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Is Co-Teaching An Effective Model In Kindergarten Writing Block?

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IS CO-TEACHING AN EFFECTIVE MODEL
IN KINDERGARTEN WRITING BLOCK?

by

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A capstone submitted in partial fulfillment of the
Requirements for the degree of Master of English as a Second Language

Hamline University

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CHAPTER ONE: Introduction

Finding a model to best educate English Learners (ELs) is a dilemma for all EL and mainstream teachers in our schools and EL department heads in school districts. The numbers of ELs in our districts have increased and EL teachers are stretched to meet the needs of ELs. According to the National Clearinghouse for English Language Acquisition (NCELA), ELs made up over 9% of our national student population in 2015 (NCELA, 2017). The EL population has increased 63% since 1994, while the non-EL population has increased 4% (NCELA, 2011). With the large increase in EL population in our schools, the efficacy of pull-out programs has come into question, as well as the ethics of separating students based on their differences (Hourcade & Bauwens, 2001). Assuming this growth trend continues, our schools will have increasing numbers of ELs and we will want to educate them in a manner where they can most efficiently increase their language skills while also mastering grade level curriculum.

Over the last 20 years, it has become common practice to use a form of the co-teaching model with an EL teacher and a content teacher (Davidson, 2006). In some districts, the co-teaching model has replaced the pull-out model where ELs were taught in small groups apart from their mainstream peers because it is thought to be more collaborative (Bell & Baecher, 2012).
In the pull-out model, ELs are instructed in a separate classroom for certain periods of the day to learn the English language and, as a result, miss parts of their general education content (Janzen, 2008). This can put ELs behind as their peers continue to move further along in content areas (Collier & Thomas, 2004).

Research has highlighted concerns with the pull-out model. Gándara, Rumberger, Maxwell-Jolly and Callahan (2003) found that segregating ELs out of the mainstream classroom contributed to unequal educational opportunities. The pull-out model also limited opportunities for ELs to be exposed to good models of English through listening to their peers (Honisfeld & Dove, 2008). The pull-out model often used less challenging curriculum which left ELs less prepared for high school graduation and college (Honigsfeld & Dove, 2008). Because of these disadvantages, EL teachers began using the co-teaching model so students could remain in the classroom where grade level content was being taught.

I became interested in the co-teaching model six years ago when I began co-teaching with mainstream elementary teachers. Last year I had the opportunity to co-teach more formally with one colleague. My co-teacher and I developed trust and a stronger teaching relationship throughout the year that helped us share responsibility in the classroom and helped us be seen as equals in the eyes of the students. We both appreciated having another expert in the classroom that we could turn to for ideas and support and from whom we could learn.

I was in this mainstream classroom two days a week for reading and math. We had the opportunity to create more in-depth lesson plans, deciding which method of co-teaching fit best for lessons. If we were presenting a new skill, we would use one
method of co-teaching. Or if teaching smaller groups would be beneficial, we would use a different method of co-teaching. I was able to develop language objectives to use in the lessons with all students and focus on these as I delivered the lessons. Overall, it was a very positive co-teaching relationship for us as educators. The problem was I did not have any evidence that this co-teaching model was improving the students’ language development or their understanding of the content.

Recently, I also began co-teaching the daily writing lessons exclusively with this same co-teaching partner. The downside of this was I was not able to be in the other three classrooms that I serviced during writing time because all kindergarten classes have writing blocks at the same time. Because of the time lost with the other classrooms, I wanted to determine if the co-teaching model was effective and the best use of my time for maximum student language growth and achievement.

**Guiding Questions**

In a co-taught classroom, ELs are in the mainstream classroom learning grade level content all day alongside their English-speaking peers. Because there are more students in the mainstream classroom and instruction is targeted toward all students, I wondered if ELs still get the attention and the focused language instruction they need. Because co-teaching is a push-in method and students receive content instruction in the classroom, time for targeted language instruction is less available and flexible. This made me wonder if co-teaching in a general education classroom with a mainstream teacher and an EL teacher is the best use of instructional time for an EL teacher. Does it produce the greatest amount of language and content growth for ELs?
These guiding questions led me to my research question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher?

I answered this question by conducting a study of the writing block in a kindergarten classroom that incorporated the instructional model of co-teaching with a mainstream teacher and an EL teacher. I compared data from this co-taught classroom to a control classroom where students received writing instruction solely from their general education teacher. This non-co-taught classroom also had daily writing support from an educational assistant and weekly conferencing and language lessons with the EL teacher. The difference between the two classrooms was that students in one received co-taught instruction and in the other, students did not. This comparison could potentially help educators at my site determine which model, co-teaching or pull-out, is the most beneficial for their students’ learning.

Summary

In this chapter I showed how this research is important for me because, as my caseload of ELs grows, I want to be certain that I am educating my ELs in the most effective manner. Does co-teaching produce the greatest amount of language and content growth for EL students? With a co-teaching model, do ELs still get the attention and the focused language instruction they need?

Chapter Overviews

In Chapter One, I looked at the purpose of my research. In Chapter Two, I will look at what research says about co-teaching methods and the addition of language
objectives into a writing lesson. Chapter Three describes the methods and procedures used for this research and Chapter Four analyzes the data that was gathered. Chapter Five discusses the findings and implications of the research.
CHAPTER TWO: Literature Review

The purpose of this study is to collect quantitative data on the effectiveness of the co-teaching model in an elementary setting to answer the question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher?

This chapter looks at what literature is available on the various methods that can be used by teachers when implementing the co-teaching model, what studies have been done to assess the effectiveness of the co-teaching model, and what are teacher attitudes towards co-teaching. It also looks at sociocultural theory as it applies to co-teaching.

In addition, this chapter looks at studies that target a specific teaching practice that positively impacts EL language development. Since in a co-teaching partnership, one of the main jobs of the EL teacher is to focus on the language skills students need to access the mainstream curriculum, I review studies that have been done in the area of using targeted language objectives in the classroom. I conducted the study during writer’s block, and so I included is a discussion of the importance of writing instruction to developing language proficiency for ELs.

To conclude, I show the gap that exists in the current research and analyze how my study will fill the gap to answer the question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is
used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher?

**Methods of Co-teaching**

Originally developed for special education (SPED) and general education collaboration, co-teaching is now also used with EL instruction and general education. Cook and Friend (1995) described co-teaching as “two or more individuals delivering substantive instruction to a diverse, or blended group of students in a single space” (p. 2). According to Cook (2004, p. 5), co-teaching, like traditional teaching, has a single group of students, takes place in a single classroom, and has specific content and objectives. It differs from traditional teaching in that it has:

- two (or more) educators or other certified staff
- a contract to share instructional responsibility
- mutual ownership, pooled resources, and joint accountability
- varying levels of participation for each co-teacher

Since there are five methods of co-teaching, teachers can choose the method that fits best with the specific lesson and group of students they are teaching (Friend, Resing, & Cook, 1993). Teachers may choose one method to introduce a new skill or topic, another method if they are working on building background information through interactions with peers, or another method if the lesson requires one teacher to explain a concept orally or in written form while the other teacher provides visual descriptions. The five methods that Friend et al. (1993, pp. 5-9) proposed are:

- **Method A: One Lead Teacher and One Teacher “Teaching on Purpose” - One teacher takes the lead role and the other teacher focuses on a specific skill or**
concept with an individual or small groups of students. This is usually used when introducing a new skill or lesson. The teacher “teaching on purpose” can also review a skill or concept from a previous lesson while the other teacher presents new information.

- **Method B: Two Teachers Teach the Same Content (two groups)** - Students are split into heterogeneous groups and taught the same lesson by separate teachers. This method is also known as parallel teaching and is often used as a follow up to Method A as information can be reviewed and clarified and students have more opportunity to demonstrate understanding.

- **Method C: One Teacher Re-teaches and One Teacher Teaches Alternative Information** – Students are grouped flexibly according to their skills on a temporary basis. Groups change as topics and abilities change.

- **Method D: Two Teachers Monitor/Teach** – Teachers move among multiple groups as students work. They can be monitoring students, teaching mini lessons, or teaching small groups in learning centers or stations.

- **Method E: Two Teachers Teach the Same Content (one group)** - Both teachers are teaching the whole class together at the same time. One may teach the content outline while the other gives examples, strategies, or explanations. This method requires planning time and coordination between the co-teachers.

These different methods allow flexibility for co-teachers to assess the needs of their classroom and determine which plan best fits with the content and language objectives they are trying to teach and the individual needs of their students. After observing over 70 co-teaching pairs use the methods above, Vaughn, Schumm, and
Arguelles (1997) suggested using all five methods throughout a unit to maximize grouping options for learning.

**Effectiveness of the Co-teaching Model**

From a review of the literature, two primary discussions emerge that support the effectiveness of the co-teaching model: benefits for ELs from remaining in the general education classroom and benefits for the participating teachers. Studies have found that co-taught classrooms provide benefits for ELs as they work alongside their English-speaking peers and for the teachers participating in co-teaching. Teacher effectiveness and attitudes have also been shown to have a positive increase when using the co-teaching model.

**Benefits to Students in the Co-Teaching Model**

When ELs are able to interact and learn from English-speaking classmates as they acquire language, their learning benefits. Vygotsky (1978) believed that children could learn from each other through collaborative learning and discourse and thus he founded the sociocultural theory of development stating that we construct knowledge through social interaction. In co-teaching, ELs are in the classroom and this social interaction takes place. But in some EL teaching models such as pull-out, sheltered instruction, and newcomer programs, ELs are surrounded by other ELs who may not be proficient in English. With the co-teaching model, ELs are in the classroom throughout the day, which, according to the sociocultural theory of development, will help them construct knowledge as they interact with their English-speaking peers and classroom teacher. This allows for social interactions where ELs can gain valuable background information about content that is unfamiliar to them. They also have the opportunity to
learn vocabulary and grammatical forms from their proficient English-speaking peers (Honigsfeld & Dove, 2008).

York-Barr et al. (2007) showed that by connecting students’ academic, cultural, and social learning, their performance improved in math and reading. This study took place in a district that only used pull-out instruction for ELs. They found that when ELs were pulled out for instruction, they became separate and disjointed from their English-speaking peers and classroom teacher. The study wanted to incorporate the co-teaching model so EL and SPED students could experience a more cohesive and inclusive educational experience. When ELs were co-taught within the mainstream classroom this interconnectedness was formed as EL, SPED, and mainstream teachers worked together, students’ different cultures were represented, and instruction included the social and cultural lives of all students (York-Barr et al., 2007). York-Barr’s findings in this study supported Vygotsky’s sociocultural theory.

**Benefits to Teachers in the Co-teaching Model**

Co-teaching has been shown to have a positive impact on the teachers involved. Just as language learners construct knowledge by interacting with other students, co-teachers can learn from each other and develop new and creative ideas as they work together to solve problems, modify curriculum, and create lessons (Benoit, 2001; Honigsfeld & Dove, 2008; Nevin et al., 2004). Having the support of a co-teaching partner encouraged teachers to experiment with new strategies and techniques (Salend et al., 2002). SPED co-teachers also reported having a better idea of what went on in the mainstream classroom and the kind of expectations needed for SPED students to work at grade level (Vaughn et al., 1997). This shows the positive impact co-teaching has on
teachers as they become more aware from each other’s expertise of students’ abilities and learning targets and are better able to instruct the students as they coordinate learning objectives together.

Past studies (Norton, 2013; York-Barr et al., 2007) have tracked the attitudes teachers have about co-teaching. Some of their responses included having more energy and enjoying teaching more, feeling more valued by colleagues, increasing reflection on teaching practices, taking greater ownership of student learning, and demonstrating more flexible and creative use of instructional time. Teachers liked being able to observe other teachers and learn from them, getting to see students’ strengths in different environments, and they felt expectations were higher for all students (York-Barr et al., 2007). Co-teaching provided many benefits to general education teachers and EL and SPED teachers that positively impacted their teaching in ways that may not have happened if they were working independently.

**Drawbacks of Co-Teaching**

Not all teachers and districts, though, are behind the co-teaching model. Districts continue to use the pull-out model for some or all of their EL students. Teachers have concerns about the details of working closely with a co-teacher and concerns about whether or not mainstream curriculum is too rigorous for ELs in the beginning levels of English proficiency (Mabbot & Strohl, 1992; McClure & Cahnmann-Taylor, 2010; York-Barr et al., 2007).

**Teacher Concerns**

Teachers have concerns about how co-teaching will impact instruction and students. Some teachers in EL/mainstream co-teaching teams complained of the lack
common planning time, having unequal power in the classroom because of the perception of content being more important than language learning, and being mandated to co-teach with little or no training (McClure & Cahnmann-Taylor, 2010). The study by York-Barr et al. (2007), reported that teachers felt a loss of decision-making autonomy, confusion about how to share instructional time, and difficulties when teachers had differing philosophies.

**Curriculum Concerns**

Rigorous curriculum in the mainstream classroom raises concerns among some teachers that EL needs cannot be met solely in the mainstream classroom (McClure & Cahnmann-Taylor, 2010). Mainstream curriculum often takes for granted that learners have a certain level of English proficiency, vocabulary, and background knowledge to understand complex grade-level text and ideas. Many beginning ELs have not reached that proficiency and need a place where their needs are not secondary to the needs of the larger mainstream classroom, a place where they can take risks and ask questions without feeling inferior (Mabbot & Strohl, 1992).

McClure and Cahnmann-Taylor (2010) say that co-teaching is ideally for intermediate to advanced level EL students. They found that newcomers, though, should still be taught in a pull-out model because when an EL teacher’s time is limited, co-teaching often becomes the only language instruction students at all levels of language proficiency receive. In their analyzing of studies, they found instances where newcomers were marginalized and unable to participate in class because they couldn’t understand the classroom instruction in English and general education co-teachers in this case did not want the class disrupted with L1 translation (McClure & Cahnmann-Taylor,
The Minnesota Department of Education English Learner Education Program Guidelines (2011) say benefits of pull-out, as opposed to co-teaching, include promoting language acquisition, providing personalized learning, and using smaller groups which allow some reluctant students a better environment for taking risks and asking questions. So while co-teaching may be beneficial to many students, it may not be appropriate for ELs at all language levels.

Impact of Co-teaching on Student Achievement

Research into the impact that co-teaching has on student academic achievement has had mixed results. Some studies have found that student achievement increases when co-teaching is the method of instruction. Other studies have found that student achievement decreases or that students are unaffected by the co-teaching model.

Positive Student Achievement in Co-Taught Classes

Several studies have found that there are academic gains for ELs when they learn in a setting with co-teaching. Research shows ELs achieve academic success most effectively when language is taught in a meaningful context (Dove & Honigsfeld, 2010; Short & Echevarria, 2005). Dove and Honigsfeld (2010) found that when an EL teacher and a general education teacher co-taught social studies using various methods of co-teaching, previously reluctant students became more confident in their ability to read and address content material in English.

According to a three-year study by York-Barr et al. (2007) teachers found that students received many benefits from collaborative instruction, both socially and academically. This study took place in first and second grades as the district began implementing a co-teaching model and participants included general educators, EL
teachers, a special education teacher, and EL and special education assistants. For their co-teaching methods, they used Method B where the class is split in two and the same lesson is delivered to each group and Method A where one teacher took the lead on the main reading lesson and the other teaching participants taught small group lessons through which students rotated. Student participants in this study made significant gains in both reading and math, experienced a greater sense of community and inclusion, had fewer negative classroom behaviors, and engaged more in class.

Co-teaching also has a positive impact on the amount of individual attention students receive. Honigsfeld and Dove (2008) found that because the teacher to student ratio was lower, students in co-taught classrooms were able to obtain more individual attention and had the opportunity to participate more frequently.

In another co-teaching study at the university level, co-taught psychology students reported that classes were more interesting. Students said co-teachers made the material more accessible and helped their understanding of the curriculum (Gillespie & Israetel, 2008).

In various co-teaching studies with EL, SPED, and mainstream teachers, students achieved greater scores academically as shown by classroom assessments and standardized tests (Hasvold, 2013; Murawski & Swanson, 2001; Qi & Rabren, 2009; York-Barr et al., 2007). Hasvold (2013) found ELs who were co-taught outperformed ELs who were pulled out for instruction on seven out of eight areas in reading comprehension. Qi and Rabren (2009) found that in the first year of implementing co-teaching with a mainstream teacher and a SPED teacher, students’ standardized math and reading scores increased compared to the previous year. A study by Hadley,
Simmerman, Long, and Luna (2000) found larger gains for co-taught students in all areas of vocabulary and phonological awareness when they compared two classrooms that were co-taught by general education teachers and a speech-language pathologist with two classrooms that were taught by single teachers. These studies all point to positive student achievement when using the co-teaching model.

**Lack of Student Achievement in Co-taught Classes**

Not all studies that look at co-teaching and student achievement, however, have found positive results. Some studies found no increase in student achievement or declining achievement.

In studying student data for co-taught EL students in one Minnesota district, Zehr (2006) found that when co-teaching methods had been in place for seven years, the gap between ELs and their native speaking peers in eighth grade Minnesota Basic Standards Test reading and math scores closed to a 2-3% difference. Although, ten years later with co-teaching still in place, the 2016 eighth grade Minnesota Comprehensive Assessments (MCAs) in this same district now showed a 23% gap in reading scores and a 15% gap in math scores between ELs and non-ELs (Minnesota Department of Education, 2016). The standardized tests used to measure the students’ performance changed between these two findings and other factors such as changed student demographics may have also contributed to these differences.

Other studies showed no difference in student achievement or mixed results. An Iranian study by Aliakbari and Nejad (2013) studied the performance of a co-taught treatment group and single teacher control group of junior high boys in grammatical proficiency showed no difference between the control and treatment groups. Another
study looked at SPED students who were moved from a self-contained classroom to a classroom co-taught by a general education teacher and a SPED teacher. In this study, while students’ math and reading scores increased after a year of co-teaching, inclusive instruction, absences and behavioral problems in this new environment also increased (Qi & Rabren, 2009). In the area of SPED co-teaching, Zigmond (2001) found that no research up to that point had shown empirical evidence that co-teaching produced positive outcomes for students with disabilities.

In the studies cited in the previous section (Dove & Honigsfeld, 2010; Hadley, Simmerman, Long, and Luna, 2000; Hasvold, 2013; Murawski & Swanson, 2001; Qi & Rabren, 2009; and York-Barr et al. 2007), co-teaching appears to be a successful approach to addressing the needs of diverse learners, but many still say little empirical evidence exists to prove its effectiveness in regards to student academic achievement (Murawski & Swanson, 2001; Morocco & Aguilar, 2002; Fu, Hauser, & Huang, 2007; Zigmond, 2001). Research shows that the findings for the impact of co-teaching on student achievement are inconclusive. Some studies have shown student achievement increase due to co-teaching, while others have found students’ scores unaffected by the model. The lack of quantitative studies using student data makes it difficult to determine the effectiveness of the co-teaching model.

**Language Objectives**

EL and classroom teachers must identify and teach the language needed to make the content understandable for ELs (Regalla, 2012). This is done by incorporating language objectives into instruction. According to Echevarria and Short (2011), language objectives are specific objectives that focus on the features of academic
language students will need to access the grade-level content curriculum. To avoid language instruction being overshadowed by content, Echevarria, Vogt, and Short (2000) suggested that lessons should contain both content and language objectives. Language objectives should be explicitly stated along with the content objectives. These language objectives involve the four language domains: listening, speaking, reading, and writing. They may also include vocabulary, grammar, and structures to access language strategies. Many states now use WIDA (2017) resources to aide teachers in determining language objectives using the Can Do Descriptors in conjunction with WIDA Performance Definitions that address linguistic complexity, vocabulary usage, and language control.

While it is the expectation in many states that all teachers must address EL concerns, not all have been trained in teaching language acquisition (Janzen, 2008). A study by Regalla (2012) found that quick training for classroom teachers on creating language objectives did not really equip them to do so. Instead of focusing on more complex grammar, language functions or language structures, these teachers only chose to focus on vocabulary words and missed out on connecting the vocabulary to recurring affixes, parts of speech, and demonstrating comprehension in meaningful ways. The WIDA (2017) resources can help EL and mainstream teachers create appropriate language objectives that identify and teach the language needed for ELs to access the mainstream content curriculum.

**Benefits of Language Objectives to ELs**

Focusing on the language used to teach academic content is just as important as teaching the content itself (Regalla, 2012). Short and Echevarria (2005) found that
without specific language development, many students do not have the literacy skills needed to understand content and succeed in mainstream classes. A study done by Echevarria, Short, and Powers (2006) found that middle school students who were taught by social studies teachers who had received training on the Sheltered Instruction Observation Protocol (SIOP) model, a model that uses specific language objectives, had significantly more growth in writing skills than those who were instructed by a regular social studies teacher without SIOP training. The social studies teachers with SIOP training were taught to use language objectives with the students to convey specific strategies for developing the English language.

