**Co-teaching with English language newcomers in a middle school science class**

by

Jenny Lee Green Havermann

B.S., Texas Lutheran University, 2002
M.S., University of Missouri - Columbia, 2004
M.S., University of Missouri – Kansas City, 2011

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

Department of Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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# Abstract

The purpose of this qualitative case study was to investigate how a Title 1 middle school with ~12% EL population transitions from a push-in (1 teach, 1 assist) co-teach model to a collaborative (team teaching) co-teach model of instruction with EL Newcomers during an academic semester. The research study aimed to understand how two middle school science educators implemented a co-teach program model with EL Newcomers, what the perceived impact to their professional identity was during implementation, and how the educators developed a co-teach partnership during the semester. Co-teaching was the backdrop for this qualitative case study, but it was focused by symbolic interactionism and teacher's professional identity. Symbolic interactionism provided the lens for understanding how the two participants made meaning out of their interactions. This meaning-making then influenced changes to each teacher's professional identity and the co-teach team identity that formed.

In addition to examining the formation and changes to each teacher's professional identity, this case study also followed the journey of two educators, who are both science educators and one is also ESOL certified, as they became a collaborative co-teaching team. This journey is documented during recorded interviews, classroom observations, and co-planning meeting observations. In reviewing and analyzing the data the following four themes were observed:

- Teacher identity
- Necessary traits for collaboration
- Team goals
- Team identity

These four themes, along with the observational data, help explain how the two educators could go from using mainly a 1 teach, 1 assist (1T, 1A) co-teach strategy to team teaching (TT) strategy.

The findings from the study suggest the journey of the two educators from viewing themselves as individuals working in the same classroom to calling themselves a team and viewing themselves as the coaches was possible because of the relationship they were able to develop with each other during their interactions. Symbolic interactionism suggests that without interactions, individuals are not able to make meaning or gain understanding of the person they are working with. Without the opportunity to collaborate, for instance during their co-planning meetings, these two educators may not have made the journey to team teaching. As the two educators began their switch from 1T, 1A to TT, they began to develop lessons that were differentiated and modified for all levels of students, including EL Newcomers.

Throughout this case study, the following question has been the focus and guiding the way: How do middle school science educators implement a co-teach model of instruction with EL Newcomers?

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Approved by:

Co-Major Professor
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# Dedication

I want to dedicate this to all the EL teachers out there looking for ways to make a difference in the lives of their students and the teachers they work with because we are all in this together. I want to say to all the educators out there – I see you and I appreciate all the hard work that you do to make a difference in the lives of each student you encounter each and every day!

# Chapter 1 - Introduction

Middle schools are in a unique position in the educational sequence in the United States. They serve as a transition period for students between elementary and high school. Middle schools adapt program models from elementary and high school levels and have a goal to prepare students to be successful at high school. Middle school students move around their building having different teachers for each course that they take just like they do high school. In each grade level, students are often placed on a core team, meaning a large group of them have the same math, social studies, science and English language arts (ELA) teachers. The purpose of teaming is to have a group of teachers get to know a group of students just like a teacher would get to know a set of students in an elementary classroom.

This type of program model was observed in middle school in this study. It provided for ease of master scheduling, allowed for students to be grouped into teams and students participated in the electives of their choosing. A struggle that faced schools like North Middle School (NMS) who have a high English Language (EL) Newcomer population was scheduling their EL teachers. In an elementary model students were clustered together to consolidate support services thus for example, the EL teacher would go into the ELA hour, or be assigned to a grade level, or assigned to a teacher to support the EL Newcomer students. There were many different options and research that supported elementary program models (Rytivaara, 2012; Schlaman, 2019; York-Barr, 2007). At the secondary level, the options and the research to support the various options varied (Marsh, 2018; Schlaman, 2019). North Middle School adopted and implemented a co-teach program model (explained below) for the past seven years with the EL Newcomers.

NMS primarily focused on a single co-teaching strategy, 1 teach: 1 assist (1T:1A). This co-teaching strategy required the least amount of co-planning time and allowed the EL teacher to focus primarily on the EL Newcomer students. The EL educator's role was to differentiate and to provide the necessary language accommodations for all EL Newcomers in the class. Co-planning time at NMS was a discussion in the hallway during a passing period, an email containing the weekly plans, a meeting before or after school and in some cases no meeting at all. The support of administration in providing co-planning time was not a priority and therefore many EL teachers and content teachers did not switch roles or incorporate co-teaching strategies beyond 1T:1A.

NMS EL educators began expressing concerns that they were overqualified and overpaid paraprofessionals in the classrooms. They were expressing these concerns because the role they had in the classroom was like that of a paraprofessional. They were not viewed by students or their colleagues as educators in the classrooms in that their responsibilities were not the same as the general education teacher, the students were not respecting their authority for discipline and their overall job satisfaction because of this suffered. NMS had a high turnover of EL teachers during the seven-year period that led up to this study. They had at least one new EL teacher every year and most years two of the four teachers were new between 2015-2023. This idea of not being viewed as an equal and not being treated as an educator was a common feeling among EL teachers who were in a program model where both teachers were not viewed as equals, i.e. push-in programs and 1T:1A teaching strategies (Davison, 2006; Scruggs, Mastropieri and McDuffie, 2007; McClure & Cahnmann-Taylor, 2010).

NMS EL educators were problem solvers and had begun looking for a way to shift their program model. At the time they were problem solving, they realized that each one of them had a

certification in a core content area in addition to their certification in English Language Learners. They requested meetings with the administration and their scheduling counselor. The EL educators made the request to shift from grade level EL support to content EL support. They made the argument that one of the only times they are viewed as an equal in co-teaching classrooms occurred when they were in the content area that they had their certification in. They felt this was because they have confidence in their ability to jump in and be in front of the class, but also the core teacher had confidence in them. Administration and the counselor agreed to make this change for the upcoming school year but no other changes (volunteer content teachers or dedicated co-planning time) were added.

This study looked at year two of this change. During year two, more changes were implemented. The EL teacher would spend two hours with one core teacher and have dedicated co-planning time. At the same time, a new EL teacher, a new administrator, and a new core teacher would join NMS. This constant turnover of staff and changes to the program model, in addition to the normal stress of just being an educator, added to the complications of this study.

To help focus this case study, a theoretical framework of Symbolic Interactionism (Blumer 1969) and teacher professional identity (Beijaard et al., 2004) was employed as the study focused on how middle school science educators implemented a co-teach program model of instruction with EL Newcomers. Symbolic Interactionism was a means of understanding collaboration and social interactions which was what two educators were required to do when they were co-teaching in a classroom (Blumer, 1969). Teacher professional identity was a means of understanding how the educator developed his or her co-teaching identity and partnership through the course of the study (Beijaard et al., 2004). As they developed their co-teaching partnership, the two educators supported EL Newcomers in their science classroom.

## Historical Background Educating EL Newcomers

The United States has a long history centered around immigration. For the most part, this country was founded by immigrants and attributed its growth to immigrants. But historically immigrants were not treated as equals when it came to education. The United States has never had an official language, but the expectation to communicate in English was so prevalent that English (ELA) was taught to students beginning in kindergarten – and still is today. Without explicitly naming an official language, mandating English be taught in public schools ensures it has (de Jong 2011).

### Court Rulings impacting EL Education

In 1896 the Supreme Court ruled in *Plessy v. Ferguson* that separate but equal was constitutional. This applied to education and schools. While the aim was meant to segregate African American students, it was also applied to people who were not white - Hispanic, Chinese, Native Americans, etc. The truth in this can be seen in the cases brought before the Supreme Court in the early 20th century. These cases argued that segregation impeded Hispanic students' abilities to learn English. In 1930 the Supreme Court ruled in *Independent School District v Salvatierra* that segregation was necessary to learn English. But in *1931 in Alvarez v. Lemon Grove* and *1947 in Mendez v. Westminster School District* the Supreme Court reversed its 1930 ruling stating that segregation did impede the English language acquisition. This ruling was the beginning of non-native English speakers having the right to be immersed with English speakers in a classroom. It did not establish a method for teaching a mixed language classroom, but educators would be expected to teach both.

The rulings in 1931 and 1947 would pave the way for *Brown v. Board of Education* in 1954 which led to the reversal of *Plessy v. Ferguson*. It established that separation was not equal

and all students regardless of race and color had the same rights to education. States have to provide equal opportunities for education to all students. In the *1974 case of Lau v. Nichols* the San Francisco Unified School District argued that it was providing equal educational opportunities to all students because students who were not English proficient were in classes with English proficient students. In the Supreme Court's ruling, Justice William Douglass wrote

> "Under these state-imposed standards there is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education. Basic English skills are at the very core of what these public schools teach. Imposition of a requirement that, before a child can effectively participate in the educational program, he must already have acquired those basic skills is to make a mockery of public education. We know that those who do not understand English are certain to find their classroom experiences wholly incomprehensible and in no way meaningful."

Justice Douglass is describing differentiation and modification in the ruling. Educators - general classroom teachers and specialists - are required to make content accessible to all students. This is especially true for English Language Learners. Just sitting in a classroom and listening to English being spoken all day doesn't mean they are learning language or content.

In a follow up to Lau, the *1981 case of Castañeda v. Pickard* established that districts must meet the needs of their English Language Learners according to the Equal Educational Opportunities Act of 1974 (EEOA). To determine if their needs were being met a three-prong test was created. This test became known as the Castañeda Standard. The three parts of this standard are: (1) based on a sound educational theory, (2) implemented effectively with sufficient resources and personnel, and (3) evaluated to determine whether they are effective in

helping students overcome language barriers. The Castañeda Standard can be applied to any program model that is used in education, i.e. co-teaching.

In the years that have followed there have been multiple cases brought before the Supreme Court arguing in favor and against bilingual education or more in more general terms, education for English Learners. Each case has brought to light the uniqueness of learning a new language while also being a student learning content. The courts have not mandated a policy or declared a specific model is the best, but they have made it known that schools are prohibited from ignoring the needs of their English Learners. It is the job of local educational agencies (LEAs) and their schools to educate their ELs in English and in academic content. Any program model that is implemented is still required to meet the Castañeda Standard.

**Federal Policy that has influence EL Program Models**

A country founded by immigrants means that its people brought with them their native languages - Chinese, French, German, Spanish, and even English. These immigrants also established schools for their children and many of them were bilingual schools. Locally operated bilingual schools were a common practice throughout the United States until the end of the 19th century (Sinclair 2018). The beginning of the 20th century brought with it the beginning of the Progressive Era, xenophobia (which also includes the Nativism and Americanization movements) stemming from World War I, and the ending of locally operated bilingual schools. Nativism and Americanization movements sought to assimilate immigrants into American society (de Jong 2011). Adult male immigrants who could not speak English were required to attend night school and learn. During this time, laws were passed stating who can enter the country and setting limits on the number of immigrants in a year.

In addition to laws that limited who can enter the United States, there were laws that stated people who were illiterate could not enter (1917 Immigration Act) and laws that made speaking English a requirement for naturalization (1906 Nationality Act). During this heightened time of Americanism, schools that taught a language other than English were thought to be un-American. The education of immigrant children was primarily neglect and/or segregation. Regardless of age, students were enrolled in 1st grade and left to learn on their own. Some places had segregated classes where students were forced to learn English speaking skills and punished if they spoke in their native tongue. The results of this educational practice were high dropout rates among immigrants, high numbers of students placed in special education classes (IQ testing in English of immigrant children), and graduates with limited skills (de Jong 2011). Perlmann (1990) found that 13% of 12-year-old students whose parents were foreign-born went on to high school (compared with 32% of white children of native parentage).

Change can be slow. Immigrant children would be subjected to subpar education for almost 70 years. The first hint of change would come in 1964 in a subsection of the Civil Rights Act. Title VI states that programs that receive federal assistance money cannot discriminate based on race, color, or national origin. This means that local education agencies (LEAs) that receive federal money are prohibited from discriminating against students based on their national origin - English Learners and immigrant children.

In 1968, Congress would pass the Elementary and Secondary Education Act (ESEA). Within the ESEA was Title VII - The Bilingual Educational Act (BEA). BEA began as a grassroots effort by communities that were linguistically diverse. Their original goal for BEA was “self-determination for marginalized linguistic communities by encouraging local languages to become an integral part of schooling” (Sinclair, 2018, p.2). BEA was meant to be a standalone

act, but Congress incorporated it into the ESEA. It has been argued that the inclusion of BEA in the ESEA took away from its original goal. Bilingual education programs were (are) focused on remediation for those classified as EL. In addition, the ESEA was the beginning of high stakes testing for school accountability and the demonstration of adequate yearly progress (AYP) in student learning. A debate would ensue on how to measure language growth in conjunction with academic growth for ELL students (Yeh, Wan, & Scott 2020).

The BEA has seen changes over the years since its original inception. The changes occur during the reauthorization of the act. The 1978 changes included an addition to include limited English proficient (LEP) students and limited instruction in native language as strictly for transitional needs. This is also the first time "the BEA required that the target population be assessed for language proficiency, and that students in Title VII classrooms must move to an English-only classroom after 2 years or else undergo an 'individual evaluation establishing the need for continued services' (1978 BEA)'" (Sinclair, 2018, p.14). 1982 amendments provide program funding for LEP students with special needs, support family English literacy programs, and emphasize importance of teacher training. The 1988 amendments included increased funding to state education agencies, expanded funding for "special alternative" programs where only English is used, established a three-year limit on participation in most Title VII, and created fellowship programs for professional training. The 1994 reauthorization attempted to keep the original ideas of BEA but also established major reforms. Among these reforms were provisions for professional development programs, improved research and evaluation at state and local level, and additional funds for immigrant education.

The new millennium would ring in the reauthorization of ESEA in 2001. This would bring about the No Child Left Behind (NCLB) era. The BEA would move from Title VII to Title

III and undergo a name change to the English Language Acquisition, Language Enhancement, and Academic Achievement Act (ELALEAA). The primary goal of ELALEAA was language acquisition that was monitored by annual exams known as English Language Proficiency Assessment (ELPA). There was a change that occurred in the type of language instruction that was required. Students did not have to be in a bilingual program. They only need to be in a language instruction program. The federal requirements for language instruction programs were: 1) teach English and 2) teach academic content following a state's English Language Proficiency standards and academic standards (Wright 2010). The freedom for LEAs to pick their own program model for language acquisition that began in 1984 and continued into the new millennium led to some LEAs looking at co-teaching as a possible model. Co-teaching allows EL students to enter a general education classroom with very limited English language ability (stipulation in 1974 amendment) and the funding for training was available.

NCLB provided steps for moving education forward by exposing the inequities of education and the achievement gap between different races and economic backgrounds. It mandated accountability by all LEAs and that AYP was monitored by the states. While it served as a foundation, those involved in education realized that achieving AYP requirements became increasingly difficult and that changes needed to happen. In 2015 Every Student Succeeds Act (ESSA) was passed. It reauthorized ESEA and the protection of students with high needs and who are disadvantaged. Regarding ELs, ESSA established a standardized criteria for identifying ELs and the inclusion of English proficiency as a measure of school achievement. ESSA also required that state EL standards be aligned to rigorous academic content of mathematics, English language arts, science and social studies.

ESSA requirements acknowledge the EL students need to acquire language but also need to learn academics. The alignment of EL standards to all four core content areas means that EL students will need to receive instruction in all four core areas. One possible program model that allows EL students to be in the classroom with their English-speaking peers is the co-teach model. This model affords EL students the opportunity to learn content from a highly qualified teacher and to also receive the language support necessary for them to be successful in their learning that can be demonstrated on annual state assessments.

Educational policies like the No Child Left Behind Act (NCLB) of 2002 and Every Student Succeeds Act (ESSA) of 2015 had requirements for school districts to quantitatively show student growth, also known as AYP (adequate yearly progress). These national educational requirements illuminated the achievement gap between nonnative English speakers and native English speakers. Many different teaching models, ranging from sheltered instruction, pull-out/push-in, and bilingual models were implemented in schools across the United States in the hopes of closing this achievement gap (Marsh 2018). But these program models have not produced data to show a reduction in the achievement gap. **Figure 1.1** is based on data from the Nation's Report Card from the Office of English Language Acquisition (OELA) (September 2018).

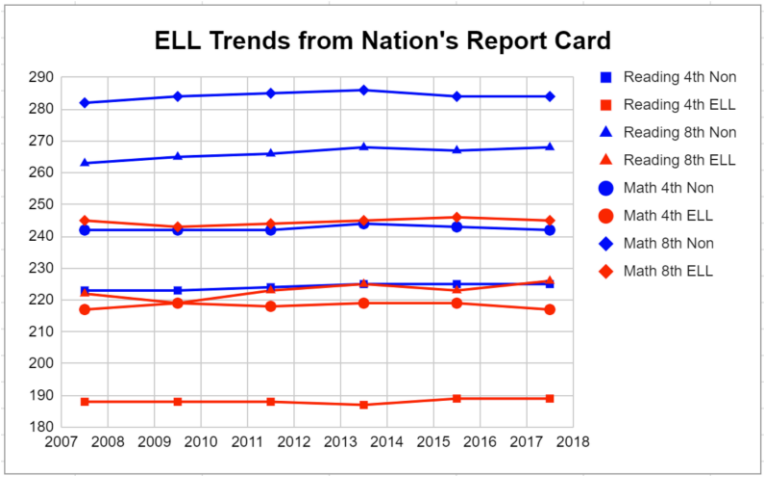


**Figure 1.1.** **ELL Trends from 2018 Nation's Report Card**

This graph shows the achievement gap in reading and mathematics between English speakers (non-EL students) and EL students in grades four and eight over a ten-year period. In every case, ELs performed significantly lower than their English-speaking counterparts.

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## Rationale for the study

The idea of co-teaching traced its roots to the 1960s with J. Lloyd Trump's proposal for team teaching (1966). When Congress passed the Education for All Handicapped Children Act in 1975, Special Education educators embarked upon looking at co-teaching models to support their students in general education classrooms. There was research that explored collaboration and co-teaching in the special education field (Friend and Reising 1993, Chitiyo 2017, Rytivaara, Pulkkinen and de Bruin, 2019). Much of the work was focused on co-teaching at the elementary level and yet it lacked the ability to be generalized to co-teaching at the secondary level (Friend & Reising 1993, Jacobson 2012, and Bauler & Kang 2020). Within the research, the duration of collaboration and partnership in co-teaching has been short term, lasting a few weeks to sixteen weeks. Research exploring co-teaching at the secondary level - middle school and high school - is limited. This study presents findings that contribute to the understanding and knowledge of co-teaching at the secondary level.

There were books published (specifically, Dove and Honigsfeld, 2017 and Beninghof, 2020) that provided examples of different co-teaching models or provided explanations and definitions related to co-teaching. No where was there a manual or literature that demonstrated how a secondary school could implement a co-teaching model given the constraints of funding, staffing, master schedule considerations, etc. This research was conducted at a secondary (middle) school that had been using a co-teach model (focused mainly on using 1 teach, 1 assist co-teaching strategy) for over seven years and was attempting to switch to a co-teach model that involved strategies (station rotation teaching, parallel teaching, and team teaching) where both teachers are teaching every day. The process of making this transition was non-existent in the literature. There was no documentation to guide how a school was supposed to accomplish this.

This research study applied an approach to co-teaching that had not been presented in literature. EL educators were co-teaching with core content teachers who had the same certification. For example, one EL teacher co-taught with only science educators because her initial certification was in science. Another EL teacher co-taught with only math teachers because they all had a math certification. Each EL teacher co-taught with sixth, seventh, and eighth grade content teachers. This was very different from what had been reported in SPED and EL literature. Normally EL (or SPED) teachers supported or co-taught with a grade level. Secondary educators were different from elementary educators in that they specialized in a specific content area. EL educators were usually certified as general educators or certified as a core content teacher before they became an EL educator (Friend & Reising 1993).

## Statement of purpose

The purpose of this study was to understand how a suburban, Title 1 middle school with 20% of its population being of Hispanic descent and 12% of the total population classified as EL, transitioned from a push-in (1 teach, 1 assist) co-teach model to a collaborative (station rotation, parallel, and team teaching) co-teach model of instruction with the EL Newcomers during the first semester of an academic year. The goal of this case study was to observe how two educators in a science classroom developed their co-teaching strategies through collaboration with each other to instruct science curriculum with EL Newcomers and general education students in a middle school.

In addition to observing how the two educators use collaboration to develop their co-teaching instructional strategies with EL Newcomers, this study is also exploring how educators describe the teacher's professional identity before and after collaborating in a co-teaching program model. Participation in co-teaching and collaboration will have an impact on a teacher's

professional identity because it is organic and every evolving (Erikson, 1968) Not only will co-teaching impact an educator's professional identity but it will also impact how both educators are able to provide support during co-teaching to EL Newcomers in the classroom. In exploring how all of this comes together, this research approaches the study from a novel perspective by observing two educators who are both science content experts. One of the experts is also an EL specialist. The two of them collaborate for two class periods each day in secondary middle school classroom implementing a co-teach program model. The researcher observed collaboration between core content and EL educators by recording monthly co-planning meetings, recording classroom instruction, and by conducting semi-structured interviews.

## Research Questions

Throughout the course of the semester, this study was guided by the question "*How do middle school science teachers implement a co-teach model of instruction with EL Newcomers?"* To share the perspective of the educators and to understand the implementation process, the following two sub-questions were asked during this study.

1. How do middle school science educators perceive the impact to their teacher identity during the implementation of the EL co-teaching program model?
2. How do educators working together in a middle school science classroom develop their co-teaching partnership to effectively support EL Newcomer students?

## Operational Definitions

1. English Learner (EL) - : "an individual who was not born in the United States or whose home language is a language other than English; or who comes from an environment where a language other than English is dominant; or who is an American Indian or Alaska Native and who comes from an environment where a language other than English has had a significant impact on his or her level of English language proficiency (US Department of Education, 2016)"

2. Co-teaching (CT)

   "An instructional delivery approach in which a classroom teacher and a special education teacher (or other special service professional) share responsibility for planning, delivering, and evaluating instruction for a group of students, some of whom have exceptional needs." "...strive to create a classroom community in which all students are valued members…" (Friend & Reising, 1993).

   "...two or more teachers working together in the same classroom sharing responsibility for the student learning" (Badiali & Titus, 2010, p.74).
3. Newcomer - a student with 3 or less years of language acquisition education in the U.S. educational system (Schmidt & Youth 2005).
4. General Education - Core content class encompassing Science, Social Studies, English Language Arts and Mathematics. For this study the focus will be on middle school science classroom.
5. Impact - to have a strong effect or influence on a situation or person (Cambridge Dictionary, n.d. Definition 6). This study is looking at the perceived impacts co-teaching has on teacher identity
6. Identity - "Identity is not a fixed attribute of a person, but a relational phenomenon" (Beijaard et al., 2004). Mead (1934) believed that identity forms through social interactions and relationships with others. Erikson (1968) added to Mead's work by stating that identity is an organic and ongoing process. For this study I will use a combination of both definitions.

## Theoretical Framework

This research's purpose was to observe and understand how educators in a secondary school can work together in a co-teach program model to educate EL Newcomers and regular students together in a classroom. Educators constructed their co-teaching identity (relationships, partnerships, and an understanding of teaching strategies) during this study. The construction of their co-teach identity was two-fold in that educators reconstruct their individual professional identity and constructed their collaborative professional identity, congruently. Constructionism occurs as humans interact with their social world (Crotty, 1998). For educators participating in a

co-teaching program model their social world was focused on the classroom and with their partner. The time spent co-planning, teaching collaboratively, and reflecting on their practice was how teachers constructed their identity as individuals and as partners in co-teaching (Galbin, 2014). The research questions driving this qualitative case study have been guided by the following theories: Symbolic Interactionism and Teachers' Professional Identity (TPI). `

Symbolic Interactionism involved meaning making through social interactions and aimed to understand the symbiotic nature of reality and human experience (Blumer, 1969). This theory was employed with the goal of getting the insider experience of how collaboration influenced the development of TPI. It also allowed for analysis of how the co-teaching team implemented co-teaching strategies with EL Newcomers. To reach the goal of implementing collaborative co-teaching strategies in the classroom, educators were required to communicate (social interaction) during co-planning and the implementation of lessons.

In his 1969 book, *Symbolic Interactionism: Perspective and Method,* Blumer wrote about three premises that composed his theory. "The first premise is that human beings act toward things on the basis of the meanings the things have for them" (Blumer, 1969, p.3). Teachers wanted meaningful lessons and to reach all their students. Working in a co-teach environment allowed educators to share skill sets (content and EL strategies) in creating lessons that were accessible linguistically by all students. "The second premise is that the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows" (Blumer, 1969, p.3). Co-teachers communicated during co-planning and implementation. The better they were at working as a team, the more they felt like they were making an impact, had a good lesson that day, and felt successful. The idea was that social interactionism (communication) that occurred in the planning stage, gave meaning during the implementation and led to more

meaning making (relationship development) during the reflection stage after a lesson was given. “The third premise is that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things that he encounters” (Blumer, 1969, p.3). Individuals were their own filters which impacted their interpretation of events. But the reflection process and communication with their partner during this time allowed them to adjust and to modify their team identity and to implement a growth mindset to do better the next day.

Educators who were part of a co-teach team attached meaning to the interactions they had with their partner which impacted how they interpreted (how they felt about and made sense):

- their collaborative experience,
- their teaching impacted EL Newcomers,
- And their identities (individual and team).

“Humans are viewed as negotiators of reality, making reality a social construct that is somewhat elusive and not firmly fixed. Ongoing interpretation creates and recreates roles” (Fink, 2016, p.9). According to Mead (1934) and Erickson (1969), identity development was an ongoing process influenced by social interactions. Through their collaboration as a co-teaching team, teachers in this study made small modifications to their individual teacher professional identities and congruently constructed a collaborative professional identity.

For the purpose of this study, the general definition of professional identity formation by Beijaard et al. 2004 was used. They wrote, “...professional identity formation is, in our view, not only an answer to the question ‘Who am I as a teacher at this moment,’ …but also an answer to the question ‘Who do I want to become?’” (2004, p. 122). The teachers in this study are veteran educators. They have established their own individual TPI. During this study they had to construct their collaborative TPI by answering the questions ``Who do we want to become " as co-teachers working in a science classroom with EL Newcomers? The process of constructing

their collaborative TPI influenced how they participated in the implementation of the co-teaching program model and developed a relationship where each person was viewed as a teaching equal in the classroom.

The use of Symbolic Interactionism and Teachers' Professional Identity development as a lens through which the data was interpreted in this study allowed the driving question and sub questions of this research to be answered. The goal was to understand how middle school teachers implemented a co-teach program model with EL Newcomers. The necessities for a successful co-teach program model are discussed in the next chapter, but one of those necessities is collaboration and the sharing of teaching responsibility during co-teach implementation, which was the focus in this study. Symbolic Interactionism and TPI worked together to demonstrate the importance of social interaction through collaboration to create a co-teach team identity that allowed both teachers to feel like they were equals in the classroom and to successfully implement co-teaching strategies in their science classroom with EL Newcomers.

## Methodology

Before beginning, it was helpful to establish what a methodology is. According to deMarrais and Lapan (2003) "Methodology encompasses our entire approach to research. Our assumptions about what we believe knowledge is embedded in methodological discussions and therefore have consequences for how we design and implement research studies" (p.5). A researcher's methodology influenced how they wrote their research questions and the methods they used to conduct their research. It also influenced how they analyzed and interpreted their results.

This study was focused on a particular location and activity happening at that location for a specified duration. A case study is defined as an in-depth contextual study of a person, issue

and place within a predetermined scope of the study (Bhattacharya, 2017). The purpose of case study is “to understand this one case” (Stake, 1995, p.4). Stake (1995) further writes that case study does not have as its goal to obtain results that are generalization but rather “particularization” (p. 8). As a researcher you come to know your study inside and out, “what it is, what it does. There is an emphasis on uniqueness and that implies knowledge of others that the case is different from” (Stake, 1995, p.8).

Participants for the study were a middle school science teacher at the site location and me. The teacher volunteered to participate in the study. The study's duration was one academic semester that began in August and ended in December. The study involved three semi-structured interviews and monthly recorded observations.

## Subjectivity Statement

Unearned powers and privileges that I, as the researcher and participant, have in this world at this moment in time include, but by no means are limited to these few that are listed here: being raised in an English-speaking family in an English-speaking society, having the ability to attend college or even more broadly but just as important is the access to quality education. I do not feel out of place when I go to someplace in public, and I have access to medical care. In isolation, each of these privileges may not seem like much, especially since I am surrounded by individuals with all the same privileges.

I have been fortunate most of my life. There were times that I would not consider myself fortunate or think that I had to struggle to get where I am. I came from a single-parent home, and I knew that money was not always abundant. My parents were not college educated and were classified as blue-collar workers. My experiences have felt like a struggle, but I also knew that my struggles could appear trivial to many people that I encountered in my daily life. I am an

English Language Educator in an affluent school district (In 2024 the average home value is approximately 400K and goes to pending in 3 days according to Zillow.com.) and yet I work in a middle school that received students from elementaries classified as Title 1 (58.1% NMS student are free or reduced lunch during 2023-24 school year). Some students literally walked thousands of miles to get to the United States - Mexico border. My students did not always know where their next meal was coming from and at times lived in fear that the authorities would find them and deport them.

Their daily struggles were so much more than anything I ever experienced. But my version of struggle was something that allowed me to connect and to empathize with them. I also knew the importance of education for their futures, and I strived to be a high-quality educator for them. For whatever reason, their parents/guardians brought them to the United States and my district, and they now have the privilege of getting one of the best public educations in the state (18 National Blue-Ribbon School Awards). Because I understood how the system works in the United States, I used my position to advocate for my students and their families. I worked to provide them with information and access to medical care and opportunities for their parents to have access to English education that was very affordable (free and includes free childcare as well), because they lived in a society that rewards those who speak English.

My educational privilege has also become a means of advocacy for myself. I knew I had been fortunate in my educational opportunities. I wanted others to have those same opportunities. It was one of the many reasons that I became an educator. I have continued my education in search of ways to become a better educator. I have also learned that education was not a one-size fits all system. As an English Language educator with students who just arrived in the United States, I was faced with unique challenges. My students came knowing very little, if any English.

Many of them arrived with a limited educational background. To communicate with other educators about what background knowledge my students possessed, I categorized them according to grade-level standards. I worked in a building that has sixth through eighth graders - a middle school. Many of my students arrived with a third grade or less education. My students still had dreams for their future, and I worked with educators in my building to help give them the foundation they needed to pursue those dreams in high school and beyond.

My dissertation research was focused on understanding that which goes beyond the few vague and poor-fitting examples in a book about co-teaching in a secondary school. It was about understanding how a co-teach model was used in secondary education with EL students. I was interested in an area that has very little data and research beyond unsubstantiated claims made by a few researchers who are viewed as experts. I observed my students make huge academic gains in this model, but I also saw some struggle and in need more support. Experience showed me multiple times that education, curriculum, and program models were not one-size fits all. But I continuously asked myself, how did educators work within a system that wanted it to be one-size fits all? My research was a case study that observed an EL educator and a 6$^{th}$ grade science teacher who were co-teachers during their first semester of a yearlong co-teach collaboration. My goal was to understand how educators made it work within the constraints beyond their control, but also how they developed their co-teaching partnership to support EL Newcomers and all students in their classroom. Selfishly, I hoped that this research would also allow me to continue to modify my teaching craft and to become an even better educator and advocator for my students.

## Limits and Possibilities of the Study

This study was exploring co-teaching in a middle school. It involved two educators who volunteered to share their experiences as co-teachers. This study was bound in that it involved a single middle school science classroom. The results of this study were a single case and cannot be generalized to apply to every situation in the future. It began to provide data that can be added to in the future by more studies of other secondary schools and content classrooms that use co-teaching as a program model with ELs.

This study was bound by the participants. The participants who volunteered could have withdrawn at any point in the study. As this study was centered around co-teaching and co-teaching was based on a partnership between two educators, one of the goals of this research was to share an interwoven educator's perspective of co-teaching; it was the job of the researcher to verify that the data was not based on opinion. Verification of data added to the integrity of the educators' perspectives that were told (Stake, 1995).

My role as a participant and a researcher was a position that needs to be acknowledged. I acknowledged that there was no possible way that I could remain objective and separated in the two roles I had in this research. In participant interviews, they would view me first as their colleague and second as the researcher. When they spoke with me and shared their experiences there were times that they sought advice and wanted to know that what they were doing was correct because they viewed me as the EL specialist. As a colleague, I knew that I would answer them when they asked for help or advice, even if it was in the middle of an interview. I also acknowledged that my ability to remain as a researcher or as a participant in particular moments was difficult.

Because I had two roles in the research study, Poerwandari 2021 suggested that intersubjectivity and reflexivity are needed. She wrote,

> Intersubjectivity entails the interchange of thoughts and feelings between individuals, while reflexivity refers to the researcher being aware of their effect on the process and outcomes of research… A wide variety of methods might be used, from self-observation, diary recording or audio-visual recording… combined with interviews and other methods… as triangulation. p. 316

Triangulation occurred in this research because the following data was collected - participant interviews, researcher audio journal, and teaching observations (mine and other participants').

## Summary

Co-teaching is a program model that has gained popularity in the EL world. It is a partnership between an EL specialist and a general education teacher. This research explored how a program model that was mainly used in the special education realm could be used with English Language Learners. Co-teaching has been mainly used in elementary schools. This research's goal was to explore one way in which co-teaching could be implemented in a middle school science classroom with EL Newcomers. The implementation of co-teaching was from the educators' perspectives and viewed through the lens of Symbolic Interactionism and Teachers' Professional Identity.

# Chapter 2 - The Literature Review

## Introduction

Non-native English-speaking students who enrolled in public education districts were given an assessment to determine their level of English language proficiency. Depending on the district, EL students were enrolled in classes that would support their language learning. These classes ranged from sheltered instruction, to pullouts, to co-taught, to aide supported. According to Krashen's Second Language Acquisition Theory (1981), it would take EL students five to seven years to acquire academic English Language proficiency. This assumed that the person had literacy skills in their native language. If they did not, then it could take seven to ten years to achieve academic language fluency.

Once a student was enrolled, they began their journey in language learning. During their educational journey, they would encounter multiple teaching models that were aimed at supporting their language acquisition and development. "The rapid growth of the ELL population has not been matched by sufficient growth in language educators or in general education teachers' knowledge of how-to best work with them. As a result, ELLs are provided an inequitable education" (Yeh et al., 2020, p.50). Federal law mandated that ELs be given the same education as American students, and this be accomplished in the least restrictive environment (Samson & Collins, 2012). For this reason, schools implemented different teaching models that allowed EL students to be in classrooms with their native-English-speaking peers. One such model was a co-teaching model within an EL setting. This model was at the heart of this study, and it is explained below in detail.

Stairs-Davenport (2021) writes on the very first page,

> In the USA, the current practice of mainstreaming ELs into general education classrooms for most or all of the day began in the 1990s for at least three reasons: 1) the ELL population grew more quickly than the capacity of pull-out English as a Second Language programs available in schools, 2) English-only policies in some states and a general political backlash against bilingual education motivated schools to mainstream ELLs, and 3) schools assumed the immersion in English would support an improvement in ELLs' standardized test scores as high-stakes testing become the norm.

The instruction of ELs in mainstream classrooms had been a topic of debate. There were many different instructional models that have been used. The effectiveness of the different models varied for many reasons including 1) the grade level - elementary versus secondary, 2) the educational background of the educators, and 3) how the model was implemented and the support it was given. One such program, which was the focus of this study, was the co-teaching model. The program had been a source of debate for many years at the secondary level due to the complexity of implementation. Hence this study aimed to focus on the co-teaching aspect of working with EL Newcomers in a middle school.

Co-teaching at the secondary level presented unique challenges for effective implementation. Secondary educators were content specialists, meaning that they have a degree and certification for a specific content. Cole and McLeskey (1997) noted that secondary educators lack ed skills and training for making content accessible to all student populations. Secondary educators received very little training during their education preparation program in working with special populations (Chitiyo & Brinda, 2018). They have traditionally relied on special education or EL teachers to do that job. This led to the special education or EL educators feeling like a paraprofessional in the classroom instead of teacher (Harkki, Vartiainen, Seitamaa-Hakkarainen, Hakkarainen, 2020).

## Research questions and purpose

Co-teaching is more than a teaching method that can be employed in a classroom. It can serve as a program model of instruction that can benefit students - both English language learners and general education students (Rubinstein-Avila & Lee, 2014; Embury, 2010; Fu, Hauser & Huang, 2007). This qualitative case study explored the evolution of co-teaching as an EL program model of instruction with English language Newcomers in a suburban, Title 1, middle school. The goal of this study was to provide firsthand experiences of Title 1 middle school educators during the implementation of co-teaching strategies in core content courses with a mixed student population that contains EL Newcomers. This study was driven by the question, "**How do middle school science educators implement a co-teach model of instruction with EL Newcomers?**" To understand the co-teachers' perspectives, this study had two sub questions that helped share the educators' journey.

1. How do middle school science educators perceive the impact to their teacher identity during the implementation of the EL co-teaching program model?
2. How do educators working together in a middle school science classroom develop their co-teaching partnership to effectively support EL newcomer students?

## Instructional Program Models used with EL Newcomers: A lay of the land

In order to delve more into this conversation on a co-teaching framework within the EL settings, it was important to reflect upon the different programmatic models and focus on challenges that were often associated with them. The United States Department of Education Office of English Language Acquisition (OELA) mandated that local educational agencies (LEAs) are required to provide educational opportunities to EL Newcomers that are equitable to native English speakers (also referred to as American students) in the least restrictive environment (LRE) with highly qualified educators. In addition to providing equitable education,

LEAs, more specifically educators, worked to close the achievement gap that existed at all grade levels between Emergent Bilinguals (this term was used instead of Newcomer here to include all EL student who had not reached state language proficiency level and/or were still acquiring academic language) and general education students (Soland, 2019; Garcia, Lawton, Diniz de Figueiredo, 2010; Good, Masewicz, Vogel, 2010). LEAs adopted different program models to provide specific language instruction to their EL Newcomers. Each of the following program models can exist in a single LEA. The following program model descriptions were taken from Marsh, 2018.

1. **Pull-out and Push-in Model**: Pull-out model is when an EL educator will pull out EL students from a general education classroom and provide instruction in a separate environment. The push-in model is when an EL teacher enters the general education classroom to support EL students.
2. **Sheltered English Instruction Model:** an approach for teaching ELs with language and content instruction. ELs are in a content classroom that is only for ELs with an EL educator. The goal of sheltered instruction is to raise an ELs current academic language and content to grade level by providing modified instruction and language support. Educators must be careful to not oversimplify content to where the students are not progressing toward grade level objectives in academic language or content knowledge.
3. **Bilingual Instruction Model:** an approach to teaching students content in two languages. Students will receive instruction in their native language and in English. The educator will speak both languages. The goal of bilingual instruction is not acquiring English but learning content.
4. **Co-Teach Model:** an approach to instruction that involves two educators in the classroom. Both educators are responsible for language and content instruction of all students in the class. Literature uses models and strategies interchangeably. For this study, the model refers to the idea of co-teaching and strategy is the different ways co-teaching can be structured within the classroom.

## The Co-Teach Model

### Defining Co-teaching

Co-teaching "is an instructional delivery approach in which a classroom teacher and a special education teacher (or other special services professional) share responsibility for planning, delivering, and evaluating instruction for a group of students, some of whom have exceptional needs" (Friend & Reising, 1993, p6). The goal in a co-teach classroom was to create a learning environment in which the needs of all students were being met using innovative teaching strategies. Co-teaching created a learning environment that would not be possible without both teachers. It should be noted that in literature co-teaching was referenced as a model and strategy, but these words were used interchangeably. For this study, co-teaching was called a program model, and the different types of co-teaching methodologies were referenced as strategies.

### Co-teaching Strategies

There were multiple methodological variations of co-teaching that involved each teacher assuming different roles during the implementation of instruction and student learning. Each strategy had a role for each teacher during instruction and multiple strategies could occur during the same lesson. It should also be noted that either teacher could assume each role. Support is not always the EL educator's role, and content instruction should not always belong to them.

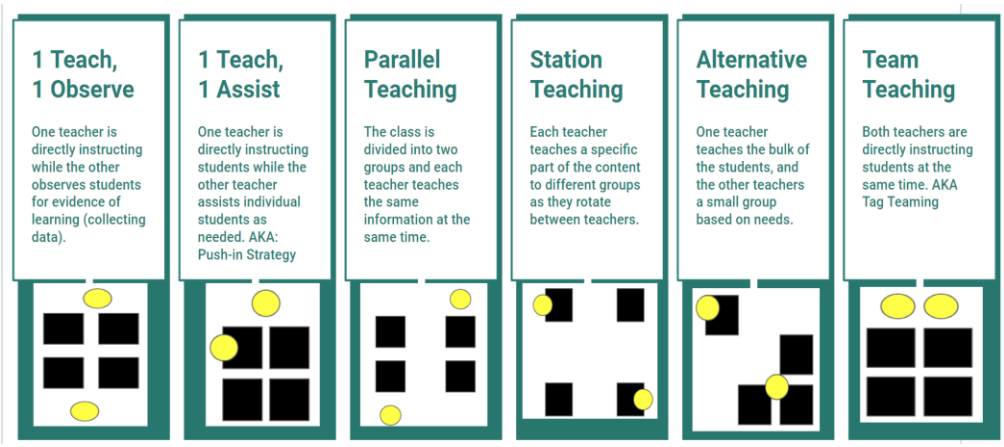


**Figure 2.1. Co-Teaching Strategies: Adapted from Dove and Honigsfeld, 2017**

The first two strategies listed in Figure 2.1 (from left to right), 1 Teach, 1 Observe, and 1 Teach, 1 Assist require less collaborating and co-planning from each educator. But to transition between these two strategies, co-planning is necessary so that each teacher understands their role. These two variations should not be the default methods implemented during instruction, but they can be useful in collecting data related to student learning and during large group instruction.

The next four variations required weekly co-planning time, good collaboration and communication between the co-teachers. It was also beneficial for the core content and EL educator to have content knowledge (Scruggs & Mastropieri, 2017). While it would be good if the EL educator had content expertise, it was not necessary for implementation of these variations. The more confident the EL educator was in the content the easier it is for both educators to switch roles during instruction (Scruggs & Mastropieri, 2017; Davison, 2006). During this study, the EL educators knew the content and the district curriculum, because they had been content educators before becoming EL educators.

**Necessities for a successful co-teach team**

The expressed needs of co-teachers were themes in Scruggs, Mastropieri and McDuffie (2007). The needs were expressed as a necessity for successful co-teaching. Among these needs were administrative support (administration cannot force educators to co-teach and participants must volunteer), time for planning ("noted in nearly all of the investigations"), and training (to learn co-teaching "strategies, and practical skill development") (Scruggs et al., 2007, p. 404). Volunteerism and compatibility were their own categories, but the findings in both categories connected back to administration support. Participants in co-teach partnerships who did not volunteer but were appointed by administration or who did not have compatible relationships were often not successful in implementing effective co-teach models.

### *The importance of co-planning between Content and EL Educators*

Co-planning was the time when both educators worked collaboratively in creating instructional plans that included content material that is accessible by all students (this included differentiating content to meet EL Newcomers language needs), educator roles during lesson implementation, and time to analyze data that informed instruction (Honigsfeld & Dove, 2021; Pratt, Imbody, Wolf, & Patterson, 2017; Bryant & Land, 1998). Co-planning enabled both educators to take responsibility for the classroom's education. It was also a time when educators could share their expertise with each other. Without this time, consistent and intentional implementation of co-teaching would not happen (Simmons & Magiera, 2007).

Dedicated time for co-planning was achieved through administrator support. In a school that effectively implemented co-teaching, the building administration showed their support by guaranteeing that master schedules at the secondary level allowed for a common plan between the co-teaching educators. Friend and Reising (1993) noted that co-teaching had an impact on secondary scheduling since secondary teachers were content specialists and the special education

educators must work with each core teacher. Secondary scheduling must include time for co-planning between each core teacher and the special education teacher (Scruggs & Mastropieri, 2017; Friend, Hurley-Chamberlain, & Cook, 2006; Weiss & Lloyd, 2002). For this study, each co-teaching team was guaranteed one day a week to meet for the sole purpose of planning. The administration had also said that during professional development days, additional time would be given to co-teach teams so they could long-range plan for upcoming units. An added difficulty during this study was that EL educators did not co-teach based on grade level, but they co-taught based on their content expertise. This meant that one EL educator would co-teach with multiple grade levels but in the same content, i.e. one EL teacher co-teaches with only science educators. So, for example, at NMS the EL educator co-taught with the 6th, 7th, and 8th grade science teachers and would have taught 4 hours of science. During the school day, one dedicated plan hour would have aligned with one of the grade levels. To co-plan with the other two grade levels, the EL teacher and the science teacher planned to collaborate after school, or they co-planned via email. If their personal plans aligned the two educators could co-plan during that time.

### *The importance of collaboration and volunteerism in co-teaching*

The co-teach model involved much more than just deciding which strategy would be used during lesson implementation. Before a lesson can be implemented, it must first be co-planned. Effective co-planning begins with two educators who are willing to work together. “Co-teaching pairs should be established based on their interest in the collaborative process and the content area” (Simmons & Magiera, 2007, p.10). For this study, the EL educators highly encouraged the administration during spring of the previous school year to ask for content volunteers to participate in co-teaching. This was not the first time educators participated in co-teaching. The school had been co-teaching for over seven years, mainly implementing 1T, 1A. The school

experienced a high turnover in EL and content educators each year which resulted in establishing new co-teaching teams frequently. The high turnover of educators also meant that very few co-teaching teams moved beyond 1T, 1A, as it was the easiest to orchestrate without sufficient planning time.

If educators were not willing to collaborate, then there could be a struggle for power or a situation where the special education teacher assumed a role more equivalent to that of paraprofessional. The difference between a paraprofessional and certified educator (core content or EL) begins with the requirements. The requirements to become a teacher in the Midwest state where NMS is located are (Kansas Department of Education):

- Earn a bachelor's degree from an accredited college or university
- Complete a state approved teacher preparation program that includes student teaching
- Pass the required Praxis exams: Principles of Learning (for all educators) and required content exam (For example EL educators must pass English to Speakers of Other Languages Exam)

Paraprofessionals do not have the same requirements. Only paraprofessionals working in programs supported by Title 1, Part A funds, have educational requirements. Those employees must meet the following minimum requirements: have a high school diploma or GED, complete 48 hours of college credit or obtain an associate's degree or pass a state assessment to determine readiness to assist in reading, writing and mathematics. Because of the high turnover of teachers, this frequently happened with EL educators. In the classroom, they will assist all students who need it, but they are not viewed, nor do they feel as equals in the classroom because they are regulated into an assistant or supporting role during instruction (McClure & Cahnmann-Taylor, 2010).

EL educators differentiated content based on the language needs of the EL Newcomers in the classroom, but they did not participate in co-planning for whatever reason (Bovbjerg, 2006; Johnson, 2003; Main & Bryer, 2005). This happened at the site for the study and is a concern during this study, especially since content educators were told (and did not volunteer) that they would be participating in co-teaching the next academic year. Content educators were selected by the administration based on a list the EL educators created. Administrators asked for a list of educators they were currently working with during the academic year. Co-planning that occurred during contract hours was only guaranteed for one grade level content teacher and EL teacher because of the team system.

### *The importance co-teaching training Content and EL Educators*

Chitiyo and Brinda (2018) noted that teacher preparation for pre-service general educators included a course on inclusive education, but this did not mean educators were prepared for co-teaching and meeting the needs of special education students. They further wrote, “Teacher preparedness in co-teaching may manifest in a number of ways i.e. confidence in using co-teaching, an understanding of job responsibilities involved, knowledge of different co-teaching formats, and knowledge of when and how to implement different co-teaching formats” (p. 41). In a study conducted by Pancsofar and Petroff (2013), educators who participated in professional development related to co-teaching showed more confidence in implementing co-teaching models during instruction. “School district leaders should always provide training for co-teachers as a pair” (Simmons & Magiera, 2007, p. 10). Administration (at the building and district level) support must continue by also offering professional development for the continued growth of the educators involved in collaborating.

White and White (1992) wrote in their findings that educators needed to be trained in co-teaching methods to have a successful partnership and implementation of the model. Twenty-five years later this is still the case according to Chitiyo 2017. Chitiyo's research in 2017 explored the challenges that prevent successful implementation of co-teaching. He found that "most participants indicated that they lack the necessary skills needed for the use of co-teaching" (p. 62). He further writes, "this finding is worrisome since there are federal mandates in place (i.e., IDEIA) that call for teachers to have adequate academic training in school-based practices (i.e., co-teaching) that promote inclusive education" (p. 62). Without proper training, educators could perceive co-teaching as too time consuming and therefore not buy in or choose to adopt a different (and less effective) instructional model.

The research site for this study used the co-teach model for seven years. During this time, educators - both content and EL – had not received specific training on co-teaching. All educators participated in district-wide training related to differentiation, with each content area receiving specific differentiation training related to their content. Only EL educators received training in how to modify and differentiate lessons to meet state EL language standards and all four core content standards. In preparation for the shift to more collaborative co-teaching strategies, the Administration provided specific co-teaching training to all participants in this study (and in the building) at the beginning of the academic year by bringing in an outside person to lead the training. The goal of the training was to allow co-teaching teams to understand how to create a collaborative team, to design a lesson that incorporated a collaborative co-teaching strategy, and for the content educators to begin learning about how accommodate for the language needs of EL Newcomers.

### *The importance of administration support in co-teaching*

Administration support was seen in each of the previous subsections (Scruggs et al., 2007). Without administration support, dedicated co-planning time would not be achieved in the master schedule (Magiera & Zigmond, 2005; Sinclair et al., 2018). This was especially true in a secondary school where administrations worked to create common plan times among grade-level-content or teams but found a way to have a common plan or a dedicated time each week for the co-teach team to meet and plan (Pratt et al., 2017). For this study, the co-teaching team had one hour each week reserved just for them. During this time, they reviewed any student data that helped drive instruction, lesson plan, made the necessary language modifications for students and discussed the roles each person assumed during lesson implementation.

District and building administration supported co-teach teams in their professional development in different ways (Scantlebury, 2016; Vangrieken et al., 2017; Admiraal et al., 2021). When professional development occurred during the school day, building administration provided substitute teachers for the co-teaching team, so they could attend professional development. Building administration provided professional development on district professional development days (Bubb and Earley, 2009). They brought in experts who offered training and support to their co-teaching teams. Both building and district administration made funds available for educators to purchase resources to continue their learning outside of school and/or to attend conferences that offered EL Co-Teaching professional development (Lohman, 2006). In addition to co-teaching, administration could also support the co-teaching team in attending EL specific professional development.

## Defining success in Co-teaching

When exploring literature, it was observed that success was defined in many ways. Researchers have defined success in co-teaching in terms of being "effective" in implementation, co-planning, student achievement, collaboration, educators' attitudes, administrative support, and teacher preparedness for co-teaching (Friend et al., 1993; Murawski & Swanson, 2001; Scruggs, Mastropieri & McDuffie, 2007; Pratt, 2014; Williams & Ditch, 2019). Many of the research studies are qualitative case studies. In a review of the literature for the previous thirty years, the two conclusions that researchers agreed upon are the benefit for students and the positive attitude of educators toward co-teaching (Rubinstein-Avila & Lee, 2014; Harkki, 2021) This study was also a qualitative case study that explored how educators developed their team identity and implemented co-teaching with secondary EL Newcomers in their science classes. Though there were similarities between this study and previous literature it is yet to be seen whether educators in this study will also express a positive attitude toward co-teaching.

The effectiveness of co-teaching in special education had been mainly anecdotal in that studies had been centered around a particular school or LEA. The findings of these studies have been summarized over the years in some key meta-analyses. The first major meta-analysis was published by Friend and Reising in 1993. Friend and Reising also reported evidence on the positive impact co-teaching had on student achievement after analyzing 25 research studies from the 1970-1980s. Teachers reported that students perceive someone is always available to help them, and everyone receives (special education students and general education students) special help during co-teach classes.

Murawski and Swanson conducted a quantitative meta-analysis on the effectiveness of co-teaching in 2001. They discovered a moderate effect size of 0.40 for influencing student

outcomes with co-teaching size. It should be noted, as they mentioned multiple times in their discussion, that of the 89 articles that were included in the meta-analysis, six contained experimental data. Murawski and Swanson found that achievement in reading and language arts both had a large effect size of 1.59 and mathematics had a moderate effect size of 0.45 when co-teaching was used.

In 2007 Scruggs, Mastropieri and McDuffie conducted a qualitative meta-analysis that involved 32 research studies centered around co-teaching in 400 classrooms. Their findings explored the benefits to educators and to students with and without disabilities. Educators perceived value in co-teaching with their co-teach partners based on being personally compatible. The lack of compatibility had a negative impact on the effectiveness of co-teaching and why one it was mentioned above that volunteers for co-teach partnerships was important.

Educators also noted that they benefitted professionally from co-teaching with growth in content knowledge by the SPED teachers and improved abilities at curriculum adapting by the core content teachers. Preservice training for special education teachers was focused on strategy instruction and intense interventions for students in language arts and mathematics. The core content knowledge gap at the secondary level was greater because of the specialization of core secondary educators. A follow-up study by Scruggs and Mastropieri in 2017 elaborated on this further by suggesting that SPED educators enhanced their content knowledge by using content curriculum maps, focusing on select standards or skills that students have struggled with in the past to be prepared to offer specialized support and to utilize available resources for personal learning.

An additional result from Scruggs, Mastropieri and McDuffie (2007) is that the most common co-teach strategy educators implemented was 1 Teach, 1 Assist. In most cases the core

content educator assumed the teacher role and the special education teacher became the assistant. This led the special education teacher to perceive they were in a subordinate position providing support for classroom routines (i.e. passing out papers) and task-specific support (i.e. assistance with classwork) for students with special education needs, comparable to that of a paraprofessional and not viewed as an equal. Scruggs et al. also found that general education teachers were open to instructional ideas from special education teachers, but only if the ideas were applicable to the whole class. General educators still relied on or expected the special education teacher to "support special education students and other students in need within the existing classroom context" (p. 412).

Co-teaching (referenced in the 1970s and 1980s as team teaching) first appeared in literature during the 1960s when J. Lloyd Trump (1966) suggested that teams of teachers in secondary schools work together to deliver large group instruction, tutoring sessions with groups of about fifteen students in individualized study sessions. The purpose of this proposal was to address the severe shortage of secondary teachers during this time but also, Trump believed this model would allow educators to offer interdisciplinary and individualized instruction to students. According to Friend and Reising (1993) team teaching was a popular practice, but educators had a variety of different definitions for team teaching. For this reason, "it is difficult to analyze whether team teaching was successful in terms of improving educational opportunities for students" (Friend & Reising,1993, p.7).

Co-teaching had not been limited to general education teachers. With the passing of the Individuals with Disabilities Education Improvement Act (IDEIA) in 1990, general education classrooms had "students with increasingly diverse learning needs" (Chitiyo, 2017, p. 55). IDEIA mandated that students with disabilities should be in the classroom learning with their

peers in the least restrictive environment (LRE). In exploring ways to meet the needs of their diverse learner population, educators looked for teaching models that allowed them to meet the needs of all learners in their classroom. One such model was co-teaching. Traditionally, general education teachers were paired with a special education teacher, and each had their own roles. The general education teacher was responsible for instruction related to content and the special education teacher was responsible for supporting students with special needs and adapting content for their learning ability (Rytivaara et al., 2019).

The main form of co-teaching that occurred during this time was 1 teach, 1 assist (1T, 1A). This was one of the easiest strategies to implement for multiple reasons. 1T, 1A does not require dedicated co-planning time (Scruggs et al.,2007). This means it had little impact in creating a master schedule, especially at the secondary level. The content teacher typically took responsibility for lesson planning and content instruction. The special education teacher assumes a supportive role and focuses on those in need of specialized support (Scruggs & Mastropieri, 2017). Scruggs et al., 2007 noted in their meta-analysis that 1T, 1A occurred when a new team was formed. This same strategy was also observed at NMS when a new co-teach partnership was formed between a core content teacher and EL teacher. During that time, the content teacher and the EL teacher got to know each other as professionals and used that time to establish their identity as a teaching team and developed their relationship. The co-teach relationship development has been compared to a “dance” (Murawski & Dieker, 2013) and a “marriage” (Murawski, 2009) because the co-teach team incorporated different co-teaching strategies based on the lesson design.

## Co-teaching with ELs

Co-teaching found popularity in education during the 1990s to address the needs of special education students entering mainstream classrooms in accordance with federal law (White & White, 1992; Friend & Reising, 1993; Chitiyo, 2017). A few short years later, co-teaching began to gain popularity with EL educators as well (Genesee et al., 2005; Friend, 2008; Yeh, et al.,2020). Up to this point, most programs were either bilingual, pull-out, or sheltered. Language acquisition and content instruction was the responsibility of the EL educators (Marsh, 2018; Sinclair, 2018). General education educators received very little, if any, training on how to teach (modify and differentiate material according to language needs) English Language Learners (Pancsofar & Petroff, 2013; Villegas et al., 2018; Stairs-Davenport, 2021). Stairs-Davenport (2021) published a study on a school district in Maine that. The entire K-12 certified (169) educators were white educators and their district EL population had recently grown larger than the state average. Stairs-Davenport found that 87.5% of educators who were surveyed had no preparation or training on differentiation or teaching EL students in their education preparation coursework. Only 3% of their educators held the state's ESL endorsement.

Prior to co-teaching, a push-in model was popular. A push-in model is when an EL educator is present in the mainstream class to provide support for English Learners (Friend & Reising, 1993). The EL educator brought their own materials to support content learning in each class. The EL and general education teacher do not need to co-plan or communicate. The EL teacher was responsible for all differentiation. The educators teaching in this model report feeling like an aide or paraprofessional (Scruggs et al., 2007, Wexler, 2018). Bell and Beacher (2012) reported educators prefer co-teaching to the push-in model because they feel more like a professional equal instead of an aide.

Implementing a co-teaching model does not just happen. “Collaboration does not happen naturally in most secondary schools” (Dellicarpini & Gulla, 2009, p. 133). To effectively collaborate in a secondary school a restructuring from the top down would have to take place. Dellicarpini and Gulla (2009) listed three teacher (EL and core content) identified barriers that could be addressed by administration that would not require a total restructuring: “time, relationships (teacher positioning), and understanding each other's disciplines” (p. 134). In multiple studies (Bauler & Kang 2020; Bell & Beacher, 2012; Goldberg, 2013; Fu, et al., 2007; Whiting, 2017; York-Barr et al., 2007) it has been found that without administration’s support, co-teaching will not be successful. Administrators who have a “vision of inclusion for ELLs in mainstream content classes set the tone for acceptance of ELLs across the school” (Russell, 2012, p.463). Every single teacher is a teacher of language and content which means we are all responsible for all student learning in our classes. To be prepared and a responsible teacher, educators must be provided with training and ongoing professional development related to teaching English language learners.

In a study conducted by Bell and Beacher in 2012, two-thirds of educators reported spending more than half of their teaching time in a pull-out model. Less than a fourth of teachers (23%) said they participated in a co-teach model and of those, only 6% did it more than half the time. A decade ago, most services ELs received did not involve the general education teacher. Again, in multiple studies (Bauler & Kang 2020; Bell & Beacher, 2012; Fu et al., 2007; Goldberg, 2013; Whiting, 2017; York-Barr et al., 2007), EL educators reported the same challenges as SPED educators when it came to co-teaching: lack of common planning time, personality conflicts, lack of administration support, lack of training and development and viewed as an equal and not a paraprofessional. These challenges contributed to EL teachers

preferring to be in a pull-out model instead of a co-teach model. A pull-out model allows autonomy for the EL teacher and avoids any power struggles or school-specific systemic issues (i.e. no time in the schedule to co-plan). The goal of this study was to observe EL educators in a co-teach model for each of the core classes; this meant at least 50% of their day was spent co-teaching.

## Gaps in the current EL Co-teaching Literature

Since co-teaching was used as a program model of instruction with EL Newcomers, there have been few cases of it being used as the program model in secondary schools (Russell, 2012; Davila et al., 2017; Williams & Ditch, 2019; Pellegrino & Brown, 2020; DeRosia et al., 2021). "Co-teaching is most often practiced in elementary schools and somewhat less in middle schools. In junior high schools and high schools, co-teaching is not a widely accepted practice" (Friend & Reising, 1993, p. 8). The lack of research involving co-teaching at the secondary level with EL Newcomers makes the proposed research relevant. This study will give insight into the nuances involved with implementing co-teaching at the secondary level.

Literature representing secondary schools was mainly focused on student teachers who co-teach with their mentors or special education students. The literature has shown some long-term qualitative co-teaching studies with English language learners (Rubinstein-Avila & Lee, 2014; Chitiyo, 2017; Whiting, 2017). Many of the studies found in the literature have co-teaching in their title, but often write about push-in tutor models which is like the strategy 1 teach, 1 assist (Chandler-Olcott & Nieroda, 2016; Davila et al., 2017). This study observed the different co-teaching strategies in secondary classrooms. In addition, this study examined educator perceptions about co-teaching with different strategies and their perceived benefits.

It has been observed that some studies mention an EL educator supporting one entire grade level (secondary) or multiple different classes (elementary) like how SPED operates (Rubinstein-Avila & Lee, 2014; Davila et al., 2017). There is no mention of EL educators supporting in a push-in or co-teach general education class by content area based on their area of expertise prior to becoming an EL teacher. This is an interesting gap given that EL educators often begin as general educators before switching to EL teachers. At the secondary level this means that EL educators are also content specialists. For this study, EL educators team up with general educators who are in their content area. Co-teaching partnerships occur by content and not grade level.

Successful implementation of co-teaching was dependent on administration support and co-planning time (Theoharis & O'Toole, 2011; Sinclair et al., 2018; Schlaman, 2019). This study took place in a school that had administrator support for co-teaching program model. The administration also created a master schedule that allowed EL educators to have time for co-planning during the day with their co-teacher. This study was designed to meet all the requirements for a successful co-teaching experience with administration support, dedicated co-planning time, and partners who wanted to be partners. The difference in this study and previously reported studies was that this one occurred in a secondary school (middle school) that had implemented co-teach program model seven years prior to the start of the study but like most of the literature focused mainly on the strategy of 1 teach, 1 assist for several years with EL Newcomers because dedicated co-planning time had not been given in the past. EL educators were state certified in ESOL and the co-taught core content (science).

## Theoretical Framework

Qualitative research has been defined as “one that explores the complex issues of what it means to be human” (Kim, 2015 p.4). Researchers tried to understand the human narrative as it relates to their research question(s). “It involves an interpretive, naturalistic approach to research phenomena, making sense of the meaning that people bring to them” (Kim, 2015 p.5). Qualitative research allowed the researcher and readers to develop a deeper understanding of a specific phenomenon. The researcher’s goal was to go beyond the numbers and to delve deeper into the social world by understanding the participants' viewpoints. Rossman Rossman & Rallis said the purpose of qualitative research wsa to “learn about some facet of the social world” (2016 p. 40). Qualitative research occurred in the field with real people -not in a controlled environment. Just like life, it happened and allowed the researcher to view the phenomenon without influence from outside factors. It relied on multiple methods for gathering data. “Qualitative research is systematic inquiry that is characterized by a stance of openness, curiosity, and respect” (Rossman & Rallis, 2016, p.49).

Qualitative researchers questioned what we already knew as truth because we looked at phenomena from different perspectives and tried to understand it from every possible angle, inside and out. For this study, I explored the phenomenon of co-teaching with EL Newcomers in a middle school science classroom. In exploring this phenomenon, this study looked at a middle school, science, and co-teaching team to understand how they implemented different co-teaching strategies while developing their co-teaching team identity. With these goals in mind, this research was guided by the following two theories: Symbolic Interactionism and Teachers’ Professional Identity (TPI).

In the following sections I explore how the above two theories influenced the direction I pursued in the research design. The development of a co-teaching team was influenced by symbolic interactionism because of how the individuals interacted as a team and made meaning from that interaction. As I synthesize how teachers developed their collaborative professional identity, I demonstrate how they must reconstruct their professional identity as individual educators. Finally, I show how the process of constructing a collaborative professional identity is a necessity in the implementation of a successful co-teach program model at the secondary level.

**Symbolic Interactionism in Collaboration**

Teaching is an endeavor that centers around interpersonal and relational experiences. Mead (1934) wrote that identity development occurs through social interactions. Blumer, who expanded on the writings of G.H. Mead, wrote about symbolic interactionism as "a relatively distinctive approach to the study of group life and human conduct (Blumer, 1969, p.1)." Fink stated in 2016 that "humans are viewed as negotiators of reality, making a reality a social construct that is somewhat elusive and not firmly fixed" (p. 9). Humans are continuously interpreting their interactions to make meaning and applying that meaning to reconstruct their role within the group or society. For this study, teachers who are part of a co-teach team attached meaning to the interactions they had with their partner which impacted how they interpreted (how they made sense of) their collaborative experience as a member of their co-teach team.

Before diving into finer details of symbolic interactionism, it is helpful first to take a small detour and look at the meaning of symbolic. Humans communicate via language. Language is composed of sentences, which are made of words, which are made of letters. Letters are associated with sounds.

> Language provides a meaning to humans by means of symbols. …
> Human beings give meaning to symbols, and they express these

> things by means of language. Consequently, symbols form the basis of communication. In other words, symbols are indispensable elements for the formation of any kind of communication act. Aksan et al., 2009, p. 903

Symbolic is the meaning humans have attributed toward the sounds used to make words. We share these symbols when we interact with others; mainly, when we communicate and collaborate.

> Symbolic interactionism consists of three premises.
>
> The first premise is that humans act towards things based on their meanings. The second premise is that the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows. The third premise is that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with things that he encounters. Blumer, 1969, p.2

In the following paragraphs, each premise will be expanded upon and shown how it relates to collaboration by co-teachers.

A key component of the first premise is meaning making. "Humans develop their attitudes towards things according to the meanings that things propose to them" (Aksan et al., 2009, p. 903). Participants entered this study with preconceived meanings about certain components of this study. A key component of co-teaching is that teachers volunteer to be a part of the team. An assumed meaning was that teachers have a positive attitude toward co-teaching. This study also involved working with EL Newcomers. Continuing in the same line of thinking, teachers participating in this study must have begun with a positive attitude toward teaching EL Newcomers. Data analysis of interactions between participants yielded clues at how meaning making influenced the development of the co-teach team relationship.

The second premise focused on how meaning was created because of collaboration. Collaboration insinuated that social interaction in the form of communication must occur. Humans express their thoughts, feelings, gestures, tone of voice, attitudes, and motives, etc. It is how we express ourselves that helps convey the meaning we want. Meaning was also developed from social interactions. In a group setting meaning would also be established by cultural norms, individual roles, and motives. In this study, teachers worked in a collaborative team that required them to communicate with each other during co-planning and co-teaching. The way they communicated was key. Through the process of communicating, each person used a variety of means to communicate - tone of voice, written form, gestures, and feelings. During the analysis of data, the conveyed meanings of ideas and interactions during co-teaching and co-planning (social interactions) were investigated.

The third premise centers around how meaning was interpreted through a receiver's filters. “Meaning is constructed by the interpretive acts of the interactant…co-conspirators in creating meaning…that cannot be divorced from individuals’ social activity” (Fink, 2016, p. 8). The reception of communication would be interpreted by their partner and their partner would attribute meaning to that interaction. Misinterpretation of meaning could cause misunderstandings. But the ability to openly communicate and explain intended meanings helped the teachers develop a better collaborative co-teaching team.

The sequential flow of the three premises regarding communication between individuals in a collaborative setting made symbolic interactionism a valuable theory to guide this research study. A key feature of this study was collaboration and communication. The three premises provide a means to analyze the meaning and interpretation that occurred during social interaction in co-teaching. As the teachers navigated between the different co-teaching strategies, they had

to switch roles and share roles. “In Mead’s (1934) theory, the central mechanism of interaction is the mutual signaling and interpretation of ‘conventional’ or ‘significant’ gestures in a process of ‘taking the role of the other’” (Turner, 2011, p. 330). The application of the three premises to collected data allowed for the analysis of common meaning making and the significance attached to these meanings during co-teaching.

### Teachers’ Professional Identity in a Co-Teach Team

A key component of this research study has been how teachers navigate their professional identity as individual teachers and as a collaborative teaching team with EL Newcomers. A teacher’s professional identity (TPI) has its roots in those who study identity development as a broad topic relating to individuals in general settings. George Mead in 1934 postulated that identity develops through social interactions. Eric Erikson furthered this research in 1968 adding that identity is not stagnant but develops throughout a person’s entire life. Over the past few decades, TPI has become a way to understand “teachers’ professional lives, career decision making, motivation, effectiveness, retention, professional development and their attitude towards educational change” (Karaolis & Philippou, 2019, p. 398). During this study, educators reflected on their effectiveness as a co-teaching team and maneuvered through a program model change all while teaching with EL Newcomers.

There are many definitions in literature as scholars have explored the different components listed above. For the purpose of this study, the general definition of professional identity formation by Beijaard et al., (2004) fits the best. They write, “...professional identity formation is, in our view, not only an answer to the question Who am I as a teacher at this moment, …but also an answer to the question “Who do I want to become?” (Beijaard et al.,

2004, p. 122). When attempting to understand the influences on a teacher's professional identity, the literature was summarized into four major themes:

- Teachers' Professional Identity is related to the perceived self.
- Identity is constructed through social interactions with others in education.
- Teachers' identity is organic, not stagnant.
- Teachers construct multiple identities based on their different roles.

These themes functioned as a personal lens through which teachers reflected on their role as an educator (their practice) and how they viewed themselves while in the role of educator at their school. The themes also served as a lens for a collaborative team to reflect on their preconceived educator roles they brought to the team and co-teaching identity that formed as a result the collaborative journey.

***Teachers' Professional Identity is related to the perceived self.***

The image of self was based on the perception a teacher had about how they believe others viewed them as a teacher. Teachers are individuals who look for ways to get better, in a sense they are students in that they are continuously learning how to be a better teacher. This pursuit of wanting to be the best they can has them asking the question "How well am I doing in my job" (Kelchterman, 2009, p. 262)? This question requires feedback and influences their image of self. According to Karolis and Philippou (2019), this question should include "as compared to others" because "feedback from significant others" is a valuable source for teachers (p. 400).

In this study educators collaborated in a co-teach program model. Each teacher brought to the co-teaching team a specific set of expertise skills. The science teacher had expertise in science content and the EL teacher had expertise in making content accessible to language learners. In a co-teaching model both teachers shared the role of lead teacher in the classroom. During co-planning, they provided each other with feedback and suggestions for improving in

the classroom. For example, the EL teacher could suggest ways of explaining or modeling a tier 3 science vocabulary that is more linguistically accessible to all. The science teacher would have multiple examples to explain scientific ideas. The feedback that each provided allowed the other to become a better teacher and teammate.

A teacher's professional identity is simultaneously "a product and a process" (Karolis & Philippou, 2019, p. 398). It can change because of influences from others during social practice. Kelchtermans (2009) attributes this to self-understanding and further explains it as "the understanding one has of oneself at a certain moment in time (product), as wells as the fact that this product results from the ongoing *process* of making sense of one's experiences and their impact on the self" (p. 261). As teachers moved from an individualistic perception of self to that of a team sense of self, it was inevitable that their identity would change too. The perceived self influenced and became a part of the team identity. Each teacher brought to the team a preconceived notion of what the team self should be. They, therefore, influenced each other's perception, but this perception was also influenced by those outside of the team because though the co-teach team collaborated for science, they were also part of other collaborations at the school and those outside interactions indirectly influenced the identity because it influenced each person's individual professional identity.

***Identity is constructed through social interactions with others in education.***

"Identity is an integrative concept....it commonly connects between the self and aspects of the world-out-there; it synthesizes past, present and future experiences" (Flum & Kaplan, 2012, p. 240). Humans are by nature social beings. We engage in conversation, storytelling, and the sharing of our lives with others. Teachers are no different. The nature of a classroom is based on social interactions between teachers and students. Outside of the classroom, teachers

collaborate in professional learning communities, school committees and general socialization. Through all these social interactions, teachers are continuously developing their professional identity and without social interactions their professional identity wouldn't be possible (Beijaard et al., 2004; Lasky, 2005; Olsen, 2008).

Dikilitas & Bahrami (2023) found in their co-teaching study in a bilingual education setting that social interaction and collaboration during co-teaching lead to the co-construction of identity of the partners. This study foreshadows what could happen in this study. The co-teaching team worked together five days a week teaching and planning. In that time, they developed a relationship that enabled them to interact socially beyond that of two educators in a classroom. They became friends. During co-planning, co-teaching and socializing each participant reconstructed their own personal teacher identity. Together, as teammates and friends, they co-constructed their co-teach identity.

***Teachers' identity is organic, not stagnant.***

A teacher does not begin their career with a fully developed professional identity. A teacher constructs their identity through the years of their career. The veteran educator has constructed a professional identity over their career. Erickson states that identity is a lifelong process, "always changing and developing" (Erikson, 1968, p. 23), and therefore this means over time teachers have tweaked and adapted their professional identities. These identities shifted due to how educators saw themselves perceived by others but also due to changes that have occurred in education, i.e. program model changes. In this study, the focus of co-teaching strategies is shifting from 1T, 1A to team teaching. This shift toward more collaborative strategies caused the participants to tweak their teacher's professional identity. This adjustment to their personal

identities impacted the collaborative identity and enabled them to transition from being an "I" to a "we" in the classroom.

A co-teach model is centered around a collaborative team. Just like teachers do not begin their career with a fully developed professional identity, neither does a co-teach team. A team identity begins with two teacher identities and through social interaction (collaboration) they construct their co-teach team identity. Flum and Kaplan (2012) explained it well when they wrote, "...the formation of personal and social identity…synthesizes past, present and future experiences. The process of identity formation is also anchored in a sense of being part of - a web of relationships, group solidarity, and communal culture" (p. 40). The educators are now coming together to form a collaborative team and must construct a new professional identity or modify their current to include collaborative teaching with EL Newcomers.

***Teachers construct multiple identities based on their different roles.***

An individual will describe herself with role labels. "Role labels convey meanings and expectations for behaviors that have evolved from countless interactions among people in a social system" (Colbeck, 2008, p. 10). The different roles a teacher may assume depend on the setting they are in at a given moment (classroom, meetings, faculty lounge, etc.). Gee (2000) defines identity as

> Being recognized as a certain 'kind of person' ...The 'kind of person' one is recognized as 'being,' at a given time and place, can change from moment to moment in the interaction, can change from context to context, and of course can be ambiguous or unstable. p. 99

In this study, each participant had multiple identities. The focus of this study was to see how the participants constructed a new identity based on their collaboration together in a co-teach model. The teachers were still in their roles as teachers, but it would be as a team -

responsible for the teaching of all students in the classroom. The expectations and behaviors would be the same, but instead of being filtered through one person's values and experiences, it would be filtered by each person. They had to communicate to establish a set of common expectations and behaviors for their identity as a team.

## Putting it all together to have a successful Co-Teach Team and Program Model

Co-teaching was a collaborative act between two teachers. The success of implementing the co-teach program model with EL Newcomers in a middle school classroom was dependent on communication and how the teachers constructed their team identity. "It [identity formation] synthesizes past, present and future experiences. The process of identity formation is also anchored in a sense of being part of - a web of relationships, group solidarity, and communal culture" (Flum & Kaplan, 2012, p. 240). The shared experiences through co-planning, co-teaching and collaborating enabled the team to develop their group identity (De Backer, Schelfhout, Simons, Vandervieren, & Rivera Espejo, 2023). Co-teachers are coming together to form a collaborative team and must construct a new professional identity or modify their current identity to include collaborative teaching with EL Newcomers. It is meaning-making that occurs during the co-teaching experience.

Combining symbolic interactionism with teachers' professional identity provided the lens through which the data was analyzed to understand how two middle-school science teachers implemented a co-teaching program model with EL newcomers. Symbolic Interactionism provided a lens to understand how collaboration influenced TPI. It also allowed me, as the researcher, to evaluate how the co-teaching team implemented different co-teach strategies with EL Newcomers. To have a successful implementation, educators communicated (social interaction) during co-planning, implementation of lessons, and all other aspects of their jobs.

## Summary

Secondary schools across the United States are going to continuously have EL Newcomers enroll and need education in all courses. The National Center for Education Statistics reported that between fall 2011 and fall 2021 the EL population in public education increased by 9.4% or 4.6 million students (NCES, 2024) There are different program models to choose from that provide support for EL Newcomers as they acquire English and learn content. One program model that allows EL Newcomers to be immersed within general education classes with their English-speaking peers from their first day is the co-teach program model (Marsh, 2018). The co-teach program is most used in the elementary system and not the secondary system because of constraints found in many of the required necessities for the program model to be successful (Sinclair et al, 2018).

Co-teaching is centered around collaboration and that means that communication must occur. Symbolic interactionism involves the meaning-making that occurs during communication. The meaning making that occurs during communication impacts relationships that develop during collaboration and co-teaching. As the relationship developed so did the development of the co-teaching team identity. The co-teach team identity was constructed from the professional teacher identities of both teachers through social interactions with each other (Beijaard et al., 2004; Lasky, 2005; Mead, 1934; Olsen, 2008).

This study was a case study observing the co-teaching program in a secondary middle school. It explored gaps in the literature by observing participants who were content specialists, as they co-taught multiple hours together and had dedicated co-planning time. The study examined the development of the co-teaching team identity and how the participants perceived their impact with EL Newcomers.

# Chapter 3 - Methodology

## Introduction

Co-teaching is a program model that has been widely used by schools and local educational agencies (LEAs) when working with special education students (Chitiyo, 2017; Rytivaara et al., 2019). There is data that supported this model being successful in elementary schools (Nilsson & van Driel, 2010; Theoharis & O'Toole, 2011). There is very little data about co-teaching at the secondary level (Russell, 2012; Davila et al., 2017; Williams & Ditch, 2019; Pellegrino & Brown, 2020; DeRosia et al., 2021). In the past thirty years, co-teaching has found popularity in the EL world. Schools have been mandated to provide education to English Language Learners since the late 1960s (Sinclair, 2018).

For about half a century LEAs have explored multiple different models for educating ELs in content and English language skills (Marsh, 2018). During this time, the education gap between EL and their English-speaking peers has not decreased (Yeh et al., 2020). Co-teaching has limited research that the model closes the achievement gap, however a study in 2001 by Murawski and Swanson did find a 0.40 effect size for co-teaching's influence on student outcomes. This particular research study took place at a suburban middle school that had been using the co-teaching model with mainly a 1 teach, 1 assist (1T, 1A) strategy for seven years. The study explored the challenges the school faced as it begins to transition fully to more collaborative co-teaching strategies, i.e. team teaching (TT) with a co-teach team that consisted of core content teacher (specifically science for this study) and an EL teacher who was state certified in EL, Biology and Chemistry. This study added to the literature by exploring how co-teaching occurred in a middle school science classroom with EL Newcomers, how veteran

educators constructed a co-teach team identity, and how educators perceived the impact of co-teaching with EL Newcomers.

## Research purpose and question

This case study followed the collaboration journey of two educators in a suburban middle school with a 12% EL student population and a 58% free/reduced lunch population. During the 2023-2024 academic year in which the study took place, these co-teachers transitioned to using new co-teaching strategies aimed at supporting EL Newcomers in a science classroom. The goal of this case study was to provide the experiences of these two middle school science educators during the implementation of collaborative co-teaching strategies in science classes with a mixed language student population that included EL Newcomers. During co-teaching implementation and the collection of educator perceptions, this study was guided by the question of *"How do middle school science educators implement a co-teach program model of instruction with EL Newcomers?"* To share the collaborative journey the educators made from the field and to understand the implementation process from their perspective the following two sub questions were asked:

1. How do middle school science educators perceive the impact to their teacher identity during the implementation of the EL co-teaching program model?
2. How do educators working together in a middle school science classroom develop their co-teaching partnership to effectively support EL newcomer students?

## Research Procedures

### Pilot Study

A pilot study was conducted during the 2022-23 school year. This case study occurred at North Middle School (NMS, This is a pseudonym used to conceal the identity and location of the school). The purpose of this case study was to understand the current co-teaching program model

with EL Newcomers from the teachers' perspectives at NMS. The study was guided by the research question "What are teachers' perceptions of the current EL Co-Teaching Model in their Middle School?" The participants in the study were core content teachers from science, math, and English Language Arts (ELA) and two EL teachers. The participants were given pseudonyms for anonymity. Each participant was interviewed once following a semi-structured protocol for 30-45 minutes.

Based on analysis of the teachers' interview data it was learned that all the teachers in the study found it difficult to co-teach because there was no dedicated co-planning time during the day. Many of the co-teaching teams collaborated during the five-minute passing period before class and/or the core content teacher sent an e-mail with lesson plans for the week. During the interview with Luna (pseudonym for anonymity), she summarized a point all EL educator participants made, repeatedly, "Many days I'm just a para[professional] in the classroom." Hermione (pseudonym for anonymity) the ELA teacher said something similar in her interview. She commented that her co-teach team had been together for seven years. She said the first few years were rough because she and Luna did not have co-planning time. They still do not have co-planning time, but Luna knows what is happening during each unit because of the number of years they have been together. Now, she just "jumps into the lesson" and takes over instruction.

When all the participants were asked what they would like to see changed for the future, the number one response was dedicated co-planning time during the school day. They all stated that if they had this time, it would help them share ideas and collaborate more. In his interview, Harry the science teacher stated,

> I know there is so much I can learn about the ELs and how to present things in class to them. I just don't have the time to work with the ELL co-teacher. She does a great job working with them

on the side. But it's almost like they are a separate group within my classroom.

In addition to interviews, the school's state assessment data was made available by the building administration and is shown below in Figure 3.1. The ELA state assessment data (for spring 2017 and spring 2022) for EL students showed that for Beyond Level 1 (meaning students are at or above academic expectations for grade level as defined on Midwest State Department of Education State Assessment website), the EL students in this school were at or above district and state average scores. The math data from the same periods also showed similar comparisons with EL students at or above district and state averages. The Spring 2017 data included the first year of NMS implemented the co-teaching program model with EL Newcomers. The Spring 2022 data showed that in ELA and math, EL students performed higher than the district and state averages for EL students according to the state report card. The state assessment data indicated the co-teaching program model is showing academic success with EL students in ELA and Math.

| ELA - ELL Beyond Level 1 | | | | Math - ELL Beyond Level 1 | | |
|---|---|---|---|---|---|---|
| **Year** | **School** | **District** | **State** | **School** | **District** | **State** |
| **2017** | 54% | 51.0% | 46.9% | 51% | 55.0% | 51.6% |
| **2022** | 26% | 18.2% | 17.4% | 33% | 27.9% | 27.1% |

**Figure 3.1. State ELA and Math Assessment Data for 2017 and 2022**

### Selection of Participants

The selection of educators for participation in this case study was made by purposeful and convenient sampling. Before the beginning of the academic year the following factors influenced who would be co-teaching together for the 2023-2024 school year:

- teacher attrition
- reassignment to different teaching duties within the school
- master schedule conflicts
- which grade level team would have EL Newcomer students

Those four factors established the guidelines for purposeful sampling. The participation of participants from the pilot study in this case study was eliminated except for one co-teaching team, the convenient sampling characteristic. The sixth-grade science co-teaching team were the only team that were constant from the pilot study to this study. For this reason, I asked my co-teaching partner if he would participate in this case study. I met with him to inform him of the study and to seek his consent in written form to make video observation recordings during our classes and co-planning meetings, to interview him and to share his story in my dissertation. My co-teaching partner was given a pseudonym name (Harry) to ensure his anonymity throughout the process and the future. During this meeting, he had the chance to ask questions and learn about benefits he could gain from participating in this case study. It was also explained that Harry could leave the study without consequences to him regarding his job or our relationship.

## Research Site

### *The School – North Middle School*

North Middle School (NMS), a pseudonym, is one of ten middle schools in a large suburban district, Unified School District (USD, a pseudonym) in the Midwest. NMS is a Title 1 school with about seven hundred students in grades six, seven and eight. Approximately 12% of the student body is classified EL. Another 15% of the student population was classified as EL but has since passed the English Language Proficiency Assessment. The school operated in a team system for each grade level. Each grade level had two teams that students were divided among. Each grade level team of students had the same core (math, science, social studies, and

ELA) teachers and same homeroom teachers. The team teachers had dedicated plan hour each day to meet, discuss students, and interventions or different kinds of learning supports that are proving effective in the classroom. Grade level core content teachers also had dedicated co-planning hour one day each week. These dedicated plan hours allowed teams of educators to collaborate on lesson planning and meeting students. This was also a time when SPED or EL educators met with core teachers to co-plan lessons and helped facilitate support needed by their students in the classrooms. A sample team schedule is provided in Figure 3.2.

| 6th grade Team 1 | 1st hr | 2nd hr | 3rd hr | 4th hr | 5th hr | 6th hr | 7th hr |
|---|---|---|---|---|---|---|---|
| **ELA** | Team Plan | ELA | ELA | ELA | Personal Plan | ELA | ELA |
| **Science (Harry)** | Team Plan | Science | Science Co-teach | Science | Science | Personal Plan | Science Co-teach |
| **S.S.** | Team Plan | S.S. | S.S. | Personal Plan | S.S. Co-teach | S.S. | S.S. |
| **Math** | Team Plan | Math | Math | Math Co-teach | Math | Personal Plan | Math |
| **EL (Jenny)** | 6th grade team plan | EL Hour | Science 6th grade Co-teach | Personal Plan | Science 8th grade Co-teach | Science 7th grade Co-teach | Science 6th grade Co-teach |

**Figure 3.2. Harry and Jenny Schedule – the 6th grade team with EL teacher included**

***The classroom – Room 403***

Room 403 was nestled in the back corner of NMS in one of the side additions that have occurred over the last fifty years. It was slightly hexagonal in shape just like the rest of the building. Inside the classroom were sixteen lab tables that were arranged in groups, a demonstration table, a teacher's desk, a safety shower, sinks, cabinets and (depending on the hour) twenty to thirty students. Figure 3.3 is a photo of Room 403.

**Figure 3.3. Room 403**

Harry arranged the lab tables into four groups of eight. His cabinets were full of resources he used for hands-on and modeling activities from the curriculum. He used the front of the cabinets as wall space to hang posters that contain key concepts related to units of study, word walls and student work. At times, the classroom could have felt overwhelming, but everything served a purpose as a visual to reinforce learning for all students.

Behind the globe was the screen, whiteboard, and teacher's desk. Harry and I usually stood on either side of the screen. One person hovered by the globe and the other by the basket when we both were in front of the room. Movement around the room was quite easy. There was a direct path down the middle of the room, along the outside and horizontally through the middle. It was easy for us to move from group to group and to have students rotate in stations (because they put their belongings on the back countertops).

## Researcher's Role

As the researcher in this study, I knew who I was in relation to the study was important. I was a secondary educator with thirteen years of teaching experience in high schools (eleven years) and middle school (two years). I am the team lead for the EL team at the middle school of this study. The district I am employed with has slowly been transitioning from sheltered

instruction and pull-out models of instruction to a co-teach program model emphasizing on 1T, 1A. The focus of EL educators has been to support their students by making all the modifications, differentiating and reteaching. The role of EL educators in the classroom has been less of collaborative co-teaching and more of behind-the-scenes student support - almost like a paraprofessional in the classroom.

My role in this study could be perceived as biased and intricate. As a member of the staff at the school and as an educator who helped create this system of dependence, I was directly involved in this process. As the team lead for the EL educators, I guided the team in the solving of daily problems, established meeting agendas and the liaison between different parties at NMS. I monitored all EL students' learning and their grades. As the researcher, I observed and recorded data. I was actively participating in the co-teaching process and the weekly co-planning meetings with my grade level content educators. I learned this process with my colleague and went through this transition journey with him.

## Data Collection

Rossman & Rallis (2017) wrote that case studies are “eclectic” and use a variety of techniques for gathering data over a period of time (p. 193). Stake (2000) stated, “We are interested in it...because we need to learn about that particular case.” (p. 3). The immersion of the researcher into the study is the key feature mentioned in the literature. For this case study, I am embedded in the study and most of the data that will be collected, because I am a researcher and a participant.

A key feature of case study is to give an in-depth description of the phenomenon being studied. The description should be so detailed that an outsider will feel like they are a part of the phenomenon (Stake, 1995). The data collected to help create this in-depth description included

the main strategies of data collection: semi-structured individual interviews, classroom observations, co-planning observations and research journals (Bogdan & Bilkan, 2007). All interviews and observations were video recorded. Video recordings allowed the researcher to review interviews and observations for symbolic interaction communication missed during the original interview or observation. The recordings enabled the researcher to be present during the interview and not focused on taking notes. It created more of a conversation during the interview.

The video recording of observations was a necessity as I was also a teacher and was actively participating in the conversation around instruction of students in the classroom. If I were to sit in the back of the room and take field-note observations, I would not be observing co-teaching as one part of the co-teaching team. The same was also true for co-planning meetings. The set-up for observations involved placing the recording device in the back of the room to observe the entire classroom in one frame. The teachers and students forget that the camera was there and behaved more naturally during the lesson or in meeting observations. The interactions recorded during observations were natural and not staged for the camera (Blumer, 1969; Fink, 2015).

Data collection is outlined in Figure 3.4 below. Each month of the study had data collected. Interview data was collected at three points during the study – the beginning, middle and end. Each month had co-teaching (CT) observations. The CT observations occurred for all co-taught class periods on that day. There were 4 CT observations, and each observation had two class periods recorded. Co-planning (CP) observations occurred three times (September, October, and November) during the 6$^{th}$ grade common plan hour.

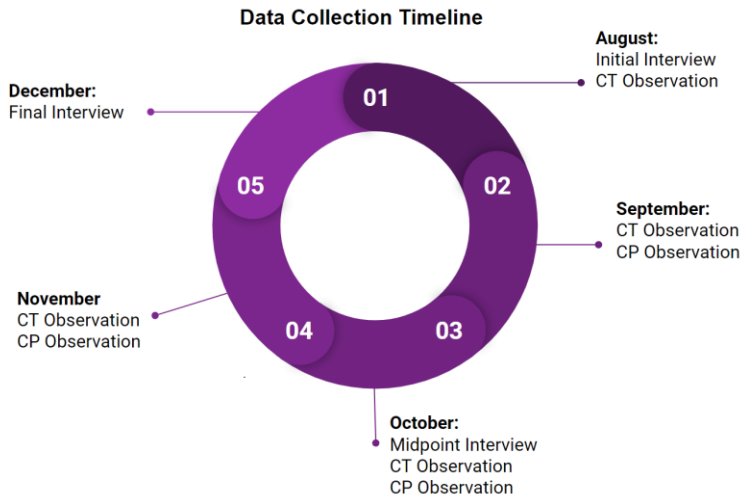


**Figure 3.4. Data Collection Timeline**

### Interviews

Interviews are a direct method that allowed the researcher to obtain descriptive data on the research topic directly from the participants (Naz et al.,2022). Interviews were semi-structured in that each interview followed the same protocol for the first part of the interview, but the order was changed based on how the conversation was going. The purpose of using the same protocol for each interview was to help focus the interview and to observe changes to questions related to TPI. As educators it was very easy to get off on a tangent and to lose focus during the interview. We are social beings who want to share and connect with each other. The nature of the questions allowed the participants to be storytellers but also focused on sharing their experiences as co-teachers during the first semester and the study. Seidman encouraged open-ended questions that enabled the participants "to reconstruct a significant segment of an experience" (1991, p.63).

The implementation of a semi-structured protocol gave the researcher freedom to ask follow-up questions or questions that elicited further reflection or details (Creswell, 2012). The follow-up questions were related to something that was said, a follow-up to an observation that was made while reviewing video recordings or a spur of the moment question. The semi-structured protocol also gave the researcher and participants the flexibility to have a tangent

(which can provide insight later during analysis) while giving the researcher the opportunity to bring the conversation back to the topic at hand. “Usage of semi-structured interview is preferred ... because it allows the interviewer to explore the opinions and ideas, ... deeper into their answers for additional information and clarification” (Naz et al., 2022, p.45).

*Special Note: As a researcher and participant, I always interviewed myself first before my co-teaching partner.

*Interview protocols are in the Appendix.

**Classroom Observation**

During each interview, participants were asked to describe their co-teaching team, how they felt they were working as a team, what were the roles each had assumed, and their team identity. The video classroom observations were one way I triangulated information (Stake, 1995) stated in the interview with what was observed during implementation. It was an opportunity to connect the narratives and responses from the interviews to what was happening in the classroom. The classroom observations were analyzed by coding the different co-teaching strategies observed during the lesson. Further rounds of coding focused on the kinds of symbolic interactions between the co-teachers and students during the lesson.

The purpose of classroom observations was to witness co-teaching in action. The observations provided the researcher with evidence to see if the team really transitioned from using 1T, 1A as the main strategy to using other co-teaching strategies. Video observations enabled the researcher to observe the co-teaching strategies being implemented. Classroom observations allowed me to observe changes made throughout the day between the first and last co- taught lessons. The participants co-taught together twice each day, once in the morning and once in the afternoon.

*Observation Protocols are in the Appendix.

### Researcher Journal

I as the researcher kept a video journal. This video journal served two purposes. The first purpose was my research journal where I can record reflections throughout the research process (Thomas & Sohn 2023). After conducting interviews or during the coding process, the journal gave me the ability to record my thoughts and ideas. I am an oral processor and video journaling allowed me the ability to reflect and process my thoughts and ideas in a more natural way. I needed to talk through an idea and while I could easily make notes, I cannot write as fast as I can talk. I analyzed and coded data by hand and then used this process to talk through connections and ideas. It gave me more video to go through, but these journal entries were filed in a separate folder from my participant interviews, and I could quickly reference them to see where my thoughts were at a particular moment.

The second purpose was to record my experiences as a participant. I responded to the same interview protocol as my co-teaching partner. I recorded additional journal entries as needed based on my experiences as a participant. For example, I made a journal entry immediately after co-teaching instead of waiting for the quarterly window. This flexibility allowed for more data but also for reflections to be shared while they are fresh in my mind. Since I was also a participant, the flexibility to make unscheduled video entries allowed me to share experiences that were conflicting in nature, moments when I was unable to differentiate or distinguish my role as a researcher and participant.

## Data Analysis

### Methodological Framework

Qualitative researchers explore a phenomenon from multiple different perspectives in the hopes of understanding its true nature. Qualitative research is defined as "one that explores the complex issues of what it means to be human" (Kim, 2016, p. 4). Researchers are trying to understand the human narrative as it relates to their research question(s). The purpose of this research was to understand how educators working in co-teaching teams in a middle school science classroom can implement co-teaching strategies with EL Newcomers. Qualitative research allowed the researcher to develop a deeper understanding of a specific phenomenon. One method used by researchers to describe specific phenomena was a case study. A case study according to Bhattacharya (2017) "involves in-depth contextual study of…[an] issue… within a predetermined scope of the study" (p. 26). Robert Stake (1995) states that the goal of case study is to describe a specific phenomenon in depth so that the consumer of research feels like they are an insider because the information is rich with details.

This case study is focused on a single science classroom in a middle school undergoing a shift in implementation of the co-teach program model with their EL Newcomers. Robert Stake (1995) opens his book *The Art of Case Study Research* with "A case study is expected to catch the complexity of a single case" (p. XI). A case study is complex and specific. It is also "a bounded system" (Stake, 1995, p.47) that provides an occasion or chance to learn. Stake (1995) also points out that qualitative case study centers around knowledge that is constructed because the goal of research is to paint a clearer picture and uniqueness of the case by using "narrative description in the final report" (Stake, 1995, p. 102). A key component of the co-teach model is the collaboration that occurs between a content teacher and EL specialist. Through collaboration the two teachers construct a professional identity.

**Theoretical Framework and its role in data analysis.**

Symbolic Interactionism is a theory situated around individuals communicating in a collaborative setting (Fink, 2016). It involves three premises that work together to provide a lens to analyze communication and collaboration between individuals (Blumer, 1969). In the science classroom, two teachers worked together in a co-teaching team to educate all students, including EL Newcomers. They needed to collaborate by co-planning prior to class and collaborated by communicating during class. Communication took on many forms including verbal, non-verbal cues, and written form. Each form of communication was subjected to interpretation by the recipient. Communication and interpretation were key features of professional identity development (Beijaard et al.,2004) and collaboration. Symbolic interactionism is used to help understand the influence collaboration has in the evolution of each participant's teacher's professional identity. For this study, symbolic interactionism provided a lens to analyze the data that was collected.

**Data Analysis**

"Data analysis involves creating a process that would allow for deep insights that reflect how the researcher integrated theoretical and analytical frameworks" (Bhattacharya, 2017, p. 149). For this study, the data was compromised of recorded semi-structured interviews, recorded video observations and field notes. The process that was followed during the data analysis:

- Interview Transcription
- First Cycle Coding
- Triangulation to Observational Data
- Second Cycle Coding
- Triangulation to Observational Data

The process follows a combination of Saldana (2016) and Stake (1995). Saldana (2016) was followed during each coding cycle and with coding methodology, which is discussed below. Stake (1995) wrote about triangulation stating, "If it is central to making the case, then we will to

be sure that we have it right" (p.112). Observational data was used to triangulate and provide evidential support to the themes that emerge from the interview data as discussed below.

The semi-structured interviews were recorded using Zoom technology. After recording, Zoom features artificial intelligence technology to create a transcript of the meeting. Transcripts were verified for accuracy by listening to the recorded interview several times and correcting any mistakes. The interviews were manually coded and sorted into four themes. For each cycle of manual coding, I went through transcripts line by line on my computer identifying codes with the highlight tool and writing comments (Saldana, 2016). I chose to do this manually because I only have six interviews and wanted to be directly involved in the entire process.

Information about the four themes can be found in Chapter Four. Chapter Five delves into the analysis of the four themes and their relationship to implementation co-teaching program model, development of team identity and perceived impact of educating EL Newcomers in a secondary science classroom.

Observational data provided evidential support to the themes that emerged during interview analysis. This was possible because symbolic interactionism offered itself as a tool to be used for analyzing human interaction during collaboration. When it was used to analyze teaching observations and co-planning observations, symbolic interactionism provided evidence to support the development of co-teach team relationship, trust and identity.

In order to analyze the data without bias, all evidence of participant identities, school identity, school location, district identity and location were eliminated. Pseudonyms were given to all participants and to the school. I did not give myself a pseudonym as I am also the researcher. When sharing the data from this research with others, the names of participants have not been released to administration. After the study was completed, all forms and recordings

were stored in a secured place until the mandated time by the university has expired. After such time they will be destroyed.

## Trustworthiness

The goal of research is to present findings that others want to pay attention to and to have findings "that are trustworthy" (Rossman & Rallis, 2017, p. 131). A difference between qualitative and quantitative research is the notion of truth. Quantitative seeks a single truth while qualitative research seeks truths about a particular phenomenon (Rossman & Rallis, 2017). This was especially applicable to case study research because it cannot be generalized since "no two cases are identical" (Rossman & Rallis, 2017, p. 193). Qualitative research, including case study, has guidelines used during a study to help certify that the findings are credible and usable - trustworthy. In the table below, shows these guidelines have been applied to this study to help the findings and conclusions qualify as trustworthy and "allows the application of lessons learned" (Rossman & Rallis, 2017, p. 131).

| Guideline | Definition (Rossman & Rallis, 2017) | How it is implemented in my study |
|---|---|---|
| **Prolonged Engagement** | "Being present for a long period in the setting [and/or] with the participants" (p.141) | • Third year teaching in the building<br>• 2nd year working with co-teach team (Harry & Me)<br>• I taught 2 hours each day with Harry.<br>• I co-planned with Harry |
| **Participant Validation** | "...take emerging findings back to the participants for them to elaborate, correct, extend or argue about." (p.141) | • conferred with Harry as data was coded and analyzed made sure I interpreted thoughts, feelings, etc correctly.<br>• Final conclusions shared for any feedback |
| **Triangulation** | "Multiple sources of data, multiple points in time, or a variety of methods are used to build the picture that you are investigating." (p.141) | • Data collected included individual & team interview data<br>• Classroom observations<br>• Co-planning observations<br>• Researcher Journal |
| **Peer Debriefer** | "You engage in critical and sustained discussions with valued colleagues…" "intellectual watchdog"(p.141) | • Conversations throughout the course of the study with research advisors<br>• Trusted colleague who is outside of the university and the study who I meet with do keep me accountable and processes through my writing |
| **Personal Bias** | "…acknowledging the perspective and bias that I can bring to the interpretation of data and findings." (p.134) | • Written my subjectivity statement<br>• Acknowledged that I had multiple roles in this study and aware how it could influence data collection, analysis, and interpretation of results. |

**Figure 3.5. Trustworthiness Accountability**

## Summary

Qualitative research aims to explore phenomenon with "an interpretive, naturalistic approach... making sense of the meaning that people bring to them" (Kim, p.5). "A case study is expected to catch the complexity of a single case" (Stake, 1995, p. IX). The data that was collected – participant interviews, recorded observations, and researcher journal – was analyzed to illuminate the co-teaching case (Saladana, 2016). Guidelines have been established and were implemented during the study to give trustworthiness to the findings that were found through analysis (Rossman & Rallis, 2017).

# Chapter 4 - Data Analysis

"Jenny: How do you feel about when we switch roles and I'm leading the class when it starts and maybe not doing things your way?

Harry: I enjoy it. I just sit back and jump in when it's my turn. At first, I was like, this is okay, but now I enjoy it."

Taken from Harry's final interview

## Introduction

This chapter presents the data analysis of two middle school teachers' journey to become team teaching co-teachers in a science classroom with EL Newcomers. As evident from the quotes shared above, my colleague and I did not start our partnership on an equal footing, yet it turned into collaboration with shared leadership. Robert Stake wrote that "a case study is expected to catch the complexity of a single case" (1995, p. IX). In addition to working together two hours a day, four days a week together, Harry and I also spent time together outside of teaching in meetings to go over student data, develop lesson plans and attend other teacher meetings. As mentioned in Chapter Three, our time together was documented with three semi-structured interviews, four teaching observations (1 observation was for two class periods during the day), three co-planning observations and researcher field notes. The data analysis of this case study shared insights into how two educators went from being individuals to a team in a co-teach classroom. These insights are shared through the themes and patterns that emerged.

This chapter will take us on a journey that illuminates the growth Harry and I underwent as we transitioned from a 1 Teach, 1 Assist (1T, 1A) strategy to a team teaching (TT) strategy. Before diving into the themes that emerged during data analysis, each participant in the study is introduced, and because I am a participant and a researcher in this study, I offer a brief pause to look at my positionality and the subjectivities that were discovered through analysis. The bulk of

the chapter is spent diving into the four major themes that emerged during data analysis and seeing how they work together to illustrate the journey from a 1T, 1A to a TT co-teaching model in a science classroom with EL Newcomers.

The four major themes that emerge from the interview data and are supported with observational data are:

- teacher identity,
- necessary traits for collaboration,
- team goals, and
- team identity.

The final section of this chapter is a series of snippets of one type of lesson repeated for each unit of study. The development of this lesson through each unit reflects Harry's and mine journey as we transitioned from 1T, 1A via role switching to team teaching. It also exemplifies how a co-teaching program model of instruction is implemented with EL Newcomers.

This case study is always being directed by the research question "How do middle school science educators implement a co-teach model of instruction with EL Newcomers?" This question was kept in the forefront throughout the analysis process to keep the goal of the research in mind. The analysis process of all interview data followed the following steps:

- Transcription of interview recordings
- Cycle 1: In vivo analysis for adjectives or descriptions of characteristics, events, or self
- Created comparison tables: Harry – Harry, Jenny – Jenny, Harry - Jenny,
- Cycle 2: Theoretical Analysis using key words: co-teaching (research topic), co-planning and collaboration (necessary traits for co-teaching from Chapter two)

The findings from this analysis are seen below in Figure 4.1 and are explored in-depth throughout this chapter.

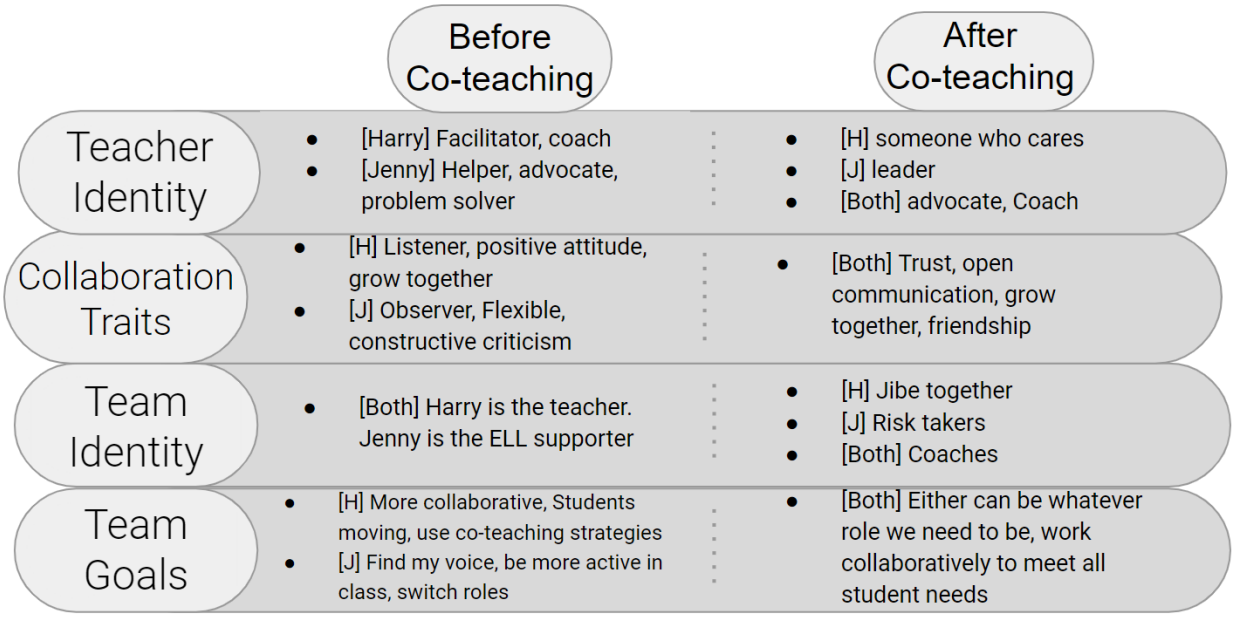


**Figure 4.1. Interview Findings after analysis**

Classroom co-teaching observations and co-planning observations were analyzed initially for types of interaction and communication between the participants using observation protocol (found in Appendix). Symbolic interactionism involved how individuals in a group make meaning from the interactions that occur through different forms of communication. Chapter Two presented the three premises of symbolic interactionism and how these three premises allow one to observe communication between individuals (Blumer, 1969). The process of analysis involved reviewing observation recordings for different types of interactions and communication. Classroom observation recordings were reviewed an additional time specifically to note the different co-teaching strategies that occurred in the lesson using the co-teaching observation protocol (found in Appendix). In addition to noting the strategies, the protocol also allowed for notation of role switching.

The results of this analysis lend support to the four major themes with concrete examples and evidence of the journey. In addition, the results provided insights to arguments made in

Chapter One. Recall that this study is unique for the following reasons: a co-teach program model is being implemented with a focus on collaborative strategies in a secondary school with EL Newcomers and an EL teacher with the same core content certification as the core co-teaching partner. Symbolic interactionism analysis showed how co-planning impacts the transition from 1T:1A to role switching to team teaching. As the development of trust in the relationship between Harry and I grew, so did the amount of role switching. The more we switched roles the more fluid we got in our transitions, and the more comfortable we got in taking on different roles.

The relationship reached a point where Harry and I trusted and communicated so openly that even when conflict arose, we didn't leave a meeting angry. We were able to compromise, share responsibility and team teach in the classroom. For example, I noted in my journal during a co-planning meeting the back and forth we had about how to have the students read an article for the mid-unit checkpoint review. Harry wanted to read the whole article out loud to them and I wanted to let the students pick how they read the article: small groups, round robin or listen on their device. I explained to Harry that I had done round robin on a day he was absent, and the students responded well in class and were capable, which is why I felt they could do it in small groups. We left the meeting with no resolution. I arrived in class a little later ready to help Harry do a read out loud. I even told him in the hall before class that I could start the article. Harry surprised me, by starting the article but then calling on someone to read the next paragraph.

## The Participants in the Study

### Who is Harry? - Harry's self-positionality

"I'm a male, born a male in 1977." This was the first response Harry gave me when we sat down for our first interview during this study when I asked him to describe his teacher

identity. Before beginning his journey in education, Harry originally went to university believing he wanted to be a pediatrician. But at some point, the path split, and the new road led him to education. Harry began his career in education 23 years ago as an elementary teacher. During his tenure in education, all in the same district, he has become a recognized leader in multiple areas. For fifteen years he was the elementary district administrator for the summer school that most EL Newcomers attended. Harry is an elementary reading specialist that puts his heart into "helping kids be successful in reading." The district had a program called Families Learning in Partnership (FLIP) that Harry helped facilitate at Title I elementary schools. The program focused on developing literacy and math skills in all members of the family. It was offered in multiple languages to support the wide variety of families in the school district. "I recently transferred over to middle school science. I was one with the passion for science and connecting the kids to it. I knew that we were skipping that in the elementary world and the way I wanted to see it done. And now I have control over it. So thus, I'm here at North Middle School." He is beginning his third year at NMS.

**Who is Jenny? – Jenny's self-positionality**

I am a person who has never really left education. I earned my bachelor's degree and immediately went into a doctorate program in chemistry. After a little over two years, I left that program with my master's degree. I then spent the next four years as a teacher of English as a Foreign Language (TEFL) volunteer in the Peace Corps. I then earned my master's in education and began my career in education as a chemistry teacher at the high school level, in an urban district. After seven years I transferred to this suburban school district, but I was placed at one of their affluent high schools. My job title was EL Science. I was there for four years and then made the move to middle school the same year as Harry. I made the move to middle school because "I

wanted to get back to a student population that was similar to the urban group that I was more familiar with and wanted to continue working with EL Newcomers."

## Researcher Subjectivities from Analysis

The role of researcher and participant is a unique position in any research. In Chapters One and Three I addressed my role as both. To remove bias during the interview process, I would always interview myself before interviewing my partner. My partner was unaware of my responses and his responses were unable to influence mine, because I gave mine first. During the study and the analysis there was dissonance that occurred between Harry and I when it came to instructional methods and with myself during analysis as I tried to keep my roles of researcher and participant separate. No amount of precaution could prevent it from occurring but ignoring it would be even worse.

During the study, there were so many factors that were beyond my control in the school. I found myself and my colleague overwhelmed and being asked to take on task after task by the administration. We kept having to fight to have our time to co-plan and to be together in the classroom. We both just wanted to do our jobs as educators, and we were not even concerned with the study. To help both of us feel less overwhelmed with the study, I modified the methodology to have fewer interviews (originally, I planned for 5 interviews, one per month) and I added more observations. Observations required less time commitment on both our parts because all I had to do was set up the computer and then go do my job. Each interview would take 30-45 minutes to complete.

I made more journal entries to collect my perspective but to also just document what was happening. Some of my journal entries are very clinical in nature in that they just describe the activities and who did the teaching role during a given lesson that day. I have other entries where

I spent most of the time reflecting on interactions between Harry and me. Those entries are more feelings based, and I spent time trying to problem solve and reflectively think about co-teaching. The final kind of journal entries are me reflecting on the study and my role as the researcher. There are journal entries where I do all three things – comment about the day, reflect on Harry and me, and then reflect on the study.

As I began analysis of the data, it was very difficult for me to begin. As a researcher and participant, I was living the study. I was very cognizant of the research questions and the events that were happening daily. I felt I knew the answers to the research questions on the last day of the study without analyzing the data, because I had lived the data. I struggled to view the data with researcher only eyes and to be unbiased. I had to stop myself during analysis multiple times and question the perspective of the notes I was making. At some point during the observational analysis protocol, I began to ignore my bias because my bias was what allowed me to interpret the symbolic interactions. By that I mean, I was analyzing myself and the reaction I had to Harry. I was also analyzing Harry's tone of voice and gestures. All this required insider knowledge which I had because I was also the participant.

One major example of dissonance between Harry and I that I speak about a lot in my journal entries is student perceived ability. I stated,

> Harry likes to talk at, not with students. He feels that the students' level of ability is so low in general that he needs to do it all. I keep asking, and I'm pushing little by little, and sometimes I make headway, and sometimes I don't. It's very interesting, because he is a former elementary teacher. So, I was expecting a lot more stuff.

The two of us spent a lot of time going back and forth on how to do reading activities in class. Harry always wanted to read aloud, and I wanted to try different methods. There were times Harry would let me take the lead and see how it would go, and other times he would not

cave in his stance. No matter how frustrated I got or how much we went back and forth on this, it never seemed to impact our relationship. In fact, our relationship seemed to grow from this dissonance. In our final interview, Harry commented that "I'm working with my friend. We bounce ideas off each other through our dialogue and conversations."

In my final interview I commented on two examples of how I came to class and Harry had changed the reading lesson at the last moment. He created a game for one activity that had the students acting out a diagram from the reading. For another he took an idea I had mentioned and created a vocabulary activity based on skimming the article. My journal captured, "Harry really listened to the different things that we are talking about." I made additional research journal entries after this interview, and I still complained about Harry and his view about student ability. It was not until I was doing the data analysis that I was able to connect these dots and see that Harry was listening and growing from conversations. It just took time for him to feel comfortable to try new things. I am sure I will still complain about Harry in the future, but it is nice to know that he did listen when I pushed for small changes.

## Theme One: Teacher Identity

Beijaard et al. (2004) wrote "...professional identity is, in our view, not only an answer to the question who am I as a teacher at this moment, …but also an answer to the question 'Who do I want to become?'" (p. 108). In Chapter Two the foundation was established that teacher identity formation occurs through social interactions (Blumer, 1969); it is organic, and teachers construct multiple identities based on their different roles (Gee, 2000) . One of the sub questions of this study is "H*ow do middle school science educators perceive the impact to their teacher identity during the implementation of the EL co-teaching program model?"* During this study,

both participants were repeatedly asked to describe their teacher's identity to see if their description of their teacher identities changed.

In our first interview Harry stated, “I'm a facilitator, coach in the classroom to help kids maximize their learning abilities.” It was very succinct and to the point. Harry is a very direct person who will tell you just like it is. He does not mince words or sugar coat things. I, however, can be very wordy and find it difficult to be succinct without providing examples. “I am on your side a hundred percent. I don't care if you're the teacher or student. I am an advocate. I will go to bat for you. I will sit there. I'm a problem solver. I see the problem. And I think that's what helps me be an advocate is that I want to find a solution. I want to understand it. I want to make it better and figure out how it's going.”

There were many opportunities throughout the study for both participants to exhibit their identity during co-teaching and co-planning. Classroom observations from the study's beginning confirmed that Harry was a facilitator in that he would naturally assume the teacher role during instruction. In co-planning meetings, Harry would send out the agenda and led the meetings. I was observed advocating for student needs in many co-planning meetings. During classroom instruction, I would take the assistant role and used it to support students by answering their questions, writing key ideas on the board and asking clarifying questions.

As the study progressed, we were observed switching roles during classroom instruction with myself taking on the teacher role and Harry taking the assistant role. Co-planning observations showed us collaborating to create lessons that included accommodation for different levels of students, including EL Newcomers. We both were advocating and making sure that we were always doing what was in the best interest of our students. Classroom observations showed that I would take the leadership role in class and when we began team

teaching, Harry and I were both in front of the room leading the class together. By the end of the study, both participants were team teaching and role switching regularly during classroom instruction and co-planning meetings.

In the final interview, each of us was asked one final time to describe our teacher identity. Harry still said he was a coach, but this time he added to his list of traits "advocate" and "someone who cares." I was still an advocate, but I added a leader and coach to my traits list. Though we interviewed separately and without knowing what the other said, we both answered with a couple of similar words: coach and advocate. We each used a trait the other had named from the beginning as one of our own traits at the end. Through our time together in co-teaching (specifically through role-switching) we had assumed the other person's role and felt that it had become a part of our own teacher's identity.

## Theme Two: Traits Necessary for Collaboration

The Merriam-Webster Dictionary defines collaboration as "to work jointly with others in some endeavor" (n.d., Definition 1). In Chapter Two, it was stated that collaboration was a necessity for co-teaching (Pellegrino & Brown, 2020). Harry and I both discussed traits that we as individuals had that would allow us to work successfully in a collaborative team in our first interviews. Harry said he is a good listener, had a positive attitude, and was willing to grow with his team. I stated that I was observant, flexible and good at providing constructive criticism.

These traits play key roles in how Harry and I were able to move from a 1 Teach:1 Assist strategy to a team-teaching strategy. Symbolic interactionism involves how individuals collaborating in a group make meaning from interactions that have occurred (Fink, 2015). Data analysis using the three premises of symbolic interactionism demonstrated how these traits support the transition to team teaching. It also provided evidence to support how Harry and I can

claim at the end of the study after we have been team teaching that we both believed there are different necessary traits for collaboration: trust, open communication, growing together, and friendship.

This section was organized into two subsections centered around recorded observation data and supported by interview data. The first subsection explores how the collaboration traits are necessary during the journey from 1T:1A to team teaching. Key moments from recorded observations are highlighted to illustrate traits and how they supported the transition from 1T:1A to TT. The second subsection focuses on co-planning and the role it played in not only being a time for planning but also time for building a relationship that would become the foundation of our team identity.

### 1T, 1A + Role Switching = Team Teaching

The first recorded teaching observation occurred just a few weeks into the school year. (Recall that for each observation, there were two recordings because each lesson was taught twice that day.) This observation yielded a lot of videos of Harry as the teacher and I as the assistant. I was doing a great job of observing students and noticed that they were struggling to take notes from his oratory statements. I asked Harry to write the answers on the board. This simple request led to a role switch, and I became the teacher. Harry's facial expressions remained positive, and he remained engaged in the class. We repeated the same lesson later in the day with the same role switch without me having to ask (demonstrated growing together). During this second observation of the same lesson, Harry was called out of the room to go substitute in another classroom. I noted in my journal that the previous year, Harry would have asked me to go substitute, but this year he went. This is an acknowledgement of the trust that he had in me to lead the class.

The second set of recorded observations occurred about a month later at the end of September. During this observation the traits of flexibility and growing together by both of us was observed. The first observation had me as the teacher and Harry as the assistant. This was intentional on our part and was discussed during our co-planning. There are multiple instances of Harry and I role switching during the lesson. When role switching occurred it is very fluid and seamless during instruction. Harry jumps into the teacher role and just as easily relinquishes the role when I jump back in. In my analysis notes I comment that it appears "almost like the beginning of team teaching."

The second observation looked very similar except Harry started the class and I took the assistant role, so I could help get a few EL Newcomers set up for the different stations that would be happening in class that hour. Once the class started, the notes from the observation looked very similar to the first observation. Role switching was still occurring. A difference is that at the end of the hour we were both in front of the room leading the class using team teaching. In my journal reflection I commented that "today was one of those days where everything clicked." We exhibited flexibility and showed that we were growing together as a team by role switching fluidly during our teaching.

The third set of recorded observations took place at the end of November. This set of observations showed that Harry and I trusted each other and had grown together into a co-teaching team. Most of both observations showed that the lesson was spent in team teaching. A noticable distinction between team teaching and 1T, 1A became where Harry and I were in the classroom. If we were team teaching both of us were in the middle to front part of the classroom. Previously, when we were 1T, 1A, only one of us was in the front half of the classroom. This

was key because at the beginning of both observations, I was leading the class, but Harry was also in the front of the room and chimes in at different times.

At one point in the first observation, I asked Harry to pull up a map of Southeastern Asia to help students visualize what we are talking about. (Harry did this without prompting in the second observation.) This began a role switch and strategy switch to 1T, 1A. I moved from the front of the room to circulating the room supporting all students. Harry began modeling at the front as he led the class through a vocabulary exercise. We ended both class periods by circling the room working with small groups of students. We both moved fluidly between groups, each taking turns working with EL Newcomers.

The final set of observations occurred in December at the end of the study. This set of observations was unique in that I got to observe the friendship that had developed between Harry and I in addition to seeing how trust influenced team teaching. The first observation showed an activity that had the students working independently creating a diagram for most of the hour. Harry and I gave some helpful insights and instructions at the beginning and would circle around periodically to support students as needed. The observation showcased Harry and I conversing in different areas of the room while still observing the students. Different topics that were recorded included discussions about family, holiday plans, second semester lesson plans, current happenings in the school and ideas for the lesson during the second observation. Our relationship was more than co-teaching.

The second observation went a little differently. Instead of setting the students free after the instructions, Harry helped them get the foundation of their diagram set up first. I went around from group to group supporting students. Harry was in the front of the room supporting a table with two EL Newcomers and modeled right in front of them. Once the students had their labels

glued down, they were then allowed to work independently on their diagrams. Harry stayed up front supporting the EL Newcomers and students at the other front table, while I supported the back two table groups until all students completed their diagrams. Harry and I truly switched roles in this observation. He became the person who supported the EL Newcomers, and I trusted him to do that.

### Building a Relationship + Lessons = Co-Planning

In our first year together, Harry and I had to find our own time to meet because it was not built into the master meeting schedule. It was something we talked about during the pilot study. "I wish we had more time to co-plan (Jenny, pilot study final interview)." Harry and I would meet before school and talk in between classes when we had the time. Administration did not allot specific co-planning time for any of the co-teaching teams in the building. At the end of the year when we found out that we would be a team again the following year, Harry and I went to administration and stated that we wanted dedicated time for co-planning. I also went to administration and presented the necessities for co-teaching as stated in Chapter Two - which includes administration support, time for co-planning and collaboration (Bray et al., 2018).

At the beginning of August, right as this study was set to start, the master meeting schedule stated that every Monday would be dedicated to grade level PLC (Professional Learning Community). It was the only time that was dedicated to co-planning. Harry and I went to administration stating the PLC was not co-planning and requesting dedicated time. **"**The expectation is that our school administration understands that we have a set aside time that is uninterrupted for us to effectively plan together, teach, reflect on the final learning and identify those students that need needs met in different ways (Harry during 1st interview)." PLC time was data driven and we wanted time to co-plan individual lessons and how we would implement co-

teaching strategies in our lessons. In the end, we got PLC time every Monday and we got thirty minutes every Wednesday for co-planning.

Every week, twice a week (approximately ninety minutes per week), there would be three people who would meet in Harry's classroom to discuss data, long term planning, short term planning and individual lessons. Those three people were Harry, me and Ron - the other sixth grade science teacher whose classroom was next door to Harry's. Our meetings were not just about developing lessons that included co-teaching strategies and EL accommodations, but they were also a time when collaboration traits of trust, open communication and friendships were developed. The development of these traits and the implementation of traits brought into the collaboration by the participants: listener, positive attitude, growth mindset, observant, flexibility, and constructive criticism giver that make a successful co-teach team possible.

Three co-planning observations occurred during this study. There are a few common observations that were made in all three observations: all meetings happened in Harry's room, the environment was always relaxed, and everyone was willing to share. The final common observation was that we would disagree during a meeting, but we never left a meeting with any of us angry at each other. Table 4.1 summarizes the findings from the observations as they relate to this subsection.

| | **Collaboration Traits Observed** | **Amount of time off topic relationship building** | **Symbolic Interactionism Observations** | **Lesson Plan, co-teaching strategies, meeting outcomes** |
|---|---|---|---|---|
| **#1: Early September (2 weeks into study)** | ● Listening<br>● