well as in the implementation. Teachers need to feel they are part of the change, and they need to have a say in how their school is implementing change. Another recommendation as suggested by Zimmerman (2006), is to “create a sense of urgency, developing and operationalizing a vision, rewarding constructive behaviors, aiming for short-term successes, and creating a professional learning community (p. 243). This way, teachers will have positive attitudes toward change.

Johnson, Kimball, Melendez, Myers, Rhea, and Travis (2009), also suggest that it is necessary to have a “supportive environment for faculty members and a supportive environment for students” (p. 149) in order to overcome resistance to change and influence teachers to implement the changes. The key factor in a supportive faculty environment is the collaborative sharing of experiences and concepts as well as failures and successes.

The Greenwich Connecticut School system cooperative learning program has been identified by Hayes (2000) as one of the most thriving programs in the nation as far as having a supportive faculty environment. They are successful because teachers volunteer to implement non-traditional teaching methods and because teachers are

provided with training which is put into practice and assessed throughout the course of the school year. DeLong and Winter (1998) argued that one of the most useful ways to improve and better implement new teaching skills is to talk with fellow teachers who are also using new techniques to learn from each other. A supportive environment for students entails a clarification in roles and expectations done early in the course, and also making clear that learning involves learning from peers.

### **Recommendations for Further Study**

Recommendations for future research include conducting a longitudinal comparative analysis of all ESL models to study the merits of the SIOP model in greater detail. It is beneficial to show a model is effective, but validity and reliability are increased when the model is compare to other models. When it is possible to show that a model is better than another through a comparative analysis of best practices, school administrators are more likely to embrace the use of the new model.

A second recommendation is that the current study should be expanded to include all schools that are experiencing rapid growth in ELL populations beyond the Harrisonburg City Public Schools. By including all the schools that are experiencing this shift in demographics, the results could be generalized to the state of Virginia. It would also help to assist school administrators on how to better approach change and thus incent the teachers to implement the changes.

The third recommendation is to conduct the current study using the elementary schools in addition to the schools studied. Since learning starts at an early stage in ones

life, it is important to understand teachers' attitudes toward change in curricula design and teaching methodologies at the elementary level. It would also shed light on teachers' attitudes at this school level, to see if they are familiar with the SIOP model, and to find out to what extent they use it.

Lastly, a longitudinal study where data is collected through observations in addition to the interviews and the survey is recommended. By having the observations, a comparison could be made from class to class where the SIOP model is used and where it is not used. It would also show if students are benefiting from the model or not. Additionally, it would be useful to track student progress from elementary school through high school in a longitudinal study. An added benefit of such a longitudinal study would be the ability to evaluate ESL SOL results each year. Designing SIOP model research using a control group methodology may serve to more accurately measure the benefits of the model. Observations should be accompanied with more interviews to grasp a better understanding of teachers' attitudes.

### **Limitations**

One underlying limitation in this study is the sample size. The sample was small and therefore not generalizable to the entire population of the county or the state. This study cannot be compared to other cities as demographic trends may differ, but it does set the framework for future research. It also provides the HCPS with an idea of teachers' attitudes toward change and teachers' thoughts about the SIOP model if it is the model chosen to follow in the future.



The researcher's quantitative scale needs to undergo additional validity testing to ensure accuracy of the measures. Because the researcher did not find any previously validated quantitative scale, she had to create her own. Even though the researcher lacked significant experience in creating quantitative measures, the qualitative data supported and expanded on the quantitative results, improving the validity of the study.

Due to time constraints on the part of the researcher, elementary schools were excluded from the study. Other limitations included researcher bias and sample size (the survey was administered only once in the semester). To minimize researcher bias, coding, external audits and member checks were developed. If the survey would have been distributed at the beginning of the school year when the teachers' workload was lighter, it may have resulted in more responses from the participants.

### **Researcher's Experience**

Throughout this study, the author learned the importance of confidentiality to be able to obtain truthful answers from the participants. She also learned the purpose, process, and the importance of the Institutional Review Board when a study involves humans. The vast number of formal approvals that she had to obtain from the HCPS and from JMU taught her the importance of scheduling meetings with different individuals involved in the decision process ahead of time. Time management and the use of a project timeline were other experiences from this study as well. These last two experiences helped the researcher reduce stress throughout the study.

The burden of balancing a mixed methods data collection design was another significant experience. Creating a survey for this study by matching the questions asked to the research goals proved to be an invaluable learning experience. Also, assuring that the qualitative data was aligned with the survey and the study was a challenge. Because the qualitative data was the researcher's tool to validate her study, it was very important that both data collection methods supported each other.

Going through all of the quantitative data and asking a colleague to code and do an external audit, taught the researcher the importance of validity and the different ways a study can be validated. It was difficult to go back and forth between both data collection methods to link the responses and relate them to the research questions. The time it took to transcribe each interview and having the interviewees do the member checks was a challenge. Having a mixed methodology taught the researcher the importance of having others review her work to reduce bias and ensure that the results reflected the data collected through both methods.

One of the major constraints in the study was participants' time for both data collection methods. Experiences gained from this study include: the importance of making contact and appointments with the study participants in advance for the interviews, difficulty obtaining responses, and reminding participants to take the survey weekly are important details to consider for the success of a future study.

To finish, another experience from this study is that classroom curriculum change is hard to establish. There are many factors influencing the decision to make changes and

many factors affecting the implementation of the changes by the teachers. When deciding on a change, it is important to make sure everyone is onboard and that the change is going to benefit everyone, instead of being a burden.

This study helped the researcher discover the passion she has for ELLs and taught her the importance of being an excellent teacher. It also made her want to make a difference in the world and lives of ELLs since she has similar experiences. Conducting this study and reading all the different articles made her realize that research is one of the best ways to make a change and impact someone's life. Not only does research shows expertise in the field but it also sends a message to those who read it and hopefully even change their attitudes and perceptions towards the topic. Using research as the means to communicate an important message is powerful because the message travels to many different places and has many interpretations.

This study allowed the researcher to explore in detail a new subject area. Reading about ELLs, the change in ELLs demographics, and ELLs academic achievement problems provided the basis of the study and allowed the researcher to investigate one of the best ESL models in use today. Sadly, the model is not used very much in HCPS where the study was conducted, but she hopes this research will be the springboard to implement the model across the city schools. This study defines where the researcher's love and passion are – with the ELLs.

## **Conclusion**

This study shows how teacher attitudes impact teacher responsiveness to implementing the SIOP model in Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School. It is clear that there are many facets affecting whether or not a teacher implements a change in his/her classroom. In order to successfully implement changes, especially curriculum design changes, it is important to address all of the factors and consider the teachers' perspectives. When there is such a fast growing ELL demographic shift in the United States, particularly within the public school system, educators should be focused on how to better prepare and educate future citizens. In order to effectively create instruction for all students, it is necessary to push for changes that will benefit them as it is as equally important to provide teachers with the necessary tools, resources and time!

# Appendices

## Appendix A

### Site coordinator letter of permission

Institutional Review Board (IRB)  
James Madison University

Page 14 of 16

#### Site Coordinator Letter of Permission

September 15, 2009

Institutional Review Board  
James Madison University  
MSC 5728  
JMAC-6, Suite 26  
Harrisonburg, VA 22807

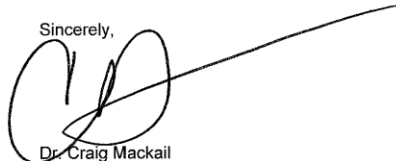
Dear Institutional Review Board,

I hereby agree to allow Diana Meza, a graduate student from James Madison University to conduct her research at Thomas Harrison Middle School. I understand that the purpose of the study is to evaluate teacher attitudes toward the implementation of the Shelter Instruction Observational Protocol (SIOP) model and changes in English language acquisition curriculum design.

By signing this letter of permission, I am agreeing to the following:

- JMU researcher has permission to be on Thomas Harrison Middle School premise.
- JMU researcher has access to the data collected to perform the data analysis both for presentation to Thomas Harrison Middle School and/or for publication purposes.

Sincerely,



Dr. Craig Mackail  
Supervisor for Research, Planning and Operations

Institutional Review Board (IRB)  
James Madison University

Page 15 of 16

## Site Coordinator Letter of Permission

September 15, 2009

Institutional Review Board  
James Madison University  
MSC 5728  
JMAC-6, Suite 26  
Harrisonburg, VA 22807

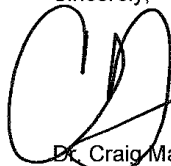
Dear Institutional Review Board,

I hereby agree to allow Diana Meza, a graduate student from James Madison University to conduct her research at Skyline Middle School. I understand that the purpose of the study is to evaluate teacher attitudes toward the implementation of the Shelter Instruction Observational Protocol (SIOP) model and changes in English language acquisition curriculum design.

By signing this letter of permission, I am agreeing to the following:

- JMU researcher has permission to be on Skyline Middle School premise.
- JMU researcher has access to the data collected to perform the data analysis both for presentation to Skyline Middle School and/or for publication purposes.

Sincerely,



Dr. Craig Mackail  
Supervisor for Research, Planning and Operations

Institutional Review Board (IRB)  
James Madison University

Page 16 of 16

## Site Coordinator Letter of Permission

September 15, 2009

Institutional Review Board  
James Madison University  
MSC 5728  
JMAC-6, Suite 26  
Harrisonburg, VA 22807

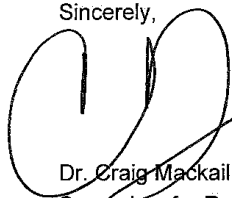
Dear Institutional Review Board,

I hereby agree to allow Diana Meza, a graduate student from James Madison University to conduct her research at Harrisonburg High School. I understand that the purpose of the study is to evaluate teacher attitudes toward the implementation of the Shelter Instruction Observational Protocol (SIOP) model and changes in English language acquisition curriculum design.

By signing this letter of permission, I am agreeing to the following:

- JMU researcher has permission to be on Harrisonburg High School premise.
- JMU researcher has access to the data collected to perform the data analysis both for presentation to Harrisonburg High School and/or for publication purposes.

Sincerely,



Dr. Craig Mackail  
Supervisor for Research, Planning and Operations

## Appendix B

### Institutional Review Board

<i>Full Board or</i>	<i>James Madison University</i>	<i>Expedited</i>
<b>HUMAN RESEARCH REVIEW REQUEST</b>		

**External Funding:**       YES       NO      If YES, Sponsor(s):

**Investigators:** This form is required for Full Board or Expedited review for all JMU research involving human subjects. If you are eligible for an exemption request, please use the alternate form at:  
<http://www.jmu.edu/sponsprog/irb/irbExemptRequest.doc>

**FOR IRB USE ONLY:**

Protocol Number: IRB- 10-0055

Received: 09/02/09

1<sup>st</sup> Review: \_\_\_\_\_

2<sup>nd</sup> Review: \_\_\_\_\_

3<sup>rd</sup> Review: \_\_\_\_\_

**Reviewer:**

**Approved**

Date: \_\_\_\_\_

**Reviewer:**

**Disapproved**

Date: \_\_\_\_\_

**Exempt**

Date: \_\_\_\_\_

**Project Title:** English as a Second Language: The Impact of Teacher responsiveness to implementing the SIOP Model

**Project Dates:**      From: 8/24/2009      To: 04/9/2010      **Minimum Number of Participants**      30

MM/DD/YY      MM/DD/YY      **Maximum Number of Participants**      100

**Responsible Researcher(s):**

Diana Meza

**Department:**

Learning Technology and Leadership Education

**E-mail:**

[mezadx@jmu.edu](mailto:mezadx@jmu.edu)

**Address**

1951 Buttonwood Ct.

**Telephone:**

540-560-2346

**and/or (MSC):**

Harrisonburg, VA 22802

**Please select:**

Faculty

Visiting

Faculty

Adjunct

Faculty

Research

Associate

Administrator/

Staff Member

Undergrad

Student

Graduate

Student

(if Applicable):

**Research Advisor:**

Jane Thall

**Department:**

Learning Technology and Educational Leadership



<b>E-mail:</b>	<a href="mailto:thalljb@jmu.edu">thalljb@jmu.edu</a>	<b>Address</b>	MSC 6913
<b>Telephone:</b>	540-568-5531	<b>and/or (MSC):</b>	MEMH 3345

**Investigator: Please respond to the questions below. The IRB will utilize your responses to evaluate your protocol submission.**

1.  **YES**  **NO** Does the James Madison University Institutional Review Board define the project as *research*?

The James Madison University IRB defines "research" as a "*systematic* investigation designed to develop or contribute to *generalizable knowledge*."

All research involving human participants conducted by James Madison University faculty, staff, and students is subject to IRB review.

Some, but not all, studies that involve human participants are considered research and are subject to full or expedited IRB review, including those:

- intended to satisfy the academic requirements for Independent Study, Bachelor's Essay, Honors/Senior Thesis, or the Master's Thesis;
- intended or expected to result in publication, presentation outside the classroom, or public dissemination in some other form;
- conducted outside the classroom and/or departmental research participant pool if they involve
  - external funding
  - minors (*i.e.*, persons under the age of 18),
  - a targeted population of adults whose ability to freely give informed consent may be compromised (*i.e.*, persons who are socio-economically, educationally, or linguistically disadvantaged, cognitively impaired, elderly, terminally ill, or incarcerated),
  - pregnant women and/or fetuses who may be put at risk of physical harm,
  - a topic of a sensitive or personal nature, the examination or reporting of which may place the research participant at more than minimal risk, or
  - any type of activity that places research participants at more than minimal risk.

Other studies are eligible to *request* exemption from IRB review, including those

- conducted solely within the confines of the classroom or within a departmental research participant pool if they
  - are a general requirement of a course,
  - have the sole purpose of developing the student's research skills, and
  - will be overseen by a faculty member;
- conducted outside the classroom and outside departmental research participant pools, provided they do not involve minors, do not target special adult populations, do not pose a risk of physical harm to pregnant women and fetuses, do not deal with a topic of sensitive or personal nature, or do not involve any type of activity that places the participants at more than minimal

risk (see details above); and provided the investigator does not intend to publish the results or share them with others in a public forum (i.e. conference presentations, senior theses).

- that are part of a larger research project that has current James Madison University IRB approval; or
- that are part of a larger research project that has current approval of a registered IRB at another institution, provided that, if research participants are to be recruited at James Madison University, the University's IRB has given permission for such on-campus recruitment.

2.  YES  NO Are the human participants in your study *living* individuals?

---

3.  YES  NO Will you obtain data through *intervention* or *interaction* with these individuals?

"Intervention" includes both physical procedures by which data are gathered (e.g., measurement of heart rate or venipuncture) and manipulations of the participant or the participant's environment that are performed for research purposes. "Interaction" includes communication or interpersonal contact between the investigator and participant (e.g., surveying or interviewing).

4.  YES  NO Will you obtain *identifiable private information* about these individuals?

"Private information" includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, or information provided for specific purposes which the individual can reasonably expect will not be made public (e.g., a medical record or student record). "Identifiable" means that the identity of the participant may be ascertained by the investigator or associated with the information (e.g., by name, code number, pattern of answers, etc.).

---

5.  YES  NO Does the study present *more than minimal risk* to the participants?

"Minimal risk" means that the risks of harm or discomfort anticipated in the proposed research are not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during performance of routine physical or psychological examinations or tests. Note that the concept of risk goes beyond physical risk and includes psychological, emotional, or behavioral risk as well as risks to employability, economic well being, social standing, and risks of civil and criminal liability.

---

### **CERTIFICATIONS:**

For James Madison University to obtain a Federal Wide Assurance (FWA) with the Office of Human Research Protection (OHRP), U.S. Department of Health & Human Services, **all** research staff working with human participants must sign this form and receive training in ethical guidelines and regulations. "Research staff" is defined as persons who have direct and substantive involvement in proposing, performing, reviewing, or reporting research and includes students fulfilling these roles as well as their faculty advisors. The Office of Sponsored Programs maintains a roster of all researchers who have completed training within the past three years.

**By signing below, the Responsible Researcher(s), and the Faculty Advisor (if applicable), certifies that he/she is familiar with the ethical guidelines and regulations regarding the protection of human research participants from research risks. In addition, he/she agrees to abide by all sponsor and university policies and procedures in conducting the research. He/she further certifies that he/she has completed training regarding human participant research ethics within the last three years.**

Test module at OSP website <http://www.jmu.edu/sponsprog/irb/irbtraining.html>

Name of Researcher(s)	Signature of Researcher(s) and Faculty Advisor (if applicable)	Date	Training Completed
Diana Meza		9/7/09	<input checked="" type="checkbox"/>
Jane Thall		9/7/09	<input checked="" type="checkbox"/>
			<input type="checkbox"/>
Signature of Faculty Advisor also required (if Student protocol) ⇨			<input type="checkbox"/>

For additional training interests visit the National Institutes of Health Web Tutorial at:  
<http://cme.nci.nih.gov/>

**To Submit a Complete protocol, this document should include the following:**

- Human Research Review Request form (i.e. *the questions above*)
- IRB Checklist (included on this form)
- Research Narrative (use the categories indicated below. 10 pages maximum, do *not* include your literature review)
- Additional relevant research materials (i.e. letter of consent, questionnaire, survey, where used)

PLEASE SUBMIT AN ELECTRONIC VERSION OF YOUR **ENTIRE** PROTOCOL TO JMU\_GRANTS@JMU.EDU

PLEASE PROVIDE A **SIGNED** HARD COPY OF THE RESEARCH REVIEW REQUEST FORM TO:

OFFICE OF SPONSORED PROGRAMS, MSC 5728, JAMES MADISON ADMINISTRATIVE COMPLEX, BLDG #6, SUITE

### Research Proposal Checklist

#### for Submission to the Institutional Review Board on the Use of Human Subjects in Research

<b>Title of Study:</b>	English as a second language: The Impact of teacher responsiveness to implementing the SIOP Model		
<b>Name of Investigator(s):</b>	Diana Meza	<b>Phone:</b>	540-560-2346
<b>Campus Address:</b>	N/A	<b>MSC:</b>	N/A
<b>Email Address:</b>	<a href="mailto:mezadx@jmu.edu">mezadx@jmu.edu</a>		
<b>Research Advisor (if applicable):</b>	Jane Thall	<b>Phone:</b>	540-568-5531
<b>Email Address:</b>	<a href="mailto:thalljb@jmu.edu">thalljb@jmu.edu</a>	<b>MSC:</b>	6913

*(Investigator - Please Organize Material on the following page using the Topics Below)*

#### **PURPOSE OR OBJECTIVE(S)**

Limited to one page

#### **PROCEDURES** (Included are:)

Research design and sampling

Method of collecting data (emphasize possible risks, and protection of subjects)

Time frame of study

#### **DATA ANALYSIS**

Discussed how confidentiality of subjects and their responses will be maintained

Discussed how data will be stored to ensure confidentiality of subjects

#### **REPORTING PROCEDURES**

Identified audience to be reached in the report of the study

Identified the presentation method(s) to be used

- Discussed how feedback will be provided to subjects

#### **EXPERIENCE OF THE RESEARCHER**

- Prior relevant experience of the researcher, supervisor, and/or consultants

#### **ADDITIONAL ATTACHMENTS (if applicable:)**

- Consent forms

- Letters of permission

- Cover letter(s)

- Questionnaire

- Tests

- Additional attachments relevant to the study

#### **NOTIFY OSP OF INTENT TO SUBMIT FOR EXTERNAL FUNDING**

- Project will be submitted for External Funding

If yes, submit proposal to Sponsored Programs: MSC 5728

Funding Agency

Program

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- \*SUBMIT PROPOSAL AND CHECKLIST ELECTRONICALLY TO: [JMU\\_grants@jmu.edu](mailto:JMU_grants@jmu.edu)

#### **TRAINING, TESTING AND FORM COMPLETION REQUIREMENTS**

- Completed IRB training on (9/27/08) at <http://www.jmu.edu/sponsprog/irb.html>

\*Note: Proposals cannot be reviewed by the IRB until all *required* checklist items are present. A sample form that reviewers will use to evaluate your proposal is available from the Sponsored Programs web site at:

(<http://www.jmu.edu/sponsprog/irb/ProtocalEvalForm.doc>)

#### **Purpose and Objectives:**

The purpose of this study is to examine and ascertain teachers' attitudes toward the implementation of the Sheltered Instruction Observational Protocol (SIOP) program into their classrooms. This study will also examine perceived teacher resistance to SIOP implementation and provide the

Harrisonburg City Public Schools with recommendations on how to motivate the teachers to use the model. Most importantly, the goal is to help all English Language Learners (ELLs) in Harrisonburg succeed in school, especially Hispanics, since the Hispanic population in the schools has grown 100% over the last ten years (National Clearing House for English Language Acquisition, 2002). Since sheltered instruction has become a preferred instructional approach for teaching English learners, especially at the secondary level, schools must prepare students to achieve high academic standards and to demonstrate English proficiency on high-stakes tests (Pearson Education, 2008). It is important that teachers at all levels implement the SIOP model.

**Procedures/Research Design/Methodology/Timeframe:**

This study will take two semesters to complete. Research will begin pending IRB approval and end on April 09, 2010. The research design employs both quantitative and qualitative data collection methodologies. Quantitative data will be obtained through the use of an electronic online survey (consisting of Likert scaled and open ended questions). I will use the JMU sponsored Qualtrics online survey database system to create and distribute my survey. The survey consists of 13 questions, which will take approximately 10 minutes to complete. Qualitative data collection consists of a semi-structured interview given to three to five teachers and each interview will take approximately 30 minutes. Each interview will be tape recorded and transcribed to ensure accuracy. The online survey will be emailed to all faculty members at Thomas Harrison Middle School, Skyline Middle School, and Harrisonburg High School. In order to keep the survey completely anonymous, I will provide my contact in the Harrisonburg City school system (ESL specialist Kimberly Oxley) with the Cover Letter and link to the survey. She, in turn, will distribute both the cover letter and the link to the survey electronically to all of the teachers in both the high school and two of the junior high schools. Prior to accessing the online survey, each teacher participant will receive an email Cover Letter requesting voluntary consent to participate in the survey. Once the participant agrees to the Cover Letter, they can click to access the survey instrument. The Consent Form for the interview process will be given to the teacher participant before each interview takes place. Informed consent must be given prior to each interview. Once the interviewee agrees to the Consent Form,

we will move on to the interview. The survey will be completely anonymous and the interview will be strictly confidential. No questions will be asked that might reveal the participants identity (name or title).

I do not anticipate any more than minimal risk to the participants. Participants may derive some indirect benefits from the research as they will be able to explore, study and reflect upon the implementation of the SIOP program as a result of both the interview and survey processes. The benefit for the researcher is to fulfill the requirements of a Master's Reading and Research Project, and to study the attitudes of the Thomas Harrison Middle School, the Skyline Middle School, and the Harrisonburg High School teachers towards the implementation of the SIOP model.

The population being studied is teachers that work in Thomas Harrison Middle School, Skyline Middle School and Harrisonburg High School. All participants are considered adults and will be at least 18 years of age, and their participation is voluntary. Participants can withdraw at any time without consequences of any kind. However, once their online survey responses have been submitted and anonymously recorded, they will not be able to withdraw from the study. For the interview process, the participants will be randomly chosen and then asked if they are willing to participate in the interview process. If a teacher declines to be interviewed, another teacher will be randomly chosen.

**Data Analysis:**

All survey responses will be collected via Qualtrics, and the researcher will collect all interview responses.

I will analyze my survey data by using Qualtrics software and SPSS. The researcher will use Excel to code all qualitative data. The identity of the subjects will remain anonymous by using the web survey and by not asking any information that will reveal the participants true identities.

Data collected from the interviews will be kept in the strictest confidence. A numeric coding system will be employed (vice name or title) to mask the identity of each participant (i.e., Sally Smith= A1). At the conclusion of each interview session, all interview data collected on site at the three schools will be immediately secured after the interview in a closet in a locked file cabinet in 3345A Memorial Hall.

Access to the locked file cabinet is controlled by the senior administrative assistant (Sandra Gilchrist) to the COE/LTLE Department Chair, Dr. Diane Foucar-Szocki. Access to the file cabinet must be approved by the Department Chairperson, Dr. Foucar-Szocki. Only Dr. Foucar-Szocki, Dr. Thall, Ms. Gilchrist and myself will have access to the raw data. Currently, the other drawers in the file cabinet contain all of the AHRD Program student records to include graduate school applications, GRE and GPA scores and comprehensive examination materials. Interview materials will be destroyed immediately following the successful defense of my Reading and Research Project (plus or minus three months from 30 April 2010). All true name data collected to include cover letters, consent forms, researcher notes, the tape recorded interview sessions, and transcriptions will be stored in the above mentioned locked file cabinet in 3345A Memorial Hall under the auspices of Dr. Diane Foucar-Szocki. Survey materials and actual surveys will be stored electronically in a password protected word document file and in the password protected Qualtrics database.

**Reporting Procedures:**

Reporting results will be presented to my Reading and Research committee during a two hour defense in which I will confer my purpose, the methods used, the results, limitations, while also allowing for a question and answer portion of the presentation. No identifiable information will be collected from the participants and no identifiable responses will be presented in the final form of this study. The researcher retains the right to use and publish non-identifiable data. Final aggregated results will be available to participants upon request.

**Experience of the researcher (and advisor, if student):**

As a graduate student in the College of Education in the Adult Education/Human Resource Development program, I have completed coursework in Research Methods (Quantitative and Qualitative), Performance Analysis, Adult Learning, Educational Technology, Foundations of Human Resource Development.

**Dr. Jane Thall's Research Experience:**

Ed.D., The George Washington University, May 2005



M.S. Applied Behavioral Science, The Johns Hopkins University, May 1999

B.A., Spanish, May 1975

**JMU Course Taught by Dr. Jane Thall:**

JMU, COE, AHRD 600 Performance Analysis and Needs Assessment in AHRD – Fall 2006, Fall 2007, Fall 2008

JMU, COE, AHRD 640 Program Evaluation and Measurement in AHRD – Spring 2007, Spring 2008

JMU, COE, AHRD 630 Research Methods, Fall 2008, Fall 2009

JMU, COE, AHRD 520 Foundations in AHRD, Fall 2008

JMU, COE, HRD 480 Foundations in HRD, Fall 2008, Fall 2009

Dr. Jane Thall has also served on the graduate thesis committee as an examiner for Dr. Cheryl Church for the degree of Ed.D., The George Washington University, July 2007.

Dr. Thall will help guide me through this research.

**“Web”/ “Email” Cover Letter (used in anonymous research)****Identification of Investigators & Purpose of Study**

You are being asked to participate in a research study conducted by *Diana Meza* a graduate student from James Madison University. The purpose of this study is to investigate teachers' attitudes towards the implementation of new curriculum design into their classrooms. This study will contribute to the researcher's completion of Reading and Research to obtain a Masters Degree. Please read this form carefully and ask any questions you may have before agreeing to take part in this study.

**Research Procedures**

This study consists of an online survey that will be administered to individual participants through email. You will be asked to provide answers to a series of questions related to your attitudes towards curriculum design.

**Time Required**

Participation in this study will require approximately 10 minutes of your time.

**Risks**

The investigator does not perceive more than minimal risks from your involvement in this study.

**Benefits**

By participating in this study there no direct benefits for you, as the participant. Findings from this research will benefit the Harrisonburg City Public Schools to better impose changes to the teachers' curriculum design

**Confidentiality**

The results of this research will be presented at James Madison University during a Reading and Research defense with three James Madison University professors present. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be shredded. Final aggregate results will be made available to participants upon request.

**Participation & Withdrawal**

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

**Questions about the Study**

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Diana Meza

Dr. Jane Thall

Adult Education/Human Resources

Learning Technology and Leadership Education

James Madison University

James Madison University

[mezadx@jmu.edu](mailto:mezadx@jmu.edu)

Telephone: (540) 568-5531

[thalljb@jmu.edu](mailto:thalljb@jmu.edu)

### **Questions about Your Rights as a Research Subject**

Dr. David Cockley

Chair, Institutional Review Board

James Madison University

(540) 568-2834

[cocklede@jmu.edu](mailto:cocklede@jmu.edu)

### **Giving of Consent**

I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

[http://jmu.qualtrics.com/SE?SID=SV\\_6KFYvnJ1VOsqowk&SVID=Prod](http://jmu.qualtrics.com/SE?SID=SV_6KFYvnJ1VOsqowk&SVID=Prod)

Diana Meza

9/7/09

Name of Researcher (Printed)

Date

**Interview Consent Form (Used in Confidential Research)****Identification of Investigators & Purpose of Study**

You are being asked to participate in a research study conducted by *Diana Meza* a graduate student from James Madison University. The purpose of this study is to investigate teachers' attitudes towards the implementation of new curriculum design into their classrooms. This study will contribute to the researcher's completion of Reading and Research Project to obtain a Masters Degree. Please read this form carefully and ask any questions you may have before agreeing to take part in this study.

**Research Procedures**

This study consists of a semi-structured interview that will be administered to individual participants through face-to-face conversations. You will be asked to provide answers to a series of questions related to your attitudes towards curriculum design.

**Time Required**

Participation in this study will require 20-30 minutes of your time.

**Risks**

The investigator does not perceive more than minimal risks from your involvement in this study.

**Benefits**

By participating in this study there no direct benefits for you as the participant. Findings from this research will benefit the Harrisonburg City Public Schools to better impose changes to the teachers' curriculum design.

**Confidentiality**

The results of this research will be presented at James Madison University during a Reading and Research defense with three James Madison University professors present. Individual responses will be obtained confidentially and recorded by the researcher using a voice recorder. Data will be represented as averages or generalizations about the responses as a whole. The data collected during the interview will be kept in a locked file cabinet at James Madison University, College of Education, Memorial Hall and then destroyed after (June 30th, 2010). All true name data will be masked to ensure confidentiality. No identifiable demographic information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all voice recorded data will be destroyed at the conclusion of the reading and research period (June 30th, 2010). Final aggregate results will be made available to participants upon request.

**Participation & Withdrawal**

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind.

### Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Diana Meza

Dr. Jane Thall

Adult Education/Human Resources

Learning Technology and Leadership Education

James Madison University

James Madison University

[mezadx@jmu.edu](mailto:mezadx@jmu.edu)

Telephone: (540) 568-5531

[thalljb@jmu.edu](mailto:thalljb@jmu.edu)

### Questions about Your Rights as a Research Subject

Dr. David Cockley

Chair, Institutional Review Board

James Madison University

(540) 568-2834

[cocklede@jmu.edu](mailto:cocklede@jmu.edu)

### Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. I certify that I am at least 18 years of age.

I give consent to be audio taped during my interview. \_\_\_\_\_ (initials)

\_\_\_\_\_

Name of Participant (Printed)

\_\_\_\_\_

Name of Participant (Signed)

\_\_\_\_\_

Date

\_\_\_\_\_

Name of Researcher (Signed)

\_\_\_\_\_

Date

## Appendix C

### Survey

[http://jmu.qualtrics.com/SE?SID=SV\\_6KFYvnJ1VOsqowk&SVID=Prod](http://jmu.qualtrics.com/SE?SID=SV_6KFYvnJ1VOsqowk&SVID=Prod) (survey closed)

This survey has been created to study the teachers' attitudes toward the implementation of the Sheltered Instruction Observational Protocol (SIOP) in Thomas Harrison Middle School and Harrisonburg High School. You will be asked a series of questions pertaining to the grades you teach, the number of English language learners you have in your classrooms, and your perceptions of the SIOP program.

Please be honest with your responses.

Thank you for participating in this study.

Your responses will be recorded until November 15, 2009



1. What grade(s) do you teach? Please select all that apply.

5

6

7

8

9

10

11

12

2. Do you have English language learners (ELL) in your classroom?

Yes

No

3. What percentage of students in your classroom are ELLs?

0 10 20 30 40 50 60 70 80 90 100



4. During your time teaching in the Harrisonburg City Public Schools (HCPS), have you experienced any change in English language acquisition curriculum design?

Yes

No

5. What was your reaction regarding those changes?

Very Satisfied

Satisfied

Neutral

Dissatisfied

Very Dissatisfied

6. Were your attitudes positive or negative about the change in English language acquisition curriculum design?

Positive

Negative

7. Were you willing to implement the changes in English language acquisition curriculum design?

Strongly Willing

Willing

Neither Willing nor Unwilling

Unwilling

Strongly Unwilling

8. Have you heard about the English as a second language (ESL) Sheltered Instruction Observational Protocol (SIOP) model?

Yes

No

9. Do you use the SIOP model in your classrooms?

Yes

No

10. Do you currently find the SIOP model in your classroom useful?

Very Useful

Useful

Neutral

Useless

Very Useless

11. Is the SIOP model an important part of your teaching methodology?

Extremely Important

Very Important

Neither Important nor Unimportant

Very Unimportant

Not at all Important



12. Does the SIOP model methodology of teaching help ELL students achieve academic success?

Strongly Agree

Agree

Neither Agree nor Disagree

Disagree

Strongly Disagree

13. Do you consider the implementation of the SIOP model easy or hard? Why?

14. What are some of the barriers to SIOP program implementation in your classroom?

## Appendix D

### Interview Questions

1. What grade(s) do you teach?
2. Do you have English language learners (ELL) in your classroom? If yes, what percentage in your class is ELL?
3. During your time teaching in the Harrisonburg Public City Schools (HPCS) have you experienced any change in English language acquisition curriculum design?
4. Were your attitudes positive or negative about the change in English language acquisition curriculum design?
5. Were you willing to implement the changes?
6. Have you heard about the Sheltered Instruction Observational Protocol (SIOP) model?
7. Do you implement the SIOP model in your classroom?
8. Do you think the SIOP model benefit your teaching?
9. Do you think the SIOP methodology of teaching helps ELL students achieve academic success?
10. Do you think by using the SIOP model students who are ELLs are more likely to achieve grade level?
11. What do you perceived are the barriers at implementing the SIOP model?
12. What is the best method to integrate ELL into the classroom?

## Appendix E

### Subset of Codes

Interviews codes								
ELLs in class	Curriculum change	Attitudes toward change	Heard about SIOP	Implement SIOP	SIOP benefits teaching	SIOP helps ELLs	Barriers to implement SIOP	Younger/older teachers
A majority	Teach something different	Positive	Yes	Parts of it	Yes	Yes	Time	Neither
All	No LEAP classes	Positive	Yes	Elements of it	Yes	Yes	Compensation	Younger
Yes 40-50%	Structure		Yes	Fairly regularly			More work	Younger
							Overwhelmed	
							Time	
Survey codes								
SIOP	Implementation	Easy	Hard	Barriers				
Useful teaching strategies	Some	Easy	Yes	Not having support				
Help focus on important concepts	Some elements	Easy	A little tricky	Lack of time to prepare				
Once in practice	Some elements	Easy	No	“Over burdened with other responsibilities”				
Used	Some elements	Easy	At the beginning	No class				
Building background hardest	Some elements	Easy	Moderate	Time				
“SIOP takes time, preparation, and practice	Content & language objectives	After a while		Not having planning time				
Time consuming at first	Language objectives	Easy		Time				

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