Critical Reflection and Mainstream Teachers’ Implementation of Sheltered Instruction Observation Protocol for English Language Learners: A Case Study

Teneisha McNeil
Concordia University - Portland, teneishamcneil@gmail.com

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Concordia University–Portland
College of Education
Doctorate of Education Program

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CERTIFY THAT WE HAVE READ AND APPROVE THE DISSERTATION OF

Teneisha McNeil

CANDIDATE FOR THE DEGREE OF DOCTOR OF EDUCATION

Barbara Weschke, Ph.D., Faculty Chair Dissertation Committee
Maggie Broderick, Ph.D., Content Specialist
Catherine Beck, Ph.D., Content Reader
Critical Reflection and Mainstream Teachers’ Implementation of Sheltered Instruction Observation Protocol for English Language Learners: A Case Study

Teneisha Trenese McNeil

Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education in partial fulfillment of the requirements for the degree of Doctor of Education in Instructional Leadership

Barbara Weschke, Ph.D., Faculty Chair Dissertation Committee

Maggie Broderick, Ph.D., Content Specialist

Catherine Beck, Ph.D., Content Reader

Concordia University–Portland

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Abstract

The researcher in this study investigated questions that explored (a) what are the frames of reference of mainstream teachers who instruct English learners in the mainstream classroom, (b) how the use of critical reflection and implementation of sheltered instruction observation protocol (SIOP) influence mainstream teachers’ efficacy of instructional delivery, and (c) how do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and sheltered instruction observation protocol. Using a case study methodology, the researcher sought to answer these questions using relative literature and theories that exist within the field of education. The goal of the research was to add to the body of literature regarding teachers’ professional growth through the use of critical reflection and sheltered instruction observation protocol. The findings of the study indicated participants used strategies similar to SIOP-based strategies, although they had no previous knowledge or formal training in the SIOP method. The findings also indicated participants held similar frames of reference associated with instructing English learners (ELs) in the mainstream classroom. Participants indicated inconsistency in the understanding of critical reflection as a concept and how to use it as an instructional habit efficaciously. Collaborative working environments and professional development for teachers of ELs is necessary in the process of critical reflection and practice of sheltered instruction observation protocol. Mainstream teachers’ professional growth can be supported by using rational discourse to learn and share quality teaching practices.

Keywords: English learners, mainstream classroom, reflection, critical reflection, sheltered instruction observation protocol, teacher pedagogy, teacher effectiveness
Dedication

This dissertation is dedicated to those educators who altruistically contribute to the art of teaching and learning through sincere servant leadership, conviction, enthusiasm, and passion.
Acknowledgements

My doctoral journey was a dream placed on my heart and brought into fruition through God’s loving hands. There is no failure in God, and I am a living testimony of His unconditional love, grace and mercy. Thank you, Lord, for your faithfulness and filling me with the strength to endure all things with you by my side.

First, I want to thank my parents. Although my father, Alfred McNeil, is resting in heaven, I know he is looking down on me and proud of this accomplishment. I also want to thank my mom, Patricia McNeil, for her prayers and support. Thank you for being the epitome of a strong woman. To my brothers, Kevin and Tony, thank you for your support as well. A very special thanks goes to my children, Kenton and Anaiah. You two are and will always be my motivation.

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Lastly, I cannot express in words the amount of gratitude I have for the principal and
educators who took a sincere interest in my study and chose to participate. Because of you all,
my dissertation will provide others in the educational community with valuable information that
can contribute to the educational enterprise.
Table of Contents

Abstract ................................................................................................................................. ii
Dedication ............................................................................................................................. iii
Acknowledgements ............................................................................................................. iv
Chapter 1: Introduction ......................................................................................................... 1
  Background of the Problem ................................................................................................. 4
  Statement of the Problem ................................................................................................. 7
  Purpose of the Study ........................................................................................................ 9
  Significance of Study ....................................................................................................... 10
  Conceptual Framework ................................................................................................... 11
  Definition of Terms ......................................................................................................... 12
  Assumptions ....................................................................................................................... 13
  Assumptions ....................................................................................................................... 14
  Limitations ......................................................................................................................... 14
  Delimitations ..................................................................................................................... 14
  Summary ............................................................................................................................ 15
Chapter 2: Literature Review ................................................................................................. 17
  Conceptual Framework ..................................................................................................... 19
  Transformative theory and critical reflection. ................................................................. 20
  Reflection versus critical reflection. ................................................................................. 20
  Review of Research Literature ......................................................................................... 23
  Approaches to critical reflection ..................................................................................... 23
  Review of Methodological Literature ............................................................................. 36
  Synthesis of Research Findings ....................................................................................... 43
Critique of Previous Research ................................................................. 45

Summary .................................................................................................. 46

Chapter 3: Methodology ......................................................................... 48

Introduction .............................................................................................. 48

Research Questions and Interview Questions ......................................... 49

Research questions .................................................................................. 49

Purpose and Design of the Study ............................................................ 49

Research Population and Sampling Method ........................................... 51

Instrumentation ....................................................................................... 52

Data Collection ......................................................................................... 55

Identification of Attributes ...................................................................... 56

Data Analysis Procedures ........................................................................ 57

Limitations .................................................................................................. 59

Validity ....................................................................................................... 60

Credibility ................................................................................................. 60

Dependability ............................................................................................ 61

Expected Findings ..................................................................................... 61

Ethical Issues of the Study ....................................................................... 62

Conflict of Interest ..................................................................................... 63

Researcher’s Position ................................................................................ 64

Summary .................................................................................................... 65

Chapter 4: Data Analysis and Results ...................................................... 67

Description of the Sample ......................................................................... 68
Research Methodology and Analysis.................................................................................................................. 69

Summary of the Findings....................................................................................................................................... 77

Presentation of Data and Results ............................................................................................................................. 78

Pre-Observation Interview Data ............................................................................................................................. 82

Findings emerging from interview question 1................................................................. 82

Findings emerging from interview question 2................................................................. 86

Findings emerging from interview question 3................................................................. 89

Findings emerging from interview question 4................................................................. 91

Findings emerging from interview question 5................................................................. 92

Findings emerging from interview question 6................................................................. 95

Findings emerging from interview question 7................................................................. 96

Findings emerging from interview question 8................................................................. 96

Findings emerging from interview question 9................................................................. 98

Findings emerging from interview question 10............................................................. 101

Observational Data................................................................................................................................................ 104

Post-Observation Interview Data .......................................................................................................................... 107

Findings emerging from interview question 11............................................................. 107

Findings emerging from interview question 12............................................................. 109

Findings emerging from interview question 13............................................................. 110

Findings emerging from interview question 14............................................................. 112

Summary ............................................................................................................................................................... 115

Chapter 5: Discussion and Conclusion ................................................................................................................... 116

Introduction......................................................................................................................................................... 116
Chapter 1: Introduction

Current educational reform places emphasis on educational equity for all students. This term implies that all students have access to high-quality education and high-quality teachers who afford students opportunities to achieve at a standard level or attain standard educational outcomes (Darling-Hammond, 2010). However, in order to understand what the term educational equity connotes in its entirety, educators must initially acknowledge the opportunity gap that exists and continues to impede the academic progress of underserved students such as English language learners (ELs).

As it pertains to education, the opportunity gap is defined as substantial inequalities in access to educational opportunity that are present from preschool to college and beyond (Darling-Hammond, 2010). The opportunity gap consists of the accumulated differences in access to key educational resources such as expert teachers, personalized attention, high-quality curriculum opportunities, quality educational materials, and ample information resources that support teaching and learning (Darling-Hammond, 2010). English learners are often marginalized and encounter this educational barrier known as the opportunity gap (Darling-Hammond, 2010).

In 2015, ELs comprised nine percent of the K-12 student population nationally (Ross & Ziemke, 2016). Research projects that by the year 2050 this percentage will increase by 21% (Ross & Ziemke, 2016). Although ELs make up a large percent of the student population in the United States, these students are directly affected by the opportunity gap due to being marginalized in society and schools (Darling-Hammond, 2010). Educational reform at both the state and federal level have emphasized accountability measures for school districts in order to ensure ELs receive a quality education (Ross & Ziemke, 2016). The Every Student Succeeds
Act (ESSA) passed in 2015, and the Common Core State Standards (CCSS) voluntarily adopted in 2010 by policy makers are current educational reform efforts that require states and school districts to ensure that underserved students such as ELs are not disproportionately taught by teachers who are ineffectual, inexperienced, or have not received any training in instructing ELs. ESSA, the nation’s most current education reform, is committed to advancing equity and educational outcomes for underserved students like ELs by raising standards and supporting states’ efforts to ensure quality teaching (Barrow & Markman-Pithers, 2016; United States Department of Education, 2017).

ELs spend the majority of the school day in the mainstream classroom (Echevarria, Vogt, & Short, 2004). ELs continue to score lower on state standardized tests across the U.S. (Murphey, 2014). ELs’ academic underachievement is a result of failing to receive high-quality instruction using appropriate teaching practices (Ross & Ziemke, 2016). For example, Cucchiara (as cited in Ross & Ziemke, 2016) stated ELs’ lack of academic success is due to teachers’ failure to acknowledge the interrelationship between language and literacy and to explicitly teach grammatical conventions of academic English. Recognizing the disparities that widen the opportunity gap, Title II and Title III of ESSA provide states and school districts with grant money to support mainstream teachers and EL instruction. Specifically, Title II of ESSA seeks to ensure educational equity by providing grant money to states and school districts in support of teacher preparation, recruitment, and continued learning programs (United States Department of Education, 2017). Title III of ESSA mandates that English language proficiency standards are adopted by states and provides grant money to supplement and support EL instruction (United States Department of Education, 2017).
The Common Core State Standards require teachers to acknowledge the relationship between content learning, language skills, and functions particular to a domain of learning. The CCSS are comprised of rigorous skills that are intended to teach students both content-area knowledge and language development in the four language domains (Hakuta, Santos, & Fang, 2013). In detail, students are expected to read and understand high complexity literature and informational texts. Students must construct a variety of text structures to argue, inform and analyze information using evidence and research in writing. The speaking and writing standards require students to work collaboratively and present academic knowledge. Lastly, the CCSS require students to use the English language to achieve specific purposes, rhetorical effects, and functions (Hakuta, Santos, & Fang, 2013). The demands of the Common Core State Standards ultimately require mainstream teachers to support ELs’ language development while learning content knowledge particular to a subject area.

In view of this reform effort, it is vital that mainstream teachers use this current reform initiative to become trained in and aware of high-quality teaching practices that can transform teacher pedagogy, and contribute to lessening the opportunity gap to influence the educational outcomes of ELs. Therefore, for this research study, mainstream teachers’ implementation of SIOP and practice of critical reflection was employed to determine their influence in transforming instructional practices to better meet the content and language needs of ELs. A case study sought to examine nine mainstream high school teachers’ experiences with sheltered instruction observation protocol (SIOP) and critical reflection in support of their professional growth. Also, examining teachers’ current instructional practices has the potential of contributing to the body of knowledge about teaching practices that increase efficacy in meeting the dual learning needs of ELs.
Background of the Problem

The diversity within schools is increasing every year with the enrollment of English language learners (Barrow & Markman-Pithers, 2016; Fregeau & Leier, 2015; Song & Samimy, 2015; Suarez-Orozco & Suarez-Orozco, 2016). By 2030, the National Clearinghouse for English Language Acquisition (2011) estimates that 40% of the United States’s K–12 student population will comprise of ELs (as cited in Song & Samimy, 2015). The influx of immigrants to the United States has caused educational policies, such as ESSA, to identify the need for more effective instructional strategies for teaching ELs. However, adequate teacher training and professional development in EL instruction has been limited (Hansen-Thomas & Cavagnetto, 2010; Martinez, Harris, & McClain, 2014; Short, 2013). Previous research that found that teacher education programs and schools nationwide are failing to adequately prepare teachers for instructing culturally and linguistically diverse students such as ELs (Fregeau & Leier, 2015; Russell, 2015).

In addition to minimal teacher training and professional development, research suggests that teachers’ traditional ways of teaching and learning must be refined to assist ELs in achieving content and academic language proficiency (Echevarria, Richards-Tutor, Chinn, & Ratleff, 2011; Hakuta, Santos & Fang, 2013; Short, Fidelman, & Longuit, 2012; Short, 2013). Bolos (2012) stated, “Simply treating ELs just like everyone else will not close the achievement gap between these students and their grade-level peers” (p. 1). In support of this statement, research has shown that teacher practice is related to student achievement (Echevarria et al., 2011; Ganger, 2013; Song & Samimy, 2015). ESSA and the substantial amount of ELs growing in U.S. school systems implies an essential transformation in mainstream teachers’ traditional views teacher practices.
Immigrant children arriving in the United States with little or no proficiency in English will require classroom instruction that is designed to promote their language and content development. Teachers have a dual obligation to ELs (Soto-Hinman & Hetzel, 2009). First, teachers must provide meaningful access to grade-level academic content through the use of appropriate instructional strategies. Second, teachers are expected to help develop ELs’ academic English language proficiency (Soto-Hinman & Hetzel, 2009). To address the aim of ESSA, bilingual teachers and English-as-a-second-language (ESL) teachers are no longer solely responsible for ELs’ academic and language development. Therefore, one way to cultivate transformative learning in mainstream teachers is to emphasize how important it is to implement instructional practices, lesson planning and delivery, and assessment aimed to meet the educational needs of ELs. Instructional strategies that support ELs’ second language acquisition and content mastery must be practiced regularly in the classroom by mainstream teachers. As a result, adequate teacher training and professional development in EL instruction is now a necessity in school districts around the United States.

Mainstream teachers must be equipped with effective strategies to support and improve ELs’ language and grade-level content learning. Without adequate knowledge in EL instruction, Fregeau and Leier (2015) contended that mainstream teachers function with an “uninformed desire” (p. 4) to support ELs as well as possible. For example, Fregeau and Leier (2015) found that mainstream teachers with limited training in EL instruction resorted to using “common sense” (p. 4) accommodations, sending ELs out of the classroom for assistance, asking ESL or non-ESL teachers for suggestions, or engaged their ELs in peer tutoring. For these reasons, teachers may benefit from implementing SIOP (Short, Echevarria, & Vogt, 2004) and critical reflection (Mezirow, 1991) into classroom instruction as a facet of the professional growth
process. Both SIOP and critical reflection are evidence-based techniques that mainstream teachers can apply to classroom instruction as methods for improving the quality of classroom instruction for ELs’ academic language and content development.

Another key point is the challenge the current educational policy may pose for mainstream teachers with previously acquired frames of reference or perceptions about instructing ELs. Research in second-language acquisition showed teachers retain an intricate set of views about students and pedagogy that form how teachers learn to teach and make instructional decisions (Baecher, Farnsworth, & Ediger, 2014; Farrell & Bennis, 2013; Hansen-Thomas & Cavagnetto, 2010; Song & Samimy, 2015). For example, according to Baecher et al. (2014), lesson planning mirrors teachers’ previous experiences as learners and teachers, knowledge of their students, pedagogical content knowledge, and theories about learning. In light of the challenge ESSA may pose for mainstream teachers, research studies have been conducted to better prepare teacher-education programs for working with diverse learners (Jurchan & Morano, 2010; Lyons, Halton & Freidus, 2013; Mortari, 2012; Song & Samimy, 2015). Lyons et al., (2013) asserted Mezirow’s (1991) concept of critical reflection was essential in participants’ reporting fundamental changes in their frames of reference. The researchers (2013) conducted three self-studies, which engaged participants in reflective inquiry about professional learning. The researchers chose to conduct self-studies because this type of study indirectly involves reflective thinking and inquiry. In particular, one participant in the self-study, who worked as a teacher educator, reported changes in previous frames of reference associated with online teaching. As a result of practicing critical reflection, the participant reported former visions of teaching and learning were transformed with the ability to see her students and teaching and learning in a new light. Using the participants’ written reflective narratives, Lyons,
Halton, and Freidus (2013) concluded that all three participants in the self-studies experienced transformative learning and attributed the critical contribution of reflective inquiry to their transformative experience. Critical reflection provides an opportunity for teachers to participate in ongoing professional growth. When joined with SIOP research, critical reflection embedded into instructional decision making can support mainstream teachers’ continued professional growth and the academic and language development of ELs.

**Statement of the Problem**

Much of the literature concerning critical reflection and SIOP validate each technique as effective when used in the field of education (Collay, 2014; Lyons, Halton, & Friedus, 2013; Mortari, 2012; Nam, 2017; Ringler, O’Neal, Rawls, & Cumiskey, 2013; Short, 2012, 2013). However, limited studies describe how both critical reflection and SIOP can be conjoined in the classroom to directly promote professional growth in teachers and enhance learning opportunities for ELs. There is little investigation into how critical reflection can be used as a method to influence personal transformative learning in conjunction with assessing teacher implementation of SIOP to meet the language and content needs of ELs in the mainstream classroom (Daniel & Conlin, 2015; Jurchan & Morano, 2010; Pena & Maxwell, 2015; Santi, 2015; Song, 2016; Song & Samimy, 2015). Also, consensus does not exist on how to assess critical reflection with a single tool throughout different disciplines (Lundgren & Poell, 2016). However, the consensus does acknowledge critical reflection as a vital component in transforming old frames of reference and behavior (Christie, Carey, Robertson, & Grainger, 2015; Collay, 2014; Lowenstein & Brill, 2010; Lundgren & Poell, 2016; Lyons, Halton, & Freidus, 2013; Mezirow, 1990, 1991; Mortari, 2012; Nam, 2017; Song & Samimy, 2015). Moreover, SIOP has been validated by research as an instructional tool that can be used to
immerse ELs into academic activities that develop their language and content skills (Daniel & Conlin, 2015; Echevarria et al., 2011; Echevarria & Vogt, 2010; Markos & Himmel, 2016; Pena & Maxwell, 2015; Ringler et al., 2013; Santi, 2015; Short, 2013; Short & Echevarria, 2004; Short et al., 2012; Song, 2016). The SIOP framework is an approach to teaching ELs in the mainstream classroom that maximizes instructional time using sheltered instruction techniques that support ELs’ language development while learning the content concepts (Short, Echevarria, & Vogt, 2004).

Furthermore, many mainstream teachers are not trained to entirely understand language minority students’ level of English language proficiency and overestimate their proficiency because of an apparent ease and comfort with conversational English (Pu, 2010; Taherbhai, Seo, & O’Malley, 2014). For instance, ELs master conversational English in 1–3 years. However, ELs’ academic language acquisition is attained between 5–7 years generally (Ross & Ziemke, 2016). The number of English learners continues to rise while training on how to effectively educate these students falls behind in teacher preservice and professional development programs (Hutchinson & Hadjioannou, 2011; Pawan & Craig, 2011; Russell, 2015; Short, 2013). Research confirms this disconnection as ELs in early grades and secondary schooling continue to score lower on state mandated tests than their native-English-speaking peers (Barrow & Markman-Pithers, 2016; Hutchinson & Hadjioannou, 2011; Murphey, 2014; Pena & Maxwell, 2015; Ross & Ziemke, 2016; Short et al., 2012). Although educational reform mandates by the United States have made conscious efforts to remain inclusive of ELs in the mainstream education population, the inclusivity component of current educational mandates is objective (United States Department of Education, 2017). These mandates fail to acknowledge the
subjectivity associated with mainstream teachers’ knowledge of how to properly instruct ELs within the classroom environment (Daniel & Conlin, 2015; Galguera, 2011; Short et al., 2012).

Because many ELs spend the majority of a school day in the mainstream classroom alongside native-English-speaking peers, the responsibility of teaching ELs is no longer solely that of ESL or bilingual teachers (Baecher et al., 2014; Hutchinson & Hadjioannou, 2011). All educators must implement strategies that will help develop ELs’ acquisition of the English language while learning academic content goals outlined by state standards. Mainstream teachers’ ability to do so, however, is limited due to a lack of professional development related to instructional practices for this special population of students (Daniel & Conlin, 2015; Kibler, Walqui, & Bunch, 2015; Pu, 2010; Pawan & Craig, 2011; Russell, 2015; Short, 2013). By integrating critical reflection and SIOP as a conceptual framework, transformative learning resonated as a process to continually inform teachers’ future pedagogical practices as appropriate for meeting the linguistic and content needs of English-language learners. Thus, this study sought to examine teachers’ professional growth in their ability to implement SIOP and critical reflection to meet the learning needs of ELs.

**Purpose of the Study**

The purpose of this case study was to examine if and how critical reflection and SIOP promote mainstream teachers’ professional growth by extending their knowledge of teaching strategies specifically designed for instructing ELs. This case study examined if and how mainstream teachers’ classroom instruction is influenced when using the SIOP model and critical reflection collaboratively. By actively employing the SIOP model and critical reflection techniques, mainstream teachers may contribute to the academic achievement of this marginalized group of learners, who often struggle to overcome language and educational
barriers. Ultimately, the goal of this research study was to produce teacher leaders who gained knowledge and understanding of teacher pedagogy through a transformative professional growth experience, in order to implement the best instructional practices for ELs. The following research questions guided this case study, allowing the researcher to determine if and how critical reflection and SIOP support mainstream teachers’ professional growth:

1. What are the frames of reference, such as experiences and perspectives, of mainstream teachers serving ELs in regard to language learning, instructional practices, lesson planning, and delivery?

2. How does the use of critical reflection and implementation of sheltered instruction observation protocol influence teachers’ efficacy of instructional delivery strategies for ELs?

3. How do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and SIOP?

**Significance of Study**

The significance of this study was vested in its capacity to contribute to the literature regarding teachers’ professional growth through the use of critical reflection and practice of SIOP. Reflection can be described as the practice of making sense of experiences, or the mental practice that transitions practitioners to technicians to competent professionals (Mezirow, 1991; Mortari, 2012). Mortari (2012) noted how reflection is engendered in school learning and adult education. Critically reflective practices lead teachers to be cognizant of how academic, social, and cultural constructs impact instructional practices (Mortari, 2012). Furthermore, research has demonstrated the SIOP model yields positive results in ELs’ language and content mastery through implementation of an eight-component framework based on teacher-led actions (Short,
Because ELs’ academic performance has lagged behind that of their native English-speaking peers in recent years despite the plethora of evidence-based research on improving ELs’ academic success, the need for the use of comprehensive research-based pedagogy to assist mainstream teachers of ELs in transforming their thinking and instructional practices associated with instructing ELs is needed. Implementation of SIOP and critical reflection can prompt mainstream teachers to look at the ways their instructional decision-making may be hindering or progressing ELs toward proficiency in content and language. This study can provide teachers with competency in teaching strategies that support their own professional growth and that of colleagues by better meeting the dual learning needs of ELs in the mainstream classroom.

**Conceptual Framework**

The conceptual framework for this case study on combining critical reflection and SIOP derived from Mezirow’s (1991) transformative learning theory for adult education and Short, Echevarria, and Vogt’s (2004) SIOP instructional model. The goal of adult education is for the learner to gain an understanding of his or her perceptions with the purpose of facilitating change and developing new meaning (Mezirow, 1991). According to Mezirow (1991), transformative learning involves two functions of reflection for adult learners. First, adults reassess the presuppositions, or perceptions, that lead to viewing reality with limitations and a lack of openness. The second function of reflection involves taking action on the reassessments that were gained from transformed presuppositions. Critical reflection is a vital component of taking action to transform unreflective perceptions (Mezirow, 1991). Applied to this study, along with the implementation of SIOP, the transformative theory served as a framework that allowed teachers to acquire new information with the purpose of guiding their instruction in future teacher-led actions and observable classroom behaviors.
Mezirow’s (1991) transformative theory for adult learners suggests that critical reflection can influence mainstream teachers’ implementation of SIOP. SIOP is a research-based tool that mainstream teachers can apply to lesson planning and delivery as a method for improving the quality of classroom instruction for ELs’ academic language and content development (Short, 2013; Short et al., 2012). SIOP is one approach to sheltered instruction, which is defined as “the method of integrating language development with techniques to make content curricular topics more comprehensible to ELs” (Short, 2013, p. 119). Sheltered instruction requires teachers to incorporate English language development strategies into academic content by focusing on content and language objectives, connecting students’ background and prior knowledge with content skills, explicitly teaching vocabulary, comprehensively using graphic organizers, visuals, and realia, facilitating content and language development through cooperative learning, and using alternate assessments to assess students’ learning (Markos & Himmel, 2016). SIOP, originally designed as an observation instrument to measure teachers’ implementation of sheltered instruction, grew into a framework that can be used for lesson planning and instructional delivery (Short, 2013). This research study integrated critical reflection and SIOP to serve as beneficial approaches in promoting teachers’ professional growth while meeting the dual learning needs of ELs.

Definition of Terms

Transformative learning. In the context of this study, transformative learning referred to the extent to which mainstream teachers experience changes in their previous perceptions, frames of reference, presuppositions, and teaching practices related to instructing ELs (Mezirow, 1991).
**Critical reflection.** This term is defined as the evaluating, reassessing, critiquing, confirming or questioning of previously held perceptions based on prior experience associated with instructing ELs (Mezirow & Taylor, 2009, p. 9).

**Sheltered instruction.** This term is defined as “language-rich, grade-level content-area instruction in English in a manner that is comprehensible to the learners” by promoting language and literacy development (Markos & Himmel, 2016, p. 1).

**Sheltered Instruction Observation Protocol (SIOP).** This term is defined as a lesson planning and delivery approach, which consists of 30 features compiled into eight components (lesson preparation, building background, comprehensible input, strategies, interaction, practice and application, lesson delivery, and review and assessment) for teachers of English language learners (Short, 2013). For this study, the phrases “SIOP model” and “SIOP framework” both referred to sheltered instruction observation protocol. The phrases “SIOP observational tool” and “SIOP observational instrument” both referred to the eight component framework of 30 instructional features used to assess teachers’ implementation of sheltered instruction techniques (see Appendix D).

**Assumptions**

SIOP is often introduced to mainstream teachers at the in-service level of teaching through professional development (Echevarria et al., 2011; Short, 2013; Song, 2016). In contrast, critical reflection is embedded explicitly and implicitly throughout teacher education and pedagogy (Lowenstein & Brill, 2010; Lundgren & Poell, 2016; Mortari, 2012). The researcher assumed that many of the study’s participants would be unfamiliar with SIOP and more familiar with critical reflection. However, the researcher also assumed that mainstream teachers would experience some form of transformation when practicing critical reflection and
SIOP. Therefore, this study sought to examine and describe how nine mainstream teachers from an inner-city high school construct meaning and encourage their professional growth by integrating critical reflection and the SIOP model as daily teaching practices.

**Limitations**

For this case study, the main form of data collection was derived from semi-focused interview questions and observations of participants’ use of SIOP-based strategies. The semi-focused interview included pre-determined questions to address the research problem and guide the researcher, and also allowed this researcher to remain flexible to explore other interesting topics or issues discussed by the participants. This study did not provide evidence of students’ learning outcomes or performance as a result of teachers’ implementation of critical reflection and SIOP. As a result, this study may provide a limited view of how the teachers’ transformative experiences affected ELs’ culminating performance or assessment. This study was conducted in a selected demographic and region of a school system. As a result, this small case study’s findings may not be generalizable.

**Delimitations**

This study was delimited to high school teachers who worked in one public high school within the inner city and who voluntarily consented to participate in the case study after initial recruitment. The researcher conducted this study with the objective of examining the perceptions of mainstream teachers of ELs regarding instructional practices through a transformative lens. Therefore, this study was descriptive in nature.

The scope of this qualitative research required this researcher to interview nine mainstream teachers from an inner city high school located in Tennessee. In an effort to obtain meaningful data, the goal was focused on recruiting teachers who were willing to participate and
stay committed to the purpose of the study. Therefore, the principal of the high school was asked to recommend mainstream teachers who instructed ELs and demonstrated behaviors that established openness and teacher-leadership capabilities. These behaviors also included minimal absences from work, exhibiting a growth mindset, and building a rapport with students to foster academic success.

Summary

Educational reforms have required school districts to be held accountable for providing ELs with access to a quality education. Title III of ESSA established federal grants for states to support ELs between the ages of 3–21 to attain English language proficiency (Barrow & Markman-Pithers, 2016). In addition to providing federal grants, ESSA requires states adopt English language proficiency standards and demonstrate success in ELs’ English language proficiency and academic achievement (Barrow & Markman-Pithers, 2016). In order to achieve the goals set by ESSA, ELs need teachers who are trained to work with this diverse group of learners. However, research has shown that despite the extra funding and high expectations associated with national reform efforts, mainstream teachers are unable to address the demands of ESSA that are outlined for ELs. Although mainstream teachers may be experts in a particular content area, this expertise lacks in the area of teaching a second language to ELs (Kibler, Walqui, & Bunch, 2015). Therefore, teacher knowledge and teaching practices must be transformed to provide ELs with a quality education. Critical reflection and SIOP can act as vectors for the professional growth of mainstream teachers during this transformative opportunity in the United States’s educational reform efforts.

Chapter 2 of this study provides an in-depth examination of the literature that describes critical reflection and SIOP. Chapter 3 details the methodology and research process of this
study in greater depth. Chapter 4 presents the case study’s findings and results. Chapter 5 provides a discussion about the implications associated with the study’s findings, conclusions, and recommendations for further research.
Chapter 2: Literature Review

English learners (ELs) are the fastest growing subgroup in the United States student population (Fregeau & Leier, 2015; Murphey, 2014; NCES, 2017; Russell, 2015; Short, 2013). The Every Student Succeeds Act of 2015 defined ELs as individuals who are: (a) between 3–21 years of age; (b) enrolled in or preparing to enroll in elementary or secondary school; (c) not born in the United States and whose native language is not English; (d) from an environment where a language besides English has had a significant impact on the person’s English language proficiency, and; (e) individuals whose difficulty in reading, writing, and understanding English may impede their ability to meet challenging academic standards, successfully achieve in English-only classrooms, and participate fully in society. Such a shift in the nation’s demographics requires a workforce of teachers who are trained to teach and meet the language and content needs of these students with the aim of meeting guidelines outlined by ESSA and the Common Core Standards Initiative (CCSSI) of 2010.