Adding explicit language objectives to the curriculum of kindergarten students co-taught by a speech-language pathologist and two classroom teachers showed student gains in vocabulary and phonological awareness (Hadley et al., 2000). Each week, the co-teaching teams embedded 20 essential vocabulary words into the thematic curriculum. The speech-language pathologist also taught a small group lesson on phonological awareness that each child rotated through during the week. These two groups were compared to two classrooms taught by single teachers. The single taught classroom teachers used the same curriculum, but they differed in the amount of explicit instruction of phonological awareness they delivered to their students. The co-taught participants in this study—SPED, EL, and general education - saw larger gains in vocabulary comprehension and expression and in all areas of phonological awareness than their single-teacher taught counterparts. These four studies showed that student achievement increased when language objectives were added to student instruction (Echevarria et al., 2006; Hadley et al., 2000; Regalla, 2012; Short & Echevarria, 2005).
Writing in Kindergarten

Since my study of the effectiveness of the co-teaching model took place during kindergarten writing block, understanding the kindergarten writing process was important, as well as being aware of the benefits that ELs gain from targeted writing instruction.

Writing Proficiency for EL Language Development

Kindergarten ELs are just beginning to learn how to write. Diaz-Rico (2008) points out that writing cannot be postponed until children are fluent in English. It is a key to academic success and a means of self-expression (Kramer-Vida, Levitt, & Kelly, 2012). In the co-taught kindergarten classroom, ELs are alongside their peers as they learn the letter sounds and how to put them together to create words. According to Schulz (2009), EL teachers should implement explicit writing instruction that focuses on real-life use, not grammar or meaningless drills, so language is developed in a natural environment. Schulz (2009) also advised that writing instruction should foster social interaction for ELs, which reinforces Vygotsky’s sociocultural theory of development.

Writing strategies such as mini-lessons, conferences, and independent writing time were beneficial to ELs because children are writing voluntarily, learning the writing processes, and discussing their work with teachers and peers (Rojas, 2007). Modeling, prompting, and creating scaffolding for ELs helps them understand the writing process (Gibson, 2008). Writing experts recommend a balance between teacher instruction and independent writing time for students (Cutler & Graham, 2008).
According to Schulz (2009), there are four different approaches to help ELs learn the writing process:

- **Language experience** – Teachers demonstrate the writing process for students.
- **Shared writing** – Teachers act as scribe, creating a shared text with student input.
- **Interactive writing** – Students participate in the writing process, collaboratively composing a text with the teacher.
- **Independent writing** – Students use their understanding of the writing process to independently compose texts. Teachers hold writing conferences with students to support their writing.

To generate ideas for writing, ELs can work in pairs and talk out ideas or use brainstorming as a class (Diaz-Rico, 2008; Hedge, 2000). Beginning EL writers move from scribbling and drawing to using consonants to stand for words before they reach the “invented” spelling phase (Diaz-Rico, 2008). When students begin to put their ideas down on paper, word walls or word banks are also helpful (Diaz-Rico, 2008) and in their later stages of writing, checklists may be helpful for students to check their content and organization (Hedge, 2000). My research focused on the co-teaching model’s ability to provide EL students with effective instructional strategies to impact EL language development and writing proficiency.

**The Kindergarten Writing Process**

Understanding the writing process in kindergarten was important to developing content and language objectives for my study. Writing in kindergarten is a process, moving from letter and phoneme recognition to putting words together to create different genres of writing. Common Core Standards (2010) state that, by the end of
kindergarten, students are expected to print many upper and lowercase letters, write a letter for most consonant and short-vowel sounds, spell simple words phonetically, and use a combination of drawing, copying, and writing to write about stories, people, experiences, or events. Kindergarten writers need to learn their letters, how to write them quickly and legibly, and what phonemes match with each letter so they can begin sounding out words (Puranik, Al Otaiba, Sidler, & Greulich, 2014). The Common Core Standards have set an emphasis on critical and higher-order thinking skills, which carries over to writing development in kindergarten (Snyders, 2014). Studies have found that young children can make complex meaning through their writing using a writing workshop approach (Kramer-Vida, Levitt, & Kelly, 2012). Teachers can use modeling, think alouds, and conferences to demonstrate to students how writers think and craft their writing (Jones, 2015, Rasinski, Homan, & Biggs).

**Gap**

Although many studies can be found about the co-teaching model, its implementation, and student and teacher attitudes about co-teaching, there is an important gap in the research. Many researchers have noted the absence of evidence that co-teaching is beneficial for student achievement. Research has focused on co-teaching methods rather than evaluating the effectiveness of the co-teaching model (Davison, 2006; Murawski, 2001; Weiss & Brigham, 2000; Zigmond, 2001). As a review of the literature showed, more studies looking at student achievement and co-teaching have been done with SPED and general education teachers, but there are few studies focusing on co-teaching with an EL teacher and a classroom teacher (Hadley et al., 2000; Murawski, 2006; Qi and Rabren, 2009). Obtaining hard data from student
performance is essential in formulating an evaluation of the co-teaching model and its effectiveness. This study will compare quantitative data from writing assessments of co-taught ELs with peers who were taught by one general education teacher.

Lastly, studies have shown some writing gains for students when general education teachers have incorporated language objectives into social studies instruction. The focus in my study will be incorporating language objectives developed by an EL teacher and incorporating the co-teaching methods described at the beginning of this chapter in a writing curriculum to determine to what extent kindergarten students gain in the writing domain.

**Summary**

This chapter looked at data from studies that addressed the benefits and drawbacks of the co-teaching model with SPED and EL teachers and their general education co-teaching partners. This chapter also identified the gap that exists in the current research and proposed how my study will provide insight on the efficacy of co-teaching teams of EL teachers and general education teachers. The next chapter will talk about the methods that will be used in my study.
CHAPTER THREE: Methodology

The focus of this study was to answer the research question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher? To investigate this, I compared writing samples from two groups of kindergarten ELs. One group of students was taught using a co-teaching model while the other group was in a single-taught general education classroom during writing block.

This chapter will discuss the research paradigm and its rationale, the methods used for the study, the participants and setting, the materials and procedures used, and how the data will be analyzed.

Research Paradigm

This study will compare writing growth between ELs in control and treatment groups because my aim was to determine if there are benefits for EL writing proficiency from a co-teaching model when an EL teacher focuses on language objectives and a classroom teacher focuses on content objectives. The control and treatment group model allowed me to use one group of students taught by a single general education teacher as a control group and another group of students taught by a co-teaching team of a mainstream teacher and an EL teacher as a treatment group.
A quantitative method of study of the quasi-experimental type was used to compare a control group and a treatment group to see if there was a relationship between the treatment and the dependent variable (Mackey & Gass, 2016). In this case the treatment was the co-teaching model and the dependent variable was the growth in the proficiency of the students’ writing. Rather than a controlled environment with randomly selected groups, my study, by necessity, used intact classes without random assignment of participants. Because they are just beginning their academic careers and do not have placement scores, kindergarten students are assigned to classrooms randomly. According to Mackey and Gass (2016) this is considered a quasi-experimental design. In this between-groups design, which compares two or more separate groups, the experimental group received the treatment of co-teaching while the non-co-taught group did not.

This study also used a pre-test/post-test design, which can help determine the immediate effect of a treatment (Mackey and Gass, 2016). In my study, the pre and post-tests were part of the kindergarten writing curriculum and were identical so they were comparable in difficulty. Therefore, the format of the study fit well with the format of the existing district curriculum. I chose this pre-test/post-test design method because students were familiar with the pre-post format of writing assessment, as they had exposure to it in previous writing units. I wanted to make sure I was assessing writing performance and not students’ understanding of a format.

Because the pre and post-tests were identical, students’ scores could be compared to show growth. The pre-test demonstrated each EL’s writing ability and knowledge of personal narratives in both the experimental and control groups. The
identical post-test was used after treatment to show and compare the gains in individual growth in the control and treatment groups.

Because language objectives were part of the lessons as well as the district content objectives, I created a language objective assessment (Appendix D) that assessed the students’ performance of the language skills that I taught. I did this to determine if the manner in which the language objectives were delivered, co-taught as part of the writing lesson or taught in a small, pull-out group, would affect the students’ writing.

**Method**

In order to determine the effectiveness of a co-teaching arrangement with an EL teacher and a general education kindergarten teacher, this study compared the growth in writing proficiency of ELs in a co-taught classroom to the growth of students in a single-taught control classroom. This method of comparison is similar to other co-teaching studies. In the study by Aliakbari and Nejad (2013) first-grade students were assigned to two groups. In one group, learners were co-taught grammar instruction, while in the other group a single teacher delivered instruction. Hadley et al. (2000) did a six-month study that looked at four kindergarten classrooms focusing on vocabulary and phonological awareness. Two of the classrooms in this study served as control classrooms and were taught solely by general education teachers, while the other two received the treatment of co-teaching with general education teachers and a speech pathologist. Hasvold (2013) compared language acquisition and reading comprehension of ELs in a co-taught class to ELs being pulled out for language instruction. In my study, a single teacher taught writing in one kindergarten classroom while co-teachers taught writing in another classroom. I then compared the writing growth of the ELs in each of
the two classrooms. Before the study began, ELs in both the treatment and control classrooms were of similar writing ability, as shown by the pre-test results (Appendix C). They were also at similar writing levels based on WIDA ACCESS scores before the treatment began. Both groups had three students at level 1 and six at level 2. There were three at level 3 for the control group and four at level 3 for the treatment group. ELs ranged from age 5 years, 6 months to age 6 years, 4 months and all were in their first year of formal English writing instruction.

Writing lessons lasted between 10-30 minutes each day and were taught at the same time of the day so, presumably, the ELs in each group had the same levels of energy and focus. The same district writing curriculum was used for instruction in both groups. The two general education teachers and I, the EL teacher, met weekly to discuss objectives and plan lessons. Together, we decided the content objectives we would present and put them in student-friendly language. Then the control teacher presented these content objectives by himself to his classroom, while the general education teacher and I presented the same content and language objectives using a co-teaching model. Students in both classrooms were taught the same writing lessons, so the co-teaching model itself became the experimental intervention in the classroom. I developed language objectives to go along with the writing lessons using the following WIDA Can Do Descriptors (2017):

- Connect oral language to print
- Communicate using letters, symbols, and numbers in context
- Make connections between speech and writing
- Draw pictures and use words to tell a story
• Reproduce familiar words from labeled models or illustrations
• Retell familiar stories through a series of pictures

I used these WIDA Can-Do Descriptors to guide my language objectives. I had students explain to a partner some of the important things in their lives that they would use as ideas for their stories using “I” statements. They recounted their stories orally to a partner or myself before they began writing. Students learned vocabulary that would frequently be used in personal narratives and learned where to access sight words in the classroom. They continued to learn their letter sounds and how to use those to slowly sound out words. I taught them that when we write our thoughts, we begin with a capital letter and end with a period. They also learned how the pictures they draw can help them recall and read the stories they write. I, as the EL teacher, focused on these language objectives during the co-taught lessons in the treatment classroom. In the control classroom, I delivered the same language objectives, using the pull-out model, with a small group of ELs.

The post-test was given after four weeks of instruction and intervention and was identical to the pre-test. This made it possible to measure students’ growth on the same key elements of personal narrative (Mackey & Gass, 2016). I also gave each participant a test to assess their performance on the skills taught through the language objectives. This was to determine if the delivery method of the language objectives, co-taught or pull-out, affected students’ performance (Appendix F).

**Participants and Setting**

The study took place at an inner city school in a large district in the northern mid-west United States. The school demographics were: 35% African American, 52%
Asian/Pacific Islander, 2% Native American, 7% Hispanic/Latino, and 3% Caucasian. In the school, 93% of students qualified for free or reduced lunch, 11% qualified for special education, and 53% are identified as EL, which is well above the 8.3% who identify as EL in the state overall (Minnesota Department of Education, 2017). There were four kindergarten classrooms, two of which were part of the study - one as the treatment group and one as the control group.

The participants in this study were 25 kindergarten ELs who ranged in WIDA English language levels from level 2-4. Their home languages included Hmong, Karen, Spanish, Somali, and Urdu. These ELs made up 60% of the two general education classrooms in which the study took place. They were 5.5 to 6.3 years old, many of them coming to kindergarten with no prior school experience. There was a slight difference between the groups in the number of students born in the first half of the school year, seven in the control group and three in the treatment group, and in the second half of the school year, five in the control group and ten in the treatment group. In other words, the students in the control group were slightly older than those in the treatment group. Girls made up 68% of the participants and boys made up the remaining 32%. One group of thirteen students was in the co-taught class with their general education teacher and me, their EL teacher. The other twelve students were instructed in the classroom solely by their general education teacher with the support of an educational assistant and served as the control group. I also instructed this group once a week in small groups using the pull-out model.
Materials

Materials for this study included daily writing lessons from “Kindergarten Personal Narrative: Small Moment” from the Discovering our World Kindergarten (KDOW) curriculum (Office of Early Learning, 2014) which is required in kindergarten classes across the district. The curriculum was created by district teachers, literacy coaches, and early childhood coaches and draws on the writing resources of Oxenhorn and Calkins (2003) and Calkins (2011).

The writing mini-lessons came from the KDOW curriculum and focused on writing personal narratives. In this school district, personal narratives at the kindergarten level describe one true story about a child’s life, are written in a four page booklet, and focus on telling a personal story with a beginning, middle, and end. These

Table 1
Overview of Student Characteristics by Group Assignment

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<thead>
<tr>
<th></th>
<th>Control classroom</th>
<th>Treatment classroom</th>
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<td>Number of participating</td>
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<td>13</td>
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<td>Female</td>
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<td>Hmong</td>
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<tr>
<td>Karen</td>
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<td>5</td>
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<tr>
<td>Spanish</td>
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<td>1</td>
</tr>
<tr>
<td>Somali</td>
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<td>Urdu</td>
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<tr>
<td>Level 3</td>
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<td>5</td>
</tr>
<tr>
<td>Level 4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
materials were chosen for the research study because they are the district’s required curriculum for all kindergarten students.

The teachers at the school where the study took place also created a daily writing booklet made from a folded 8”1/2 by 11” piece of paper. It consisted of four half-pages, a front cover and three story pages with a large box for illustrations and three lines below for writing (Appendix K). The students used these booklets to write their narratives each day during writing time. They also used these booklets when they wrote their pre and post-test assessments.

In both classrooms, the teachers used a district provided student checklist to guide our lesson planning together. We taught the different points on the checklist as we presented our lessons each day and modeled for students how to use the checklist as they wrote. We added pictures to the checklist to help students use it independently (Appendix L). We also added some commonly used words when writing personal narratives to a word bank on the back of their checklists so they would have these words available while they were writing. We gave the checklists to students to keep in their writing folders to help them when they were writing independently and to help reinforce our writing objectives that would become the quantitative data we assessed in their final post-test. The student checklist included:

- I can write a true story about me.
- I can put the events in order: beginning, middle, end.
- I can use details to describe my story: setting, feelings, and descriptions.
- I can write my words using the sounds I hear.
- I can reread my story.
• My pictures match my words on each page.

We then modified the student checklist, making it into a rubric with a scoring continuum that we could use to rate the students’ writing in the pre and post-tests, and we created a rubric guideline sheet (Appendix B) that gave further detail for each item on the rubric so we could have standard criteria for scoring.

Procedure

Both classrooms used a writing block model called Writer’s Workshop for writing instruction. Writer’s Workshop is a model for teaching writing created by Graves (1994) and made popular by Calkins (2011) where students are encouraged to see themselves as real writers. Students follow the same process as professional writers: prewriting, writing, giving feedback, editing, and publishing (Hertz & Heydenberk, 1997). Writer’s Workshop consists of four components that teach the foundational and compositional skill of writing: 1) daily mini-lessons, 2) student writing time, 3) conferencing, and 4) sharing (Au, Carrol, & Scheu, 1997; Fletcher & Portalupi, 2007).

Both general education teachers in the study had been teaching kindergarten writing using the Writer’s Workshop model for over five years. The kindergarten students had used the Writer’s Workshop model earlier in the year as they wrote how-to books, observational writing, and pattern books. For this study, the students in both classrooms worked on writing personal narratives, a component of the district’s kindergarten writing curriculum, which was based on the work of Oxenhorn and Calkins (2003) and Calkins (2011). The writing unit was four weeks long and began with a pre-on-demand writing assignment to assess the students’ previous knowledge of personal narratives and existing writing skills. This assessment used the teacher-created four-
page booklet described above. All students were given the following prompt: Think of a true story from your own life and write about it using everything you know as a writer. Students then independently wrote a personal narrative to the best of their ability.

When they were finished writing, teachers transcribed what the students said they wrote on each page and this was attached to their writing booklet. We did this for two reasons. One was because one of the objectives was that students could read what they had written. The other was so that when we went back to assess their writing, we could determine if they had attempted to sound spell words, if their pictures matched their words, and if their stories had a beginning, middle and end. Because kindergarteners, based on district standards, are only expected to write the sounds they hear in a word, many times their phonetic spelling is not conventional and may only contain one sound from any given word. Without the transcription, we would not be able to read most students’ writing on our own or ensure consistency if multiple teachers assessed their writing using the rubric. By transcribing what they said they had written, we could see if the phonemes they wrote matched the words they read and assess the other items on the rubric.

This on-demand writing assignment became the pre-test. All three teachers then analyzed each pre-test using the rubric (Appendix B) to establish a baseline for all students involved in the study. Each student’s writing was scored based on the rubric (Appendix C).

All students in both classrooms then received four weeks of content instruction in the elements of personal narrative. The overall focus for the students was thinking of and writing about true stories that happened in their lives. All writing lessons for the
unit contained content objectives and followed a detailed lesson plan as prescribed in the curriculum. Teachers in both the treatment and control classrooms met each week to review the objectives and plan each lesson so that we would be consistent in our delivery (Appendix J).

While the content objectives were presented the same way in each classroom, language objectives were not. With the control classroom, I pulled small groups of ELs into a separate area once a week for 20 minutes to specifically teach language objectives regarding writing personal narratives. I wrote these language objectives (Appendix F) with guidance from the WIDA Can-Do Descriptors: Grade Level Cluster PreK/K (WIDA, 2017). In the co-taught intervention classroom, I focused on these same specific language objectives and paired them with the daily content objectives (Appendix F). The teacher in the control classroom also used some of these language objectives in his teaching, as they helped create scaffolding for students to build upon in their writing. For example, we had students orally tell a partner or teacher their story so they could determine the beginning, middle, and ending before they began writing. Other language objectives he did not teach, and these became the focus of my small group instruction with his control classroom.

For the co-taught lessons, the general education teacher and I used different methods of co-teaching to present our lessons each day based on the difficulty of the objectives being taught and the needs of our students. This included times where one of us taught the lesson and the other modeled the writing as in Method E: Two Teachers Teach the Same Content with One Group (Friend et al., 1993), as described in chapter one. For example, while I taught a lesson about personal narratives being written in the
first person, my co-teaching partner highlighted the words “I,” “me,” and “my” on a chart story we had written the previous day. The teacher in the control classroom taught this same lesson, but presented it all on his own.

When introducing new concepts, we co-teachers used Method A: One Lead Teacher and One Teacher Teaching on Purpose where one taught the main lesson and the other taught or reviewed a specific skill and monitored the classroom for understanding. This was helpful when we taught the lesson on adding adjectives to our writing. The classroom teacher taught the lesson on adding color, size, and feeling adjectives while I worked on sound spelling and locating adjective sight words around the room with specific students in my study who were struggling with independently writing words. In the control classroom, the teacher added color words to his word wall and worked with students on adjective synonyms so they would be familiar with the words.

Other times we co-teachers each took half of the group and did parallel teaching of the same lesson with a smaller group as in Method B: Two Teachers Teach the Same Content with Two Groups. This method was helpful when it came time for the students to think of a title for their stories. Some students struggled more with figuring out the main theme of their story. First, they needed to determine in one or two words what their story was all about and then they needed to capitalize and sound spell these words. I took a smaller group of students who needed more support while my co-teaching partner led the same lesson for the rest of the class. In the control classroom, the teacher used stories of his own as a whole group to model how to choose a title. He
projected some of his own stories and, together as a class, they decided on some possible titles.

After the daily writing mini-lesson, students in both classrooms wrote for 15-25 minutes per day for 20 days on true stories that had happened to them (Appendix I). They broke their stories into a beginning, middle, and end and put each part on a separate page. Then they stretched out the sounds in each word to determine letter sounds and wrote the sounds they heard as words. They then went back and added details to their stories in the form of adjectives. Finally, they drew pictures that illustrated the words in their stories.

During this 20 minute daily independent writing time, co-teaching Method D: Two Teachers Monitor/Teach, was also used each day as both teachers moved among groups of students and monitored and provided mini lessons on writing and language concepts to specific students. During individual student work time, both the classroom teacher and I worked with individuals and small groups of students, focusing on specific writing and language skills they needed. In the control classroom, the classroom teacher provided this individual support to his students with the help of his educational assistant (EA). The EA was an English-speaking aide who was in the control classroom for a large portion of the day. She did not collaborate with the classroom teacher outside of school, but was briefly given directives from the classroom teacher as to what to work on with the students in their writing. She did not help teach the lessons, but did help students sound out words and problem solve as they were writing their personal narratives each day. In this way, both classrooms were similar as there were two
teachers, but the co-teaching classroom had the benefit of a licensed EL teacher instead of an educational assistant.

Daily writing lessons and independent writing times were consistent between the control and treatment groups (Appendix I). Besides daily writing during their independent writing time, students in both classrooms also had conferences with their respective teachers about their writing using the writing checklist. In the co-taught intervention classroom, the classroom teacher and I had conferences with the EL students on their writing throughout the week. The amount of time each student had conferences was dependent on their needs. Some students were much more independent and did not need as much support time. Conferences consisted of helping the students think of a story for their personal narrative, helping them break it into a beginning, middle, and end, aiding them in sounding out words, and making sure their pictures matched the words they were writing. While conferencing, students in both classrooms used the checklist above to remind them of the expectations for their writing. The information gleaned from the students’ daily writing helped to inform me of their linguistic and grammatical needs and helped shape future language objectives.

In the control classroom, students had conferences with the classroom teacher and with the EA. The classroom teacher in the control classroom followed the writing lesson objectives each day in the curriculum and added small group mini-lessons during conferencing for skills upon which he felt both mainstream and EL students needed to improve. He grouped these small groups by language and independent writing ability.

At the end of the unit, the students completed a post-on-demand writing sample for assessment that was identical to the pre-on-demand writing assessment. We
teachers also transcribed what the students said they wrote on each page as they had for the pre-tests. This transcription was attached to their post-test booklets. These post-test assessments were scored using the transcription and the teacher rubric (Appendix B). All three teachers compared the transcription of what the students read to their actual writing to see if they were able to sound spell words and if they could read what they wrote. When students’ writing was unreadable due to lack of phonemes, the transcription also helped to determine if the story was written in first person, if their words matched their pictures, and if their stories contained a beginning, middle, and end. For example, if a student read the story in first person, but did not actually write the words read, points would still be awarded for this area on the rubric because there was evidence of understanding. Each student was given 0-2 points for each area of the rubric. Total gains or losses for each individual student were then compared between the treatment and control groups.

I also individually gave each participant a test to assess their performance on the skills taught through the language objectives (Appendix F). These scores were compared between the treatment and control groups.

Data Analysis

Using the rubric and the transcription of the students’ writing, all three teachers involved in the study assessed each student’s pre and post-on-demand writing for each rubric area and assigned points, as described in the previous paragraph, using the rubric guidelines (Appendix B). I then recorded each student’s growth in each area of the rubric (Appendix A). Looking at both the pre and post-test assessment rubrics, I compiled change for each student in each area of the rubric (Appendix E). I analyzed
the data in many ways. I looked at growth for each student on each rubric point and also looked at an overall averaged score for students in the control and treatment groups. I also compared the growth between pre and post-test scores for students in the control and treatment groups looking at gender, first language (L1), date of birth, and WIDA language level. I looked at the group of students who had the lowest and highest amount of growth between their pre and post-test to see if there were patterns evident. Finally, I looked at the students’ scores on the language objective assessment to look for patterns.

**Verification of Data**

In order to minimize the potential for variation in lesson delivery and teaching styles several protocols were followed. First, the two general education teachers chosen for the study had been teaching a similar number of years, thus making sure both were sufficiently familiar with the curriculum and teaching the writing process to kindergarten students. We tracked the length of the lessons each day and the length of time students were given to write to ensure these were consistent between classes (Appendix I). I also presented the same language objectives to both groups of students, one through the co-taught model and one through the pull-out model, to isolate co-teaching as the variable.

After a person outside the study removed students’ names and replaced them with numbers, the two classroom teachers involved in the study and I separately analyzed all 25 writing samples according to the given rubric, which all teachers had used previously. This removed any teacher-to-teacher discrepancies that could occur. If any scores varied by more than one point, the three teachers discussed them and came to a consensus.
Ethics

The following steps were taken to assure that students’ rights were protected during the study:

• Teachers, students, and parents received and signed a letter of informed consent in their home language stating that normal instruction would occur and that students could withdraw from the study at any time without consequence.

• Students’ names were removed from their pre and post on-demand writing booklets by a person not associated with the study and were replaced with a number. This was done before the booklets were analyzed using the rubric.

• Writing booklets were kept stored in a locked cabinet that could not be accessed by participants in the study.

• All student work was returned to the personal possession of the students at the end of the study.

• Permission for the study to take place was granted by the school district and by Hamline University, MN.

Conclusion

This chapter discussed the methods of data collection for this study, the participants and setting in which the study took place, and the procedures that were used for the study including the materials, data analysis, verification of data, and ethics behind the study. This was done to answer the question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education
teacher and language objectives are taught by the EL teacher? In the next chapter, 
analysis of the data from this study will take place.
CHAPTER FOUR: Results

This study took place in two kindergarten classes within a Title 1, urban school. One class was taught by a general education teacher and served as the control classroom. The other class was co-taught by a general education teacher and me, the EL teacher. I focused on six language objectives with each class, presenting them within the co-teaching lessons in the treatment classroom and with a pull-out model in the control classroom. Participants were given a pre-test on writing personal narratives and then received four weeks of instruction in their respective classrooms. They then took a post-test that was identical to the pre-test. All three teachers independently assessed the students’ pre and post-test writing on a three-trait rubric (Appendix B). I compared the growth from the pre to post-tests for each participant in each group and then looked for patterns and trends. I also individually tested the participants on the four language objectives that I had explicitly taught using an assessment I created (Appendix F) and looked for trends between the two groups.

Through the collection of this data, I sought to answer the following question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher?
Students in both classrooms wrote personal narratives in their writing booklets (Appendix K) after being given the prompt, “Write a true story about yourself using everything you know as a writer.” These narratives were used as a pre-test assessment. All three teachers independently assessed and scored the writing using a rubric and rubric guide (Appendix A and B). Scores for each content objective ranged between 0-2, with 2 being the highest score possible.

**Pre-test Assessment Results**

On this pre-test assessment, more students in both groups scored 0 in the content objectives of including a beginning, middle, and end and adding adjectives to their writing. For the content objective of including a *beginning, middle, and end*, seven of twelve participants in the control group scored 0 while eight of thirteen in the treatment group scored 0. For the content objective of *adding adjectives*, eight of twelve participants in the control group scored 0 and five of thirteen participants in the treatment groups scored 0. Both of these were areas for growth, although the treatment group did have more mastery of *adding adjectives* in the pre-test.

Both groups had the most students score a 2 for three content objectives: *sound spelling*, *rereading*, and *pictures matching words*. In *sound spelling*, the control group had eight of twelve participants score 2 on the pre-test while the treatment group had four of thirteen. This was an area where the control group had more mastery in the pre-test. For the objective *rereading*, there were six of twelve participants in the control group who scored a 2, while in the treatment group there were six of thirteen. The content objective of *pictures matching words* had the most students score a 2 in both
groups, 8 of 12 in the control group and 9 of 13 in the treatment group. This was an area of strength in the pre-test for both groups.

**Growth Results by Content Objectives**

After four weeks of instruction, the students took a post-test that was identical to the pre-test. All three teachers also independently assessed and scored the post-test writing using the rubric and rubric guide (Appendix A and B). Scores range between 0-2, with 2 being the highest score possible on each objective. In the post-test, the objective of *adding adjectives* was still the lowest scoring objective, but scores increased from the pre-test. In the pre-test no students scored the highest score of 2 points, but by the post-test, twelve students scored a 2. Figure 1 shows the difference in scores between the pre and post-test for the content objective of *adding adjectives*. It compares the number of students in each group who fell into each category of score change.

* out of 2 points possible
Figure 1: Pre-test score to post-test score for the content objective, *adding adjectives.*

This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

Because participants started out with low pre-test scores in this content objective, there was room for growth. Ten out of twelve students in the control group made growth of 1 to 2 points, while nine out of thirteen students made growth of 1 to 2 points in the treatment group. Two students in the control group made no growth and four students in the treatment group made no growth or had their score decrease.

The other content objective that was low in the pre-test, including a *beginning, middle, and end,* also had gains on the post-test. Five participants in the control group scored 1 and seven scored 2 on the post-test. In the treatment group, six participants scored 1 and seven scored 2 on the post-test. No one in either group scored 0. This was the content objective where students showed the most growth in proficiency from pre to post-test.
Figure 2. Pre-test score to post-test score for the content objective, including a beginning, middle, and end. This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

As figure 2 shows, in the control group there were eleven out of twelve students who made 1 or 2 points of growth, and one student who made no growth during the study in regards to including a beginning, middle, and end in their narrative. In the treatment group, there were ten out of thirteen students who made 1 point or 2 points of growth, and three students who made no growth in this area.

In the highest scoring content objective of the pre-test, sound spelling, rereading, and pictures matching words, students in both groups continued to score high in the post-test. They did not show as much growth in these areas as their initial pre-test scores were higher.
Figure 3. Pre-test score to post-test score for the content objective, sound spelling. This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

In sound spelling, thirteen of the total participants began as proficient, scoring 2 on their pre-test, as seen by adding the right two columns. The number of participants who showed growth between the pre and post-test, then, was not as high in this area. In the control group, two participants showed growth, nine stayed the same, and one showed negative growth. In the treatment group, five participants showed growth, six stayed the same, and two showed negative growth in the area of sound spelling.

The content objective of rereading their narratives aloud to a teacher was also one that participants initially scored high on their pre-tests and so there was not much room for growth. Figure 4 shows the difference between the participants’ pre and post-test scores and how many students from each group fell into each category of score changes.
Figure 4. Pre-test score to post-test score for the content objective, rereading. This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

For the content objective of rereading, twelve participants in the study began as proficient, as shown in their pre-test scores, which limited the amount of growth that could occur. In the control group, three students made growth, while six stayed the same. In the treatment group, five made growth, while five stayed the same. The content objective of rereading was different than the rest in that six of the participants had scores that deceased in the post-test.

The final content objective that had initial high scores in the pre-test was pictures matching words. Figure 5 shows that this area had seventeen students who began the study as proficient, eight in the control group and nine in the treatment group. Three students in the control group made growth, eight students stayed the same, and one’s score decreased. In the treatment group, four students made growth, six stayed the same,
and three students had scores that decreased. This is a low area for growth for both groups, as so many students were proficient when they began the study.

![Graph showing score change from pre to post-test](image)

*Figure 5.* Pre-test score to post-test score for content objective, *pictures matching words.*

This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

For the content objective of *writing in first person,* the participants showed growth from the pre to post-test. In the control group (figure 6), seven students made 1 point of growth, one student made 2 points of growth, and four students made no growth in writing their narrative in first person. In this case, three students were already proficient in this area in the pre-test, so no growth was possible. In the treatment group, seven students made 1 point of growth, one student made 2 points of growth, and four students made no growth. Again, three students in this group were already proficient in the pre-test in this area.
* out of 2 points possible

*Figure 6.* Pre-test score to post-test score for content objective, *writing in 1st person.*

This figure shows the number of students in each group (y axis) and their score change from pre to post-test (x axis).

**Overall Proficiency Results**

Although my study was looking at the growth students made in each content objective, it is also important to look at the proficiency students achieved in their writing. For each content objective, figure 7 shows the number of students in each group that achieved proficiency, 2 points out of 2 possible, on their pre and post-tests.
Figure 7. Overall proficiency results on pre and post-tests. This figure shows the number of students from the control and treatment groups who were proficient, with a score of 2, on each content objective for the pre and post-tests. ADJ = adding adjectives, BME = beginning, middle, end, Pictures = pictures match words.

Figure 7 shows, the objective of adding adjectives saw a large increase in proficiency between the pre and post-test. On the pre-test, no one was proficient, but by the post-test, twelve students were. The content objective of beginning, middle, end, had the largest increase in proficiency. The control group went from no students proficient on the pre-test to seven students proficient on the post-test. The treatment group also saw increased proficiency, going from one student on the pre-test to seven on the post-test. For sound spelling, eight students were proficient on the pre-test in the control group while nine were proficient on their post-test. In the treatment group, five students were proficient on the pre-test and eight students were proficient on their post-test. For the content objective of rereading, there was not much change in the number of students...
who were proficient between the pre and post-test. In the control group, six students were proficient on the pre-test and six students were proficient on the post-test, while in the treatment group, proficiency between the pre and post-tests increased from six to eight students. As I mentioned earlier, the content objective of pictures matching words began with the highest proficiency with seventeen students scoring proficient on their pre-tests, eight in the control group and nine in the treatment group. Post-test proficiency for this content objective was as follows: the control group had ten students, while the treatment group had nine. The content objective of writing in first person also had nineteen proficient students in the post-test, nine in the control group and ten in the treatment group. This increased greatly from three students in the control group and four students in the treatment group who were proficient in the pre-test.

Averaged Scores of Control and Treatment Groups

After looking at the individual content objective areas for each student, I also looked at the averaged scores from the post-test content objective data (figure 8) to get an overall look at each group’s performance at the end of the unit. This figure shows the average performance of the control and treatment group for each content objective in one figure, making it easier to visually compare the data. For the post-test, the two groups had equal averaged scores for writing in first person, adding adjectives in their writing, and rereading the words they had written. The control group scored higher in including a beginning, middle, and end in their stories, sound spelling, and pictures matching words in their narratives.
Figure 8. Comparison of post-test scores using rubric. This figure shows each group’s averaged scores for each content objective with 2 being the highest possible score.

I then added the average pre-test data to make a comparison between the pre and post-test data in the control and treatment groups for each content objective. This allows us to visually see in one graph the overall average growth for all areas of data.
Figure 9. Average group growth between pre and post-test averages. This figure shows the difference between the average pre and post-test for each content objective for the control and treatment groups. Two is the highest score possible.

The data that provided these averages in figure 9 showed that more students in the control group showed growth in the content objectives of including a *beginning, middle, and end* in their narrative and *adding adjectives* in their writing. In writing a *beginning, middle, and end* to their narrative, eleven of twelve students showed growth in the control group, while ten of thirteen showed growth in the treatment group. For adding adjectives, ten of twelve students made growth in the control group, while nine of thirteen made growth in the treatment group.

More students in the treatment group showed growth between their pre and post-tests in *sound spelling* and *rereading* their narratives. In the treatment group, five of thirteen increased their sound spelling score compared to two of twelve in the control
group. For rereading, five of thirteen increased their score in the treatment group and three of twelve increased in the control group.

**Student Sub-Groups**

**Growth by Gender**

I then looked at the data to see if gender played any role in student’s growth with co-teaching. When analyzing the data by gender of students, I looked at the pre and post-test scores for each group to determine if co-teaching affects gender differently. Figures 10 and 11 show each student’s pre and post-test score by group and gender.

*Figure 10. Boys: Comparison between pre and post-test scores. This figure shows total scores in pre and post-tests, 12 being the highest possible score. P# stands for participant number.*
When looking at figure 10, it shows that the post-test proficiency is higher for the control group, three of four participants scored 11 out of 12 points while only one student scored this high in the treatment group. It also shows greater growth for the boys in the treatment group, as evidenced by the gap between the pre and post-test scores.

![Graph showing test scores for boys and girls in treatment and control groups.]

Figure 11. Girls: Comparison between pre and post-test scores. This figure shows total scores in pre and post-tests, 12 being the highest possible score. P# stands for participant number.

The girls’ comparison scores are different than the boys’ in that female students in the treatment group scored higher on their post-test than those in the control group. Five female students in the treatment group scored 11-12 points on their post-tests, while two students in the control group scored 11-12 points. Most female students made 2-4 points of growth between their pre and post-tests, one student from each group made 6 points of growth, and two students in the treatment group dropped 1 point.
Growth by L1

In my study, the majority of my participants were L1 Hmong and Karen. I analyzed the data of these two groups in the same way as I looked at gender above. I showed each student’s pre and post-test scores in all areas of the rubric, with 12 as the highest possible score.

![Bar chart showing pre and post-test scores for Hmong Treatment and Control groups.](image)

*Figure 12.* Hmong pre and post-test score comparison between groups. This figure shows total growth in all six language objectives between the pre and post-test, 12 points being the highest possible growth. P# stands for participant number.

Post-test scores are slightly higher for the control group, with all participants scoring 8-12 points. Growth between the pre and post-tests are mainly between 2-4 points for both groups. Two students in the control group and one in the treatment group have growth of 6 points.
Figure 13. Karen pre and post-test score comparison between groups. This figure shows total growth in all six language objectives between the pre and post-test, 12 points being the highest possible growth. P# stands for participant number.

Post-test scores of the Karen students in both groups were similar with four of five treatment participants scoring 11-12 points and four of six control participants scoring 11-12 points. Growth scores for the Karen group were slightly higher in the treatment group. Overall, three of ten Hmong students were proficient with 11-12 points on their post-test and eight of eleven Karen students were proficient.

Growth by Age

I also analyzed all participants’ growth data looking at dates of birth to determine if age had any effect on their scores or their growth, or if student age had any relation to the effectiveness of co-teaching. The district has a cut off date of September 1 to start
kindergarten, so those born in September would be the oldest and those born in August
would be the youngest in their class. My findings were that age did not seem to affect
the students’ growth scores. The four students with the highest growth (6-9 points) had
birthdays in January, March, and June. The eleven students with the lowest growth (-1-
2 points) had birthdates in October, December, January, February, March, May, June,
and August. Six of these students had low growth scores due to high scores on their pre-
tests. They had birthdays in October, December, February, and March, so mostly in the
first half of the school year. The five students who had low growth for other reasons had
birthdays in October, December, January, May, June, and August. This group of
students was spread evenly throughout the school year.

**Students With Least Growth**

I looked at students who had the least amount of growth to see if any patterns
were evident. I chose students whose growth between their pre-test assessment and
post-test assessment ranged from -1 to 2 points. I charted both their growth scores and
their post-test scores and separated them by control and treatment groups.
Figure 14. Students with lowest growth scores. The first column in each pair in this figure shows total growth in all six content objectives between the pre and post-test, 12 points being the highest possible score. The second column in each pair shows the post-test score, with 12 points being the highest possible score. P# stands for participant number.

This analysis of the students with the lowest growth scores (figure 14) shows that, although some students did not make much growth on their writing from the pre to post-test, seven still scored mid to high on their post-test assessment. I will discuss possible reasons for this in chapter 5.
Students With Most Growth

I then looked at students with the most growth between their pre and post-test. I chose students who made 6-9 points of growth. I charted their growth scores and their post-test scores and separated them by control and treatment groups.

![Bar chart showing growth scores for P3, P12, P13, and P21.

Figure 15. Students with highest growth scores. The first column in each pair in this figure shows total growth in all six rubric areas between the pre and post-test, 12 points being the highest possible growth. The second column in each pair shows the post-test score, with 12 points being the highest possible score. P# stands for participant number.

Students who made the most growth (figure 15) also had mid to high post-test scores, 10-11 points out of 12 possible. These four participants with the highest growth were among the nine students with the lowest pre-test scores, ranging from 1 to 5 points, so they potentially had the most room for growth.
Assessment Results by Student Language Level

Next, I looked at participants’ post-tests and grouped them by their language proficiency. Students in the study had WIDA language levels of 2, 3, and 4. Figures 16-18 show students at each language level and compare their post-test scores to their language assessment scores. On the post-test, scores of 11-12 are categorized as high, 9-10 mid, and 5-8 low. Students are separated by control and treatment groups.

Figure 16. Post-tests compared to language assessments – Language Level 4. Figure 16 compares the post-test scores (out of 12 points) and the language assessment scores (out of 15 points) for individual students in both groups. P# stands for participant number.

Students with WIDA language level 4 in both control and treatment groups scored mid to high, 9-12 points, on their post-tests. The exception to this was participant 19 in the treatment group who scored 7. Eight of eleven of these students were
proficient on their post-test, with a score of 11-12 points. Language assessment scores in both groups were very similar, 11-15 points out of 15 points possible.

Figure 17. Post-tests compared to language assessments – Language Level 3. Figure 17 compares the post-test scores (out of 12 points) and the language assessment scores (out of 15 points) for individual students in both groups. P# stands for participant number.

Students with WIDA language level 3 showed more varied results. On the post-test, the control group had four participants who were mid scorers and one that was low. The treatment group had two high scorers, two mid scorers, and one low scorer. On the language assessment, the treatment group had three out of five students who scored 13 or more while the control group had one student. Three of these students scored low on their language assessment with a score of 8 or less, two in the control group and one in the treatment group.
Students with WIDA language level 2 performed better in the control group on both the post-test and language assessment.

**Language Objective Assessment Results**

I also gave students in both classrooms a one-on-one language objective assessment (Appendix F) at the end of the four weeks. This assessment focused on the language objectives I taught throughout the writing unit: writing specific sight word vocabulary that they used in writing narratives, sounding out verbs that were used in their narratives, orally telling a story with a beginning, middle, and end, and then writing
that story using what they know about capitalization and punctuation. For the story, I assessed them by having them write a separate story with the prompt: Tell me about a time you went to the park. The average score out of 15 possible for the control classroom was 10.6 and the treatment classroom was 11.4. On this assessment that specifically addressed areas that were the focus of my language objectives, the co-taught classroom scored higher.

Looking at figure 19, the control group has five students who scored high, 12-15 points, on their language objective assessment, while the treatment group has eight. With mid range scores, 9-11 points, the control group has four students while the
treatment group has two. Both groups have three students who had low scores for the language objective assessment with 5-8 points.

The language objective that students in both groups performed the best on was orally telling their story with a beginning, middle, and end. Twenty out of twenty-four students were able to tell a story with these three parts. The lowest area for the control group was sound spelling verbs used in their narratives. Many of them could only write the beginning sound. The lowest area for the treatment group was writing the narrative sight words. Most of them could not write the word “our,” and many confused “me” and “my.”

**Conclusion**

In this chapter, I presented the results to my research question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher? I collected pre and post-test data from kindergarten students in writing workshop and compared the data between two groups: one which was co-taught by a general educational and EL teacher and the other which was taught by a single general education teacher. I compared the growth from the pre to post-tests for each participant in each group and then looked for patterns and trends. I also individually tested the participants on the language objectives that I had explicitly taught using an assessment I created and looked for trends between the two groups. In the next chapter, I will discuss my major findings, their implications, and further suggestions for research.
CHAPTER FIVE: Conclusions

As a teacher of kindergarten EL students, I have been co-teaching in the classroom for the last six years. ELs are in the classroom learning grade level curriculum with their peers, regardless of their language level, and I am collaborating with the classroom teacher to present the curriculum in a way that is understood by ELs. While students and teachers alike seem to enjoy this method of teaching, there has been little quantitative data that shows the benefits of co-teaching to students’ learning. Because my time with my students is limited, I wanted to make sure that co-teaching provided the most effective means for my EL students to increase their English proficiency and understand the curriculum that they were expected to master.

My study compared the writing growth of kindergarten students from a co-taught classroom to the writing growth of students in a single-taught classroom after four weeks of instruction (Appendix I). In my study, I attempted to answer the question: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher? In this chapter I will address the major findings of my study and discuss its
limitations. I will also discuss the implications my study has for teachers and administrators and give suggestions for further research in this area.

**Major Findings**

My research question was: To what extent is there growth in writing proficiency for kindergarten ELs when a co-teaching model of instruction is used for writer’s block where content objectives are taught by the general education teacher and language objectives are taught by the EL teacher? In answering this question, I found mixed results.

**Growth in the Treatment Group**

Students in the treatment group did make growth in all areas of their writing proficiency. They made the most growth in writing their personal narratives in the content objectives of *first person*, including a *beginning, middle, and end*, and *adding adjectives* to their writing. They made a small amount of growth in *sounding out words*, *rereading* the stories they had written, and *pictures matching words*. To that extent, co-teaching was an effective model of instruction for their writing block as students grew in all target content objectives.

Two areas that were unique to personal narratives that students were not familiar with at the beginning of the study were writing in the first person and telling a story with a beginning, middle, and end. These were both focuses of my language objectives as we learned key vocabulary that is used in personal narratives and orally told stories that had a beginning, middle, and end. These were also focuses of the content objectives so they
were reinforced because they were targeted in both sets of objectives. The content objective focused on students writing a true story in the first person, while the language objective gave students a word bank of pronouns so they were familiar with and had access to them. Only six students began the pre-test proficient in the area of writing in first person. By the post-test, 21 students scored 2 in this area and four scored a 1. The area where participants in both groups showed the most growth was in having a beginning, middle and end. This was also an area of focus for language objectives as we planned orally what would happen first, next, and last in our stories, as well as a focus for the content objectives as the students wrote down these stories with a beginning, middle, and end. Adding language objectives to these two content areas produced growth for students in my study just as other studies showed in the literature review (Echevarria, Short, & Powers, 2006; Hadley et al., 2000).

**Treatment Group Versus Control Group**

When comparing the co-taught class to the control class, results were not as significant. On the post-test writing, the control group and the treatment group scored similarly on the content objectives of *adding adjectives* and *beginning, middle, and end*, but more students in the control group made growth (See figures 1 and 2). The treatment group scored slightly higher in the pre-test, so less growth was possible for them. For the content objective of *sound spelling*, more students in the treatment group made growth but here again, more students in the control group were proficient in the pre-test so less growth was possible for them. For the content objective of *rereading*, more students made growth in the treatment group; more reached proficiency, eight participants compared to six. This is also the area that saw the most scores decrease
between the pre and post-test, which I will address below. The content objective of *pictures matching words* was high in the pre and post-test. Seventeen students began the study as proficient and nineteen were proficient by the post-test. Drawing as part of telling and writing stories was a task they had been working on all year, so one with which they were the most familiar. A major finding of my study was that co-teaching did not positively or negatively affect the students’ scores overall, much like the study by Aliakbari and Nejad (2013). Most scores for the control and treatment group in my study were very similar to each other.

Although gender and ethnicity were not addressed in any of the studies that I found, the results in my study were worth noting. More boys in the control group scored high on their post-tests, 11-12 points, but boys in the treatment group made more growth throughout the study. The opposite was true for the girls. More girls in the treatment group scored high on their post-tests than those in the control group. Both groups of girls made similar growth. Looking at L1s, Hmong students in the control group scored higher than the Hmong students in the treatment group on their post-tests. Growth for the Hmong control group was also higher than that of the Hmong treatment group. For the Karen students, post-test scores were a little higher for the treatment group than the control group and the treatment group had higher growth scores than the control group.

One question I wanted to answer in my study was if ELs in a co-taught classroom would still get the language attention they need if they were in the regular classroom all day. On the language objective assessment, as shown in figure 15, the students in the treatment group scored higher than those in the control group. I taught these language objectives using the co-taught model in the treatment classroom and
using the pull-out method in the control classroom. There was also overlap in the content and language objectives so students were getting more focused instruction on these objectives. This data shows that the students in the treatment group were able to understand and demonstrate these language objectives when taught using a co-teaching model. This data was consistent with other studies where EL and SPED students who were co-taught by a general education teacher and an EL or SPED teacher outperformed students who were taught by a single teacher. (Hadley, Simmerman, Long, & Luna, 2000; Hasvold, 2013; Qi & Rabren, 2009; York-Barr et al., 2007).

The treatment group outscored the control group on the language objective assessment. This was not the case, though, for the post-test scores on the content objectives. On the post-tests and on the growth students made between the pre and post-tests, the control group scored similar to or slightly higher than the treatment group. This is similar to the study by Aliakbari and Nejad (2013) that found no difference in student achievement between co-taught and single teacher classrooms.

**Student Growth Outside the Norm**

Students who did not make much growth in my study, figure 13, did not grow for various reasons. Of the eleven students whose scores changed from -1 to 2 points, five of them began with mid-scores on their pre-tests, 9-10 points. It was not possible for them to make much growth during the study. Three of the six remaining students were my lowest language learners, WIDA level 2. I will discuss these students later. Two of the students had scores that decreased. One of these students wanted to be the first one to finish the post-test, and so did not do her best on it. The other student had done well
on the previous unit of writing pattern books, which is what she wrote for her pre-test. She scored high on her pre-test for sound spelling, rereading, and matching words and pictures because she was familiar with the pattern words she used, “I see the ____.” During the personal narrative unit, she understood the idea of telling a story about herself, but she was unable to sound out any of her words, and thus scored 0 on 3 of the 6 rubric areas.

Four students had the highest growth scores in the study with 6-9 points of growth, two in the control group and two in the treatment group. Students with the most growth, figure 14, all began with low pre-test scores and ended with mid to high post-test scores, 10-12 points out of 12. These four students all had a turning point during the four-week unit where sound spelling and the ability to find sight words really clicked for them. This made a big difference in their writing confidence and in their post-test scores. Co-teaching did not seem to have a major positive or negative effect on this happening as it occurred in both classrooms.

One of the concerns of co-teaching was that mainstream curriculum may be too rigorous for ELs with low levels of English proficiency (Mabbot & Strohl, 1992; McClure & Cahnmann-Taylor, 2010; York-Barr et al., 2007). Although I did have two students in the treatment group with a language Level 1, they did not return their consent forms and were unable to be a part of the study. There were, however, three Level 2 students involved, one in the control group and two in the treatment group. All three of these participants scored low on their pre-tests and had low growth scores. From the pre to the post-test, the two students in the treatment group went from 4 to 6 and 6 to 5 points, respectively. The control student went from 5 to 8 points. The control student
also scored higher on the language objective assessment with 11 points out of 15, while the treatment students scored 5 and 7 points out of 15. Although the number of students in this category was very small, this data supports the idea that students with lower language levels may need the support of a smaller, separate group to support their language needs.

**Is Co-teaching the Best Use of Time?**

Another question I was interested in was whether co-teaching is the best use of instructional time with so many students to service. Co-teaching requires a lot of planning time with the co-teachers to look at data, coordinate the lessons, and decide which method of co-teaching will work best with specific lessons. Co-teaching also requires dedicated time spent in the classroom. To achieve this, I was in one classroom for the writing lessons every day. I work with three other classrooms as well, one that was part of the study and two that were not. The teachers from the classrooms not in the study were not part of our planning time, but they were using the same writing curriculum and rubric for evaluation. From my observation, the students who participated in my study in both the treatment and control classrooms had more advanced writing skills than those who were in the non-participating classrooms. They were much more able and confident in writing independently and attempting to sound out words on their own. They also scored an average of one level higher in the writing portion of the ACCESS test and were much more confident in their writing during the ACCESS test than those who were not in the study. When asked to write down a story they first told orally, most students who had not participated in the study said, “I can’t.” In comparison, most students in the study began to sound out and write down letter
sounds, words, and phrases. I attribute this, in part, to the collaboration that took place between the teachers participating in the study and to our intense focus on the writing process for our ELs. Even though co-teaching, with all the coordination and planning between teachers, is effective and beneficial for students, many schools do not have the resources to hire as many EL teachers as might be needed to co-teach throughout the school. That said, the co-teaching model may not be the most effective model for all ELs if other classes are losing EL service time because of the time commitment co-teaching requires.

Overall, both the control and treatment groups showed growth in all areas of writing proficiency. The co-teaching model proved to be effective in helping the students improve their writing proficiency, but it did not prove more effective than the single-taught classroom with ELs pulled out for language instruction.

**Limitations**

One limitation of my study was the small sample size of students. I had only twenty-five students in the study, none of who were WIDA language levels 1 or 5. Having students of all language levels would be beneficial to see if co-teaching affects participants differently. Also, most of my participants, 21 of 25, were Asian. Students from various ethnicities may have different results.

One concern about the study was that two separate general education teachers and classrooms were used to procure data. Some variation in teaching styles and writing focus may have altered how the students performed on their on-demand writing rather than the intervention of having a co-taught classroom incorporated into the writing
lessons. Because of this, it is difficult to say with complete certainty that co-teaching was the only variable affecting the students’ learning. I tried to lessen this as much as possible by choosing two teachers with comparable teaching experience and two classrooms of children with comparable abilities. I also made sure that each classroom was taught the same language objective by me, either in a co-taught presentation or in a small, pull-out group.

The two classroom teachers and I also did all of our planning for the unit together so both classrooms were following the same content and language objectives, allotting the same amount of time for writing and instruction, and using the same checklists and rubric to evaluate student work. This helped to keep the model of co-teaching as the variable between the classrooms. It may have also helped the control teacher focus more on the language objectives than he normally would have. Like teachers in the studies sited in my literature review (Benoit, 2001; Honigsfeld & Dove, 2008; Nevin et al., 2004; Salend et al., 2002), the other teachers in my study and I learned from each other as we modified the curriculum, created lessons, and tried new strategies. All three teachers in the study felt that the planning time together and the emphasis on language objectives was beneficial to us as teachers and to the students. I think planning all together helped us all think of better ways to present information to the students. This was great for the students, but may have skewed what a single taught lesson might have looked like and what we, as a co-teaching pair, might have come up with on our own.

The personal narrative unit for this study followed a writing unit on pattern books. This may have affected some of our pre-test scores because some students wrote
pattern books for their personal narrative pre-test. Because students were familiar with the simpler pattern books, they scored well on sound spelling, rereading, and adding adjectives in the pre-test rubric. By the post-test, the students knew what a personal narrative was and they all attempted to write one. Some of these students showed little or no growth on the post-test because they struggled with the lengthier, more complex genre of narrative which required sounding out more words and being able to reread what they sounded out. I think these were the areas of least growth because of the complexity of the task.

Another limitation was that, in working with young human subjects, it was difficult to control their motivation on any given date. For example, one very competent student, participant 19, rushed through her post-test because she wanted to finish first and her many of her scores decreased compared to her pre-test, which she had written conscientiously. Other students performed very well with a small amount of support on their daily writing, but struggled when they were told they had to do everything on their own.

A final limitation of the study was that I was both a researcher and a teacher within the study so I was not a completely neutral observer. I tried to maintain an unbiased evaluation by removing the names of students from their writing before they were evaluated and by having all teachers involved in the study evaluate each pre and post-test. Having another researcher would have been useful in this regard, but the scope of this study was limited.
Implications

This study set out to look at the effectiveness of the co-teaching model compared to writing content instruction from a single teacher and English language instruction in a small, pull-out group. Although my study did not show a large difference in growth between the two groups, it did show that both groups made more growth in certain areas. It also showed overall growth for both groups and a high degree of proficiency when three teachers planned lessons together and included intentional language objectives into the lessons. Both classroom teachers in my study felt that the co-planning helped to make the writing instruction more purposeful and focused. My co-teacher also felt that two teachers kept students more accountable because we were able to monitor their work and make sure they were getting it done.

Although the co-teaching model did not show significantly more growth in the students’ writing compared to the control group, the students in both groups grew as writers because of the collaborative approach the three teachers took. The implication of this to other teachers and districts is that co-teaching and the intense planning it involves positively impacts students’ academic performance. For teachers and administrators, this could mean prioritizing planning between EL and general education teachers so that lessons are approached through both lenses. For administrators and policy makers, this could mean hiring more EL teachers so in-depth collaboration between general education and EL could be made possible.
As for my position, I have seen the impact co-planning and co-teaching has had on my students. I have seen the improvement in their confidence and in their writing as my co-teacher and I planned lessons focused on the content and language they needed to become better writers. As I go forward, I will use these results within the other classrooms that I am working. I will invite the other grade level teachers to be a part of the co-planning process and share with them the language objectives and methods of presentation so that all ELs in the grade level can benefit. I will also share this research with my co-workers and administration and encourage them to support our co-teaching teams and increase our opportunities for co-planning as grade level teams.

Further Research

While researching my co-teaching for my literature review and carrying out my study, I realized that further research needs to take place in the area of co-teaching. Because we wanted the students to be receiving the exact same curriculum and evaluation, we did all of our planning together with my co-teaching team and with the teacher from the control classroom. Although this kept our lessons similar, it may have also affected the amount of EL practices and knowledge the control teacher brought into his single-taught lessons. Because co-teaching is so reliant on co-planning, this is what really brings depth and diversity into the model, further research could be done that included a third group – a single taught classroom whose teacher was not part of the lesson co-planning.

The students in my study were all intermediate level English proficiency. The three level 2 ELs that were part of the study showed more proficiency in the control
group than in the treatment group. My sample size was very small, though. It would be important to see if results are similar with level 1 ELs or with level 5 ELs. This would show if co-teaching is effective for students at different language levels.

Finally, more quantitative research on co-teaching and student achievement needs to take place. Many researchers point out the lack of empirical evidence to prove the effectiveness of co-teaching (Fu, Hauser, & Huang, 2007; Morocco & Aguilar, 2002; Murawski & Swanson, 2001; Zigmond, 2001). More studies at different grade levels and in different subject areas would help show the effectiveness and importance of co-teaching.
REFERENCES


Cook, L. (2004). *Co-teaching: Principle, practice, and pragmatics*. Albuquerque, NM: New Mexico Public Education Department, Quarterly Special Education Meeting


Holt, N. M. (2004). Pull-out to collaboration: Becoming an effective ESL co-


Minnesota Department of Education. (2011). English Learner Education Program Guidelines. MN.


Appendix A

Writing Assessment Rubric

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<th>Post-test</th>
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<table>
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<th>Sometimes 1 point</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>Story contains a beginning, middle, and end.</td>
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</tr>
<tr>
<td>Students use adjectives to describe details.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Words contain one or more phonemes (invented and conventional spelling).</td>
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</tr>
<tr>
<td>Student can reread story.</td>
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<td>Pictures match words.</td>
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## Appendix B
### Teacher Rubric and Guidelines

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<td>Story contains a beginning, middle, and end.</td>
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<td>Pictures match words.</td>
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</tbody>
</table>

- Booklet contains one story written in the 1st person.
  - 2 – it is a story and it is written in 1st person
  - 1 – it is either a story or it is written in 1st person
  - 0 – it is not a story and is not written in 1st person
- Story contains a beginning, middle, and end.
  - 2 – contains beginning, middle, and end
  - 1 – contains a beginning (setting)
  - 0 – is not a story/has no elements of narrative
- Students use adjectives to describe details. (Setting, feelings, adjectives)
  - 2 – contains more than one adjective/detail
  - 1 – contains one adjective/detail
  - 0 – contains no adjectives/details
- Words contain one or more phonemes (invented and conventional spelling).
  - 2 – all words contain one phoneme
  - 1 – some words contain one phoneme
  - 0 – words contain no phonemes matching the story
- Student can reread story.
  - 2 – most written “words” match with what they say
  - 1 – some words match
  - 0 – written words are not connected to their retell
- Pictures match words. (the words they say when retelling)
  - 2 – all pictures match
  - 1 – 1 picture matches
  - 0 – no pictures match
## Appendix C

### Student Pre-Test Scores Using Rubric

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<th>Reread</th>
<th>Pictures match</th>
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* *beginning, middle, and end**  **adjectives**
Appendix D
Post-Test Scores Using Rubric

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Appendix E

Pre-Test to Post-Test Growth Change in Scores Using Rubric

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Pre-test score of 0 to Post-test score of 2 = 2
Pre-test score of 1 to Post-test score of 2 = 1
No growth = 0

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<tr>
<th>Student Number</th>
<th>1st person</th>
<th>BME</th>
<th>ADJ</th>
<th>Sound spell</th>
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Language Assessment – Teacher copy

Student #_____       Student name: ________________________________

Student can write the following sight words related to personal narratives:
Me  my  I  we  our  _____ of 5

Student can write a beginning, middle and end sound for the following words:
Went  made  got  saw  played  _____ of 5

Student can relate a personal story about going to the park with a beginning, middle, and end.
Beginning       Middle       End

_____ of 3

Student can write a sentence from their oral recount beginning with a capital letter and ending with a period.

_____ of 2
Appendix G

Language Assessment – Student Copy

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Appendix H

Language Objective Assessment Scores

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Appendix I

Time Chart of Writing Instruction

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## Appendix J

### Content and Language Objectives

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<td>On demand writing: “think of a true story from your own life and write about it using everything you know as a writer.”</td>
<td>C.O. I can draw and label about things that are important to me.</td>
<td>C.O. I can draw and label about things that are important to me.</td>
<td>C.O. I can use “Map of my Heart” to write a true story about me. (using 1 pg story paper)</td>
<td>C.O. I can describe a personal narrative. L.O. Personal narratives use I, my (make chart with ½ for singular and ½ for plural)</td>
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<tr>
<td>L.O. I can orally tell a partner about something that is important to me.</td>
<td>L.O. I can explain my “Map of my Heart” to a partner using “I” statements.</td>
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<tr>
<td>C.O. I can write a story with a beginning, middle, and end. (using 3 box story paper)</td>
<td>C.O. I can write a story with a beginning, middle, and end.</td>
<td>C.O. I can tell what to do when I think I am done. (using front page of checklist and last piece of writing)</td>
<td>C.O. I can use new personal narrative paper. Copy text and pictures onto each page of booklet.</td>
<td>C.O. I can write a title and draw a cover illustration for my book. L.O. I can identify the big idea of my book to create a title.</td>
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<td>L.O. I can tell a story with a beginning, middle, and ending.</td>
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<th>Day 15:</th>
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<tr>
<td>C.O. I can write words using the sounds I hear. L.O. I can identify a letter by hearing the sound it makes.</td>
<td>C.O. I can use words in the room to help me write. L.O. I can produce familiar words from environmental print.</td>
<td>C.O. I can use the words we, our, and us in my personal narrative. L.O. Personal narratives use we, our, us, and me</td>
<td>C.O. I can use the checklist to help me write a personal narrative. L.O. Personal narratives use I, my, we, our, us, and me</td>
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<td>L.O. I can begin my personal narrative by telling the setting. L.O. I can identify the beginning of my story and tell where it took place.</td>
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<tr>
<td>Day 16:</td>
<td>Day 17:</td>
<td>Day 18:</td>
<td>Day 19:</td>
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<tr>
<td>C.O. I can make the middle of my story longer by adding details.</td>
<td>C.O. I can end my personal narrative by telling how I felt.</td>
<td>C.O. I can leave spaces between my words when I write.</td>
<td>C.O. I can use my writing checklist to choose my best work.</td>
<td>On demand assessment: “think of a true story from your own life and write about it using everything you know as a writer.”</td>
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<tr>
<td>L.O. Adjectives describe how something looks or feels</td>
<td>D. S. finish story telling how she felt.</td>
<td>L.O. I can use capital letters at the beginning of my sentences and in my title</td>
<td>L.O. I can use a period at the end of my sentences.</td>
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Appendix K

Writing Booklet for Pre and Post-Test
Appendix L

Student Checklist
Writer's Checklist
Personal Narrative

• Write a true story about me

• Put events in order:
  beginning  middle  end

• Use details to describe my story:
  Setting:
    beach  zoo
  Feelings: happy  mad  sad
  Descriptions: big, little, red

• Write my words using the sounds I hear

• Pictures match my words on each page

• I can reread my story
## Words I Can Use

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### Setting:
- beach
- zoo
- park

### Feelings:
- happy
- mad
- sad
- silly
- surprised

### Descriptions:
- big, huge, enormous
- little, small, tiny