In order to meet the dual needs of ELs, a transformation in the traditional views of learning and teaching must take place within classrooms and specifically mainstream teachers (Ganger, 2013; Kibler, Walqui & Bunch, 2015). However, adequate teacher training and professional development in instructing ELs has been limited (Hansen-Thomas & Cavagnetto, 2010; Martinez, Harris, & McClain, 2014; Short, 2013). This literature review examined two research-based teacher practices that can be implemented in mainstream classrooms serving ELs as tools for instructional transformation. The first practice, critical reflection, evokes transformative learning experiences within teachers (Mezirow, 1991). Researchers who studied the transformative theory for adult learners suggested that critical reflection can influence teachers’ awareness of instructional practices (Collay, 2014; Lowenstein & Brill, 2010; Mortari,
The second practice reviewed in the literature, sheltered instruction observation protocol (SIOP), is a professional-development tool that can be implemented in classrooms to transform teachers’ academic instruction of ELs (Short, 2013). Research demonstrated that SIOP yields positive results in ELs’ language and content performance through implementation of its framework, which is based on teacher-led actions (Echevarria, Richards-Tutor, Chin, & Ratleff., 2011; Ringler, O’Neal, Rawls, & Cumiskey, 2013; Short, Echevarria, & Richards-Tutor, 2011).

The purpose of this study was to explore if transformation of mainstream teachers’ pedagogy takes place by implementing critical reflection and SIOP into their daily lesson planning and delivery. The problem statement associated with this literature review sought to explore mainstream teachers’ perceptions associated with instructing ELs and whether or not implementing critical reflection and SIOP influence the instructional practices of these teachers to meet the needs of ELs. Throughout the literature reviewed, four major themes emerged as relevant to the purpose of this study’s aim: approaches to critical reflection, the role of critical reflection in transformation, factors affecting transformative learning opportunities for mainstream teachers, and integration of critical reflection and SIOP as tools to transform mainstream teachers’ instruction of ELs.

The studies discussed throughout the literature review presented findings that concluded critical reflection as an integral component of the transformative learning experience. Other findings concluded that SIOP can be used as a professional-development tool to produce high-quality teachers who meet the instructional needs of ELs in mainstream classrooms. For this research study, critical reflection was used to explore if and how mainstream teachers’ knowledge of SIOP influenced their perceptions and instructional practices associated with
instructing ELs. This core aspect of the research study contributed innovative information to the overall body of literature about the combined use of critical reflection and SIOP.

Research showed that teachers’ beliefs about learning a second language directly influenced their classroom instruction and decision-making (Baecher et al., 2014; Farrell & Bennis, 2013; Hansen-Thomas & Cavagnetto, 2010). To address this issue, further research is needed to provide educators with a skillset of various practices that can be implemented inside mainstream classrooms to support ELs’ proficiency in the academic content areas and the English language. As the United States undergoes shifts in student-population demographics, the academic demands of ESSA and CCSS require teachers to be equipped with the knowledge and professional skills needed to instruct ELs in an effective manner. Mainstream teachers’ instruction must be adjusted to meet the content and language needs of ELs in order for these students to be equally academically successful as their native-English-speaking peers (Short, 2013). Examining the integration of critical reflection and SIOP as tools of transformative learning in mainstream teachers can add to the body of knowledge about types of teacher practices that support adjusting instruction to meet the learning needs of ELs.

**Conceptual Framework**

Previous research that found that teacher education programs and schools nationwide are failing to adequately prepare teachers for instructing culturally and linguistically diverse students such as ELs (Fregeau & Leier, 2015; Russell, 2015). Despite the plethora of evidence-based research on improving English learners’ academic success, ELs’ academic performance has lagged behind that of their native English-speaking peers in recent years. There is a need for comprehensive research-based pedagogy to assist mainstream teachers of ELs in transforming their teaching practices associated with instructing ELs. The conceptual framework prompts
mainstream teachers to look at the ways their instructional decision-making influences ELs’ proficiency in content and language.

**Transformative theory and critical reflection.** In 1978, Mezirow introduced a theory of adult learning called the transformative theory. Mezirow’s (1991) further development of the transformative theory addressed an oversight in adult learning theories by noting a “failure to recognize the central roles played by an individual’s acquired frame of reference, through which meaning is construed and all learning takes place, and by the transformation of the habits of expectation during the learning process” (p. 4). Mezirow stressed that it is not what occurs to people, but how people interpret and explain what occurs that determine their actions, expectations, satisfaction, continual well-being, and performance. Simply stated, the transformative learning theory describes an individual’s process of making meaning of life’s experiences by critically reflecting on and transforming one’s frame of reference. As a result, the transformative theory is useful in adult education to gain an understanding of adult learners’ perspectives, beliefs, and assumptions with the purpose of facilitating change and developing new meaning perspectives (Mezirow, 1991). Applied to this study, through critically reflective practices, the transformative theory allowed teachers to examine their acquired frames of reference for instructing ELs and to form new meaning by implementing SIOP in their classrooms.

**Reflection versus critical reflection.** Reflection requires adults to intentionally, logically, and purposefully review the ways ideas have been applied in strategizing and implementing problem solving. In modest terms, reflection can be described as the practice of making sense of experience. Reflection is an essential dynamic of the transformative learning process (Mezirow, 1991). Furthermore, Mezirow recognized how imperative the practice of
reflection is during the transformative learning process for adults by distinguishing among reflection, critical reflection, and learning using specific explanations:

Reflection enables us to correct distortions in our beliefs and errors in problem-solving.

Critical reflection involves a critique of the presuppositions on which our beliefs have been built. Learning may be defined as ‘the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action (Mezirow, 1990, p. 1).

Critical reflection involves the ability to reflect upon old meaning schema to fit new meaning schema into an individual’s worldview.

Critical reflection challenges adults to critique, reassess, confirm, and transform the validity of prior learning to question or examine assumptions that have been embraced and deemed as true (Mezirow, 1991). Kreber (2012) affirmed this notion when stating that the ability to reflect critically is fundamentally important in order to address the challenges, responsibilities, and complexities associated with adult life. Mezirow (1991) suggested this 10-stage process for critical reflection: (1) a disorienting dilemma; (2) self-examination of affect (feelings of guilt or shame); (3) critical assessment of assumptions; (4) recognition that one’s discontent and process of transformation are shared and that others have negotiated a similar change; (5) exploration of options for new roles, relationships, and actions; (6) planning a course of action; (7) acquiring knowledge and skills for implementing one’s plans; (8) provisionally trying out new roles; (9) building of competence and self-confidence in new roles and relationships, and; (10) a reintegration into one’s life on the basis of condition dictated by one’s new perspective. According to Mezirow (1991), adults change their frames of reference through
this 10-stage process; however, not every individual will encounter all 10 stages or exhibit this exact order of progression in the stages.

An in-depth knowledge of the metacognitive processes, or *levels of reflection*, and how critical reflection of distortions and assumptions is directly related to the intellectual development of adults served as a basis for understanding Mezirow’s (1991) transformative learning theory. The levels of reflection are different categories of reflection during the transformative learning process in a hierarchical way. Mezirow (as cited in Mezirow & Taylor, 2009) condensed critical reflection into a taxonomy: (1) critical reflection of assumptions (CRA), which focuses more on instrumental learning, and; (2) critical self-reflection of assumptions (CSRA), which focuses more on psychological and cultural limitations of an individual’s worldview and allows rational discourse for perspective transformation. When applying the transformative-learning lens to an educator’s daily lesson planning and instruction, one can see how Mezirow’s taxonomy for critical reflection is comparable to the advanced levels of Bloom’s Taxonomy for cognitive awareness: analysis, evaluation, and creation (Harbecke, 2012). By using critical reflection, teachers may transform old assumptions and gain new perspectives of teaching and learning practices to meet the language and content needs of ELs.

In a previous publication, Mezirow (1990) concluded that critical reflection is transforming one’s frame of reference on assumptions, and is one of the most important aspects of transformative learning. Critical reflection of assumptions, also known as premise reflection, represents the highest category of the levels of reflection (Lundgren & Poell, 2016, p. 4). According to Mezirow (1991), transformative learning can only transpire if critical reflection of the distorted assumptions sustaining individuals’ expectations takes place, for critique and reevaluation that lead to the negation of inadequate prior learning are the hallmarks of reflection.
Researchers who studied the transformative theory for adult learners suggested that critical reflection can effectively influence teachers’ knowledge of instructional practices (Collay, 2014; Lowenstein & Brill, 2010; Mortari, 2012; Mosley, Maloch, & Hoffman, 2017; Zhao, 2013).

Review of Research Literature

Approaches to critical reflection. An adult’s frames of reference could positively or negatively impact reactions and interactions with others. Formative learning occurs in childhood through socialization and education (Mezirow, 1991). This formative learning has the ability to become transformative learning in adulthood through the use of critical reflection (Mezirow, 1991). There are many approaches to using critical reflection in adult learning and in a vocation such as teaching. Critical reflection involves intentionally identifying, prioritizing and reconstructing adult beliefs and behaviors as means of avoiding highly emotional responses and increasing rationality in adult decision making. Rationality in decision making is especially important for educators. For instance, a teacher’s decisions can provide vital guidance to students’ learning (Baecher, Farnsworth & Ediger, 2014; Farrell & Bennis, 2013; Song and Samimy, 2015). The wisdom and support of an educator can influence intellectual and creative inquiry, create opportunities, and foster the confidence and self-esteem of students. Transformative thinking, learning and teaching includes personal and social change (Willink & Jacobs, 2012).

Critical theory lens. Brookfield (2009) viewed critical reflection through the critical theory lens. From this perspective, critical reflection focuses less on how to operate effectively in an existing structure and more on questioning the foundations, assessing the morality, and considering alternatives different from the structure’s majority. Brookfield argued in order for reflection to be critical, there must be a focus on uncovering and challenging the power dynamics
that frame practice. As defined by Brookfield (2009), power dynamics refers to the predominant economic, cultural, and political ideologies embedded within society that people are influenced to embrace such as capitalism. In other words, power dynamics represent a group’s or an individual’s ability or authority to influence others’ behavior or thinking. By this definition, according to Brookfield (2009), critical reflection should call into question and critique power dynamics and sets of practices considered to be theoretically efficient.

Brookfield (2009) concurred with Mezirow that critical reflection is central to transformative learning, but extended its significance by associating critical reflection with power and hegemonic assumptions. Hegemonic assumptions are assumptions adults embrace as working positively or beneficially (Brookfield, 2009). In actuality, however, these assumptions are working contrary to what adults believe. According to Brookfield (2009), hegemonic assumptions create a façade that certain interests are desirable, natural and should be considered common sense. Brookfield (2009) claimed, critical reflection’s main focus is to investigate the human processes of power and hegemonic assumptions. For example, Brookfield’s (2009) theory of critical reflection challenged the traditional constructs of the classroom to contest the hegemonic assumptions associated with the field of education. Some examples of hegemonic assumptions about educators are that teachers should be available to students at all times, or teachers should stay beyond working hours to analyze data for an administrator. These examples are hegemonic assumptions because one may propose these actions demonstrate teachers’ loyalty and leadership capabilities. In actuality, working beyond a certain point produces profit, and protects the status quo for powerful minority interests (Brookfield, 2009). In this example, administrators at the school and district level represent the powerful minority.
Brookfield (2009) described the process of critical reflection in three phases: (1) identifying the assumptions that underlie personal thoughts and actions; (2) assessing and scrutinizing the validity of these assumptions in terms of how each relate to personal real-world experiences and current contexts, and; (3) transforming these assumptions to become more inclusive and integrative in order to inform future actions and decisions more appropriately. Brookfield (2009) concluded that “critical reflection is a reflexive habit of analyzing commonly held ideas and practices for the extent to which they perpetuate economic inequity, deny compassion, foster a culture of silence, and prevent people from recognizing a common sense of connectedness” (p. 127). In both Mezirow’s (1991) and Brookfield’s (2009) theories, the term “critical” emphasized the ability to transform by undergoing a change in perspective. However, Mezirow focused on examining underlying assumptions to evoke change, while Brookfield focused on change by becoming aware of underlying assumptions associated with power and how power operates in a social context.

**Model of transformation.** Another model of transformative learning was proposed by Taylor (as cited in Mezirow, 1991). Taylor developed a process of transformative learning through a six-step model applied to a case study. There were three phases in Taylor’s model of transformation. Each phase focused on the participants’ level of consciousness and can be compared to Mezirow’s levels of reflection. Each phase included two steps. The first phase of Taylor’s model is *generation of consciousness* and includes two steps: (1) encountering trigger events, and (2) confronting reality. Taylor indicated that trigger events may be personal upheavals or life-shattering incidents. The second phase of Taylor’s model, *transformation of consciousness*, represents a developmental progress from an old perspective to a new perspective. This phase included the next two steps: (3) reaching the transition point, and; (4)
shift and leap of transcendence. Taylor’s *integration of consciousness* is the last phase of the transformation model. The last two steps in this phase are (5) personal commitment, and; (6) implementation of new skills, understandings and behavior. Taylor (as cited in Mezirow, 1991) noted that personal and group support are most essential during this stage. Taylor’s model of transformation is similar to certain aspects and phases of Mezirow’s transformative theory; however, Taylor’s model does not involve critical self-reflection.

**Critical reflection in teacher practices.** Teacher reflection becomes critical reflection with two distinct purposes. According to Johnston (as cited in Lowenstein & Brill, 2010), the first purpose suggests teachers understand how power implicitly and explicitly frames educational interaction and structures. The second purpose, according to Wink (as cited in Lowenstein & Brill, 2010), occurs when teachers identify and transform personal assumptions and practices that appear to make teaching easier but in actuality work against students’ best interest. In order to make classroom practices equitable, Howard (as cited in Lowenstein & Brill, 2010) argued that critical reflection entails integrating the issues of equity into teachers’ thinking. This argument is a precursor to meeting the needs of diverse learners. In an era of educational reform that places emphasis on Common Core State Standards (CCSS) and high academic achievement for ELs, Mezirow’s theory affords mainstream teachers the opportunity to extend pedagogical knowledge by fostering critically reflective practices within teacher practice. Therefore, research that supports critical reflection can encourage the professional growth of teachers who self-monitor, self-evaluate, and self-assess their teaching practices for the academic achievement of ELs.

Some empirical research has been conducted on critical reflection in teaching practices. For example, Lowenstein and Brill (2010) conducted a case study on the role of critical
reflection in teacher preparation; novice teachers’ experiences were distinguished as critical reflection from reflective practice due to their consideration of how social systems and power dynamics affect student engagement, the purpose of education and their roles as teachers; this aspect of the study applied Brookfield’s (2009) critical theory to examine the role of critical reflection in preparing novice teachers for the classroom environment. Furthermore, Lowenstein and Brill (2010) argued against technical reflection, which generally asks four standard questions: (1) what do I do as a teacher; (2) what does this mean for my students and me; (3) how did I come to act this way, and; (4) how might I do things differently? The case study indicated promoting critically reflective thinking in teachers is central to making the classroom environment equitable for all children.

Similar to Lowenstein and Brill (2010), Zhao’s (2012) case study argued against technical reflection, and instead argued for critical reflection as a practice that can enhance teachers’ knowledge of classroom practices. Zhao (2012) conducted a case study on teachers’ professional development from the perspective of teaching reflection levels. Zhao placed professional development in two categories. The first category, average professional development, was externally controlled; the second category, advanced professional development, was value based and developed teachers’ personal inner growth to become an agent of change (Zhao, 2012). Teaching reflection levels were divided into three categories (Zhao, 2012). Critical reflection was the highest level of reflection, using analysis and rational consideration of teaching practices; technical reflection focused more on refining teaching techniques rather than evaluating outcomes, and practical reflection focused more on the teaching environment. After analyzing written reflections of four teachers, Zhao found that teachers who experience advanced professional development tended to employ practical and
critical reflection, and teachers who experienced average professional development mostly engaged in technical reflection. By the conclusion of the study, Zhao suggested teachers reduce the use of technical reflection and create more opportunities for inner growth professional development through critical reflection. Akin to Lowenstein’s and Brill’s (2010) research study, Zhao’s study also supported Mezirow’s (1991) research on the levels of reflection by reiterating that critical reflection and critical self-reflection are most essential for evoking perspective transformation in an individual.

Brooks’s (as cited in Collay, 2014) outlook on transformative learning was similar to Mezirow’s (1991). Brooks asserted that transformative learning leads to a fundamental change in learners’ sense of themselves, worldviews, understanding of the past, and their orientation to the future. From this point of view, Collay (2014) conducted a case study that employed systematic critical reflection and emphasized equity. This case study provided one perspective on the experiences of a Latina female teacher by analyzing structured critical reflections over a two-year period. Five vignettes of the participant’s responses and an overall analysis summarize the Latina teacher’s experience. After critically reflecting on the role of teacher leader, the participant’s awareness expanded to acknowledge her place and voice in mainstream society, influence higher understanding, and advocate for marginalized students who are not fully served by American urban schools (Collay, 2014). Grounded in the transformative learning theory, the study showed critical reflection supported teachers who led grade-level teams, school-leadership teams, and school-district personnel in minority schools and communities. This case study demonstrated the transformative power of critical reflection when incorporating personal, cultural, and professional experiences to promote teacher leadership through efficacy of classroom practices for marginalized students and families such as ELs.
**Transformative experiences for mainstream teachers.** There are a number of factors affecting mainstream teachers’ consideration and inclusiveness of ELs when planning classroom instruction to improve educational outcomes. First, the rapid growth of ELs in school systems is continually rising (Fregeau & Leier, 2015; Murphey, 2014; Russell, 2015). The National Center for Education Statistics (NCES) reported the percentage of ELs increased between 2004–2005 and 2014–2015 in all but 15 states. The estimated number of ELs in public schools during 2004–2005 increased by 4,600,000 million students during 2014–2015 (NCES, 2017). Although the number of ELs in schools continues to grow, academic achievement of ELs does not (Galguaera, 2011; Short, 2013). Murphey (2014) researched and compared trends in academic achievement over time for ELs and non-ELs in the nation, using measures from the National Assessment of Educational Progress (NAEP). According to Murphey (2014), states are expected to assess at least 85% of the EL population represented in assessment samples. NAEP’s data, which represents all students state-by-state, estimates students’ proficiency in fourth-grade reading and eighth-grade math. Students’ scores from the NAEP reading and math assessment are then tabulated and evaluated as performing at the ‘basic or above’ proficiency level (Murphey, 2014).

Results for ELs’ and other student populations are provided on a national level. In 2013, eight states did not fulfill the 85% EL participation requirement in the fourth-grade reading assessment, while the District of Colombia and three states did not fulfill this requirement in the eighth-grade math assessment (Murphey, 2014). In 2013 at the national level, 31% of fourth-grade ELs scored at the basic or above proficiency level in reading when compared to 72% of non-ELs. On the eighth-grade math assessment, 31% of ELs scored at the basic or above proficiency level when compared to 75% of non-ELs nationally (Murphey, 2014). Comparing NAEP data, Murphey concluded that the achievement gap between ELs and their native-English-
speaking peers did not change from 2000–2013. These data support the need for further research on teacher practices that promote academic achievement for ELs.

Next, the shift to mandated CCSS suggested mainstream teachers’ traditional ways of teaching and learning must be revised to assist ELs in achieving content and academic language proficiency (Echevarria et al., 2011; Hakuta, Santos & Fang, 2013; Short, 2013; Short, Fidelman, & Longuit, 2012). For mainstream teachers, there are several implications surrounding the United States’s shift to CCSS: (a) CCSS involve language and literacy demands; (b) these demands designate shifts in preconceived instructional strategies for ELs, and; (c) teacher preparation for these shifts must be a “mainstream” concern (Bunch, 2013; Peercy, 2011). Kibler, Walqui and Bunch (2015) also argued that the CCSS represent instructional transformations for all teachers in the United States, and these shifts may not resonate with some teachers’ philosophies, instructional practices, and experiences in relation to teaching ELs. As a result, the language and literacy demands of CCSS represent a transformative learning opportunity for educators of ELs.

However, a substantial number of mainstream teachers have not had formal training in pre-service or professional-development programs focusing on how to integrate language and content instruction into a lesson (Bunch, 2013; Hansen-Thomas & Cavagnetto, 2010; Short, 2013). Baecher et al. (2014) conducted a study to investigate the major patterns of mainstream teachers’ lesson planning. Employing a qualitative analysis of objectives designed by Teaching English to Speakers of Other Languages (TESOL) candidates, the study sought to identify the areas of potential difficulty in designing language objectives rather than content objectives. Data included 107 coded-lesson plans among practicum teachers in the final stage of the master’s TESOL program. The researchers identified significant challenging patterns among different
subject areas, grade levels, and language foci. Baecher, Farnsworth and Ediger (2014) found that many of participants tended to have more difficulty designing language objectives than content objectives. For example, in terms of content objectives in the subject of English language arts (ELA), 47% of objectives were considered as clear as opposed to 38% of language objectives being considered as clear. Most of the plans analyzed had a content-area focus. The participants’ lesson planning lacked an adequate amount of content and language integration, and focused heavily on particular language skills and less on grammatical functions and language learning strategies (Baecher et al., 2014). This study revealed the integration of both content and language standards posed a challenge for teachers of ELs in the mainstream ELA classroom.

Ganger (2013) acknowledged the challenges mainstream teachers face with revising instruction for ELs by arguing that K-12 educators must possess an additional linguistic and cultural knowledge base that can be applied to literacy instruction in order to meet the content and language needs of these students. Hadjioannou and Hutchison (as cited in Ganger, 2013) conducted a study where 25 self-selected participants completed a professional-development program in Modular Design for English Language Learner instruction (MODELL). MODELL was designed to support mainstream teachers of ELs. The researchers employed a mixed-methods and inductive approach using qualitative data from pre-and post-surveys of knowledge, reflective writings, and classroom observations, to identify evidence patterns of participants’ perceptions about their learning and development regarding second language acquisition. In this case study of pre-service teachers conducted by Hadjioannou and Hutchison (2011) (as cited in Ganger, 2013), findings indicated that 87% of pre-service teachers ranked their understanding of grammar knowledge as a three or lower on a scale of 1–5. A diagnostic assessment of foundational grammatical concepts confirmed the pre-service teachers’ self-rankings with the
average score being 51.6 out of 100 with scores ranging from 35 to 85. These findings concluded that teachers lack the grammar knowledge and skills to meet the language demands of ELs. However, observations from early program phases showed substantial improvement in the pre-service teachers’ language and literacy knowledge after participating in the research study’s professional development. Also, participation in the professional-development program had a positive impact on participants’ second language acquisition knowledge and how this knowledge was expressed through classroom practice.

This case study supported Ganger’s (2013) claim that teachers must have additional linguistic and content knowledge to support students’ literacy development. In conclusion, the researcher cited seven cultural and linguistic differences among native-English speakers (NES) and ELs that should be acknowledged when designing literacy instruction: (1) the role of literacy in different cultures; (2) research on the brain and literacy; (3) language interference; (4) discourse structures; (6) grammar knowledge, and; (7) literacy assessment. According to Ganger, designing teacher pedagogy around these differences could strengthen schools’ and teachers’ overall approach to providing literacy instruction to diverse student groups. For example, traditional literacy and grammar strategies that are beneficial to NES may have little effect with ELs. Instead, ELs should be grouped based on their individual background and needs to receive differentiated and personalized instruction. Ganger also noted other best practices for ELs such as incorporating visuals, building background and vocabulary knowledge, providing cooperative learning opportunities, and implementing SIOP strategies.

The last factor affecting mainstream teachers and the EL population is the high-stakes assessment measures of the Every Student Succeeds Act (ESSA) (National Conference of State Legislatures, 2016). The ESSA legislation requires states’ testing practices to assess ELs’
English-language proficiency annually, and past data showed ELs underperformed in every measure of state and national assessments when compared to native-English-speaking students (Short, Fidelman, & Longuit, 2012). Echevarria et al. (2011) cited the role of academic language in literacy and learning as a major factor of ELs’ poor performance. Fregeau and Leier (2015) noted that since the inception of No Child Left Behind Act (NCLB) of 2001, which was recently replaced by ESSA of 2015, responsibility for educating ELs has shifted from bilingual and English-as-a-second-language (ESL) teachers to primarily mainstream teachers (Russell, 2015; Kibler et al., 2015). Accordingly, Fregeau and Leier conducted a study to examine mainstream teachers’ perceptions regarding their preparedness in instructing ELs. The 9-year study was based on three questions: (1) if they felt prepared to work with diverse populations; (2) what they would do if they had an EL in their classroom; (3) how they communicate and collaborate with EL parents/guardians. Two emergent domains were revealed from participants’ responses. The two domains were that mainstream teachers either had knowledge of best practices or did not have knowledge of best practices for ELs. Overall, mainstream teachers in this study lacked knowledge or held misconceptions about the strategies used to teach and assess ELs. Fregeau and Leier (2015) concluded that current educational policy shaping the education of ELs did not assure this population of students would receive adequate education. Thus, this study’s results indicated though educational policy mandates ELs acquire language and content proficiency, mainstream teachers lack the appropriate knowledge and skills for teaching and assessing ELs. Fregeau and Leier’s (2015) findings support the aforementioned study conducted by Hadjioannou and Hutchison’s (2011) (as cited in Ganger, 2013), which also concluded that teachers lacked foundational skills and knowledge to effectively instruct ELs in language and literacy development.
Sheltered instruction observation protocol. Research showed the SIOP model yields positive results in ELs’ language and content performance through implementation of an eight-component framework, based on teacher-led actions (Echevarria et al., 2011; Ringler, O’Neal, Rawls, Cumiskey, 2013; Short, Echevarria, & Richards-Tutor, 2011). Regalla (2012) conducted a research study to examine the learning outcomes of a series of workshops designed to teach the SIOP method to teacher-certification candidates with mainstreamed ELs in their classroom. The researcher chose the SIOP model due to its national recognition as a validated model of instruction to assist mainstream teachers in supporting the needs of ELs. Transcripts from videotaped lessons were compared to lesson plans to determine whether participants incorporated written language objectives into instruction. Data from the study showed all four participants learned to teach key vocabulary as a result of the SIOP workshops focused on designing language objectives. However, Regalla (2012) stated that without the necessary background in English grammar and linguistics and proper training, mainstream teachers may not be able to implement SIOP to its full potential.

Respectively, Short (2013) argued that professional development for training mainstream teachers of ELs be matched with the same rigor expected from students by the CCSS. Short offered seven guidelines for professional development for implementing SIOP: (1) the intervention must be empirically tested; (2) the professional development must be guided and sustained over time; (3) the professional development should be designed in order to let teachers practice sheltered instruction techniques and aspects of lesson planning; (4) provide substantial and quality support; (5) present teachers with a theoretical base in second language acquisition; (6) engage the school administration, and; (7) employ a means to employ teacher implementation. Given the increase in the EL population, the high demands of CCSS and
current educational policy, training and professional development in SIOP could assist in transforming mainstream teachers’ instructional practices to increase academic achievement for ELs. Short’s (2013) seven guidelines for implementing high-quality professional development in SIOP also support Zhao’s (2012) conclusions about the importance of engaging teachers in advanced professional development to promote critical reflection as a teaching practice.

Three successive studies, designed by Short et al. (2011), examined teacher change and student achievement on standardized testing over time. The researchers sought to offer guidance for strengthening professional development to improve the quality of instruction to ELs in order to increase academic achievement. The first study’s participants included 19 treatment teachers and four comparison teachers in a small quasi-experimental study. A second, larger quasi-experimental study with two matched districts (one treatment, one comparison) with a representative sample of teachers in both districts was conducted. The third study was a small cluster-randomized trial with randomization at the school level that investigated the impact of SIOP on student achievement in middle-school science and tested alternative delivery methods of SIOP professional development. The subject of science was chosen due to its recent addition in federal testing mandates (Short et al., 2011). The conclusion of these three studies indicated that students of teachers trained in SIOP performed significantly better on literacy and language assessments than teachers who were not trained in using SIOP. Results from this study also indicated mainstream teachers’ who are trained in the SIOP method are better equipped to meet the language and literacy needs of ELs.

**Critical reflection and SIOP as tools for transformation.** Research in second-language acquisition showed teachers maintain a complex set of beliefs about students and pedagogy that influences instructional decision-making (Baecher et al., 2014; Farrell & Bennis, 2013; Hansen-
Thomas & Cavagnetto, 2010). However, current research revealed a gap in literature for connecting critical reflection to the SIOP method for the enhancement of mainstream teachers’ instruction of ELs. Critical reflection is a common theme intertwined into teacher-education programs as a technique that informs practice (Frazier & Eick, 2015; Lowenstein & Brill, 2010; Mezirow, 1991). SIOP is a research-based tool that mainstream teachers can apply to lesson planning and delivery as a method for improving the quality of classroom instruction for ELs’ academic language and content development (Short, 2013; Short, Fidelman & Louguit, 2012). Critical reflection and the SIOP observational tool will be combined and applied to this study. As a result, the transformative theory may serve as the framework for allowing mainstream teachers to gain a deeper understanding of applying critical reflection and SIOP to classroom instruction to challenge the validity of their frames of reference associated with instructing ELs. Supported by this review of literature, teachers may be drawn to think more profoundly about how a set of perceptions may influence their teaching methods. Lastly, teachers may be drawn to think about how those methods affect the academic success of ELs.

**Review of Methodological Literature**

Philosophy and theory are two integral beginning components of the research process. Philosophical assumptions inform researchers’ choice of theories that will guide the research (Creswell, 2013). Researchers must consider philosophical worldview assumptions that are present prior to conducting a research study, the research design related to this worldview, and the precise methods or procedures of research that render the approach into practice (Creswell, 2013). Philosophical assumptions combine with the framework of a particular theory to form a methodological approach that orders the steps and methods used during the research process. Choosing a particular approach, or the
research process and the methods used, depends on the nature of the issue and the questions researchers seek to answer by conducting the research (Crotty, 2010).

As stated by Creswell (2013), the paradigms that guide research are basic sets of perspectives based on theories and concepts, which have been established in the research community throughout history. Paradigms ultimately form theoretical perspectives. Creswell’s explanation of philosophical assumptions coincides with Mezirow’s (1991) argument that every individual holds a particular worldview that is based on a set of paradigmatic assumptions that originate from a person’s upbringing, life experiences, culture and education (Christie, Carey, Robertson, & Grainger, 2015). By identifying philosophical assumptions, paradigms, and approaches as part of a research design, implications suggest researchers explicitly state the theoretical perspective, and provide honest reasoning to justify the approach that informed the qualitative research when presenting research to an audience.

One type of philosophical worldview, or paradigm, is the transformative worldview. According to Creswell (2013), research based in a transformative worldview asserted that research inquiry needs to be entangled with politics and a political change or action agenda that focuses on the needs of marginalized or disenfranchised groups and individuals in society. An agenda as such promotes reform that may alter participants’ lives, the organizations in which individuals work or live, and may even alter the researcher’s life (Creswell, 2013).

The various types of methodological approaches to qualitative research include case study, phenomenology, grounded theory, ethnography, and narrative research. A case study method was chosen for this research study because the aim was to examine the
frames of reference held by participants in the context of instructing ELs, practicing critical reflection, and implementing SIOP. Verschuren (as cited in Adams & Lawrence, 2015) designated the case study approach as a popular design in anthropology, political science, sociology and education. In case study research, researchers develop an in-depth analysis of a particular case, program, process, activity or one or more individuals (Creswell, 2013). Detailed data for cases are collected over a continued period of time, using a variety of procedures from multiple data sources such as field notes, observations, video and audio recordings, responses to questionnaires, in-depth interviews and narratives. For the purpose of this case study, collection of data through observations, self-assessments, and in-depth interviews will comprise the final data analysis with a focus on gaining an understanding of, and describing, participants’ transformative learning experience by practicing critical reflection and implementing the SIOP framework.

Similar to case study methodology, the phenomenological approach uses concrete situations. However, phenomenology allows the researcher to gain a deeper understanding and interpretation of the problem through the lived experiences of research participants’ first-person point of view rather than an in-depth understanding of a particular case (Creswell, 2013). In other words, phenomenology captures the essence of human experiences through descriptive and interpretive analysis rather than explanations and analyses of a single case, event or program. By the end of this type of study, the reader should better understand the participants’ feelings associated with a phenomenon. Like case study, data collection typically involves interviewing; however, this is not a universal trait. Some phenomenology studies use other sources of data such as poems,
observations, documents, journals, music, poetry, taped conversations, and formal responses (Creswell, 2013).

In contrast to case study, researchers who prefer grounded theory promote using cases to build theory (Adams & Lawrence, 2015). Grounded theory uses the views of participants to derive a general theory of process, action, or interaction (Creswell, 2013). “A researcher applying grounded theory would start with a single case and attempt to understand the case in its entirety, identifying categories and concepts that emerge from the case and making connections between them” (Adams & Lawrence, 2015, p. 472). Then categories and concepts are continuously compared and honed until a single theory emerges. Data from the categories and concepts are produced, sorted, and analyzed from participant observation, informal and formal interviewing. The intent of grounded theory research is to move beyond description and to generate or discover a theory for a process or an action (Creswell, 2013). Conversely, case studies serve as inspiration for exploration of a case that leads to the improvement, development or validation of a theory (Adams & Lawrence, 2015).

Narrative research retells a story based on an individual’s life. Similar to phenomenology, this type of research analyzes experiences of individuals’ lived and told stories. Narratives are generated from many different forms of data such as interviews, observations, documents, pictures, and other sources of qualitative data. In narrative research, the researcher shapes the story back together in chronological order from a first-person point of view (Creswell, 2013). Narrative and phenomenology are alike in collecting meaning from participants’ lived experiences and perceptions, yet both approaches lack the formal and systematic procedures that accompany case study parameters, such as time and place.
The final research design is ethnography. Ethnographic research is the study of people in their own environment through the use of methods such as participant observation and face-to-face interviewing. According to Creswell (2013), “ethnography is a qualitative design in which the researcher describes and interprets the shared and learned patterns of values, behaviors, beliefs, and language of a culture-sharing group” (p. 90). While conducting ethnographic research, the researcher looks for patterns of the groups’ mental activities, such as ideas, beliefs, social organization, social networks, ideational systems, and worldviews. There are two types of ethnographic research. Realist ethnography is popular, and written in third-person point of view to report information objectively from participants on the field site. Critical ethnography is conducted from an advocacy perspective. In this type of ethnographic research, the author is interested in advocating against inequality and discrimination for marginalized groups in society (Creswell, 2013). Although this type of research method fits well with critical reflection as a topic, ethnography requires researchers to be well-vetted in cultural anthropology, and social-cultural systems while a case study investigates a particular program, event or an individual as a specific theoretical construct.

Having reviewed the different methods of research, a case study approach was chosen as most appropriate for this study. A major reason for this was due to the limited research available on employing both critical reflection and SIOP to evoke transformative learning in mainstream teachers of ELs. The concept of applying Mezirow’s (1991) theory to determine if and how mainstream teachers’ learning was explored and understood in a case study manner that extends the literature on appropriate and applicable teaching practices for teachers of ELs. Therefore, through a transformative lens, this case study contributed to lessening the gap in literature on this issue.
Review of Methodological Issues

The research problem addressed in this study assisted in determining the type of design and method chosen to conduct the research (Creswell, 2013). For example, the case study method is one strategy to the qualitative research design, and is viewed as a descriptive and exploratory technique that aims to gain thorough knowledge about a particular case or set of cases. This method requires detailed investigation of an event or experience that is thought of as prototypical or unique (Adams & Lawrence, 2015). The methods of data collection in a case study use qualitative approaches such as in-depth interviews, narratives and observations (Adams & Lawrence, 2015). The case study method’s greatest strength is that it allows for a holistic view of an individual or phenomenon. According to Adams and Lawrence (2015), this holistic view can be lost using quantitative measures that quantify and analyze information into data. However, because case studies are confined by time and activity, their holistic nature can limit the validity of findings from the study. The ability to generalize a case study’s findings to a wider population beyond a single case study is a controversial issue (Adams & Lawrence, 2015). This often leads to data being collected over extended periods of time in longitudinal studies that can make data less applicable or relevant.

For example, Echevarria et al., (2011) conducted a longitudinal case study to examine if the extent in which teachers implemented SIOP with fidelity influenced student outcomes. The researchers investigated SIOP professional-development efforts across 17 different sites in the United States. Findings from the study noted the difference between high implementers and low implementers of SIOP was a matter of the frequency and degree to which the features of SIOP were implemented and not if a specific feature was implemented. This research demonstrated the importance of implementing research-based literacy practices with fidelity to have a positive
effect on student achievement. However, the researchers experienced less-than-favorable conditions than those commonly suggested in research literature. Due to district scheduling across the many sites, issues such as limited time for pre-and post-observation conferences, lesson preparation, study timelines, and union contract restrictions hindered more sustained support for participating teachers. The researchers hypothesize that with additional intensive and sustained support over a longer period of time, more participants in the study would have implemented SIOP to a higher degree. Because of the study’s limited amount of time and lack of sustained support, the findings may be viewed as less relevant or substantial when establishing an ongoing causal relationship between SIOP implementation and student achievement.

Because a case study lacks control, or the ability to minimize the effects of the study variables to establish cause-effect relationships is limited. The findings from a single case study may only be applicable to similar cases. For this reason, there is a greater chance for interpretation of a case study’s results to be biased. Also, there is often one researcher in case studies and this can lead him or her to weigh results heavily on a single case instead of results from other research (Adams & Lawrence, 2015). For example, Daniel and Conlin (2015) conducted a case study analysis of one pre-service teacher as evidence of the mixed messages the SIOP sends to teachers. According to Daniel and Conlin (2015), the SIOP prompted teachers to focus on themselves rather than students' thinking, actions, and sense-making in the classroom. Methods of data collection for this study included observations, field notes and use of rich and thick description to detail the participant’s instructional habits. The researchers used their findings to argue for adding three additional features to the SIOP framework: (1) helping teachers attend to student contributions; (2) supplementary reflective prompts, and; (3) principles from successful professional development. However, this case study’s analysis included data
from one teacher candidate’s learning in a pre-service program in the research study. Therefore, the researchers’ argument was not extensively supported or validated due to a lack of participants and inability to generalize similar findings from other cases.

**Synthesis of Research Findings**

Researchers emphasize the use of critical reflection in adult education because it evokes transformative learning. Willink and Jacobs’s (2012) research defined transformative learning and teaching by highlighting four key communicative capabilities of the transformative learning process as emotional discernment, openness, dialogue, and reflection. According to the researchers, these four communicative capabilities offer a framework for qualitative assessments of transformative learning. The researchers concluded that teachers of any discipline can prioritize and rehearse these concepts to embody transformative learning within teaching and learning experiences. Similar to Mezirow (1991) and Brookfield (2009), Willink and Jacobs’s (2012) framework for transformative learning includes creating social change through collaboration, and creating personal change through the adoption of new ideas in order to gain a deeper understanding. Therefore, critical reflection is communicative in nature, and can provide mainstream teachers with the opportunity to challenge and transform their perspectives associated with teaching ELs while affecting social change in the educational enterprise.

When acquiring a second language, research has shown teachers retain a complex set of beliefs about students and teaching that influence instructional decision-making (Baecher et al., 2013; Farrell & Bennis, 2013; Hansen-Thomas & Cavagnetto, 2010). In further support of critical reflection, a growing body of evidence showed teachers of second-language learners make more informed decisions about their practice when reflecting on personal beliefs (Farrell & Mom, 2015). Many of these studies have focused on language-acquisition skills related to
grammar, speaking and reading, and their relationship to teacher beliefs and practices. However, Farrell and Mom (2015) conducted a study focused on teachers’ reflection of their beliefs about the type of questioning used in the classroom. Farrell and Mom’s (2015) study found that when teachers reflected and articulated on their beliefs about the use of questioning inside their classroom, they became more aware of the impact and meaning of personal beliefs on their classroom practices. The results of the case study also suggested the collection of data sources such as observations, journal writing, and discussions contributed to teachers’ reflection on their beliefs and practices related to the use of questioning in the classroom. Accordingly, a mainstream teacher’s use of critical reflection may promote awareness of how their personal beliefs influence instructional practices for ELs.

In addition to critical reflection as a tool for transformative learning, embedding the SIOP method within teacher pedagogy makes teacher instruction and lesson content comprehensible for ELs. The developers of SIOP have researched and refined SIOP since 1995 (Echevarria & Vogt, 2010). SIOP was introduced as an observation tool for researchers to measure implementation of sheltered instruction techniques. Sheltered instruction incorporates opportunities for students to develop general academic competencies through instructional delivery that is language rich and grade level appropriate to develop ELs’ English proficiency and academic content (Echevarria et al., 2011; Markos & Himmel, 2016; Short, 2011, 2013; Short, Fidelman, & Longuit, 2012). SIOP is a research-based tool that can support mainstream teachers by determining to what extent sheltered instruction is implemented into lesson designs for ELs.
Critique of Previous Research

An in-depth knowledge of the metacognitive processes associated with reflection served as a basis for understanding how critical reflection of distortions and assumptions is directly related to the intellectual development of adults. Mezirow’s (1991) theory of transformative learning is a comprehensive and multifaceted approach to the adult learning process that focuses on the cognitive and psychological processes associated with critical reflection. “Mezirow’s theory and its importance to academia can be gauged by the number of masters and doctoral students who used it as a basis for their dissertations…” (Christie et al., 2015, p. 12). To this aim, incorporating critical reflection in conjunction with the SIOP can contribute to mainstream teachers’ professional growth and use of best practices for ELs.

Lundgren and Poell (2016) reviewed empirical studies that researched critical reflection based on Mezirow’s definition of critical reflection. The review drew data from 12 case studies, using Mezirow’s theory. Using three databases, the researchers conducted a step-by-step literature review through selection criteria and key search terms. Lundgren and Poell examined, analyzed and compared the 12 case studies. The 12 studies were categorized into three study aims: (1) development of a new conceptual model or instrument to study and assess reflection; (2) testing or evaluating an existing coding scheme, and; (3) observing an existing scheme, adding to it and adapting it to a specific study. The findings from seven of 12 studies were based on written accounts such as journal entries, diaries, reflective essays, or rationale statements. Three studies’ findings were based on participants’ personal accounts collected during interviews. Two studies used a survey method. Half of the studies took place in teacher-education programs, professional-development programs, business programs, and elementary- and higher education settings while the other half took place in the medical field. Because there
were various approaches and outcomes throughout each case study, the researchers noted that there is little agreement on how to operationalize reflection. Next, Lundgren and Poell reviewed the 12 case studies to determine if Mezirow’s (1991) levels of reflection had been assessed. The researchers found that when assessing critical reflection, researchers from each case study had to decide on a coding scheme and unit despite the type of data collection methods used. Five of the 12 studies embedded reflection themes in their assessment and coding processes while the remaining seven only embedded the levels of reflection. The studies on critical reflection frequently reported whether this level of reflection was achieved. Lundgren and Poell observed within the 12 case studies that high frequencies of critical reflection were seldom achieved.

As a result of their research, Lundgren and Poell (2016) concluded that Mezirow’s theory has been translated, using different methods, processes, and results in research studies, and there has been little progress toward integrating a harmonized instrument that can be applied to different disciplines in adult education. This particular research study showed that critical reflection is a vital component of Mezirow’s theory, although there has been little research on how to operationalize and assess outcomes of critical reflection (Lundgren & Poell, 2016). Despite this issue, a consensus in the research on the outcomes of critical reflection continues to be prevalent; Mezirow’s (1991) transformative learning theory suggests that critical reflection can transform mainstream teacher perceptions and practices. Therefore, examining the use of critical reflection and SIOP by mainstream teachers of ELs can influence classroom instruction of ELs.

**Summary**

Research suggested that critical reflection is essential in the transformative learning process. Thus, by combining critical reflection and SIOP, teachers of ELs can become more
informed during instructional decision making and strive to provide equitable educational opportunities. By implementing critical reflection and SIOP, mainstream teachers can foster personal and social change that can lead to increased academic achievement in ELs. Based on this review of literature, which details a comprehensive conceptual framework using Mezirow (1991) and Short (2011), to understand the transformative learning experience, there was adequate research for rationalizing that a case study examining the influence of critical reflection and SIOP on mainstream teachers of ELs instructional practice would yield significant findings for the field of education. Therefore, the literature review demonstrated scholarly support for pursuing a research study to answer the following research questions: (1) What are the perceptions of mainstream teachers serving ELs in regard to language learning, instructional practices, lesson planning and delivery? (2) How does the use of critical reflection and implementation of SIOP influence teachers’ efficacy of instructional delivery strategies for ELs? (3) How do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and SIOP?


Chapter 3: Methodology

Introduction

At the core of transformative learning is critical reflection (Kreber, 2012; Lundgren & Poell, 2016; Lyons, Halton, Freidus, 2013; Mezirow, 1990). Critical reflection involves a mental and behavioral adjustment in adults that promotes intellectual development through examination of prior learning (Christie, Carey, Robertson, & Grainger, 2015; Lyons et al., 2013; Mezirow, 1991). Researchers often refer to critical reflection when conducting empirical studies related to understanding adult learning (Lundgren & Poell, 2016). Practicing critical reflection in the field of education is one method of enhancing the professional growth of teachers (Frazier & Eick, 2015). Therefore, a case study method was used to investigate, identify, and examine participants’ perceptions associated with teaching English-language learners (ELs), in order to enhance mainstream teachers’ intellectual and instructional development through their use of critical reflection (Adams & Lawrence, 2015).

This chapter includes the research design, instrumentation, participant selection, and the procedures and methods that will be used during data collection, in addition to the research’s limitations and ethical issues. From this case study, the data revealed the commonalities and differences among mainstream teachers’ prior learning and how using critical reflection with sheltered instruction observation protocol (SIOP) influenced their classroom instruction for ELs. This study provided an in-depth examination of some mainstream teachers’ frames of reference and teaching practices related to English learners. Furthermore, the findings from this research study may contribute to the educational enterprise and community by offering insight into the practice of critical reflection and SIOP as tools for influencing professional growth in mainstream teachers of ELs.
Research Questions and Interview Questions

With the aim of exploring mainstream teachers’ prior learning and their experiences with using critical reflection and SIOP to influence instructional delivery, the research questions and interview questions guided the research process. Case studies are descriptive in nature (Creswell, 2013; Yin, 2009). Yin (as cited in Adams & Lawrence, 2015) suggested that a case study be used to explain an experience and to answer “how” and “why” questions (p. 470). These types of questions allow the researcher to gain an all-inclusive view of the participants and the individual case in a real-life setting (Adams & Lawrence, 2015). Interviewing participants is also a method used in qualitative research that requires planning and preparation for the researcher to gain efficient information from participants (Booth, Colomb & Williams, 2008). Therefore, a list of semi-focused interview questions was prepared prior to conducting the research study.

Research questions.

1. What are the frames of reference, such as experiences and perspectives of mainstream teachers serving ELs in regard to language learning, instructional practices, lesson planning, and delivery?

2. How does the use of critical reflection and implementation of SIOP influence teachers’ efficacy of instructional delivery strategies for ELs?

3. How do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and SIOP?

Purpose and Design of the Study

The purpose of this research study was to explore if and how Mezirow’s (1991) concept of critical reflection and Short, Vogt, and Echevarria’s (2004) SIOP model influence the teaching
practices of nine public high-school-mainstream teachers of ELs. Although critical reflection and SIOP are considered to be essential practices in the teaching community, there is limited knowledge in current research as to how critical reflection and SIOP can be used collaboratively as an innovative means to enhance teacher instruction (Daniel & Conlin, 2015; Lundgren & Poell, 2016; Lyons, Halton & Freidus, 2013; Short, 2013; Short, Echevarria & Richards-Tutor, 2011). Thus, the rationale for this study was predicated on its potential to contribute to the body of knowledge about mainstream teachers’ perceptions associated with instructing English-language learners and how critical reflection and SIOP may transform their instructional practices to meet the academic and linguistic needs of second-language learners.

The objective of this case study was to examine the ways in which critical reflection and SIOP could support teacher development and professional growth in a classroom setting designed to meet the educational needs of ELs. Yin (2009) defined case study as a method of research used to investigate a contemporary phenomenon within a real-life context, especially when the parameters between phenomenon and context are ambiguous. According to Yin (2009), this aspect of a case study’s design aids in distinguishing it from other research methods. Therefore, a case study method was presumed as appropriately aligned with the purpose of this study, which was to gain an understanding of if and how critical reflection and SIOP may transform the instructional practices of mainstream teachers of ELs. Merriam (as cited in Creswell, 2013), advocated a general approach to case studies in the education field. Subsequently, this case study was bounded by place and time at the research site during the academic school year and conducted in an effort to gain a general understanding of how critical reflection and SIOP may influence teacher instruction for ELs.
To further explore the phenomenon of implementing critical reflection and SIOP, Yin’s (2009) approach to analyzing case study data were used in this study. According to Yin (2009), the questions posed in a case study should accommodate the unit of analysis of the case study. As a result, interview questions were designed with the purpose of utilizing Mezirow’s (1991) criteria for the stages of critical reflection and Short’s et al. (2011) framework for SIOP to construct critical self-reflective questions that provide an in-depth understanding of the research questions. Forms of data collection included interviews, observations, observation field notes, and participants’ reflective writings for the researcher to analyze and codify emergent themes derived from participants’ experiences.

**Research Population and Sampling Method**

Creswell (2013) recommended the use of four-to-five cases when conducting case study research. In addition to the number of cases, Creswell (2013) suggested researchers use purposeful sampling by selecting representative cases that yield detailed descriptions of the cases within their context. Moreover, Yin (2009) indicated that a case study’s sampling method can be straightforward due to special circumstances or access the researcher may already have. Therefore, nine teachers from one inner-city high school in Tennessee were selected to participate in this research study upon their interest and teaching profiles. The research site was designated as a Title I school; the student-to-teacher ratio was 19:1 (National Center for Education Statistics, 2014–2015). The student-enrollment total was approximately 1,100; approximately 75 students were designated limited English proficient (LEP), and approximately 600 students were categorized as economically disadvantaged (XXX School Profile, 2016–2017). The total population of teachers at the research site was 60.
Out of the potential pool of nine participants, a higher number of males than females were expected to enroll. In order to have a varied pool of participants, one teacher from each grade level (9-through 12) and content area (English, math, science and social studies) was recruited. The participants had at least two years of teaching experience, at least one EL in their classroom, and little-to-no previous training or experience with SIOP. Although the research population included mainstream teachers from various subject areas, grade levels, ethnic backgrounds, and years of teaching experience, more veteran teachers were anticipated to participate due to the possibility of a greater amount of experiences with ELs during their teaching careers.

Yin (2009) described one rationale for case study research as investigating a representative or typical case. According to Yin (2009), a typical case apprehends the circumstance and condition of an event that is common and occurs frequently. The objective and knowledge gained from typical cases are informative about the experiences of the phenomenon from an average person’s perspective. Therefore, a full description of the study’s purpose and aspects were shared with the school’s administrator in order to gain permission to conduct the case study. The researcher met with the teachers to discuss the purpose of the research study and the research process in depth before providing each teacher with a consent form. After teachers acknowledged their participation through written consent, special arrangements were made to accommodate the participants’ availability and schedule for possible interview, observation, and workshop dates and times (Yin, 2009).

**Instrumentation**

Documentation, interviews, direct observations, archival records, participant-observations, and physical artifacts were noted by Yin (2009) as the most common sources of
evidence in case study research. Creswell (2013) described data collection during a case study as an extensive process that includes information from multiple sources such as interviews, observations, audiovisual materials and documents. Specifically, Yin (2009) highlighted interviews as the most essential source of evidence in case studies because participants offer insight into human and behavioral matters. Also, observational evidence can provide additional information and insight on the case study’s topic. According to Yin (2009), classrooms can be used as a formal observational instrument to assess the instances of behaviors during certain times.

Due to the boundaries of time and place in the case study, the amount of time used to conduct interviews and the two SIOP workshops was limited in an effort to accommodate participants’ personal schedules and provide flexibility. As the principal investigator, this researcher conducted direct observations of participants’ classrooms to assess their instructional behaviors in a natural setting (Yin, 2009). A pre-intervention observation took place after the pre-observation interview to gain an understanding of the participants’ current teaching practices. For this study, semi-focused interview questions were produced to address the research questions and knowledge gained from the review of literature. This researcher interviewed each participant a total of two times. The two interviews were face-to-face and took place in a private setting at the research site, which was a classroom inside the high school. Both interviews lasted no longer than 25 minutes. During the first interview, the pre-observation interview, the questions were designed to elicit open-ended answers from the interviewees about their previous experiences in teacher education and professional development related to instructing ELs, their current lesson planning and instructional habits as they relate to ELs in their classroom. The pre-observation interview questions focused on identifying participants’ frames of reference for EL
instruction in the mainstream classroom, and if and how participants apply critical reflection and SIOP into their current instructional decision making and lesson designing. During the first interview, participants completed the SIOP self-assessment to describe their current instructional habits in detail and relative to the SIOP framework. The SIOP self-assessment was used as an informal and self-reflective analysis of mainstream teachers’ current use of SIOP techniques (see Appendix C). The goal of the pre-observation interview was to gain an understanding of participants’ previous training, pedagogical ideas and instructional habits associated with the research topic.

After the pre-observation interview and the pre-intervention observation, each of the participants took part in two SIOP intervention workshops. Each intervention workshop lasted no longer than 30-minutes. During the intervention workshops, the participants learned how to implement the SIOP framework into their lesson design and instructional delivery. Also, in both SIOP intervention workshops, participants learned about the SIOP approach to teaching while engaging in SIOP-based activities presented and facilitated by this researcher. For example, participants wrote language objectives for a future lesson using the Common Core State Standards for their respective content areas.

During the first SIOP intervention workshop, participants were given information about one language learning theory and introduced to the first four components of the SIOP framework. Participants learned about the last four components of SIOP framework in the second SIOP intervention workshop. In addition, participants received a folder with tangible copies of the information presented as well as the PowerPoint presentation that was used. Participants composed critically reflective writings at the end of each workshop to discuss what was learned and how it could be applied to their current teaching practices. The SIOP
observational instrument provided the researcher with descriptive field notes about participants’ SIOP implementation (see Appendix D); however, participants’ interview data were used during data analysis to examine participants’ frames of reference and subsequent learning from the use of critical reflection and SIOP.

After participants took part in the two intervention workshops, the researcher conducted a post-intervention observation to assess participants’ implementation of SIOP strategies into their classroom instruction. Field notes from the observations included what the researcher heard and observed while each participant actively instructed his or her class. Lastly, a post-observation interview took place to assess if and how implementation of critical reflection and SIOP influenced participants’ instructional habits to support ELs’ instructionally and to support teachers’ professional growth. The interview questions are located in Appendix E.

**Data Collection**

The researcher was the primary instrument for data collection and analysis. Yin (2009) suggested that a case study’s report should cite specific and relevant data such as documents, interviews, and observations. According to Yin (2009), documentary information should be reviewed and used carefully as explicit evidence of the case study’s findings. For this study, field notes from the pre- and post-observations, workshop interventions, and the SIOP observational tool were used as evidence to extend and substantiate the data collection process by providing a consistent link to the case study’s protocol and initial research questions. Interviews are an essential component of case study information (Yin, 2009). Focused interviews were conducted during this study to elicit responses from participants, using a set of questions derived from the case study’s protocol. Interviews were audio-recorded and transcribed to provide accurate renditions of the participants’ responses.
Observational data were used to capture the contextual setting and relevant behaviors of participants to understand their actual use of SIOP strategies. The use of observational data provided awareness of other environmental conditions that could have potentially influenced the case study’s findings. This researcher scheduled times to observe each participant in his or her classroom environment. Detailed field notes using the SIOP observation instrument were used as observational data for collection (see Appendix D). The pre-intervention observation allowed this researcher to see each participant in his or her natural classroom setting while employing existing teaching habits. After participants completed two intervention workshops, a post-intervention observation was conducted using the SIOP observation instrument to assess participants’ use of SIOP in the classroom environment with ELs present. Then, documentation from the pre- and post-intervention observations were compared to measure participants’ SIOP implementation as professional growth. At the conclusion of the study, this researcher conducted a post-observation interview using reflective discourse to gain an understanding of if and how critical reflection and SIOP influenced participants’ acquired frames of reference associated with instructing ELs. Questions used in the post-observation interview were reflective in nature to elicit responses from participants about their experiences. Then, feedback was shared with participants about their pre- and post-intervention observations using the SIOP data.

**Identification of Attributes**

The attributes for the case study were critical reflection, sheltered instruction as an instructional technique, SIOP as an observational tool, adult learning, and transformative learning. Each of these attributes contributed to the findings that are reported as a result of the case study’s research. According to Ravitch and Riggan (2017), “The values you report need to
be attached to concepts, relationships, and, ultimately, your research questions” (p. 159). Thus, each of these attributes was attached to the findings of this research study and produced high-quality data intended for the use of practical application in the field of education.

The transformative theory is an adult learning theory that attempts to describe and analyze how adults make meaning of experiences through educational interventions that assist them in learning (Mezirow, 1991). In this study, transformative learning referred to how teachers transform their perceptions, or frames of reference and teaching practices associated with ELs by implementing sheltered instruction and critical reflection. Sheltered instruction is a classroom approach for ELs that extends instructional time for English language support while learning content objectives (Short, Vogt and Echevarria, 2004). SIOP is an instrument used to measure teachers’ implementation of sheltered instruction (Short, Vogt and Echevarria, 2004). The SIOP model provides actual examples of the components of sheltered instruction that can enhance teachers’ instructional practice (Short, Vogt and Echevarria, 2004). Critical reflection, as defined by Mezirow (1991), “involves a searching view of the unquestioningly accepted presuppositions that sustain our fears, inhibitions and patterns of interactions…” (p. 87). In this study, critical reflection was expressed by participants in written formats and orally. Critical reflection was measured using analytical and descriptive assessments of teachers’ learning from their experiences before, during and after engaging in the transformative learning process.

**Data Analysis Procedures**

In an effort to explain and understand participants’ experiences and learning from engaging in critical reflection and SIOP, the researcher read over the participants’ responses from the intervention workshops, records of the SIOP observational tool from both the pre- and post-intervention observations, and transcripts from the participants’ pre- and post-intervention
interviews. Using Yin’s (2009) steps for case study data analysis, the researcher used an iterative and reflective process during the research and data analysis process. First, this researcher made an initial proposition about mainstream teachers’ frames of reference and instructional habits pertaining to delivering lessons to ELs. Next, the researcher compared the findings from the data to the expected findings. Edwards and Holland (2013) indicated listening and attending to participants’ responses as an essential skill for promoting social interaction during qualitative interviews. Therefore, this researcher built a description of participants’ experiences with the phenomena by actively listening to participants’ responses to interview questions, and reviewing transcripts from the audio-recorded interviews in addition to taking detailed field notes using the SIOP observational tool, and reading over participants’ reflective writings.

Each participant was assigned a pseudonym to be used with his or her audio-recorded interviews and other research forms to ensure confidentiality. In addition, a transcriber was hired to ensure accuracy in providing participants with interview transcripts for verification. Interview transcriptions were emailed to participants for member checking before the final analysis. Bracketing was used to assure the researcher maintained a focused inquiry that was aligned with the purpose of the study.

Taking the aforementioned measures and reading each interview several times assisted this researcher in detecting key phrases while taking notes during the interview and data analysis process. In an effort to facilitate the development of themes, descriptive coding was used to link connections among the findings during data analysis. This researcher employed descriptive coding to summarize the primary topic, and scope of participant responses and actions using one word or short phrases (Saldana, 2016). Then the researcher used these categorical codes to
refine the data and identify common and emergent themes in the participants’ responses. Creswell (as cited in Saldana, 2016) recommended qualitative researchers create 25–30 categories that combine into five or six major themes. This coding process was repeated as many times as needed to gain a final explanation as to how critical reflection and SIOP influenced mainstream teachers’ professional growth by supporting instructional habits that meet the needs of ELs.

Therefore, the following steps, as recommended by Creswell (2013), were used for the case study’s data analysis: this researcher read over all the data to develop and organize a list of significant statements about mainstream teachers’ perceptions and experiences with critical reflection and SIOP; the coding process was used to produce categories and themes for data analysis; a written textual description was used to discuss in detail “what” the participants experienced as frames of references and “how” participants experienced critical reflection and SIOP. Lastly, the researcher synthesized this information into an explanation about the influence critical reflection and SIOP had on mainstream teachers’ instruction of ELs.

Limitations

One limitation of this study was that all the participants are employed at one public school located in Tennessee. This population represented a selected demographic and region of the school system; therefore, this small study’s findings may not be generalizable due to the small sample size. Another limitation was the availability of teachers. The teachers were involved in other school-related responsibilities and duties such as professional learning communities, sponsoring after-school activities, and staff meetings. Therefore, flexibility in scheduling dates and times with participants was consistently considered throughout the research study.
Validity

According to Yin (2009), using a chain of evidence and explanation building throughout the data analysis process are procedures to establish and increase the validity of a case study’s findings. Explanation building is a procedure used to analyze case study data in order to frame an explanation about the case (Yin, 2009). These procedures should be applied throughout the study for me, as the researcher, to ascertain the quality of the case study’s research design. Yin (2009) asserted that a chain of evidence allows the readers of the research to follow a line of evidence derived from the research questions that lead to the case study’s conclusions. For this study, both procedures were used; the chain of evidence cited participants’ responses from interview transcripts, critically reflective writings from the two intervention workshops, and documentation of the two pre- and post-intervention observations using the SIOP observational tool. The final analysis of this case study’s data is in a rich, thick description that links the study’s findings to the research’s initial proposition about mainstream teachers’ transformative experiences when implementing critical reflection and SIOP to enhance instruction for ELs and promote professional growth. This study’s explanation can contribute to future research in implementing critical reflection and SIOP as tools of transformative learning in teachers of ELs.

Credibility. According to Creswell (2013), researchers should engage in at least two validation strategies when conducting qualitative research. For this study, credibility was established using debriefing and member checking of data derived from information obtained from observational documentation and participants’ written and oral responses about implementing critical reflection and SIOP. Participants were briefed first about the purpose of the study, the interview process, workshops, and scheduling, in order for this researcher to gain written consent from the participants. Semi-structured interviews with the participants were
audio-recorded for accuracy and debriefing purposes so that member checking may be used by participants to verify their responses.

**Dependability.** To establish a study’s dependability, Yin (2009) advised that researchers must minimize the possibility of errors and biases. According to Yin (2009), one criterion for overcoming errors and biases within case study research is using a case study protocol. A case study protocol is an overview of the case study that includes the study’s instrument and describes how the researcher will operationalize the data collection process (Yin, 2009). The researcher followed the case study protocol and topic guide (Edwards and Holland, 2013) prior to collecting data. According to Edwards and Holland (2013), a topic guide allows the researcher to consider the focus of inquiry, what types of questions to ask and how the questions should be asked during the interview process. This case study’s protocol contained a thorough and descriptive set of guidelines to address several features of the research study: the introduction to the study, the data collection procedures, the case study’s questions, the instrument being used, and a report detailing the format and presentation of data (Yin, 2009).

**Expected Findings**

As the researcher, it was expected that the results could inform existing literature with new knowledge on how critical reflection and SIOP can be used concurrently for two purposes in the mainstream classroom. First, by highlighting mainstream teachers’ perceptions and approaches to instructing ELs, a transformative learning opportunity may ensue. Second, from this transformative learning experience, mainstream teachers’ instructional practices associated with ELs can be influenced and supported. Interview responses, reflective writings, and field notes from observational data provided insight into how mainstream teachers view instruction of ELs and forms of educational practices that support meeting the content and language needs of
ELs. One of the researcher’s expected findings was a supposition that participants were more knowledgeable of the practice of critical reflection rather than SIOP.

**Ethical Issues of the Study**

Studying human subjects and the occurrence of a real-life event in a particular setting necessitates social science researchers to use ethical practices (Yin, 2009). Therefore, the researcher must consider any ethical issue that may arise during all stages of the research process (Creswell, 2013). For example, researchers should inform participants of the purpose of the research, what participation in the research will involve, the potential risks and benefits involved in participation, and promises of confidentiality (Edwards & Holland, 2013). The following ethical considerations were used to increase trustworthiness when collecting, interpreting and publishing data during the research process: participants were informed of the purpose of the study, the research procedure, risks and benefits and a description of the selection process and their role; (1) participants exercised autonomy and voluntariness through documentation of informed consent; (2) participants will not be identified in any publication or report; (3) data did not contain participants’ names or other identifying information in order to maintain confidentiality and protect participants’ privacy; (4) any identifiable information was replaced with codes; (5) pseudonyms were used to label audio-recorded interviews to protect participants’ identities; (6) a transcriber was hired to transcribe interviews and will sign a confidentiality agreement; (7) data were stored in a locked file cabinet; (8) the study used a password-protected computer and software; (9) data were stored on a computer with a secure server, and; (10) analyzed data will be kept for a period of 5 years after the research study has concluded.

As the principal investigator, this researcher’s role was to ensure that participants understand these elements of the research study and deem it trustworthy due to the level of
confidentiality, anonymity and accuracy of reporting that will be used. Thus, the researcher met with each participant to provide this information and address any concerns or questions pertaining to the purpose, process and participation in the study. After the teachers agreed to participate in the study, each was asked for his or her written consent, using a hard copy version of the consent form that contained the specific details about the research process, potential benefits and risks, participants’ rights, measures that would be taken for confidentiality, and an explanation of how results would be disseminated, and how to contact the researcher with further questions and concerns about the research study. Additionally, the participants were informed of their right to withdraw from the research study at any time.

**Conflict of Interest.** The researcher acknowledged and bracketed out any previous knowledge with the SIOP model to focus on the core elements of the research. To ensure confirmability, this researcher also reduced researcher bias by focusing only on the data to gain answers to the research questions. The data reinforced confirmability by acting as a chain of evidence that led to the final analysis of the case study’s findings. The researcher’s role was to ensure that participants understood these elements of the research study and deemed it trustworthy due to the level of confidentiality, anonymity and accuracy of reporting that was used. Any personal experience with SIOP, previous experience as a mainstream teacher, and current professional role as an English-as-a-Second-Language (ESL) teacher at the research site required any preconceived notions to be set aside to focus on the experiences of the study’s participants. In an effort to achieve this, the researcher bracketed herself out of the research. According to Creswell (2013), the researcher brackets himself or herself out of the study by discussing personal experiences with the phenomenon in order to set them aside and focus on the participants’ experiences. Bracketing was essential when interpreting data so that evidence
would be analyzed appropriately. Also, in an effort to avoid deception, personal previous experiences with the research topic and role as a teacher at the research site was addressed at the beginning of the research process. Subsequently, this researcher formulated the interview questions to guard against any researcher bias and frequently assured participants’ that their responses throughout the data collection process were confidential.

Therefore, the topic guide was used to conduct the interview process during the case study. The topic guide allowed the researcher to devise a question format prior to the research to ensure participants’ perspectives and experiences are disseminated without interviewer bias (Adams & Lawrence, 2015). In addition to this, the coding system was used to record the study’s findings accurately through systematic data analysis procedures.

**Researcher’s Position.** By identifying personal experiences with the research topic, the researcher was able to control bias and personal opinion from impeding and compromising any data. As the primary instrument in this case study, the position as researcher was not overshadowed by personal experiences with or interests in the research topic. Therefore, any relationship to the topic of the research was recognized at the outset to avoid conflict of interest and deception. Additionally, in order for research to be reliable and unbiased, researchers cannot overlook data that distort or contradict their initial claim (Booth, Colomb, & Williams, 2016). On the other hand, researchers can unintentionally show bias by favoring evidence of sources that support the research’s claim (Booth, Colomb, & Williams, 2016). Researchers can avoid a one-sided view of findings by presenting counter-arguments or alternatives in the research (Machi & McEvoy, 2012).

The researcher’s experience with teaching in a mainstream classroom is three years. This researcher’s experience with teaching ELs in the ESL classroom has spanned over seven years.
The researcher has instructed ELs on varying levels of language acquisition in the secondary classroom setting. Methods of support for mainstream teachers consist of providing language support plans and charts, which detail individualized accommodations and modifications for EL students in their classroom. The researcher’s expectation is that teachers will refer to an EL’s language support plan when designing lessons and assessments to differentiate their teaching practice to meet these students’ learning needs.

As an ESL teacher, this researcher is often confronted with the frustrations of mainstream teachers who express their lack knowledge of appropriate instructional skills for ELs and how to implement these skills in order to support the academic and language needs of ELs. Although these frustrations are common, what is not known is the extent to which teachers reflect upon their personal assumptions about instructing ELs and whether these assumptions can be linked to effective or ineffective instructional decision-making and practices concerning ELs’ learning in the mainstream classroom. This researcher’s interest in this research topic was rooted in the desire to understand teachers’ use of critical reflection and SIOP in an effort to develop new meanings that can be used to support teacher development. The researcher can now extend support as an ESL teacher to include professional interventions such as critical reflection and SIOP.

Summary

In this chapter, the researcher discussed the research study’s design, procedures and measures that were taken to collect and analyze data. This chapter also provided a discussion about the credibility of the study and ethical considerations that were taken to validate the study’s findings. To fulfill these goals, this case study investigated nine high school public school teachers’ experiences with critical reflection and SIOP teaching practices to provide a
detailed explanation of how these two practices influenced teacher instruction designed to meet the needs of ELs. The researcher provided the participants with two intervention workshops during the research process that informed them about the components of the SIOP model. The findings from this study may provide teachers with strategies to transform their instructional habits to better support ELs’ content and language needs in the mainstream classroom. In addition, the research from this study may promote further study in support of combining critical reflection and SIOP as tools to evoke professional growth within mainstream teachers through the transformative learning process.
Chapter 4: Data Analysis and Results

This chapter presents a description of the sample, research methodology and analysis, a summary of the findings, and a presentation of the summary of results. The purpose of this case study was to examine the professional growth of nine mainstream teachers from one public high school in their ability to implement critical reflection and sheltered instruction observation protocol (SIOP). The data analysis of this study demonstrated how participants engaged in SIOP and critical reflection practices enhanced their instructional planning and delivery in order to better meet the content and language needs of English learners (ELs). The research questions below guided this research process of transforming mainstream teachers’ frames of reference of instructional practices associated with English learners to promote professional growth.

1. What are the frames of reference, such as experiences and perspectives, of mainstream teachers serving ELs in regard to instructional practices, lesson planning, and delivery?

2. How does the use of Mezirow’s process of critical reflection and implementation of sheltered instruction observation protocol influence mainstream teachers’ efficacy of instructional delivery strategies for ELs?

3. How do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and sheltered instruction observation protocol?

The researcher’s responsibility was to examine the frames of reference of nine mainstream teachers of ELs to determine the influence of critical reflection and SIOP on their current instructional planning and delivery practices. Mainstream teachers’ use of critical reflection and sheltered instruction observation protocol may influence and support their professional growth by meeting the content and language needs of ELs. The researcher’s interest in this study originated from a desire to share teaching strategies with mainstream teachers that could expand
their current professional knowledge to include effective instructional practices to use in the mainstream classroom with ELs. Therefore, a case study method was considered reasonable to explore and examine the frames of reference of individual mainstream teachers who engaged in critical reflection and implemented SIOP into their lesson planning and delivery on a case-by-case basis.

The data collection process constituted of conducting a total of 18 audio-recorded interviews, collecting two hand-written critically reflective writings by participants, recording SIOP data from two observations, and assigning pseudonyms to each participant. Major codes linked to the study’s conceptual framework were identified and labeled in the margin of each transcript. Afterwards, the commonalities among participants’ responses were used to disaggregate these codes into categories. The categories were then synthesized into themes generated from data analysis results of participants’ responses. A comparison among each of the nine interview transcripts was made to identify emerging themes and patterns. These themes and patterns provided a textual description of participants’ current frames of reference as classroom experiences with ELs and newly acquired knowledge and skills after engaging in critical reflection and SIOP. Therefore, the data analysis and results rendered an explanation of if and how engaging in critical reflection and SIOP influenced participants’ professional growth.

**Description of the Sample**

This case study was conducted at one high school in an urban public-school system. Because Creswell (2013) recommended the use of four to five cases when conducting case study research, this researcher recruited 10 mainstream teachers instructing in the core content areas of math, science, reading, and social studies. Yin (2009) recommended that a case study’s sampling method be straightforward due to access the researcher may already have. Nine
teachers showed interest in the purpose and process of the study and completed a consent form for participation. Participants were provided with a demographic information questionnaire to ensure a purposeful and varied sample for the case study. The nine participants fulfilled the criteria for the sampling method and data collection purposes. All of the participants were teachers at the research site with a diverse group of learners in the classroom such as ELs, at-risk and special-education students. The participants served as mainstream teachers of ELs in the content areas of algebra, geometry, physical science, English, and U.S. history. In addition to the participants’ EL students being provided additional language support services through an English-as-a-Second-Language class, the teachers were charged with providing instruction to ELs that develops the content and language skills of these students. Eight of nine participants taught in a content area that requires students to successfully pass a standardized state assessment at the end of each school year. None of the participants was familiar with sheltered instruction observation protocol. Table 1 shows an overview of the demographic data for participants by gender, race, level of teaching experience, content area, and number of ELs in the classroom (see Appendix F).

**Research Methodology and Analysis**

The research study was organized and based on the study’s research questions. The researcher used a qualitative case study research design to conduct the study. This case study sought to examine mainstream teachers’ frames of reference associated with instructing ELs in the mainstream classroom to determine if critical reflection and SIOP enhanced their teaching habits for professional growth. The research study challenged participants to reconsider, reinforce, question, and examine their frames of reference associated with instructing ELs in the mainstream classroom. Yin’s (2009) definition of case study design required the investigation of
a phenomenon in a real-life context using a logical order of steps to ultimately report findings that are linked to the research study’s questions and conclusions. Therefore, Yin’s (2009) approach to data collection and analysis was applied to examine and explain mainstream teachers’ frames of reference and newly acquired knowledge using SIOP and critical reflection. As the researcher, reflective and iterative data analysis was employed consistently throughout the research study.

The interviews, workshops and observations were scheduled according to the participants’ availability and were completed within 10 weeks at the research site during the months of April and May. The research methodology comprised of conducting 18 semi-structured interviews, two observations, and collecting two critically reflective writings from participants. Specifically, to examine mainstream teachers’ frames of reference, collect data and investigate the research questions guiding this study, teachers participated in one pre-observation interview, one pre-intervention observation, two SIOP workshops, one post-intervention observation, and one post-observation interview. Participants were debriefed with a comprehensive explanation of the research and interview process. A consent letter (see Appendix A) was given to teachers who were interested in participating in the case study. After receiving consent from the teachers, participants were assigned a pseudonym to eliminate any identifiable information to increase confidentiality. For the study, each participant was referred to by the letter “P” and a study number.

Both the pre-observation interview and the post-observation interview were conducted with an interview guide consisting of 14 questions. Each interview question represented a particular stage in Mezirow’s (1991) process for critical reflection. The interview questions were designed with this purpose in order to guide participants through the process of critical reflection.
The researcher chose a semi-structured interview format to use the interview questions as a topic guide to exercise flexibility in exploring interesting topics or issues in more depth with participants.

During the pre-observation interview, participants assessed their implementation of SIOP strategies using the SIOP self-assessment. The SIOP self-assessment was collected and used as data that established participants’ frames of reference, or current perceived teaching habits associated with ELs. Using the SIOP self-assessment, the researcher identified each participant’s teaching habits as strengths or weaknesses in the various components of the SIOP framework. During data analysis, data from the SIOP self-assessment was compared to data from the pre- and post-intervention observations in an effort to examine if the participants’ perceptions of their current teaching habits were confirmed through observational data. Participants’ strengths and weaknesses were represented by SIOP component numbers 1–8 (see Appendix C).

In this case study, participants’ disorienting dilemma was indicative of the major challenges, problems, or issues teachers face when instructing ELs in the mainstream classroom. According to Mezirow (1991), the disorienting dilemma occurs at the first stage of critical reflection. A disorienting dilemma is an important personal predicament that can be internal or external (Mezirow, 1991). The researcher analyzed and codified participants’ responses as a disorienting dilemma by carefully listening to their descriptions of major challenges with instructing ELs in the mainstream classroom. Participants’ use of common and descriptive key words and phrases were then identified within the eight components of the SIOP framework using the 30 instructional features that describe each component. The researcher assigned each SIOP component a number according to its numerical order within the SIOP framework. Using the following coding system, participants’ disorienting dilemmas were represented by the
numbers 1–8 that corresponded with each SIOP component: Lesson Preparation-1, Building Background-2, Comprehensible Input-3, Strategies-4, Interaction-5, Practice and Application-6, Lesson Delivery-7, Review and Assessment-8. To address research question 1, a table about each participant’s disorienting dilemma is located in Appendix G.

Each of the pre-intervention interviews was no more than 25 minutes. The post-intervention interviews were also no more than 25 minutes. Each participant’s disorienting dilemma, biggest challenge, greatest success with instructing ELs, and description of a time when participants utilized critical reflection was categorically coded to identify the prespecified components and instructional features of the SIOP framework. Data from the interviews provided the researcher with insight about what challenges mainstream teachers face with instructing ELs, their current frames of reference, and teaching strategies that participants use with ELs. The final interview allowed participants to reflect on and explain how incorporating critical reflection and SIOP into their instructional planning and lesson delivery supported their professional growth.

The intervention workshops consisted of two sessions that introduced teachers to the SIOP framework while engaging in SIOP activities and rational discourse. According to Mezirow and Taylor (2009), rational discourse is the fourth step of critical reflection and is vital for adult learners to participate in if transformation to be stimulated. The average time for each workshop was approximately 30 minutes. After each workshop presentation, participants completed a short critically reflective writing about the new SIOP information presented. Responses from the critically reflective writing prompts and the post-observation interview were used to provide triangulation and cross-referenced for validity purposes of descriptive analysis of the case study’s findings. Participants’ responses were coded categorically using words, phrases
and ideas that aligned with a relative component of the SIOP framework. The following writing prompts were given at the conclusion of each SIOP workshop:

- What do you think about the information you learned today? How has your knowledge of Sheltered Instruction Observation Protocol (SIOP) changed? What does this knowledge mean to you as a mainstream teacher of English Learners (ELs)?
- How is what you learned relevant to your frames of reference associated with instructing ELs in the mainstream classroom? What will you do with/or about what you have learned or experienced?

Data from the pre- and post- intervention observations provided the researcher with a numeric percentage of participants’ SIOP implementation in the form of observable behaviors during lesson delivery. The average time of each observation was approximately 25-30 minutes. During each observation, the researcher used the SIOP observation instrument to record detailed field notes of participants’ implementation of SIOP-based strategies and instructional features during lesson delivery. The observations allowed this researcher to take field notes about each participant’s instructional habits before and after the intervention workshops to capture professional growth. The SIOP observational instrument used to record observational data is located in Appendix D.

The data analysis process began with member checking of participants’ interview transcriptions. At the conclusion of each interview, this researcher sent the interview’s minutes for transcription by a JasVirtuel, Inc., a professional third-party transcription service. To ensure confidentiality and anonymity of the study participants, the transcriber agreed to sign a confidentiality agreement (see Appendix B). Additionally, to ensure credibility, member checking ensued after all interviews were transcribed. The researcher e-mailed a copy of both
interview transcripts to review for accuracy. According to Creswell (2013), researchers should engage in member checking as method to validate research. For this study, member checking provided participants with an opportunity to review the transcription for accuracy and to correct any errors in interpretations. After participants took part in member checking, the researcher received confirmation of accuracy of the transcripts from each participant. The participants requested no changes to the transcripts. The process of coding then began by this researcher reading, reviewing, analyzing and coding the transcriptions.

During the first stage of the coding process, descriptive and process coding were used to manually sort data into categories for further classification. As the researcher, I read over each interview several times while highlighting, underlining, and taking notes in the margin of each interview. Descriptive and process coding were utilized to analyze the transcripts from each audio recorded interview. For this case study, the codes used during analysis placed value on each descriptive key word or phrase used by participants. Descriptive and process codes were used for interview coding when participants utilized key terms, phrases and ideas similar to the eight components and 30 instructional features of SIOP. Eight prespecified categories were created using the SIOP framework and reviewed transcripts to identify commonalities in words, phrases and ideas from participants’ responses to the interview questions. Each code represented one of the eight components of the SIOP framework. The coding system included the following initial basic codes: P (Lesson Preparation-1), BB (building background-2), CI (comprehensible input-3), STR (strategies- 4), I (interaction- 5), PA (practice and application- 6), LD (lesson delivery-7), RA (review and assessment- 8). As participants restated consistent words, phrases or ideas, the information was connected to the SIOP framework and coded for data analysis. From the initial eight codes, a total of 20 codes were generated from participants’ rich, thick
descriptions of their frames of reference relative to SIOP. Participants’ transcripts were read, reviewed, and analyzed multiple times for accuracy, and then codes were documented and redocumented if necessary. These 20 codes were used to establish categories for classifying the data’s themes into patterns using participants’ responses to the interview questions and writing prompts.

According to Yin (2009), data analysis acts as a chain of evidence linked to the research study’s questions. During the second stage of coding, categories from participants’ coded responses emerged to describe and identify themes for their frames of reference. Because the interview questions were multilayered, the categories created from participants’ responses established themes for increased practicality in the analysis of data for reporting findings. Table 3 lists categories regarding participants’ responses about the frames of reference of mainstream teachers serving ELs (see Appendix H).

During the third stage of coding, categories were synthesized into themes. The data analyzed determined the participants’ frames of reference and new “meaning perspectives” associated with instructing ELs in the mainstream classroom (Mezirow, 1991, p. 1). According to Mezirow (1990), meaning perspectives are the arrangement of assumptions where new experiences take place, are integrated and transformed by an adult learner’s prior experience during the interpretation process. Data analysis determined the participants’ perspectives on if and how critical reflection and SIOP contributed to their professional growth and efficacy in meeting the learning needs of ELs. The categories were synthesized into the themes listed below:

- Participants’ responses regarding their frames of reference as mainstream teachers serving ELs;
Participants responses regarding the use of critical reflection and SIOP to influence efficacy of EL instruction in the mainstream classroom; and

Participants’ responses regarding how mainstream teachers construct meaning and encourage their professional growth through the use of critical reflection and SIOP.

Using these three themes, data analysis of the findings identified patterns emerging regarding each theme. Sixteen patterns emerged regarding participants’ frames of reference as mainstream teachers serving ELs. Eight patterns emerged regarding participants’ use of critical reflection and SIOP to influence efficacy of EL instruction in the mainstream classroom. Three patterns emerged regarding how mainstream teachers construct meaning and encourage their professional growth through the use of critical reflection and SIOP to influence efficacy of EL instruction in the mainstream classroom. Patterns were established from participants’ responses to the interview questions and writing prompts. The patterns were analyzed and synthesized to determine which components of SIOP mostly influenced participants’ frames of reference and how this new knowledge would enhance future lesson planning and delivery to meet the dual learning needs of ELs. The patterns developed as six key themes that provided information about the ways participants: acknowledged and/or transformed their frames of reference, enhanced their instructional habits through the use of critical reflection and SIOP, and planned to implement SIOP-based strategies in the future to support ELs’ content and language needs. These patterns were synthesized to identify the participants’ perspectives in regard to the research questions.

The focus of the research study’s final data analysis method was to collect, analyze, and synthesize the data to examine (a) what mainstream teachers learned relevant to their frames of reference associated with instructing ELs in the mainstream classroom, and; (b) how do
mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and sheltered instruction observation protocol. The findings were reviewed for accuracy using triangulation of the data collected from the interviews, observations, and the critically reflective writing prompts. Therefore, the final themes were created based on stages 6–10 of Mezirow’s (1991) process of critical reflection by capturing what teachers experienced or learned during the transformative learning experience. The data, classified as six key themes, were derived from the research questions. The six key themes are: actively enjoys learning new teaching skills, recognizes an area for professional growth, open to changing one’s instruction, reinforcement of current effective strategies, seeks new solutions to dilemma, willing to examine one’s frames of reference. Implications of the patterns synthesized in relation to the participants’ responses as themes are discussed in Chapter 5. Participants’ critically reflective writings were cross-referenced with their responses to interview questions 11 and 12. Table 5 shows responses to interview questions 13 and 14 by listing key themes that describe how each participant constructed meaning and encouraged their professional growth through the use of critical reflection and SIOP (see Appendix G).

**Summary of the Findings**

Participants’ responses were identified by the letter “P” and by their assigned number of 1–9. Seven of nine participants’ responses to the interview questions indicated that the communication presented the greatest challenge, or disorienting dilemma, when instructing ELs in the mainstream classroom. By acknowledging participants’ perceived disorienting dilemma, which is the first stage of critical reflection, the researcher was able to induce emotions associated with particular events, discover participants’ limitations of their current frames of reference, or teaching habits, question participants’ perspectives, and provide feedback during
the data collection process. After data analysis of participants’ responses to interview questions and the critically reflective writing prompts, data indicated eight out of nine participants would seek new solutions to their disorienting dilemma after participation in the research study.

After reviewing participants’ responses, a general inability to convey lesson objectives and content concepts in a manner that was particularly clear and comprehensible to ELs was identified as the perceived leading factor challenging mainstream teachers’ instruction of ELs. According to the Short, Vogt, and Echevarria (2004), teachers of ELs must utilize a content objective and a language objective to deliver classroom instruction that supports ELs’ content learning and English language learning. Content objectives communicate to students “what” will be learned, and language objectives communicate to students “how” they will demonstrate what was learned.

**Presentation of Data and Results**

The researcher examined the data to investigate the case study’s research questions to build a final explanation of (a) what are the frames of reference of mainstream teachers who instruct ELs in the mainstream classroom, (b) how the use of critical reflection and implementation of sheltered instruction observation protocol influence mainstream teachers’ efficacy of instructional delivery, and (c) how do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and sheltered instruction observation protocol. In an effort to answer these questions accurately, the researcher used data that indicated repetition of descriptive and process terminology associated with SIOP and critical reflection to understand teachers’ frames of reference, the influence of critical reflection and SIOP on EL instruction, and in what ways mainstream teachers construct meaning and encourage their professional growth by using critical reflection and SIOP. Findings
regarding the first research question were analyzed and synthesized using participants’ responses to interview questions 1–10. Respectively, findings regarding the second and third research questions were analyzed and synthesized using participants’ responses to interview questions 11–14.

After assessing participants’ responses to the interview question 13, the findings indicated eight of nine participants agreed that the most influential instructional feature to implement into the mainstream classroom were language objectives. Language objectives are an essential feature of the SIOP framework (Short, Vogt, & Echevarria, 2004). All of the participants indicated having familiarity with and using content objectives to communicate daily lesson goals. After assessing participants’ responses to the post-intervention interview, eight out of nine participants named language objectives as the most influential SIOP-based strategy to implement into their future lesson planning and delivery. However, findings indicated none of the participants was familiar with or used language objectives in their lesson planning and delivery before participating in the SIOP workshops. Two participants noted a lack of cultural knowledge and/or background as the biggest disorienting dilemma affecting their instruction of ELs.

Rational discourse takes place at the fourth stage of critical reflection, and considered the third theme of the transformative learning theory (Mezirow & Taylor, 2009). This stage in Mezirow’s (1991) process for transformative learning is described as the event in which the adult learner shares his or her experiences with others through communication that is objective, critically reflective, and participatory. Rational discourse allows adult learners to be able to assess new learning and meaning through a rational consensus (Mezirow, 1991). Participants engaged in rational discourse during the two SIOP workshops; however, participants’ responses
to the interview questions indicated participating in little to no rational discourse concerning EL instruction within school-level Professional Learning Communities (PLCs). Although the participants did meet in PLCs with their colleagues, eight of nine participants did not converse with other teachers about effective strategies to use with ELs in the mainstream classroom within their school-level PLCs. Findings indicated EL instruction was not a topic of discussion for the majority of participants within their school-level PLCs. Two participants indicated that the general education and special education student population were the major focus of most PLC discussions. Rational discourse stimulates the transformative process, and adult learners gain validation through human communication (Mezirow, 1991). Although the majority of participants did not engage in rational discourse about EL instruction on the school level, all participants reported applying critical reflection to their instruction on a consistent or occasional basis.

The participants reported that the greatest instructional success experienced with instructing ELs presented itself when using instructional features of SIOP component 5 (Interaction). Seven out of nine participants named cooperative-learning pairs, or placing ELs into some form of group configurations, as the most successful teaching strategy for supporting content delivery to these students in the mainstream classroom. Seven participants attributed the success to placing students with peers who speak the same native language. However, none of the participants practiced placing students into cooperative learning pairs or groups with native-English speakers to support their lesson objectives. According to Short, Vogt, and Echevarria (2004), interaction allows ELs to be supported when practicing and applying the content and language skills taught. Activities that promote interaction also promote the four language domains of learning (reading, writing, listening, speaking); therefore, interaction within the
mainstream classroom should utilize a variety of grouping configurations such as independent work, pairs, trios, groups of four or five students, and differ by gender, language proficiency, language background, and/or ability (Short, Vogt, & Echevarria, 2004). Interaction allows opportunities to have a concept or assignment explained in the EL’s first language by an instructional aide, peer, or translation website if needed (Short, Vogt, & Echevarria, 2004). Five of nine participants indicated instructional behaviors of component 5 as perceived strengths on the SIOP self-assessment.

Research asserted that a substantial amount of mainstream teachers had no formal training in pre-service or in-service programs on integrating language and content into their lesson planning and delivery (Hansen-Thomas & Cavagnetto, 2010; Short, 2013). After assessing participants’ responses to the interview questions, the data indicated none of the teachers had previous training in SIOP. Participants attributed participation in the research study as their first encounter with the SIOP instructional model. Subsequently, six of nine participants suggested some form of additional instructional support would assist mainstream teachers in effectively instructing ELs in the mainstream classroom. Forms of additional support named by participants included a teacher aide or assistant, a peer-tutor, professional development meetings, and a language proficiency profile of the EL student. However, five of nine participants agreed that the description of SIOP strategies sounded similar to other well-known teaching techniques. Short, Vogt, & Echevarria (2004) noted that it is important to recognize and understand that SIOP does not require mainstream teachers to eliminate their favored practices. Instead, SIOP connects what to teach by providing teachers with an approach on how to teach it. Data indicated eight of nine participants currently used some form of teaching methods similar to those listed as instructional features in the SIOP framework.
Transformative learning is an active process that effects change in adult learners’ frames of reference by integrating new information into an already well-developed set of thoughts, beliefs, ideas, values, and assumptions (Mezirow, 1991). Critical reflection supports adult learners in becoming more open, inclusive, self-reflective, and participatory in questioning and revising their perspectives (Mezirow, 1991). However, data indicated seven of nine participants did not obtain feedback from their EL students about their daily instructional habits. Short (2013) asserted that reflection is an essential part of the SIOP framework when implemented with high fidelity. According to Short (2013), reflection may be used to self-assess teachers’ lesson delivery and to evaluate students’ work. Although the majority of teachers obtained no instructional feedback from ELs, nine of nine participants agreed that critical reflection was an ongoing practice in their professional lives that was used to refine teaching habits and methods.

Pre-Observation Interview Data

Findings emerging from interview question 1. What is the biggest challenge you face with instructing ELs in the mainstream classroom?

Overall participant group findings. Four categories emerged from the data to describe teachers’ frames or reference as the biggest challenge, or disorienting dilemma, in their mainstream classroom. The four categories were absenteeism, communication, students’ lack of background knowledge, and teachers’ lack of instructional time (see Appendix H). Patterns also emerged regarding participants’ frames of reference of challenges associated with instruction as mainstream teachers of ELs. The three major patterns were a lack of clear communication, lack of instructional time, and poor student engagement. A total of seven participants indicated that communication, or the language barrier itself presented the biggest dilemma, or challenge in the mainstream classroom. Seven study participants cited the language barrier itself as the
disorienting dilemma affecting EL instruction in the mainstream classroom. The participants also indicated that some of their ELs lacked the ability to express their learning in one or more of the four language domains (reading, writing, listening, speaking). In addition to this dilemma, an emerging pattern of student engagement posing a challenge was mentioned by more than half of the algebra and geometry teachers. Teachers indicated that although grouping EL students into pairs appeared to be the most successful teaching strategy to implement for these students’ learning needs, pairing also resulted in excessive off-topic conversations with their peers, which was counterproductive to effective student engagement. Participants named other common factors that presented challenges when instructing ELs in the mainstream classroom as a lack of instructional time, student engagement, and a lack of cultural background knowledge.

**Participant group findings by content area.** Participants who taught algebra and geometry indicated that communication, vocabulary and instructional pacing presented the biggest challenges in the classroom. P1, P2, P3, P4, and P7, expressed that ELs had difficulty understanding and the content area’s concepts and expressing their learning. Their descriptions were relative to instructional features of component 3 (Comprehensible Input) of the SIOP framework. Because the ELs were limited in their English language ability, participants found it difficult to provide these students with a clear and comprehensible explanation of the academic math skills and tasks.

Participants who taught U.S. history indicated that communication presented a problem in the mainstream classroom. P6 and P9 expressed that it was difficult for ELs to express what was learned in their own words during informal checks for understanding during lesson delivery and formal assessments of learning objectives. P9 explained how informal checks for understanding helped to determine ELs’ mastery of the content area’s concepts. P9 stated:
I would definitely just say making sure they understand and comprehend what we're doing, the task, they understand the directions. Oftentimes, my largest classes are comprised of IEPs, ELLs and different learning styles. Sometimes I forget to circle back to them to make sure that they understand. If I see them working, it's my telltale thing. If they're in groups, I know that the next person has told them because I see them working. I don't see them just looking confused.

P5, reported that the biggest dilemma or challenge present in this mainstream science classroom was writing. The participant noted that writing lab reports and essays posed difficulty for EL students. P5 stated, “The main issues I have – I don't have very much of a problem with instruction. My issues would be writing and things like that. That's the main issue. It’s going to be writing essays and a lot of reports.” P8, however, reported that the biggest dilemma present when teaching ELs in the mainstream classroom is prompted by the school district’s choice in textbooks for the English. P8 stated:

I would say the biggest challenge that we have is that our curriculum is predetermined by the district, and so we do not have the option to select text that are culturally sensitive. We also don't have the option to select text that are at an appropriate reading level for our students.

*Individual participant findings.* When reviewing the participant data collected from the pre-observation interview, the categories for participants’ descriptions of the biggest challenge facing ELs in the mainstream classroom were relative to instructional features of components 1, 2, 3, and 7 of the SIOP framework (Lesson Preparation, Building Background, Comprehensible Input and Lesson Delivery). P1 and P2 indicated that communication and student engagement posed challenges because ELs became distracted when working with peers who speak the same
native language. This interaction strategy, an instructional feature of SIOP component 5, eventually led to the ELs excessively talking to their peers about topics not related to the lesson in some cases. Student engagement is an instructional feature of component 7 (Lesson Delivery) of the SIOP framework, and requires 90% to 100% of students to be engaged in the lesson. Component 7 (Lesson Delivery) was recorded as a weakness in P1’s pre-intervention observation, but as a strength in the post-intervention observation. P2 perceived instructional features of SIOP component 7 (Lesson Delivery) to be strong teaching habits that were practiced on a daily basis in the classroom. Component 7 was reported as an observed strength in P2’s pre- and post-intervention observation.

Within the group of participants, P1, P3, P4, and P9 cited instructional pacing as a perceived challenge in addition to communication when instructing ELs in the mainstream classroom. Communication was linked to components 1 and 3 (Lesson Preparation and Comprehensible Input) of the SIOP framework, which requires a clear explanation of the tasks using language objectives, demonstrations, gestures, visuals, models and scaffolding, etc. Pacing is an instructional feature of component 7 (Lesson Delivery) of the SIOP framework. According to Short, Vogt, and Echevarria (2004), lesson delivery should be paced appropriately for students’ ability level. A theme emerged that participants found it difficult to substantially support ELs’ learning in the mainstream classroom due to time constraints. The participants indicated an inability to provide ELs with extended or individualized support during instructional time due to the magnitude of content to be covered on a daily basis with all students. Math participants indicated a lack of instructional time to provide ELs with individualized support. One-on-one interaction with the EL is an instructional feature of SIOP framework. Short, Vogt, Echevarria (2004) recommended the use of one-on-one teacher-student interaction as an
instructional feature of component 5 in the SIOP framework as implementation of a best practice for EL instruction. P1’s and P3’s disorienting dilemmas were linked to SIOP components 3 and 7 (Comprehensible Input and Lesson Delivery). Characteristics of P4’s and P9’s perceived challenge were linked to component 3 (Comprehensible Input). The data did not support instructional features of component 3 as strengths or weaknesses in P1, P3, or P4’s observations. Component 3 was recorded as a strength in P9’s post-intervention observation.

P6 and P8 identified a disorienting dilemma in component 2 (Building Background). Both participants perceived that the lack of knowledge in the English language was a precursor to academic difficulty for mainstreamed ELs who were attempting to master new content and language skills. P6 and P8 both reported that a cultural disconnection was the biggest challenge present in the mainstream classroom when instructing ELs. Both participants taught in a content area that utilized classical and historical literature as high-quality texts to support school-district, state-content objectives, and learning outcomes. However, the participants argued that their ELs lacked the cultural background knowledge needed to comprehend the context of the content presented. P6 acknowledged that native-English speakers also lack the cultural background knowledge needed to make real-world connections to the content.

**Findings emerging from interview question 2.** What is your greatest success with ELs in your classroom?

**Overall participant group.** Seven of nine participants’ perceived that component 5 (Interaction) of the SIOP framework contributed to their greatest success with ELs in the mainstream classroom. All of the algebra and geometry teachers named instructional features of component 5 as a strategy that assisted ELs in successfully meeting learning outcomes. A U.S. history teacher also chose instructional features of component 5 as teaching habits that
contributed to instructional success with ELs by using peer tutoring. The two categories that emerged from data analysis of participants’ responses to interview question 2 were pairing and clear instruction. One pattern emerged of pairing students together for peer-tutoring purposes. Seven of nine participants referred to their preferred group configuration of pairing or paired learning as a successful teaching habit for teachers of mainstreamed ELs. Participants attributed the success to allowing ELs to work with peers who are able to communicate with an EL in his or her first language. Two of the participants related their successes with ELs in the mainstream classroom to instructional features of component 3 (Comprehensible Input) of the SIOP framework. These participants perceived that delivering clear instruction and providing extended time to complete assignments supported ELs.

**Participant group by content area.** Within the participant group who taught math, a theme emerged of using grouping configurations to support daily lesson objectives. Four of five algebra and geometry teachers chose component 5 (Interaction) as a strategy that assisted ELs in successfully meeting learning outcomes. P1, P2, P3, and P7 referred to their preferred group configuration as pairing or paired learning. One of the U.S. history teachers also chose component 5 as contributing to instructional success with ELs by using pairing. Component 5 was recorded as an area of strength for P1, P2, P3, P7, and P6 during the post-intervention observation. According to analysis of data from participants’ completed SIOP self-assessment, two participants, P1 and P3, perceived component 5 (Interaction) to be an area of strength in their current implementation of SIOP-based teaching strategies. Teachers in the English and science departments related instructional features of component 3 as being most successful in the mainstream classroom with ELs. P8 stated, “…the reason that we've been successful there is very much with direct instruction regarding clear objectives.” Component 3 (Comprehensible
Input) of the SIOP framework requires teachers to clearly explain and review content and language tasks to students.

**Individual participant findings.** Pairing and peer tutoring emerged as one theme to support mainstream teachers’ instruction of ELs. P1, P2 and P7 mentioned that pairing ELs with peers who shared a first language and were more proficient had both positive and negative outcomes. P1, P2, and P7 indicated that pairing ELs inadvertently caused the students to talk excessively to each other about topics that were not related to the learning objectives, which caused students become less engaged. P1 also mentioned that on occasion the EL who is more proficient in the English language was also less proficient in the math concepts being taught. In a case such as this, P1 pointed out, neither student is able to teach the math concepts correctly to the other student through the use of paired learning.

P5 and P8’s success with ELs in the mainstream classroom related to instructional features of component 3 (Comprehensible Input). P5 allowed ELs to take extended time on completing assignments. P8 labeled the ability to deliver clear and direct instruction as a beneficial teaching habit for EL instruction in the mainstream classroom because ELs were able to pinpoint exactly what particular grammar skill was needed and how to use that skill. Data from the SIOP self-assessment indicated that P5 perceived component 3 as a weakness instructionally, and P8 perceived component 3 as a strength agreed with the math teachers and indicated component 5 (Interaction) as being most successful in the mainstream classroom. However, P9 perceived instructional features of component 2 (Building Background) of the SIOP framework as contributing to success with ELs because students were able to feel comfortable with relating real-life experiences to the course’s content. Component 2 was recorded as an observable strength in P9’s pre-intervention observation. Participants’ responses
offered one concrete theme, pairing students, regarding the teaching habit that had been most successful with supporting ELs’ learning needs.

**Findings emerging from interview question 3.** What is the biggest dilemma or problem you have faced with ELs in your classroom?

**Overall participant group.** Interview question three was designed by the researcher to reflect (mirror) interview question 1. By eliciting the same information using synonymous words, terms, and phrases with different nuances, the researcher was able to establish greater validity in the research study’s findings. Similar to interview question 1, the findings indicated a majority of participants perceived their disorienting dilemma, or problem as teachers of ELs in the mainstream classroom as communication, or the language barrier itself. And when posed this question twice, nine of nine participants responded with the same answer from interview question 1. Four categories emerged from the data to describe teachers’ frames of reference as the biggest problem, or disorienting dilemma, in their mainstream classroom. The four categories were absenteeism, communication, students’ lack of background knowledge, and teachers’ lack of instructional time (see Appendix H). The participants expressed these four problems as hindering effective EL instruction in the mainstream classroom.

The interview responses coded reported four categories of dilemmas that were relative to the SIOP framework components 1, 2, 3, 4, and 7 (Lesson Preparation, Building Background, Comprehensible Input, Strategies, Lesson Delivery). Five participants, P1, P2, P3, P5, and P8, perceived their weaknesses in SIOP implementation to fall under one or more of these five components. Seven participants indicated their perceived disorienting dilemma as communication or the language barrier itself. Nine of nine participants named communication or a language barrier as an obstacle to effectively instructing ELs in the mainstream classroom.
Lack of background or cultural knowledge was cited as a disorienting dilemma by P6 and P8. One participant, P9, indicated that low academic performance of ELs posed a challenge in the mainstream classroom.

**Participant group by content area.** Math teachers indicated that communication is the biggest dilemma regarding effective instruction of ELs. The teachers reported an inability to express content concepts in a comprehensible manner. P5 named writing skills as a disorienting dilemma, which is an instructional feature of components 1 and 3 (Lesson Preparation and Comprehensible Input) of the SIOP framework. The U.S. history teachers did not indicate common disorienting dilemmas.

**Individual participant responses.** Although communication was reported as the major perceived disorienting dilemma impacting EL instruction in the mainstream classroom, four participants indicated a different dilemma, or problem in the same content area mainstream classroom. P6 named communication, while P9 named poor academic grades as disorienting dilemmas. P9’s response agreed with the Math teachers’ responses. Both P6 and P9’s disorienting dilemma were relative to instructional features of SIOP component 1 (Lesson Preparation). P8 named the school’s district preference in textbooks as a disorienting dilemma because of ELs’ lack of cultural background knowledge. Text complexity is an instructional feature of SIOP component 1.

Participants’ responses developed emerging themes deconstructed into patterns for inclusion in the final data analysis. Participants who taught math indicated communication between the teacher and student created a hindrance to effectively instructing ELs in the mainstream classroom. Specifically, P1 and P3 additionally mentioned a lack of communication between teachers and parents as a subsequent dilemma. P1, P2 and P3 both mentioned a lack of
instructional time to provide EL’s with individualized support as contributing factor to the dilemma.

**Findings emerging from interview question 4.** What supports need to be in place for mainstream teachers to effectively instruct ELs?

**Overall participant group.** Two categories emerged from the data to describe teachers’ frames of reference for supports that need to be in place for mainstream teachers to effectively instruct ELs. The two categories were additional support and communication with the ESL teacher (see Appendix H). More than half, or six of nine participants named additional support such as a teacher aide, or students who speak in the EL’s L1 (first language), a text in the L1, or instructional support from the ESL teacher as effective supports for mainstream teachers. Three of the teachers, two math teachers and one English teacher, specifically referred to the ESL teacher as resource for providing on-site instructional support and additional supplementary materials. According to theses participants, additional supplementary materials that can support EL students’ background knowledge of content-specific vocabulary and their teachers’ knowledge of each EL student’s language proficiency background should be offered by the ESL teacher to the mainstream teacher. One teacher named additional professional development such as the study’s two SIOP workshops as an effective means of additional support. Two patterns emerged from the theme regarding participants’ frames of reference associated with effective support methods for mainstream teachers of ELs. The patterns are forms of support and frequent clear communication with the school’s ESL teacher.

**Participant group by content area.** The interview responses coded reported three categories of support that were relative to the SIOP framework components 1, 2 and 5 (Lesson Preparation, Building Background, Interaction). Six of nine teachers indicated that additional
support in the mainstream classroom would assist teachers in effectively instructing ELs. Four of five math teachers indicated additional support in the form of a certified teacher or textbook in the ELs’ first language would be helpful to make content concepts clearer to ELs, and to provide the additional one-on-one time with ELs. A participant from the U.S. history department named additional training in EL instruction as an effective means of support to mainstream teachers.

**Individual participant responses.** P1, P2, P3, P5, P8 and P9 indicated having additional support from a teacher aide, students who speak in ELs’ first language (L1), textbooks in ELs’ L1, or instructional support from the ESL teacher, as effective supports for mainstream teachers. One participant indicated no knowledge of additional support methods that could assist in solving their perceived dilemma. P7 stated:

> I have no idea. I'm just going to be honest with you, because I don't – the reason I say that is because to me in some cases it's like a desk job if I can't interpret to them, and I don't have anyone in the class that can interpret for them.

Although additional support was reported as the most needed support method in the mainstream classroom, P2 and P8 mentioned frequent communication with and support from the ESL teacher would assist in instructing ELs in the mainstream. P2 labeled this support as instructional guidance, and P8 labeled this support as a type of language proficiency profile and/or document about each EL that could be given to the mainstream teacher throughout the school year. P4 also indicated supplementary materials that support students’ vocabulary knowledge would help support mainstream teachers’ of ELs.

**Findings emerging from interview question 5.** Can you describe your experiences with other mainstream teachers as they pertain to instructing ELs?
Overall participant group. The interview responses coded reported two categories of participants’ communication with colleagues to discuss instructional strategies pertaining to ELs. From those coded responses, two categories emerged to describe participants’ experiences with other mainstream teachers as it pertained to communicating about instructional successes or challenges with EL instruction. The two categories were participants had little to no rational discourse during PLCs, or some rational discourse during PLCs. Eight of nine teachers indicated not commonly speaking with other mainstream teachers about EL instruction. Eight of nine teachers also indicated little to no focused discussion about EL instruction in their PLC meetings. One pattern emerged that EL instruction was not a major focus during PLC meetings.

By engaging in rational discourse, teachers could exercise adult reasoning through effective interaction and discourse with their colleagues about instructional habits used with ELs in the mainstream classroom (Mezirow, 1991). However, two teachers indicated a greater focus on the general education and special-education population of students. When asked if EL instruction was a topic of discussion in the English PLC meetings, P8 stated, “You want me to tell the truth, no not really. What – because – and I hate to say that, because obviously we should focus on every student.” P1 stated, “When we have our peer meeting what we're really meeting about is trying to get that proficient number for the school, in general. But we don't specifically talk about the ESL population in any way…. Because rational discourse is the fourth step of critical reflection, the researcher deemed it important to determine if participants regularly shared their thoughts and ideas regarding EL instruction with other mainstream teachers of ELs in the same content area. However, most of the participants indicated not commonly engaging in rational discourse with other mainstream teachers about EL instruction.
**Participant group by content area.** Two of five math teachers, P1 and P3, indicated no discourse about EL instruction took place within their PLC. Three of five math teachers, P2, P4 and P7, indicated described their discourse with other mainstream teachers about EL instruction as “very little”. P6, indicated discourse with other mainstream teachers of the same content area occurred occasionally; however, P9, reported having no communication about EL instruction within the social studies PLC itself. P8 and P5 also reported no communication about EL instruction within the English and science PLCs.

**Individual participant responses.** P1, P2, P3, P4, P5, P7, P8, and P9 indicated little to no focused discussion in their PLCs about enhancing EL instruction in the mainstream classroom. P1 and P8 indicated a greater focus on the general education population and special-education students rather than ELs while participating in PLCs. P3, P4, P6, P8, and P2 indicated successes have been discussed in pairing and in using supplementary materials in past PLCs or professional development trainings; however, there was no consistent discourse about EL instruction among these participants during weekly PLCs. P6 mentioned success with ELs in the U.S. history content area involved teachers’ use of technology in the mainstream classroom. P6 stated:

If you tell them to use Google Chrome, they'll look at the book online in Google Chrome as opposed to Firefox or in Explorer, you right click on it, Google Chrome translates it for you. So, they can read the book in their native language, it literally translates it from everything from Afrikan to Zulu. So, there's that option for them.

Although little to no discourse about instructing ELs was reported by eight of nine participants, P2, P4, and P7 indicated there was some limited discussion about the EL students. However, these three participants did acknowledge that using cooperative learning pairs has been the only strategy implemented as a result of past rational discourse with other teachers. P3
mentioned a conversation with a fellow educator at an outside professional development as the event that encouraged implementing cooperative learning pairs into weekly instruction for ELs.

**Findings emerging from interview question 6.** In what ways, if any, do you use sheltered instruction in the mainstream classroom?

**Overall participant group.** From the coded responses, two categories emerged. The categories were how participants perceived themselves as currently using SIOP strategies in some degree and how participants recognized SIOP strategies as familiar. Eight of nine participants used a variation of the instructional features listed within the SIOP framework such as scaffolding, differentiating instruction, teaching vocabulary, and modeling. Five participants identified descriptions of the SIOP strategies listed by the researcher as familiar. Three math teachers, a physical science teacher, and one of the U.S. history teachers stated that the SIOP strategies sounded familiar and/or were currently utilized in the mainstream classroom in some manner. One participant had no previous knowledge of SIOP or strategies similar to SIOP. P6 stated, “To be honest, this exposure to sheltered instruction is the first time I've heard of it. I don't even think in pedagogy classes in grad school, I don't remember hearing anything about SIOP.” Responses to the interview questions indicate teachers’ frames of reference recognized SIOP strategies as being similar to other common pedagogical techniques.

**Participant group by content area.** SIOP includes eight components and 30 instructional features of observable behaviors shown by teachers and students during lesson delivery. It acts as a guide for the implementation of best practices using sheltered instruction (Short, Vogt, & Echevarria, 2004). The SIOP framework can be used across various content areas. Although none of the participants reported previous training in SIOP, all of the participants indicated using some variation of SIOP strategies except P6.
Individual participant responses. This interview question was designed by the researcher for sampling purposes and to establish if teachers were already using best practices associated with the SIOP framework in the mainstream classroom with ELs. According to Short, Vogt, and Echevarria (2004), SIOP has been research-based and field-tested as essential for ELs and academically beneficial for all students. The researchers describe the SIOP instructional framework as a guide for all teachers instructing ELs using best practices that effective teachers have already incorporated into their teaching habits. Although no previous knowledge of SIOP was reported by all participants, P1, P2, P4, P5 and P9 indicated the SIOP strategies sound familiar and/or similar to other teaching techniques he or she had heard of in the past, or currently used in the mainstream classroom. P3 and P6 mentioned having no college background in courses for teacher education; therefore, their knowledge of teaching strategies was limited. P7 specifically reported using scaffolding techniques similar to the SIOP strategies despite having no prior knowledge of the SIOP method.

Findings emerging from interview question 7. How would you describe the level of training you have received in SIOP?

Overall participant group. The interview responses coded reported one category for participants’ responses to the pre-observation interview question. No SIOP training emerged as one category to describe participants’ previous experience or knowledge of the SIOP framework. Nine of nine participants indicated no previous training in SIOP. However, data indicated eight of nine participants’ reported using variations of SIOP strategies currently in the mainstream classroom.

Findings emerging from interview question 8. How often do you obtain feedback from your ELs about your classroom instruction during or after a lesson?
**Overall participant group.** Component 8 of the SIOP framework, Review and Assessment, requires teachers to perform a comprehensive review of the lesson’s objectives, concepts, and vocabulary at the end of each daily lesson (Short, Vogt, & Echevarria, 2004). For interpretive purposes of data analysis, this interview question helped the researcher to determine if each participant currently engaged in any form of critically reflective thinking practices to enhance instruction for ELs and support their ongoing professional growth. Nine of nine participants indicated obtaining little to no feedback from ELs about their classroom instruction or lesson delivery. Seven of these nine participants reported obtaining no feedback from ELs about their instruction. Four of five math teachers stated that obtaining feedback from ELs about their instruction was not a teaching habit often used in their mainstream classroom. A physical science teacher, English teacher, and U.S. history teacher agreed with the majority of math teachers. Two participants, P3 and P4, indicated obtaining feedback occasionally. P4 stated, “I would say about half the time because if I don't ask them they won't tell me. But I'm a pretty good reader of the eyes.” P4’s response is similar to other participants and helped to develop a pattern after reviewing, analyzing and synthesizing data.

**Participant group by content area.** Participants who taught geometry indicated obtaining feedback from ELs occasionally. P3 gained feedback from ELs using exit tickets, a lesson closure activity, at the closure of each lesson. P4 obtained feedback informally by using clarifying questions and checking for understanding. Participants who taught algebra obtained no feedback from ELs about classroom instruction. P2 reported directing ELs’ feedback to peer tutors. P1 and P7 reported the frequency of obtaining feedback from ELs using the phrase “not often.”
**Individual participant responses.** One participant, P8, reported using academic grades as feedback. If an EL’s grades were declining, P8 would use low academic grades as indicators for the need of an instructional intervention. Four teachers mentioned that ELs often do not ask questions or share their thoughts about learning. P1, P9, P4, and P7 indicated ELs do not ask questions often or share their thoughts about learning. P1, P9, P4, and P7 reported ELs would not ask questions or share feedback even when prompted. P1 stated this in response to the interview question:

> Not often at all. I am available for feedback; I'm always asking questions. Do you understand? Do you have any follow-up questions? I also offer tutoring after school. So, I'm available for them to give input on the lessons, but frequently they don't have anything that they want to volunteer to share.

This interview question developed a total of two categories and one pattern for the theme of participants’ frames of reference about obtaining ELs’ feedback. The two categories were little to no feedback from ELs was used by participants and occasional feedback from ELs was obtained by participants. The pattern that emerged from the data were ELs were reluctant to give feedback.

**Findings emerging from interview question 9.** How does critical reflection guide your instructional practices when teaching ELs?

**Overall participant group.** Two categories emerged from the data to describe teachers’ frames of reference for using critical reflection to guide their instruction of ELs. The categories were participants’ practice of critical reflection was ongoing and participants’ use of critical reflection to refine their teaching methods (see Appendix H). All participants indicated ongoing practice of and using some form of critical reflection to adjust instruction to support ELs. All
participants indicated using some form of critical reflection to adjust instruction in the mainstream classroom to support ELs’ learning needs. Participants’ responses indicated practicing critical reflection enhances instruction to assist ELs’ in achieving mastery of content concepts. However, data analysis of responses to the final pre-observation interview question did not support participants perceived use of critical reflection to drive instruction.

**Participant group by content area.** Patterns of responses indicated that math teachers used critical reflection to adjust instruction for individual students and for classes as a whole. Participants who taught geometry indicated that in the past critical reflection prompted adjusting instruction for classes rather than individual students within their mainstream classroom. Two algebra teachers referred to using critical reflection when adjusting instruction for classes throughout the school day. P2 stated, “Because what I had planned on at the beginning and I realized that didn't quite work. I'm going to decide to do something different so that it's to my benefit for my nerves and to the kids benefit for their nerves too.” P2 asserted that critical reflection allowed delivery methods to be adjusted using students’ difficulty with understanding a math skill as feedback from each class. P1 explained that assessing how well a class retained the information during lesson delivery allowed instruction to be adjusted for individual ELs. P1 stated:

One thing I do, for example, I apply – I'll assess some students work in one of my particular class, in one of second period classes. I have – that's why I have a book of my ELs students. Once I've assessed them I've tried to pair them with a bilingual student on that level. I'm trying to – and I'm frequently in contact with the bilingual student about what I can do to help them help the other students. So, I'm always looking for input from
the – my bilingual students about how I can help them and the non-English speaking students. So, that's a daily process.

Comparison of the participant responses in the U.S. history department supported commonalities in findings. Both U.S. history teachers reported using critical reflection as an effective teaching tool for adjusting instruction. P6 reported using critical reflection to compare ELs’ work ethic and language-ability level to former EL students. P9 used critically reflective talks as daily lesson openers to establish goals and connections using writing and speaking. P8 reported using ELs with poor course grades as the driving force for the use of critical reflection.

**Individual participant responses.** Critical reflection is the highest form of reflection (Mezirow, 1991). Critical reflection requires adult learners to examine any assumptive ideas, thoughts, beliefs or values for the reintegration of new knowledge that transforms any previously learned ideas (Mezirow, 1991). Although all nine participants indicated the use of critical reflection to enhance their instruction, responses to the interview question described technical and practical reflection rather than critical reflection. According to Zhao (2012), technical reflection is focused more on refining teaching techniques rather than evaluating outcomes, and practical reflection is focused more on the teaching environment. Critical reflection uses analysis and rational consideration of teaching practices (Zhao, 2012). As a result, four of nine participants’ responses were analyzed as the use of practical or technical reflection. P3 stated this:

Yeah, I think about how I – I think about what I've taught all the time and whether the kids – how the kids have grasped it. I think about where I feel they're at, and then, of course, I assess to see where they're really at. I think about things like that all the time.
P7 stated this when asked about the use of critical reflection to drive the instruction of ELs, “Particularly with ELs. I've tried – if I'm in a lesson and I ask questions here and there specifically to ELs then if they don't get it or they won't even respond at all then I know there's an issue.” P3 and P7’s examples indicated the use of technical reflection. However, P7 was the only participant to indicate taking notes while critically reflecting over a lesson. P6 perceived using critical reflection to compare ELs’ work ethic and language ability level to former EL students to gain an understanding of students’ capabilities. P6 stated, in terms of instruction, critical reflection poses the question, “Why did it happen?”, so that educators can revisit the challenge to review how it worked with one group of learners versus another group of learners to enhance instruction for clarity purposes. P6’s example described the use of practical reflection.

**Findings emerging from interview question 10.** Tell me about a time when you critically reflected before, during or after a lesson. Explain if you used this time as an opportunity to evaluate your teaching strategies, personal strengths, challenges, values, beliefs, assumptions, and/or biases associated with instructing ELs?

**Overall participant group.** Using the responses from participants as units of analyses, the findings indicated that critical reflection is perceived as an ongoing practice in participants’ daily professional lives. The general consensus among participants is that critical reflection refined teaching methods. All of the participants recalled a time when they perceived to have critically reflected before, during or after a lesson. P1 described a time when a teaching assumption was transformed by reversing ELs’ roles in peer tutoring. P2 described a time when instruction was adjusted due to a teaching assumption associated with having low expectations of EL students. P3 described a time when instruction was adjusted due to the omission of building background with EL students. P4 described a time when instruction was adjusted due to being
taught a less complicated method of teaching percentages by an EL student. P5 and P8 described a time when instruction was adjusted for ELs due to the level of difficulty of a particular assignment. P6 described a time when instruction was adjusted according to the learning needs of the class. P7 described a time when instruction was adjusted for instructional pacing purposes, and P9 described times when critical self-reflection of instruction was used to promote student engagement during lesson delivery. Three categories emerged from participants’ responses regarding their frames of reference of a time when critical reflection was employed to adjust instruction in the mainstream classroom. The three categories were participants’ applied critical reflection, practical reflection, or technical reflection. One pattern that emerged from data analysis of participants’ responses was that participants held a common misconception about the meaning of critical reflection. Findings from the data analysis show reflection as a tool in participants’ professional lives, but critical reflection was applied less to participants’ perspectives of teaching practices associated with instructing ELs.

The interview responses reported five instances of participants’ use of critical reflection before, during and after a lesson. Five of nine participants indicated an applicable event in which critical reflection was used to evaluate personal teaching strategies and assumptions that led to the rational analysis and evaluation of student outcomes. Four participants indicated descriptions of events that constituted the use of practical or technical reflection.

**Participant group by content area.** Critical reflection was perceived as an ongoing practice in all nine of the participants’ daily professional lives. Data analysis of participants’ pre-observation interview responses indicated use of reflective thinking practices prompted by review and assessment or the teaching environment; however, five of nine participants applied critical reflection to their perspectives of teaching habits associated with instructing ELs. All
participants who taught algebra applied critical reflection to their frames of reference, or teaching perspectives. P1 reported the use of critical reflection resulting in the transformation of a teaching assumption associated with assigning roles to EL students according to their English language proficiency level in speaking. P1 mentioned a transformation in the assumption that ELs who speak English fluently always understand the content concepts better than those ELs who are not as fluent in the English language. P2 reported the use of critical reflection, resulting in the transformation of a teaching assumption associated with setting low expectations for ELs by allowing ELs to be challenged. P7 reported the use of critical reflection, resulting in the transformation of an instructional strategy and habit associated with pacing by learning to become more patient with ELs. A participant in the math department reported the use of critical reflection resulting in the transformation of modeling a math skill associated with varying demonstrations of “solving for percentages” for ELs. A participant who taught English reported the use of critical reflection in a past experience resulting in the transformation of a teaching value associated with preparing meaningful activities. P8 recalled modifying an assignment so that an EL found relevancy to his life and cultural experience through a research paper. P8 stated this when referring to the event:

So, we actually modified the scope of the assignment because he really felt passionate about writing about this [research paper]. I said if that's something you feel passionate about, you're still doing the research, you're still writing, you're still presenting, so sure.

*Individual participant responses.* According to Mezirow (1991), adult learners must become critically aware of their own and others’ assumptions in order to integrate new knowledge into their frames of reference in a meaningful manner. Although all of the participants indicated the use of critical reflection to enhance their instruction, responses to the
interview described six cases in which critical reflection was implemented by participants to transform their frames of reference. P3, P5, and P6’s responses indicated using practical and technical reflection during the shared description of an event.

**Observational Data**

*Pre-Intervention Observational Data.* The pre-intervention observation data indicated nine of nine participants used SIOP-based strategies to some degree prior to the intervention workshops. For this case study, a “high” implementation level was defined by the researcher as displaying observable instructional features from four or more SIOP components. A “low” implementation level of SIOP was defined as displaying observable instructional features from 3 or less SIOP components. P1, P4, P7, and P9 used strategies described within the SIOP framework at a high implementation level. P2, P3, P5, P6, and P8 used SIOP-based strategies at a low implementation level.

Data from the observational evidence indicated three participants who taught math, P1, P4, and P7, implemented SIOP-based strategies at the highest degree out of eight participants. During the pre-intervention observation, these three participants used instructional features of component 2, 3, 7 and 8 (Building Background, Comprehensible Input, Lesson Delivery, Review and Assessment) in a high degree by referring to students’ previous knowledge of academic mathematical terms, modeling algebraic concepts throughout the lesson while eliciting input from the students, and engaging students through use of explicit instruction of mathematical processes. P9 implemented SIOP-based strategies at a high level also. This researcher observed this participant implemented instructional features of SIOP components 2,5,7, and 8 (Building Background, Interaction, Lesson Delivery, Review and Assessment) substantially throughout the lesson. During the observation, this researcher observed students sitting in groups of four to
promote interaction and discussion. P9 built students’ background knowledge by asking clarifying questions as a lesson opener and as a review of information presented in previous lessons. The participant instructed students to use a pre-determined graphic organizer to organize the content knowledge presented in the lesson.

P2, P3, P5, P6, and P8 implemented instructional features of the SIOP framework on a low level. Detailed notes from these participants’ observations indicated instructional features of the SIOP framework were implemented at a low degree. Specifically, many instructional features of components 1, 6, 7 and 8 (Lesson Preparation, Practice and Application, Lesson Delivery, Review and Assessment) were not observed by this researcher during these participants’ observations. For example, direct teacher-led instruction was used for the majority of P2, P3, P5, P6 and P8’s lesson delivery during the pre-intervention observation. Daily objectives were not stated or visibly written for students to see or restate. Students did interact or collaborate with each other about the information being presented in the lesson but rather only interacted with teacher when called upon. The students were not engaged and talked amongst themselves during lesson delivery by the teacher. Lastly, this researcher did not hear or observe P2, P3, P5, P6 or P8 review the lesson’s vocabulary terms or lesson concepts at the close of the lesson.

The pre-intervention observation data recorded common areas of weaknesses and strengths among the study participants’ daily lesson delivery prior to participating in the intervention workshops. Instructional features of SIOP component 2 (Building Background) were noted as instructional strengths for five out of nine participants- P1, P4, P5, P8, and P9. Instructional features of SIOP component 6 (Practice and Application) were recorded as instructional weaknesses for six out of nine participants- P1, P2, P3, P7, P8 and P9.
**Post-Intervention Observational Data.** The post-intervention observation data indicated that five of nine teachers implemented SIOP-based strategies at a higher level after participating in the intervention workshops. P3, P5, P6, P7 and P8’s SIOP implementation was greater than before when compared to their pre-intervention observation data. Based on participants’ post-intervention observation assessments, data also indicated at least one participant from each content area enhanced their instruction to include more SIOP-based strategies during their lesson delivery.

Analysis of post-intervention observation data showed common areas of weaknesses and strengths among the study participants’ daily lesson delivery following participation in the intervention workshops. Instructional features of SIOP component 5 (Interaction) were recorded as instructional strengths for eight participants except P4 during the final observation. Instructional features of SIOP components 2 and 4 (Building Background and Strategies) were recorded as instructional weaknesses for six out of nine participants- P1, P2, P3, P5, P6 and P7. Five participants improved their SIOP implementation significantly by the conclusion of the post-intervention observation. P3, P5, P6, P7, and P8’s implementation level increased significantly due to their observable use of instructional features in component 1 and 5 (Lesson Preparation and Interaction) of the SIOP framework. Two participants did not, however, improve in their SIOP implementation capabilities. P4’s and P9’s pre- and post- intervention observational data remained the same. P4 and P9’s implementation of SIOP-based teaching strategies remained at a consistent high level due to the use of many of the same teaching practices used during the pre-intervention observation.
Post-Observation Interview Data

Findings emerging from interview question 11. How do you think critical reflection and SIOP have transformed your instructional habits to enhance ELs learning?

Overall participant group. The interview responses coded reported four categories of how participants’ think critical reflection and SIOP have influenced their instructional habits to enhance ELs’ learning. The four categories were relative to the SIOP components Lesson Preparation, Practice and Application, Strategies, and Lesson Delivery. Component 6 of SIOP (Practice and Application) and critical reflection enhanced instruction for three participants. P8 indicated more activities would be used in the future to support active learning by students using hands-on materials and manipulatives. One participant chose instructional features of component 4 (Strategies) as most influential in transforming his or her instructional habits to enhance learning for ELs.

Eight of nine participants’ responses indicated SIOP language objectives allowed teachers to reduce the lesson’s goals to a student-friendly language that EL students could understand. These participants indicated SIOP language objectives transformed their instructional habits to promote structure and understanding of how daily learning will be demonstrated. P1, P2, P3, P4, P5, P6, P7, and P8 chose SIOP language objectives, an instructional feature of Component 1, as most influential in the transformation of their instructional habits to enhance ELs. Findings indicated that the majority of participants chose the instructional feature as capable of supporting their professional growth and ELs’ learning. Four participants, P1, P4, P5, and P6, agreed that SIOP reinforced effective strategies already being used in their classrooms.
**Participant group by content area.** All teachers who taught algebra indicated use of the SIOP framework’s language objective influenced their instructional habits to enhance ELs’ learning. P1, P2 and P7 specifically mentioned the language objectives in their post-observation interview responses. Both geometry teachers also specifically mentioned the language objectives in their post-observation interview responses. P3 stated, “I will definitely continue to incorporate the language objectives. I felt those were good and not just for ELs, but everyone.” Categories from responses of the U.S. history teachers did not indicate components of SIOP having a common influence on their teaching habits by content area; however, P9 and a physical science teacher, indicated a shared perspective of the instructional features of component 7 (Lesson Delivery) having a common positive influence on their future teaching habits.

**Individual participant responses.** Data analysis of participants’ interview responses indicated the SIOP framework also showed teachers different strategies to increase student engagement and scaffolding for ELs. One participant, P9, stated that critical reflection and SIOP transformed instructional habits related to component 6 (Practice and Application). Data analysis of P6’s response to the post-observation interview question indicated SIOP reinforced the importance of scaffolding for ELs. P3’s response to the post-observation interview question indicated SIOP encouraged more emphasis of basic vocabulary terms. P3 also mentioned that an emphasis on vocabulary will take better preparation when planning objectives and activities. P3 then revealed critical reflection and SIOP assisted in revealing an assumption associated with ELs. P3 stated, “… it [critical reflection and SIOP] showed me what I took for granted, that I assumed that certain students knew.” P8 indicated instructional features of component 6 (Practice and Application) were also the primary descriptor of areas to enhance for the instruction of ELs.
Findings emerging from interview question 12. What will you do differently when implementing instructional habits and designing lessons to meet the academic and language needs of ELs in the future?

Overall participant group. The interview responses coded reported three categories of participants’ intended academic goals for future implementation of SIOP. Assessment of the data analysis reported communicating clear objectives, using hands-on activities and materials, and varying grouping configurations as the three instructional habits participants planned to implement into classroom instruction for mainstreamed ELs. A majority of teachers reported changing future instruction to include language objectives. P1, P2, P3, P6, P7, and P8, or six of nine participants, indicated in post-observation interview responses that future lesson planning and delivery in the mainstream classroom would include language objectives to better meet the dual needs of ELs. Three teachers designated their area for implementing their new SIOP knowledge as component 6 (Practice and Application).

Participant group by content area. Six teachers used the same words “clear, narrow, and simple” to describe their reasoning for future implementation of language objectives into their mainstream classroom. Participants reported an interest in this particular feature because the instructional feature appeared to make the learning clear for not only ELs, but also the teacher and students. Language objectives support the content objective by communicating to students how they will demonstrate what they have learned using one of the four language domains (reading, writing, listening, speaking) (Echevarria, Short, & Vogt 2004). All of the algebra teachers indicated the use of language objectives as a teaching habit to implement in the future to support ELs’ language learning. Teachers who taught geometry indicated different areas of focus for designing future lessons and delivering content to ELs. P3 mentioned implementing
language objectives, and P4 mentioned implementing instructional features of component 6 (Practice and Application) of SIOP to provide ELs with manipulatives as activities. Practice and Application describes the process of the teacher guiding the student through practice sessions before expecting the student to apply the learning independently (Hunter, 1982) (as cited in Echevarria, Vogt, & Short, 2000, 2004). P4 reported component 6 as an area for a future course of action when instructing ELs with the new knowledge of critical reflection and SIOP. P5 and P8 also cited instructional features of component 6. P5 used the phrase “different forms of engagement” to describe future implementation of various activities, materials, and manipulatives into the physical science classroom.

**Individual participant responses.** Both P7 and P9 indicated two components of SIOP for planning their course of action for future instruction of ELs with the knowledge of critical reflection and SIOP– Lesson Preparation and Interaction. P7 and P9 indicated changing grouping configurations will be a course of action for instructing ELs in the future with the knowledge acquired from the SIOP workshops. Grouping configurations is an instructional feature of component 5 (Interaction).

**Findings emerging from interview question 13.** How has your frame of reference for instructing ELs changed since participating in this research study?

**Overall participant group.** Data analysis indicated the two categories to describe how participants’ frames of reference for instructing ELs changed due to participating in the research study as participants learned to challenge ELs and participants reinforced current effective teaching strategies. An emerging pattern showed participants’ frames of reference for instructing ELs changed mostly based on the two SIOP components, Lesson Preparation and Interaction. Six participants (P1, P2, P3, P7, P8, P9) experienced perspective transformation. Three
participants (P4, P5, P6) indicated their frames of reference were not transformed. Instead, P4, P5, and P6’s frames of reference for instructing ELs were reinforced. These participants affirmed that participation in the research study reinforced what they already knew about instructing ELs. P4 stated, “I'm looking to enhancing what I have been doing to help out my EL students so they can be successful.” P5 stated, “I really can't say I had any preconceptions that I previously held.” P5 explained that participation in the research study provided a fresh review of those practices that all teachers should use. Six participants clearly explained how their frames of reference, or perspectives had been influenced due to participation in the study. P1, P2, P3, P7, P8 and P9 experienced perspective transformation. P7, P9 and P3’s perspective transformation was based in component 5 (Interaction). These three participants previously thought ELs should always be placed with other ELs and peers who spoke the same language during instructional time.

**Participant group by content area.** Data analysis indicated no common change in participants’ frames of reference by content area. The outcome of knowledge learned during this study was dependent on the adult learner’s frame of reference. According to Mezirow (1991), perspective transformation can take place individually or collectively. Therefore, the process of critical reflection rendered unique learning outcomes for each individual participant. Each participant reaffirmed or transformed their perspectives according to a personal and broad range of prior experiences with ELs of varied ability levels.

**Individual participant responses.** Perspective transformation is evoked by an external disorienting dilemma (Mezirow, 1990). “Perspective transformation is the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world…” (Mezirow, 1990, p. 14). Findings from data
analysis indicated six participants experienced perspective transformation. P1, P2, P3, P7, P8, and P9 indicated a perspective transformation in their frames of reference associated with EL instruction. P7 stated, “Previous notions were that I needed ELs to be with other ELs or other – not necessarily ELs, but other Spanish-speaking students, especially all the time. I don't think that anymore.” P8 stated:

I think there's a lot of intimidation around instructing ELs, and I like SIOP because it gives you tangible, hands on things that you can do, and it gives a sense of empowerment as an instructor to know that I have these things that I can do that will be helpful.

P4, P5, and P6 indicated that no frames of reference concerning EL instruction were transformed; however, knowledge of SIOP and critical reflection reinforced utilization of effective strategies already being used in their mainstream classroom.

Findings emerging from interview question 14. Tell me what has this study revealed about you as a teacher and your instructional habits pertaining to ELs?

Overall participant group. Critical reflection and SIOP expanded participants’ professional knowledge of pedagogical strategies to support ELs’ learning based on three SIOP components– Lesson Preparation, Comprehensible Input and Practice and Application. Codes from the data analysis indicated that the study revealed characteristics of participants’ teaching habits changed pertaining to SIOP components 1, 3, and 6 (Lesson Preparation, Comprehensible Input, Practice and Application). Five of nine participants indicated instructional features of component 3 expanded their professional knowledge of pedagogical strategies to implement in the mainstream classroom to support ELs’ content and language needs. Two participants, P2 and P4, responded that both critical reflection and SIOP have expanded their overall teaching capabilities. The four categories that emerged from data analysis of participants’ responses were
teaching ELs is not hard, SIOP and critical reflection enhances overall teaching pedagogy, challenging ELs, and reinforcing effective strategies.

**Participant group by content area.** Three participants, P1, P3, P7, who taught math reported component 3 (Comprehensible Input) as a point of revelation about the characteristics of their teaching habits. Data analysis findings from two algebra teachers indicated instructional features of component 3 were most influential in revealing areas of future enhancement for EL instruction. The U.S. history teachers indicated a transformation in ensuring clear explanations were given to ELs about the academic tasks, which is also an instructional feature of component 3.

**Individual participant responses.** P2 and P4, specified that implementing the SIOP framework and critical reflection revealed their ability to still be able to improve their overall teaching. P2 expressed an interest in learning new pedagogy and stated the realization “that I can learn something new. That I haven't arrived. I don't know everything, but there are programs out there that can help me to improve my teaching, and I appreciate that.” P4 stated a similar revelation about personal teaching habits:

This study as a teacher, it is causing me to reflect more about my teaching and think of different ways. Because we have different students nowadays, and we can't be stuck and set in our old ways. We have to learn how to tweak and modify things so that everyone can benefit from it.

P3 and P9 indicated a new understanding that EL instruction needed to be well-planned to make content comprehensible. P5 and P8 indicated a need to utilize more activities with hands-on materials and manipulatives. P8 stated,
I think most definitely. I think that you have to be reflective to implement the strategy [SIOP]. You can't do it [SIOP] from a – you can't do it off the cuff. It's not something you can walk in and unprepared and wing it. I think that it's something it's almost a tool to force critical reflection, because you have to have that preparation piece and you have to be deliberate in planning how you're going to implement that instruction.

P1, P3, P6, P7, P9 indicated an understanding in ensuring clear explanation is given to ELs about the academic tasks. P1 stated:

But my approach with dealing with the ones that speak English is trying to get them to work with the other students hasn't been working, because they haven't really grasped the concepts. So, it's more like even though I'm allowing them to work together I still have to make sure that somebody in the group understands the concepts so we can benefit from that working together time.

Data analysis of the participants’ responses resulted in six themes regarding participants’ new meaning perspectives concerning professional growth. Six themes ultimately emerged from participants’ responses regarding how mainstream teachers construct meaning and encourage their professional growth through the use of critical reflection and SIOP. By analyzing the interviews, this researcher was able to develop themes of mainstream teachers’ frames of reference and patterns regarding the perspective transformations of mainstream teachers engaged in critical reflection and SIOP implementation. These patterns are the following: (a) actively enjoys learning new teaching skills, (b) recognizes an area for professional growth, (c) open to changing one’s instruction, (d) reinforcement of current effective strategies, (e) seeks new solutions to dilemma, and; (f) willing to examine one’s frames of reference (see Appendix K).
Summary

This researcher identified and examined the frames of reference of mainstream teachers serving ELs to determine if and how critical reflection and SIOP influenced their pedagogical knowledge of instructional habits associated with meeting the learning needs of ELs. Implications of the themes and patterns found relative to the research study’s questions are elaborated on in Chapter 5. By interviewing mainstream teachers of ELs and analyzing their responses to discover common frames of reference and new meaning perspectives, similar teaching habits and experiences were identified among the participants in regard to instructional practices, lesson planning and delivery, and EL students’ language learning. The final chapter discusses these themes and patterns from the data’s findings in detail.
Chapter 5: Discussion and Conclusion

Introduction

Chapter 5 of the dissertation addresses the research questions by presenting, evaluating, and interpreting the findings from the data. The purpose of the study was to examine (a) mainstream teachers’ frames of reference associated with instructing ELs in the mainstream classroom; (b) how does the use of critical reflection and implementation of sheltered instruction observation protocol influence mainstream teachers’ efficacy of instructional delivery, and; (c) how do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and sheltered instruction observation protocol. The study’s findings indicated teachers shared common perspectives and instructional experiences associated with instructing ELs in the mainstream classroom before and after engaging in critical reflection and SIOP. Chapter 5 includes a summary of the results, a discussion of the results in relation to the literature, the limitations of the study, the implications of the results for practice, policy and theory, and recommendations for further research. The findings from the study’s data are included in the summary of results, the discussion of the results, and the discussion of the results for practice, policy and theory sections of Chapter 5.

Summary of Results

A data analysis composite with the descriptive and process words created for coding participants’ responses was constructed. Nine high school teachers participated in the research process by engaging in two semi-structured interviews, two observations, and two SIOP workshops, which served as intervention. Eighteen interviews were audio-recorded and transcribed and reviewed for accuracy by the researcher and by study participants’ using member checking. After receiving confirmation of accuracy for each participant’s transcript, the coding
process began. According to Yin (2009), inquiries in case study research benefit from the previous development of theoretical propositions to direct data collection and analysis. A case study’s unit of analyses should be defined by the research questions (Yin, 2009). Over the course of the study, participants’ responses were manually coded using key terms and phrases similar to the eight components and 30 instructional features of SIOP. The study’s initial data collection and data analysis were classified using a total of 20 descriptive and process codes.

**Discussion of Results**

**Pre- and Post-Intervention Observational Data.** The eight components and 30 instructional features within the SIOP framework were designed to guide teachers’ daily lesson using sheltered instruction techniques such as scaffolding, supplementary material, visuals, and hands-on activities (Echevarria & Short, 2014). Previous research established that the SIOP framework is a conglomerate of teaching strategies effective teachers already practice in the classroom. Echevarria and Short (2014) stated, “It is important to recognize that the SI model [sheltered instruction] does not require teachers to throw away their favored techniques, nor add copious new elements to a lesson” (p. 10). After completing the SIOP self-assessment, the participants had a general understanding of the instructional behaviors outlined in the SIOP framework that should be present in a mainstream classroom serving ELs. Although the interview questions designed for the case study did not ask participants to the name the specific SIOP strategies used in their classroom, participants expressed that the description of SIOP strategies did sound similar to other classic teaching strategies. Although evidence from the interview data indicated none of the participants received any previous training in SIOP, evidence from the observation data indicated all nine participants implemented SIOP-based strategies and activities to some degree prior to the intervention workshops. As stated in Chapter
3 of the dissertation, the researcher’s expectation regarding participants’ lack of knowledge in the SIOP framework was affirmed by the study’s findings.

The findings from the participants’ pre-intervention observation data indicated that the most significant instructional weakness among participants’ classroom instruction of mainstreamed ELs was based in component 6 (Practice and Application) of the SIOP framework. During this round of observations, this researcher noticed the activities chosen by participants did not require students to practice the observable behaviors needed to effectively implement instructional features of component 6. The use of supplementary materials to support ELs’ learning is a prominent feature of the SIOP model (Echevarria & Short, 2014). These teaching habits include providing students with hands-on activities and materials that require using all four language domains to apply content and language knowledge (Echevarria & Short, 2014; Short, 2004). Next, evidence from the participants’ pre-intervention observation data indicated that the most significant instructional strength among participants’ EL instruction was based in component 8 (Review and Assessment) of the SIOP framework. This researcher observed that the participants’ teaching habits employed providing students with comprehensive reviews of content concepts using academic vocabulary. Participants also provided feedback to students throughout the lessons.

During this round of observations, evidence from the participants’ post-intervention observation data indicated that the most significant instructional strength among participants’ EL instruction was based in component 5 (Interaction) of the SIOP framework. This researcher observed that the participants’ teaching habits employed providing students with an opportunity to work collaboratively in a variety of group configurations including number of students and language background. The participants’ new knowledge of the importance of varied interaction
and collaboration for mainstreamed ELs was evident in their lesson delivery during the post-intervention observation. Participants also provided students with more activities that integrated practicing skills from all four language domains by the end of the post-intervention observation. The findings from the participants’ post-intervention observation data indicated that the most significant instructional weaknesses among participants’ classroom instruction of mainstreamed ELs were based in components 2 and 4 (Building Background and Strategies) of the SIOP framework. This researcher noticed the participants did not provide sufficient background knowledge before delivering the lesson or require students to practice the observable behaviors needed to emphasize key vocabulary. The SIOP framework requires teachers to activate students’ prior knowledge and build upon it by explaining and linking content concepts to students’ past learning experiences while reiterating key vocabulary (Short, 2014). Component 4 of the SIOP framework describes observable instructional habits such as providing students with activities that promote higher-order thinking skills through consistent teacher-led scaffolding techniques (Short, 2004, 2014). Features of this component were not being implemented by participants in a high degree during the post-intervention observation.

Pre-and Post-Observation Interviews. The findings of the study indicated that participants instructing ELs have similar frames of reference, or perspectives in regard to language learning, instructional practices, and lesson planning and delivery. The findings of the study indicated that the majority of participants perceived communication, or the language barrier itself, as the biggest challenge facing mainstream teachers of ELs in the classroom, as presented in Table 3 (see Appendix H). In addition to sharing a common challenge, the findings indicated that mainstream teachers of ELs shared a common success when using the instructional strategy of paired learning.
A general inability to convey lesson concepts in a manner that was comprehensible to ELs was cited by all of the participants. Subsequently, seven of nine participants indicated eliciting no feedback from ELs on a consistent basis about their daily instructional habits during or after lesson delivery. Critical reflection has the ability to expand professional knowledge and enhance professional expertise for teachers because it allows the adult learner to form a “connection to self” and practice awareness (Mortari, 2012). Mainstream teachers who obtain feedback from their EL students can improve their efficacy and capability to be respondent to ELs’ learning needs (Mortari, 2012). To improve instruction in the mainstream classroom, it is important that teachers exercise critically reflective practices through eliciting feedback about their instruction from ELs to refine instructional habits and reinforce content concepts through lesson delivery. However, one interesting pattern that emerged from the data was ELs are reluctant to give feedback. Four of the participants indicated ELs do not ask questions often or share their thoughts about the teaching and learning even when prompted. Research shows that immigrant children arrive to the U.S. with a myriad of social-emotional challenges in addition to overcoming a language barrier (Suarez-Orozco & Suarez-Orozco, 2015-2016). The practice of critical reflection is frequent and on-going (Mortari, 2012). By practicing critical reflection, mainstream teachers could foster supportive learning environments through the continued awareness of the social-emotional challenges ELs face. For example, writing prompts connected to EL’s prior knowledge or past experiences helps to build background for classroom objectives while nurturing a relationship with the EL (Suarez-Orozco & Suarez-Orozco, 2015-2016). Additionally, Echevarria and Short (2014) assert the socialization of students occurs implicitly through classroom expectations, rules, routines and activities; thus, ELs benefit from a classroom
structure of teacher-led actions that provide opportunities and examples for appropriate classroom behaviors and interactive learning styles.

The SIOP framework addresses the challenges communication presents for teachers of ELs by including the instructional feature known as language objectives in component 1 of the SIOP framework (Lesson Preparation). Lesson objectives keep the classroom learning focused for both teachers and students by guiding the development of content skills and knowledge. Content objectives communicate the learning outcomes of state standards and grade-level curriculum. However, ELs will be unable to learn the content taught to them without knowledge of the language and its functions (Echevarria, Vogt, & Short, 2004). The SIOP framework requires mainstream teachers to construct both content and language objectives. The language objective identifies the knowledge and skills needed to successfully master the content objective using functions of the four language domains (Echevarria, Vogt, & Short, 2004). “Making the language demands and practices of the content-area classroom explicit for teacher and students helps teachers support language development in service of content-area learning” (Hakuta, Santos, & Fang, 2013). Perhaps if the participants implemented the SIOP framework into their lesson planning and delivery, the challenge communication presents now could be minimized with the practice of creating both content and language objectives so that ELs have a comprehensible path to understanding the academic content and the English language. The findings of the study indicated that mainstream teachers acknowledged the major challenge with instructing ELs. However, in practice, they were unable to implement solutions that effectively eradicated the challenge or dilemma.

Data showed that a majority of participants’ frames of reference attributed using the cooperative learning strategy of “paired learning” as most successful in supporting ELs with
learning content concepts. Although the questions designed for the case study did not list or ask about any particular instructional strategy, participants indicated in their interviews that pairing ELs with peers who speak the same language proved to be the best technique to support ELs’ learning in the mainstream classroom. The SIOP framework requires teachers to provide students with a variety of cooperative-learning opportunities and activities through instructional features of component 5 (Interaction). For example, one SIOP strategy that promotes cooperative learning is the “think-pair-share” activity, which allows students to actively think and speak about a lesson’s topic with all of their peers (Short, Echevarria, & Vogt, 2004). The study’s findings showed five participants chose component 5 of the SIOP framework as an instructional strength when completing the SIOP self-assessment (see Appendix C). Furthermore, component 5 was recorded as an instructional strength for eight participants during the post-intervention observation.

Participant data showed a comprehensive perspective of the need for additional support and professional development among the participants across the different content areas. Teachers classified and described additional support in several ways. Six out of nine mainstream teachers described the additional support needed as a teacher aide, student-peer(s), and/or textbooks in the students’ first language (L1). Three participants specifically reported that additional support from and communication with the ESL teacher could assist in designing lessons and activities to support ELs’ learning needs. The participants’ descriptions of additional support concurred with previous research on the types of support needed to assist teachers in successfully instructing a “linguistically diverse student population” (Russell, 2013, p. 29). For example, Russell (2013) asserted that instructional coaching or mentoring by an EL facilitator can impact the professional learning of teachers, especially novice teachers. Based on the
literature reviewed for the study, schools around the United States are accountable for reporting the academic growth and achievement of ELs (Murphey, 2014; United States Department of Education, 2017); therefore, all teachers must work collaboratively to remain aware of best practices for mainstreamed ELs.

Based on the information presented in Chapter 2 of the study, rational discourse is the fourth stage of Mezirow’s (1991) process for critical reflection. Although the participants engaged in rational discourse during the research process through the two SIOP workshops, eight participants reported having little-to-no discussion about EL instruction with other mainstream teachers during school-level professional learning communities. Two participants indicated that a greater focus was given to the general education and special education population during PLC meetings. Suarez-Orozco and Suarez-Orozco (2015-2016) indicated schools often do not focus on the needs of “dual-language students”; instead these students are often ignored or viewed as problematic academically by contributing to low performance on standardized state assessments. To improve student learning using rational discourse, teachers must embrace a common understanding regarding effective EL instruction using best practices. If mainstream teachers planned together during PLC meetings, they may determine what instructional habits and materials are appropriate for ELs’ language proficiency level and learning needs.

In this study, critical reflection was defined as the “evaluating, reassessing, critiquing, confirming or questioning of previously held perceptions based on prior experience” associated with instructing ELs (Mezirow & Taylor, 2009, p. 9). Participants in all of the content areas reported using critical reflection as a teaching strategy to refine their instructional habits and methods for the academic benefit of all students. However, the descriptions shared by participants indicated a comprehensive misconception of the meaning of critical reflection.
Evidence from the interview data indicated participants were familiar with the term critical reflection but less knowledgeable of the actions or outcomes associated with Mezirow’s (1991) process of critical reflection. Six participants indicated through their descriptions that critical reflection was applied to their frames of reference, which resulted in a transformation of their teaching practices associated with instructing ELs to evaluate personal values, beliefs, assumptions, and/or biases associated with teaching ELs. Based on the information presented in the literature review for the case study, evidence from the interview data indicated that participants also described an event that employed technical or practical reflection. Technical reflection involves refining teaching techniques rather than evaluating outcomes, while practical reflection focuses on the teaching environment (Zhao, 2012). Three participants shared descriptions of events that constituted the use of practical or technical reflection.

Critical reflection of assumptions represents the highest form of reflection (Lundgren & Poell, 2015). For that reason, only those participants’ responses that illustrated this aspect were deemed as applicable events of a time when critical reflection was used before, during, or after a lesson to modify instruction. For example, the data from the interview responses indicated six applicable illustrations of participants’ descriptions of the use of critical reflection before, during or after a lesson. Conversely, three participants indicated an event that illustrates the practice of technical or practical reflection to their instructional habits. Therefore, evidence did not demonstrate a comprehensive understanding of the practical use of critical reflection to transform an adult learner’s frame of reference among the study participants.

Participant data from interview questions 11–14 were cross-referenced with participants’ two critically reflective writings. At the end of each SIOP workshop, participants responded to a multi-layered writing prompt. Evidence from the data indicated that the majority of participants
chose language objectives, an instructional feature of SIOP component 1 (Lesson Preparation), as influential in supporting their professional growth and ELs’ learning. Eight participants’ responses to the two writing prompts indicated learning about the SIOP framework and the language objectives influenced a change in their future lesson designing to support the dual learning needs of ELs. At the conclusion of SIOP workshop two, P3 responded to the writing prompt by saying, “Some of the things I’ve learned not only will help my ELs, but also my [English speaking] students.” P3 mentioned this same assertion during the post-observation interview. Accordingly, research proved the SIOP framework to be instructionally beneficial for both native-English-speaking students and ELs (Echevarria, Vogt, & Short, 2004). According to Echevarria and Short (2014), the SIOP approach complements techniques and practices recommended for use in both mainstream and second language classrooms. Evidence from the study’s findings illustrated participants’ use of SIOP-based strategies during the pre-intervention observation without previous training or knowledge of the approach.

Interview questions 11–14 mostly revealed what components and instructional features of the SIOP framework participants would use for future implementation into the mainstream classroom for ELs, and how the process of critical reflection allowed the participants to reexamine and transform their frames of reference associated with instructing ELs. Participants indicated that critical reflection and SIOP expands their professional knowledge of pedagogical strategies to support ELs’ learning based on four SIOP components– lesson preparation, comprehensible input, interaction, and practice and application. Data analysis of the participants’ responses to the interview questions and writing prompts developed six themes regarding how mainstream teachers construct meaning and encourage their professional growth through the use of critical reflection and SIOP.
By analyzing the interviews, the researcher was able to develop themes of mainstream teachers’ frames of reference and patterns regarding the perspective transformations of mainstream teachers engaged in critical reflection and SIOP implementation. The six patterns that emerged from data through the course of the case study were the following: (a) actively enjoys learning new teaching skills, (b) recognizes an area for professional growth, (c) open to changing one’s instruction, (d) reinforcement of current effective strategies, (e) seeks new solutions to dilemma, and; (f) willing to examine one’s frames of reference (See Table 6).

Participants were assigned several final themes based on interview and writing prompt data that expressed how critical reflection and SIOP influenced their professional growth as mainstream teachers of ELs. The researcher holistically and reflectively reviewed the data to create a chain of evidence that led back to the case study’s methodology. Table 6 (Appendix K) shows how many times each theme was assigned to a participant to describe how he or she constructed meaning and encouraged their professional growth through the use of critical reflection and SIOP.

**Discussion of the Results in Relation to the Literature**

The study took place at a Title I school during the first year of undergoing the leadership of an experienced and new principal. Because Title I schools are strongly bound to state and federal education policies, the research site, like many other schools around the United States currently, was required to assess and report ELs’ academic achievement at the end of each school year, which counts for a percentage of the school’s total data in academic growth and achievement (United States Department of Education, 2017). One central assumption of the study was that mainstream teachers would be unfamiliar with the SIOP framework as an approach to teaching ELs in the mainstream classroom. Based on the literature reviewed for the
study, SIOP is often introduced to mainstream teachers through in-service professional development (Echevarria et al., 2011; Short, 2013; Song, 2016). However, the study’s results indicated all nine study participants had no previous knowledge or training in the SIOP framework. Echevarria and Short (2014) emphasized that the SIOP framework must be integrated as part of a larger school-based initiative that is cognizant of the “total schooling” ELs’ need (p. 5). Yet, the evidence from the data strongly supports previous research about schools overlooking the instructional needs of ELs (Suarez-Orozco & Suarez-Orozco, 2015-2016). Participants indicated a greater focus on the school’s general education and special education student population during school-level professional learning communities.

By implementing the SIOP framework on a larger school-level basis, ELs are familiarized and socialized into a set of academic responsibilities and “routine classroom environments” (Echevarria & Short, 2014, p. 4). This educational design is especially beneficial to ELs because it extends language support services while simultaneously teaching subject-area content needed for graduation requirements (Echevarria & Short, 2014). Even though participants reported being familiar with or using strategies similar to those described in the SIOP framework, assessment data from the pre-intervention observations indicated participants were implementing sheltered instruction strategies at a low-to-high level.

When asked what “additional supports need to be in place for mainstream teachers to effectively instruct ELs,” participants indicated several types of additional support perceived to be helpful in assisting mainstream teachers effectively instruct ELs. The types of additional support included teacher aides, peer-tutoring, supplementary materials, and collaboration with the ESL teacher. Russell (2015) found that collaborative support of an EL facilitator allowed teachers to focus on an EL’s individual needs, and connects teachers with resources, practices,
and guided coaching from a colleague who specializes in language learning. Without adequate substantial support and training, Fregeau and Leier (2015) determined that mainstream teachers resort to four common practices: (1) practicing common sense accommodations used with regular mainstream students, (2) sending ELs out the classroom for help, (3) asking ESL or non ESL teachers for help, or; (4) engaging ELs in peer tutoring.

When asked about their greatest success with ELs in the mainstream classroom, the study’s data indicated seven participants named paired learning as a successful teaching technique when instructing ELs in their classrooms. Although participants who taught algebra mentioned that pairing students also caused excessive and off-topic talking among the EL and his or her partner during some lessons, evidence from the study’s data indicated participants used this cooperative-learning strategy frequently but only homogeneously in the mainstream classroom. However, the SIOP framework calls for mainstream teachers to use a variety of group configurations, including heterogeneous and homogeneous pairs, triads, and/or small groups consisting of students from different genders, language backgrounds, proficiency levels and abilities (Echevarria, Vogt, & Short, 2004). During the post-observation interview, three participants, P1, P7 and P9, reported transforming an assumption associated with always pairing ELs with peers who spoke the same L1 during engaged and academic learning time (Echevarria, Vogt, & Short, 2004).

P1, P7 and P9 describe a specific frame of reference which transformed a previous notion associated with EL instruction by the conclusion of the research study. P1 stated that previously perceiving that pairing ELs with peers who were proficient in the English language was a sufficient support method for ELs. P1 assumed knowing more of the language designated a peer tutor’s ability to understand the algebra concepts. However, SIOP and critical reflection
revealed that this regular teaching practice and assumption was ineffective and needed to be corrected in order to be of benefit to the teacher and ELs. P7 admitted that implementing critical reflection and SIOP revealed a personal teaching style that needed to be more accommodating of ELs’ learning needs by becoming more patient and slowing down the classroom’s instructional pace. P7 also mentioned a teaching assumption that ELs must be paired with peers who speak the same language. As a result of implementing critical reflection and SIOP, P7 declared future group configurations would place ELs with English-speaking peers as well. P9 described a perspective transformation that also dealt with this teaching assumption and plans to vary group configuration for ELs in the mainstream classroom. Interview data from these three participants report a perspective transformation. These participants reported using critical reflection of assumptions and were willing to change their instructional habits as a result of implementing SIOP and critical reflection into their lesson planning and lesson delivery.

There was a need to conduct this research because as the enrollment of ELs increases each year in schools, teachers need to be adequately trained and provided with a coherent method for instructing ELs in the mainstream classroom (Barrow & Markman-Pithers, 2016; Echevarria & Short, 2014; Fregeau & Leier, 2015; Song & Samimy, 2015; Suarez-Orozco & Suarez-Orozco, 2015-2016). Current educational reform movements, such as the Every Student Succeeds Act, adopted in 2015, are demanding more rigor from all students by requiring the development of intellectual capacities proficient in the relationships between content and language (Hakuta, Santos, & Fang, 2013; Short, 2013). For example, the Common Core State Standards (2010) regarding mathematics calls for students’ use of discussion to understand multiple mathematical concepts through visual representations, discuss mathematical practices, explain math concepts, make real-life connections to the content, solve problems and
communicate their thought processes, and justify their answers using reasoning (Hakuta, Santos, & Fang, 2013). This shift in the educational demands required of students and teachers suggests a shift in the frames of reference of mainstream teachers and educators, in general.

Because theoretical literature exists in the broader practical and academic community regarding the positive influence of using the SIOP framework and reflective practices to improve student learning outcomes (Echevarria & Short, 2014; Echevarria, Vogt, & Short, 2004; Echevarria & Short, 2014; Santi, 2015; Song, 2016), the researcher’s central assumption was teachers would be more familiar with the concept of critical reflection rather than SIOP. The study was pertinent because it revealed the gaps in teachers’ understanding of critical reflection and best practices for ELs, which may be of interest to those considering practicing critical reflection to expand their professional growth and knowledge in the field of education. The existing literature includes limited knowledge of how critical reflection and SIOP can be used collaboratively as an innovative means for mainstream teachers to construct meaning and promote their professional growth by transforming instructional habits associated with EL instruction in the mainstream classroom (Daniel & Conlin, 2015; Echevarria, Vogt, & Short, 2004; Song; 2016). For example, seven participants indicated a common successful technique by perceiving that EL students could only be homogeneously paired with other Spanish-speaking students. As previously stated, the SIOP framework requires teachers to use a variety of group configurations; consequently, Wink (as cited in Lowenstein & Brill, 2015), described one purpose of critical reflection in teacher practices is for teachers to identify and transform personal assumptions and practices that appear to make teaching easier but actually works against students’ best interest. By willingly examining this individual frame of reference about paired learning, three of the participants experienced and reported perspective transformations,
which interview data indicated resulted in these participants’ openness to seeking new solutions to their particular situation with EL instruction and changing their traditional instructional habits associated with mainstreamed ELs. Teachers can support their professional growth through their use of critical reflection (Frazier & Eick, 2015).

Teachers sustain a complex set of views regarding second-language-learning students and pedagogy that shape their instructional decision-making and practices (Daniel & Conlin, 2015; Hansen-Thomas & Cavagnetto, 2010; Song & Samimy, 2015). Ross and Ziemke (2016) identified that despite the fact that English-language-development standards have traditionally guided the learning objectives in many instructional models for ELs, their contribution and significance to learning subject-area content was disregarded by educators. One reason for this, according to Ehren, Lenz, and Deshler (as cited in Ross and Ziemke, 2016), is the relationship between learning content knowledge and different language skills and functions associated with understanding a specific domain of knowledge resulted in teaching the content without acknowledging the language. Ehren, Lenz, and Deshler (as cited in Ross and Ziemke, 2016) asserted that teachers must take on the accountability for teaching the language of their content area extensively and simultaneously to improve the language development and literacy outcomes of students.

After conducting a study investigating mainstream teacher lesson-planning habits, Baecher, Farnsworth, and Ediger (2014) found that mainstream teachers experience significant challenges across grade levels, content areas, and language foci. Their research determined that participants’ lesson planning lacked an adequate amount of content and language integration and focused less on grammatical function and language learning strategies (Baecher et. al, 2014). Yet, Regalla (2012) found that teachers learned how to deliver explicit vocabulary instruction
after designing a series of three SIOP workshops to show teachers how to use SIOP-based vocabulary strategies. Data from the study’s findings also agree with the Regalla’s (2012) research conclusions. For instance, evidence from this study’s findings showed component 4 (Strategies) as a major instructional weakness among study participants.

Evidence from the data’s findings indicated the SIOP framework’s integration of content and language objectives supported participants’ professional growth by extending their professional knowledge of best practices associated with EL instruction in the mainstream classroom. Eight participants cited language objectives, in particular, as most influential for supporting their instruction of ELs. By practicing the use of writing content and language objectives to communicate daily learning with students, participants may be able to address the perceived instructional challenge of communication, which seven participants reported through interview data as the most significant dilemma hindering the efficacy of instruction to mainstreamed ELs. In order to benefit ELs, schools and teachers must be provided with high-quality professional development and ongoing support (Short, 2013). Echevarria and Short (2014) asserted that pre-service teachers need training in the SIOP framework to build foundational knowledge in sheltered instruction; in-service teachers need the SIOP framework to enhance their lesson planning and delivery through a consistent approach; and administrators need the SIOP framework to train and evaluate teachers. During the pre-observation interview, P6 was the only participant to indicate professional development or training as a form of additional support when asked what additional supports needed to be in place to assist mainstream teachers with EL instruction by the researcher. P6’s application of the knowledge learned from the study’s professional development, or SIOP intervention, was evident when comparing and analyzing the pre- and post-intervention observational data.
Although eight participants perceived using a cooperative-learning strategy as a successful teaching habit associated with instructing ELs, data from the study’s findings indicated this same interaction did not transcend or exist between the mainstream teachers and ELs’ student-teacher relationships. Seven participants reported obtaining no feedback from their EL students about their daily lesson delivery. In addition, four participants reported ELs will not share feedback about the lesson even when encouraged to do so. Evidence also indicated that the participants did not interact or share ideas, thoughts, or feedback regarding EL instruction with their colleagues. In terms of the study, it was important for the researcher to establish participants’ practice of critical reflection by examining their instructional habit of eliciting feedback from ELs and/or their colleagues regarding classroom instruction.

Eight participants reported engaging in little-to-no rational discourse with their colleagues during common planning or PLC meetings. The interview questions allowed the researcher to establish each participant’s practice of critical reflection as ongoing through the consistent self-monitoring, self-evaluating, and self-assessing of their teaching practices for professional growth. The findings demonstrated the misunderstandings or misconceptions between the concept of critical reflection and the actual process and practice of critical reflection. Research showed teachers’ previous experiences as teachers and learners mirror lesson planning, knowledge of their students, and pedagogical content and theories about learning (Baecher et. al, 2014). Previous research also showed that teachers lacked knowledge of or held misconceptions about the strategies used to teach and assess ELs (Fregeau & Leier, 2015; Ganger, 2013; Hadjioannou & Hutchison, 2011). Because teacher knowledge and experience affect students’ learning outcomes, the effective practice of critical reflection is pertinent to successfully expand mainstream teachers’ professional knowledge and professional growth (Song & Samimy, 2015).
Nine participants indicated through the interview data actively practicing critical reflection in their positions as mainstream teachers of ELs. However, data analysis of the participants’ responses revealed six teachers who described an applicable past event in which critical reflection was used to evaluate personal assumptions, values, or beliefs associated with instructing ELs. P3, P5, and P6’s responses described the use of practical and technical reflection during the shared description of an event. For example, participants who taught algebra described a relevant example of applying critical reflection to their frames of reference, or teaching perspectives in the past. One English teacher and one geometry teacher also described a relevant example of an event when critical reflection was applied to their frames or reference.

**Limitations**

Qualitative research is not generalizable. Yin (2009) acknowledged a common criticism of case study research is its inability to provide scientific generalizable results. The small sample size was the first limitation considered about the case study. The participants were employed at one public high school in Tennessee. Because the sample size represented a selected demographic and region of the school district in Tennessee, this study’s findings may not be generalizable. This study focused on the example of one high school located in a large school district comprised of public, private, charter and alternative schools. This study provided a depiction of what can happen if a real-life phenomenon is examined to gain an in-depth understanding and provide a description of the cases studied (Yin, 2009). The results are particular to a small group of mainstream teachers of ELs in Tennessee; however, the descriptions and discussions found in this study regarding mainstream teachers’ frames of reference may be applied to another context. Though it is beyond the scope of this study, future
research may use a larger sample size to compare the findings from similar research to support generalizability.

The methodology used in the case study has the potential to facilitate the process of critical reflection, and presents a valid framework for the implementation SIOP. However, a second limitation of the study was related to the difficulty in replicating the study and its findings. There is a wide range of research on the different approaches to fostering reflection in adult learners; however, little research shows how effective these approaches are to learning the process of reflection (Mortari, 2012). Lundgren and Poell (2016) found that little research has been conducted in the field of education to operationalize a common instrument to measure the process or outcomes of critical reflection. Yet, Yin (2009) contended that case studies are generalizable to theoretical propositions and seek to expand theories rather than compute statistics. Case study research provides a holistic view of the phenomenon or case that cannot be conveyed using quantitative measures that analyze the data (Adams & Lawrence, 2015).

Transformative learning is defined as “the process of making new or revised interpretation of meaning of an experience, which guides subsequent understanding, appreciation and action” (Mezirow, 1991). Mezirow (1990) suggested adult learners’ use of various reflective techniques such as journal writing, reflective conversations, and composing biographies. Brookfield (as cited in Mortari, 2012) suggested reflective techniques such as writing autobiographically and talking and working with others to solve problems. Using interview data and written responses to two critically reflective writing prompts, the findings from this study focused on the frames of reference and experiences of nine mainstream teachers of ELs. This research design allows the transformative learning experience to be pinpointed as a change in participants’ thinking and action that resulted from their new knowledge and implementation of
critical reflection and SIOP (Lyons, Halton, & Freidus, 2013). However, the data from the study would be different from another descriptive case study because the responses regarding the phenomena would differ based on participants’ frames of reference and learning outcomes.

A third limitation considered in the study was the time constraint hindering the data collection process. Creswell (2013) stated that detailed data for case study research should be collected over a prolonged period of time using a multitude of procedures from multiple data sources. The study data gained were acquired from multiple data sources such as the documentation and notes from fieldwork, observational data, and interview data. Using multiple data sources allows the data to be triangulated and increases the chance for the coding process to actually make meaning by giving the participants multiple paths to express reflection in different ways (Lundgren & Poell, 2016). However, constraints of completing the research in a timely manner that did not impose upon participants’ personal and professional responsibilities caused an extensive number of workshops and follow-up observations to be unfeasible. The research required consideration of scheduling before and during the data collection process. The research also required time for the interviews to be conducted and transcribed, the coding to be designed, applied and reviewed for iterative analysis of the data, and member checking to take place before the end of the school year. For this reason, future research may engage study participants in more SIOP workshops and observations on a consistent basis than the amount employed in this case study.

Lastly, the professional background of the researcher may be viewed as a limitation and as a possibility for researcher bias in the evaluation and interpretation of participants’ responses. According to Machi and McEvoy (2012), research can never be void of bias; however, researchers must recognize and control bias at the onset of conducting research. Therefore, at
the onset of the conducting the research, the researcher bracketed herself out of the research by briefing participants about the purpose of the study before obtaining written consent from the teachers to acknowledge their participation in the study. The researcher also bracketed herself out of the study by discussing personal experiences with the phenomenon with the intention of setting those experiences aside to focus on participants’ experiences only (Creswell 2013). Consequently, Yin (2009) suggested researchers should acknowledge contrary findings that can produce documentable rebuttals to lessen the likelihood of bias. In this study, the final key themes were created to represent participants’ frames of reference and how they constructed meaning from implementing critical reflection and SIOP to promote their professional growth by expanding their professional knowledge of best practices for mainstreamed ELs.

The findings in this study should not be viewed as comprehensive, but representative of the themes that occurred most as a particular frame of reference pertaining to the participants’ data. The findings in the study did not measure the influence of critical reflection and SIOP on student learning outcomes but rather mainstream teachers’ ability to become critically reflective thinkers by transforming teacher-led actions associated with EL instruction in the mainstream classroom.

**Implications of the Results for Practice, Policy, and Theory**

A review of the literature shows that through active engagement with the process of critical reflection and implementation of the SIOP framework, teachers are influenced to address the learning needs of ELs through the critical examination of their own frames of reference associated with instructing ELs. While participants acknowledged a familiarity with and use of teaching strategies similar to the SIOP-based strategies, communication was reported as the most significant dilemma instruction of ELs. The issue of communication can be addressed using an
instructional feature of SIOP component 1 (Lesson Preparation) called language objectives. Participants in this study indicated instructional features of SIOP component 5 (Interaction) as the most successful instructional habits to use with mainstreamed ELs in their classrooms. Although existing theoretical literature on critical reflection and SIOP validate both as tools to enhance adult learning and teaching practices in the field of education, the existing literature does not include how the two concepts could be used collectively to promote professional growth through the critical reflection of their frames of reference related to EL instruction in the mainstream classroom (Daniel & Conlin, 2015; Echevarria, Vogt, & Short, 2004; Mezirow, 1991; Song; 2016).

**Implications of the results for practice.** The findings of the study add confirmation to the previous research regarding the SIOP framework as a set of sheltered instruction practices already used by most effective teachers (Echevarria & Short, 2014; Echevarria, Vogt, & Short, 2004). Participants indicated a familiarity with and use of strategies similar to the description of SIOP-based strategies listed on the SIOP self-assessment (see Appendix C). Pre-intervention observation data indicated the presence of SIOP-based strategies during instructional delivery were present in most of the participants’ classrooms and were being implemented on low-to-high level. After engaging in the SIOP workshops, findings from the post-intervention observation data indicated five participants’ use of sheltered instruction practices improved. Therefore, implications of the data results for practice demonstrate a need for comprehensive professional development in the district for teachers of mainstreamed ELs.

In regard to the goals of this study, professional development should focus on training teachers and administrators in using best practices and/or research-based approaches for instructing ELs in the mainstream classroom such as the SIOP model and effectively applying
critical reflection to personal teaching habits. For example, participants in the study regarded paired learning or interaction as a successful teaching habit when instructing ELs, according to evidence from the pre- and post-observation interview data; however, in practice, interaction was recorded as an instructional strength for only one participant during the pre-intervention observation. However, after implementing critical reflection and SIOP, this researcher noticed how participants examined their teaching habits associated with pairing ELs and adjusted this teaching practice to enhance learning for both ELs and native-English speaking students during the post-intervention observation.

As schools continue to implement Common Core State Standards (2010), teachers’ pedagogical language knowledge must increase to include foundational knowledge in grammar and literacy (Bunch, 2013). The initiatives outlined by the Common Core State Standards “reconceptualizes” the instruction of ELs as a shared responsibility in contemporary educational institutions (Bunch, 2013). Data from the pre- and post-intervention observation indicated participants’ instructional weaknesses were present in instructional features of SIOP components 2, 4, and 6 (Building Background, Strategies, and Practice and Application). These components, in particular, require teachers to link new learning with students’ past learning, emphasize key vocabulary, use a variety of supplementary materials and activities that promote higher-order thinking skills, and support students’ learning of the content and language through ongoing scaffolding. Perhaps the deficits in these instructional areas are due to teachers lack of pedagogical language knowledge or inability to design meaningful academic tasks that integrate the four language domains. These instructional deficits can be linked to the limited preparation mainstream teachers receive in secondary-language acquisition theories and literacy practices before actually instructing ELs (Bunch, 2013; Short, 2013). Mainstream teachers lack the
knowledge and skills to effectively instruct ELs in content knowledge and language skills (Fregeau & Leier, 2015; Ganger, 2013; Hutchinson & Hadjoannou, 2011). Therefore, the implications for practice based on the data results are to provide teachers with school-level and district-level professional development that consistently contributes to mainstream teachers’ frames of reference for effective teaching strategies and activities to employ in the classroom with mainstreamed ELs.

Participants were aware of the need to differentiate or specialize instruction through the use of reflective practices to address the learning needs of ELs. Yet, their descriptions of the use of critical reflection demonstrated a misunderstanding of the meaning and processes critical reflection. The study’s findings indicated a clear gap between the theory and practice of critical reflection by participants to examine their frames of reference associated with EL instruction in the mainstream classroom. A recommendation based on the data results is an increase professional-development opportunities provided for mainstream teachers of ELs, especially those teaching in a state-tested core content area. District-level professional development could be an extenuating circumstance out of the participants’ locus of control and an underlying issue causing mainstream teachers’ lack of knowledge and accessibility to proper training in critically reflective practices and the SIOP framework. For example, participants indicated through the study’s findings that SIOP instructional feature called language objectives was most influential in adding to their knowledge of best practices to use with ELs. Professional development could align with school-level and district-level expectations and curricular objectives informed by the CCSS. Because data results indicated an absence of rational discourse through professional conversations and meaningful EL feedback, it may be challenging for mainstream teachers to
meet the dual learning needs of ELs. Therefore, an increase in district-level and school-level professional-development opportunities would benefit the study participants.

Implications of the results for policy. Previous research found that teacher-education programs fail to provide novice teachers with a substantial amount of training that prepare them for instructing a classroom full of diverse learners such as ELs (Bunch, 2013; Russell, 2015; Short, 2013;). Data results indicated none of the participants had previous training in the SIOP approach. Without the proper training, guidance and support from administration, teacher leaders and each other, it would be inappropriate to expect mainstream teachers to effectively reflect over their frames of reference to reexamine instructional habits and decision-making associated with ELs. In addition, without the proper and ongoing training and support, it would be inappropriate to expect teachers to implement the SIOP framework to a high degree of fidelity. Even with knowledge of critical reflection and SIOP, a teacher’s decision not to integrate these frameworks could be a result of deficits in professional training or development, lack of experience, lack of knowledge in academic English, or a lack to willingly design a well-prepared lesson that meets the dual learning needs of ELs. State and federal policies must support the preparation of pre-service teachers and the professional growth of in-service teachers through teacher education programs and professional development based in language-learning theories and practice designed to address the learning needs of culturally and linguistically diverse students (Hakuta, Santos, & Fang, 2013).

Implications drawn from the data results regarding participants’ frame of reference demonstrate that mainstream teachers in the district need additional support and guidance pertaining to EL instruction from the school-level first, followed by support of the school district. Based on evidence from the study’s results, participants responded differently to interview
question four: “Describe what supports need to be in place for mainstream teachers to effectively instruct ELs,” the recommendation is to have teacher aides, peer-tutors, supplementary materials, professional developments, and ESL teachers as resources to support EL instruction in the mainstream classroom. Even with CCSS (2010) at the forefront of educational reform, the inconsistency of current state and federal language-learning policies and the disparity in the quality of instruction between educational settings pose challenges for both mainstream teachers and their ELs (Bunch, 2013; Suarez-Orozco & Suarez-Orozco, 2015-2016). For example, standardized assessments place prominence on CCSS and are highly dependent on use of the English language. Standardized math assessments require students to perform math computations and respond to written word problems. These standardized assessments require a level a cultural and linguistic knowledge that state and federal policies fail to recognize. P8 also mentioned the biggest challenge facing EL instruction in the mainstream classroom is that the “curriculum is predetermined by the district, and so we do not have the option to select text that are culturally sensitive. We also don’t have the option to select text that are at an appropriate reading level for our students.” Therefore, these implications require school districts to take a course of action as an intervention to support teaching the CCSS and language development for EL students (Hakutos, Santos, & Fang, 2013; Ross & Ziemke, 2016; Suarez-Orozco & Suarez-Orozco, 2015-2016). Professional development could be used as intervention strategy to train in-service mainstream teachers’ of ELs in the practice of critical reflection and SIOP on the school and district-level.

Participant data also indicated teachers would benefit from instructional guidance from the ESL teacher. Russell (2015) pointed out that ESL teachers are often a neglected resource for mainstream teachers’ learning. Russell (2015) suggested that ESL teachers can substantially
contribute to teachers’ knowledge of best practices for ELs if they were recognized as collaborative partners instead of teachers who are solely responsible for “fixing” second-language learners (p. 31). This study’s findings suggested mainstream teachers would benefit from school-level professional learning communities. Mainstream teachers and ESL teachers could collaborate voluntarily or by professional duty according to the content-area taught or common planning periods to address the challenges facing EL instruction in the mainstream classroom (Pawan & Craig, 2011). Mentor partnerships could also be encouraged among mainstream teachers and ESL teachers.

Implications of the results for theory. Based on data from the case study, implications suggest that mainstream teachers share common frames of reference associated with instructing ELs. Implications also suggest teachers can transform their instructional habits associated with EL instruction in the mainstream classroom to encourage and promote their professional growth with training, guidance and support from administration, teacher leaders, and each other. Research supports professional development that provides opportunities for advanced levels of learning on a consistent and supportive basis in second-language learning theories and best practices for diverse learners (Santi, 2015; Short, 2013; Zhao, 2012). Using professional development as an opportunity to engage in professional rational discourse, teachers may be more capable of examining the ways in which their frames of reference shape their decision-making regarding instructional habits in the mainstream classroom environment.

There is limited research on the effectiveness of SIOP implementation in secondary-school settings (Song, 2016). The use of sheltered instruction techniques varies inconsistently from school to school, content area to content area, and classroom to classroom (Echevarria & Short, 2014). However, Echevarria and Short (2014) contended that research proved most
schools are not meeting the challenge of providing ELs with a quality education, and research on the SIOP framework has proven validity and reliability in being a system that incorporates best teaching practices for teaching content and academic English to ELs at the elementary and secondary grade levels. Although the study results indicated that mainstream teachers held no previous knowledge of the SIOP framework and misconceptions about the practice of critical reflection, the study results also indicated that these teachers recognize their obligation as mainstream teachers to teach content and language to ELs and want these students to succeed. Participants’ final frames of reference were captured and described using the critically reflective themes listed in Table 6 (see Appendix K).

**Recommendations for Further Research**

The results of this case study showed that mainstream teachers began to apply their knowledge of SIOP strategies after engaging in two SIOP interventions and critical reflection when delivering their lessons to mainstreamed ELs. Based on the results of the study with its limitations, and the analysis of the research questions, potential areas for further research are based on three recommendations: (1) professional development for in-service teachers, district and school leaders using a unified SIOP model (2) professional development programs and school-level meetings designed to enhance professional collaboration between content area teachers and ESL teachers, and (3) mixed-methods methodology be used to replicate the study’s methodology with more participating mainstream teachers, more time and opportunities for one-on-one SIOP coaching sessions using critical reflection. Future research could contribute to the literature regarding the subject of enhancing mainstream teachers’ professional growth through the use of critical reflection and sheltered instruction observation protocol.
The analysis of the data demonstrated that secondary mainstream teachers of ELs located in a public and urban school setting did not have previous training or knowledge of the sheltered instruction observation protocol. One recommendation for further study would be a case study that involves content area in-service teachers, school and district leaders in ongoing SIOP professional-development trainings. The professional development should increase unity and fidelity in the use of SIOP-based strategies in the mainstream classroom to build a structured classroom learning experience for ELs. High-quality professional development builds teacher performance, and effective teacher performance improves student performance (Short, 2013). Evidence from the study’s findings suggest professional development should also focus on mainstream teachers most prevalent areas of observable instructional weaknesses in relation to the SIOP framework and teacher-led actions. The post-intervention observation data from the study suggests professional development specifically based in equipping mainstream teachers with an expansive knowledge base for activities and materials that can be used to present content concepts and language skills to ELs in a manner makes content comprehensible and differentiates instruction for English learners is needed on the secondary education level.

Based on analysis of the data gathered in the study, participants indicated several forms of additional support to assist mainstream teachers in effectively instructing ELs. A second recommendation for further study would be conducting research with mainstream teachers and ESL teachers from a single school district or research site, examining their frames of reference in depth. A comparison of mainstream teachers’ and ESL teachers’ frames of reference could be beneficial to compare characteristics of effective and ineffective instructional habits, challenges and successes. Professional-development programs or trainings could then establish long-term collaborative efforts between the two teachers, which can be beneficial to both mainstream
teachers and ESL teachers by engaging in ongoing professional rational discourse to promote professional growth and critical examination of their own teaching practices. The SIOP framework can act as a guide to instructional areas that support and encourage collaboration between mainstream teachers and ESL teachers (Pawan & Craig, 2011).

A third recommendation for further research would be a mixed-methods study be used to replicate the study’s methodology with more participating mainstream teachers, more time and opportunities for one-on-one SIOP coaching sessions. By conducting a study based in mixed-methods research, the research may find more concrete data to support the rich, thick description the case study provides to document its findings. Although the study employed a validated instrument to measure participants’ implementation of sheltered instruction, it is possible that a mixed-methods study may produce numeric results that are more reliable and able to be discussed in more detail. Over time, the participants in the study may produce more evidence with the integration of quantitative and qualitative measures to examine the research problem.

Overall, data results from the study revealed a need for further study to assess the long-term influence of critical reflection and SIOP implementation on mainstream teachers’ frames of reference and instructional habits. If replicated in a larger context over a longer period of time, the outcomes may remain the same or change, according to teachers’ background knowledge, teaching experience, or content area. Because the existing empirical literature on combining Mezirow’s (1991) concept of critical reflection and Echevarria, Vogt, and Short’s (2004) SIOP framework to promote mainstream teachers’ professional growth through the examination the frames of reference is limited, it would be valuable to see whether the study’s findings are replicable in other school districts. The goals of the case study are to contribute to the overall
body of knowledge in the field of education and that all teachers and educational stakeholders will benefit from the recommendations offered by the study.

**Unexpected Findings**

During the data collection process, this researcher’s expected findings were confirmed. Critical reflection and the implementation of SIOP influenced participants’ professional growth by expanding their professional knowledge of instructional practices to use in the mainstream classroom with ELs. Furthermore, evidence from the data also revealed an unexpected finding. This researcher observed that those participants who implemented SIOP-based strategies on a high level prior to the SIOP intervention workshops instructed students in a mathematical course. Specifically, two Algebra teachers and one Geometry teacher, were observed by the researcher during the pre-intervention observation as implementing instructional features of SIOP component 6 (Practice and Application) at a greater degree when compared to the participants from other content areas. These participants used hands-on manipulatives such as calculators and digital interactive boards to encourage student participation and appeal to the varied learning styles of the students. According to Echevarria, Vogt, & Short, (2004), manipulatives help students learn by building links to the content and promoting high-quality instruction.

**Conclusion**

Recent educational reforms have outlined the need for mainstream secondary content-area teachers to develop ELs’ grade-level content knowledge and academic English in order to successfully meet the demands of ESSA and CCSS (Hakuta et. al, 2013; Ross & Ziemke, 2016). By doing this, teachers can contribute to lessening the opportunity gap and achievement gap that exists between ELs and their NES counterparts (Darling & Hammond, 2010; Mortari, 2012; Ross & Ziemke, 2016). This study addressed examining mainstream teachers’ frames of
reference to understand if and how critical reflection and SIOP influenced teacher practices to encourage professional growth through a transformative learning experience.

Although the data revealed several challenges in instructing ELs in the mainstream, the major challenge indicated was a breakdown in communication between teachers and ELs. To ensure mainstream teachers support the development of ELs’ content knowledge and language skills, the SIOP framework requires language and content objectives be integrated in the curriculum of each content area. These objectives must be used to present grade-level content and develop ELs’ academic English proficiency consistently and regularly as part of mainstream teachers’ instructional habits, and lesson planning and delivery (Echevarria & Short, 2014). When mainstream teachers weave both content and language into their daily lesson delivery, careful attention is given to meeting the dual learning needs of ELs.

Participants indicated no previous knowledge of or training in sheltered instruction observation protocol and an inconsistent understanding of using critical reflection to guide instructional practices. The participants’ lack of training in SIOP was supported by previous research. Although state and federal policies hold schools accountable for ELs’ academic achievement, a lack of training for pre-service and mainstream classroom teachers is a prominent issue in today’s educational climate hindering teachers’ professional growth and knowledge (Fregeau & Leier, 2015). Teachers must be made aware of best practices for instructing ELs in the mainstream classroom and supported using professional development. Mezirow (1991) stated that participatory learning through discourse is reflective and interactive and essential to evoking transformative learning. To ensure the instructional practices of mainstream teachers are effective, collaborative working environments must be fostered among the mainstream teachers and between mainstream teachers and ESL teachers.
An analysis of the interview data determined mainstream teachers held a misconception of the meaning and practice of critical reflection. Mezirow (1991) stated that critical reflection is the highest form of reflection because it requires adult learners to question, reexamine or assess their frames of reference to evoke a subsequent change with action. All learning cause change; however, all change does not cause transformation (Mezirow, 1991). Therefore, final data analysis of the interview data indicate participants experienced transformative learning through the implementation of critical reflection and SIOP. Efforts to improve mainstream teachers understanding of critical reflection and its benefits to teacher pedagogy should be included in future research.

Critical reflection can act as a vector for change for mainstream teachers’ thinking and actions associated with EL instruction in the mainstream classroom. Critical reflection and SIOP can contribute to mainstream teachers’ capacity to meet the learning needs of ELs while leading to professional growth. To support the educational demands of ESSA and dual learning needs of ELs, mainstream teachers must implement innovative instructional habits. Professional development programs for both pre-service and in-service teachers can help mainstream teachers cultivate their full potential as educators using critical reflection and SIOP. Furthermore, this study may help guide mainstream teachers and multiple stakeholders in expanding the current understanding of critical reflection, and it may also guide other investigations about how critical reflection and SIOP can lead to deeper levels of critical self-reflection of teaching practices.
References


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Appendix A: Consent Form

Research Study Title: Critical Reflection and Mainstream Teachers’ Implementation of Sheltered Instruction Observation Protocol
Principal Investigator: Teneisha McNeil
Research Institution: Concordia University–Portland

Faculty Advisor: Dr. Barbara Weschke

Purpose and what you will be doing:
The purpose of this study is to examine the experiences of secondary teachers of English Language Learners (ELLs) using critical reflection and Sheltered Instruction Observation Protocol (SIOP) as tools for transformative learning. Teachers will be selected upon the principal’s recommendation and approval. We will begin enrollment on March 19th, 2018 and end enrollment on March 23rd, 2018. Teachers of ELLs will be offered instructional support and strategies for enhancing pedagogy to meet the language and content needs of these students.

To be in the study, you will be asked to:
• Read and sign a consent form for participation in the research study
• Return the consent form in the attached self-addressed stamp envelope
• Complete a demographic questionnaire that discloses information such as name, age, gender, years of teaching experience, subject and grade level currently being taught
• Participate in two recorded interviews of approximately 35 minutes each, two workshops of approximately 35 minutes each, two observations of approximately 30 minutes each, and one possible follow-up meeting of approximately 15-20 minutes
• Participate in “member-checking” to review interview-transcripts, interpretations, and conclusions about the research study

Risks:
There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you or the school. Any name or identifying information you give will be kept securely via electronic encryption and locked inside a file cabinet. The research study will use a computer that is passcode protected and utilizes a secure server. Interviews will be transcribed, and any personal identifiers will be omitted from the transcripts. Pseudonyms will be used to replace participants’ names. When we or any of our investigators look at the data, none of the data will have your name or identifying information. You will not be in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed 3 years after we conclude this study.

Benefits:
Information you provide has the potential to contribute to the body of knowledge on how educational practices transform teachers’ instructional habits. You could benefit from this by
understanding how critical reflection and SIOP can support teacher development and professional growth in a classroom setting designed to meet the educational needs of ELLs.

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety.

Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Teneisha McNeil at email redacted. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_______________________________                   ___________
Participant Name                       Date

_______________________________                   ___________
Participant Signature                   Date

_______________________________                   ___________
Investigator Name                       Date

_______________________________                   ___________
Investigator Signature                   Date

Investigator: Teneisha McNeil; email: [email redacted]
c/o: Professor Dr. Barbara Weschke; email: bweschke@cu-portland.edu
Concordia University– Portland
2811 NE Holman Street
Portland, Oregon 97221
Appendix B: Confidentiality Agreement

Transcriptionist

I, ______________________________ transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentations received from (researcher’s name) related to his/her research study on the researcher study titled (name of research study). Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents.

2. To not make copies of any audiotapes or computerized titles of the transcribed interviews texts, unless specifically requested to do so by the researcher, (name of researcher).

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession.

4. To return all audiotapes and study-related materials to (researcher’s name) in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber’s name (printed) ____________________________________________________________

Transcriber’s signature ________________________________________________________________

Date ____________________________________________________________

Researcher’s name (printed) ________________________________

Researcher's signature ________________________________________________

Date ____________________________________________________________
Appendix C: SIOP Self-Assessment

Using the features below, mark the box that most closely represents your current teaching practices:

D = Daily  O = Occasionally  N = Never

<table>
<thead>
<tr>
<th>Lesson Preparation</th>
<th>D</th>
<th>O</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Content objectives</strong> clearly defined, displayed, and reviewed with students</td>
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<td></td>
<td></td>
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<tr>
<td>2. <strong>Language objectives</strong> clearly defined, displayed, and reviewed with students</td>
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<tr>
<td>3. <strong>Content concepts</strong> appropriate for age and educational background level of students</td>
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<tr>
<td>4. <strong>Supplementary materials</strong> used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)</td>
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<tr>
<td>5. <strong>Adaptation of content</strong> (e.g., text, assignment) to all levels of student proficiency</td>
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<tr>
<td>6. <strong>Meaningful activities</strong> that integrate lesson concepts (e.g., interviews, letter writing, simulations, models) with language practice opportunities for reading, writing, listening, and/or speaking</td>
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<tr>
<td><strong>Building Background</strong></td>
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<tr>
<td>7. <strong>Concepts explicitly linked</strong> to students’ background experiences</td>
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<td>8. <strong>Links explicitly made</strong> between past learning and new concepts</td>
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<td>9. <strong>Key vocabulary emphasized</strong> (e.g., introduced, written, repeated, and highlighted for students to see)</td>
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<tr>
<td><strong>Comprehensible Input</strong></td>
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<tr>
<td>10. <strong>Speech</strong> appropriate for students’ proficiency levels (e.g., slower rate, enunciation, and simple sentences for beginners)</td>
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<tr>
<td>11. <strong>Clear explanation</strong> of academic tasks</td>
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<tr>
<td>12. <strong>A variety of techniques</strong> used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)</td>
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<tr>
<td><strong>Strategies</strong></td>
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<tr>
<td>13. Ample opportunities provided for students to use <strong>learning strategies</strong></td>
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<tr>
<td>14. <strong>Scaffolding techniques</strong> consistently used, assisting and supporting student understanding (e.g., think alouds)</td>
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<tr>
<td>15. A variety of <strong>questions or tasks that promote higher-order thinking skills</strong> (e.g., literal, analytical, and interpretive questions)</td>
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<tr>
<td><strong>Interaction</strong></td>
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<tr>
<td>16. Frequent opportunities for <strong>interaction</strong> and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts</td>
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<tr>
<td>17. <strong>Grouping configurations</strong> support language and content objectives of the lesson</td>
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<tr>
<td>18. <strong>Sufficient wait time for student responses</strong> consistently provided</td>
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<tr>
<td>19. Ample opportunities for students to <strong>clarify key concepts in L1 (1st language)</strong> as needed with aide, peer, or L1 text</td>
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<tr>
<td>Practice and Application</td>
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<tr>
<td>20. <strong>Hands-on materials and/or manipulatives</strong> provided for students to practice using new</td>
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<tr>
<td>content knowledge</td>
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<tr>
<td>21. Activities provided for students to <strong>apply content and language knowledge</strong> in the</td>
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<td>classroom</td>
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<td>22. Activities integrate all <strong>language skills</strong> (i.e., reading, writing, listening, and</td>
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<tr>
<td>speaking)</td>
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<tr>
<td>Lesson Delivery</td>
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<tr>
<td>23. <strong>Content objectives</strong> clearly supported by lesson delivery</td>
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<tr>
<td>24. <strong>Language objectives</strong> clearly supported by lesson delivery</td>
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<tr>
<td>25. <strong>Students engaged</strong> approximately 90% to 100% of the period</td>
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<tr>
<td>26. <strong>Pacing</strong> of the lesson appropriate to students’ ability levels</td>
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<tr>
<td>Review and Assessment</td>
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<tr>
<td>27. Comprehensive <strong>review of key vocabulary</strong></td>
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<tr>
<td>28. Comprehensive <strong>review of key content concepts</strong></td>
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<tr>
<td>29. Regular <strong>feedback</strong> provided to students on their output (e.g., language, content,</td>
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<tr>
<td>work)</td>
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<tr>
<td>30. <strong>Assessment of student comprehension and learning</strong> of all lesson objectives 9e.g.,</td>
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<td>spot-checking, group response) throughout the lesson</td>
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</table>

D = Daily       O = Occasionally       N = Never
Appendix D: SIOP Observational Instrument  
(Adapted from Echevarria, Vogt, & Short, 2004)

Observer(s):______________  
Date:___________________  
Grade:__________________  
Teacher:________________________  
School:________________________  
Class/Topic:________________________  
Lesson: Multi-day Single-day (circle one)

<table>
<thead>
<tr>
<th>I. Lesson Preparation</th>
<th>I Noticed...I Heard...I Saw...I Observed...(Field Notes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clearly defined <strong>content objectives</strong> for students</td>
<td></td>
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<tr>
<td>2. clearly defined <strong>language objectives</strong> for students</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Content concepts</strong> appropriate for age and educational background level of students</td>
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<tr>
<td>4. <strong>Supplementary materials</strong> used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)</td>
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<tr>
<td>5. <strong>Adaptation of content</strong> (e.g., text, assignment) to all levels of student proficiency</td>
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<tr>
<td>6. <strong>Meaningful activities</strong> that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking <strong>Comments:</strong></td>
<td></td>
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<tr>
<td>II. Building Background</td>
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<tr>
<td>7. <strong>Concepts explicitly linked</strong> to students’ background experiences</td>
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<tr>
<td><strong>III. Comprehensible Input</strong></td>
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<tr>
<td>10. <strong>Speech</strong> appropriate for students’ proficiency level (e.g., slower rate and enunciation, and simple sentence structure for beginners)</td>
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<tr>
<td>11. <strong>Explanation of academic tasks</strong> clear</td>
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<tr>
<td>12. Uses a variety of <strong>techniques</strong> to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)</td>
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</tbody>
</table>

**Comments:**
### IV. Strategies

13. Provides ample opportunities for students to use **strategies**

14. Consistent use of **scaffolding** techniques throughout lesson, assisting and supporting student understanding, such as think-alouds

15. Teacher uses a variety of **question types, including those that promote higher-order thinking skill** throughout the lesson (e.g., literal, analytical, and interpretive questions) *Comments:*

### V. Interaction

16. Frequent opportunities for **interaction** and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts

17. **Grouping configurations** support language and content objectives of the lesson

18. Consistently provides sufficient **wait time for student response**

19. Ample opportunities for students to **clarify key concepts in L1** *Comments:*

### VI. Practice/Application

20. Provides **hands-on** materials and/or manipulatives for students to practice using new content knowledge.
<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>VII. Lesson Delivery</strong></td>
<td></td>
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<tr>
<td>23. <strong>Content objectives</strong> clearly supported by lesson delivery</td>
<td></td>
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<tr>
<td>24. <strong>Language objectives</strong> clearly supported by lesson delivery</td>
<td></td>
</tr>
<tr>
<td>25. <strong>Students engaged</strong> approximately 90% to 100% of the period</td>
<td></td>
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<tr>
<td>26. <strong>Pacing</strong> of the lesson appropriate to the students’ ability level</td>
<td>Comments:</td>
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<tr>
<td><strong>VIII. Review/Assessment</strong></td>
<td></td>
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<tr>
<td>27. Comprehensive <strong>review of key vocabulary</strong></td>
<td></td>
</tr>
<tr>
<td>28. Comprehensive <strong>review of key content concepts</strong></td>
<td></td>
</tr>
<tr>
<td>29. Regularly provides <strong>feedback</strong> to students on their output (e.g., language, content, work)</td>
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</tr>
<tr>
<td>30. Conducts <strong>assessment</strong> of student comprehension and learning of all lesson objective (e.g., spot checking, group response) throughout the lesson</td>
<td>Comments</td>
</tr>
</tbody>
</table>
Appendix E: Interview Protocol

Demographic Data for Interviews:

- Name of Participant
- Gender
- Race/Ethnicity
- Number of Years Teaching
- Grade Level/Subject Currently Teaching

Interview Protocol and Guiding Interview Questions:

Interview Protocol

Name of Interviewer:

Name of Pseudonym of Interviewee:

Time and Length of Interview:

Date and Location of Interview:

Pre-Intervention Interview Questions

Research Question 1: What are the perspectives of mainstream teachers serving English-language learners (ELs) in regard to language learning, instructional practices, lesson planning and delivery?

- Explain the biggest challenge you face with instructing ELs in the mainstream classroom?
- Tell me about your greatest success with ELs in your classroom? Describe some of the instructional habits you used that attributed to that success, e.g., did you use supplemental
materials or scaffolding techniques, build background knowledge, emphasize key vocabulary, and/or integrate all language skills (reading, writing, listening and speaking)?

- Tell me about the biggest dilemma or problem you have faced with ELs in your classroom? Describe what perceptions, events or actions may have attributed to that obstacle? What were your feelings during and after this dilemma or problem?

- Describe what supports need to be in place for mainstream teachers to effectively instruct ELs? Why do you perceive these supports to be effective?

- Describe your experiences with other mainstream teachers as they pertain to instructing ELs. How do you share common successes or dilemmas with instructing ELs? How do you and your colleagues exchange ideas to promote success or resolve dilemmas associated with instructing ELs in the mainstream classroom?

**Research Question 2: How does the use of critical reflection and implementation of SIOP (Sheltered Instruction Observation Protocol) influence teachers’ efficacy of instructional delivery strategies for ELs?**

- Sheltered instruction is a classroom approach for ELs that extends instructional time for English language support while learning content objectives. SIOP is an instrument used to measure teachers’ implementation of sheltered instruction. The eight components of SIOP are lesson preparation, building background, comprehensible input, student strategies, interaction, practice and application, lesson delivery, and review and assessment. In what ways, if any, do you use sheltered instruction in the mainstream classroom?

- How would you describe the level of training you have received in SIOP?
post-intervention interview questions

research question 3: how do mainstream teachers construct meaning and encourage their professional growth through their use of critical reflection and siop? now i am going to ask you about how practicing critical reflection and siop transformed your teaching.

• how do you think critical reflection and siop have transformed your instructional habits to enhance els learning?
• What will you do differently when implementing instructional habits and designing lessons to meet the academic and language needs of ELs in the future? Explain your intended academic goals or course of action for instructing ELs now with knowledge of critical reflection and SIOP. Describe how you will achieve these goals.

• How has your frame of reference for instructing ELs changed since participating in this research study? Have you transformed any perceptions you previously held about instructing ELs? If so, tell me what were those previous notions in particular, and how have those notions been invalid with the new knowledge you have acquired?

• Tell me what has this study revealed about you as a teacher and your instructional habits pertaining to ELs? How do you think critical reflection and SIOP have expanded your professional knowledge of pedagogical strategies to implement into the mainstream classroom to support ELs’ academic and language needs?
Appendix F: Demographic Data

Table 1

Demographic Data for Participants

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5 of 9</td>
</tr>
<tr>
<td>Female</td>
<td>4 of 9</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>5 of 9</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3 of 9</td>
</tr>
<tr>
<td>Asian</td>
<td>1 of 9</td>
</tr>
<tr>
<td><strong>Teaching Experience</strong></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>4 of 9</td>
</tr>
<tr>
<td>6-10 years</td>
<td>1 of 9</td>
</tr>
<tr>
<td>10+ years</td>
<td>4 of 9</td>
</tr>
<tr>
<td><strong>Content Area</strong></td>
<td></td>
</tr>
<tr>
<td>Algebra I</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Algebra II</td>
<td>2 of 9</td>
</tr>
<tr>
<td>English IV</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Geometry</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Physical Science</td>
<td>1 of 9</td>
</tr>
<tr>
<td>U.S. history</td>
<td>2 of 9</td>
</tr>
<tr>
<td><strong>Number of ELs taught</strong></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>3 of 9</td>
</tr>
<tr>
<td>6-10</td>
<td>3 of 9</td>
</tr>
<tr>
<td>11-20</td>
<td>2 of 9</td>
</tr>
<tr>
<td>20+</td>
<td>1 of 9</td>
</tr>
</tbody>
</table>

Note. This table illustrates the demographic breakdown of the number of participants by gender, race, years of teaching experience, content area, and number of ELs in the classroom.
Appendix G: Disorienting Dilemma Interview Responses

Table 2

Participants’ Disorienting Dilemmas

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>SIOP Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1, 3, 7</td>
</tr>
<tr>
<td>P2</td>
<td>3, 6</td>
</tr>
<tr>
<td>P3</td>
<td>3, 7</td>
</tr>
<tr>
<td>P4</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>P5</td>
<td>1, 6</td>
</tr>
<tr>
<td>P6</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>P7</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>P8</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>P9</td>
<td>1, 3</td>
</tr>
</tbody>
</table>

Note. This table illustrates participants’ interview responses regarding the disorienting dilemma, or challenge(s) hindering effective instruction of ELs in their mainstream classroom. The participants’ responses were coded using the numbers 1–8 that corresponded with each SIOP component.
## Appendix H: Pre-Intervention Interview Responses

Table 3

*Categories of Participants’ Responses to Pre-Intervention Interview Questions*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absenteeism</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Communication</td>
<td>7 of 9</td>
</tr>
<tr>
<td>Little background knowledge</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Lack of instructional time</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Pairing</td>
<td>7 of 9</td>
</tr>
<tr>
<td>Comprehensible Input</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Additional support</td>
<td>6 of 9</td>
</tr>
<tr>
<td>ESL teacher</td>
<td>3 of 9</td>
</tr>
<tr>
<td>No/little rational discourse with others</td>
<td>8 of 9</td>
</tr>
<tr>
<td>Some rational discourse with others</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Focus on special education</td>
<td>2 of 9</td>
</tr>
<tr>
<td>No training in SIOP</td>
<td>9 of 9</td>
</tr>
<tr>
<td>Using similar strategies</td>
<td>8 of 9</td>
</tr>
<tr>
<td>Familiar with strategies</td>
<td>5 of 9</td>
</tr>
<tr>
<td>No EL feedback</td>
<td>7 of 9</td>
</tr>
<tr>
<td>Occasional EL feedback</td>
<td>2 of 9</td>
</tr>
<tr>
<td>ELs are reluctant to share feedback</td>
<td>4 of 9</td>
</tr>
<tr>
<td>Practice critical reflection</td>
<td>9 of 9</td>
</tr>
</tbody>
</table>
| Critical reflection refines teaching methods      | 9 of 9       | *(continued)*
<table>
<thead>
<tr>
<th>Categories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied technical reflection</td>
<td>3 of 9</td>
</tr>
<tr>
<td>Applied practical reflection</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Applied critical reflection</td>
<td>6 of 9</td>
</tr>
</tbody>
</table>

*Note.* This table lists categories regarding participants’ responses about their frames of reference as of mainstream teachers serving ELs. The categories were analyzed and synthesized for similarity and regularity among participants’ responses during the pre-observation interview.
Appendix I: Post-Intervention Interview Responses 11-12

Table 4

Categories of Participants’ Responses to Post-Intervention Interview Questions

<table>
<thead>
<tr>
<th>Categories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language objectives</td>
<td>8 of 9</td>
</tr>
<tr>
<td>Practice and Application</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Strategies</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Student engagement</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Clear objectives</td>
<td>6 of 9</td>
</tr>
<tr>
<td>Activities/ manipulatives</td>
<td>3 of 9</td>
</tr>
<tr>
<td>Grouping Configurations</td>
<td>2 of 9</td>
</tr>
</tbody>
</table>

Note. This table illustrates participants’ interview responses regarding the use of critical reflection and SIOP to influence efficacy of EL instruction in the mainstream classroom. It shows which SIOP components and instructional features participants’ identified as most influential to transform their frames of reference for EL instruction.
Appendix J: Post-Intervention Interview Responses 13-14

Table 5

*Categories of Participants’ Responses to Post-Intervention Interview Questions*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher expectations</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Teaching ELs is not hard</td>
<td>1 of 9</td>
</tr>
<tr>
<td>Improves overall teaching</td>
<td>2 of 9</td>
</tr>
<tr>
<td>Reinforces best practices</td>
<td>4 of 9</td>
</tr>
</tbody>
</table>

Note. This table illustrates participants’ responses regarding how mainstream teachers construct meaning and encourage their professional growth through the use of critical reflection and SIOP.
### Appendix K: Critical Reflection Themes

Table 6

*Categories of Participants’ Final Themes for Professional Growth*

<table>
<thead>
<tr>
<th>Critical Reflection Theme</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively enjoys learning new teaching skills</td>
<td>4 of 9</td>
</tr>
<tr>
<td>Open to changing one’s instruction</td>
<td>6 of 9</td>
</tr>
<tr>
<td>Recognizes an area for professional growth</td>
<td>3 of 9</td>
</tr>
<tr>
<td>Reinforcement of current effective strategies</td>
<td>4 of 9</td>
</tr>
<tr>
<td>Seeks new solutions to dilemma</td>
<td>8 of 9</td>
</tr>
<tr>
<td>Willing to examine frames of reference</td>
<td>6 of 9</td>
</tr>
</tbody>
</table>

Note. This table illustrates shows themes that classify how participants constructed meaning and encouraged their professional growth from implementation of critical reflection and SIOP. These themes were created using the final stages of the process for critical reflection.
Appendix L: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

**Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

**Explanations:**

**What does “fraudulent” mean?**

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

**What is “unauthorized” assistance?**

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.
Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University- Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the Publication Manual of The American Psychological Association.

Teneisha Trenese McNeil

Digital Signature

Teneisha Trenese McNeil

Name

10-5-2018

Date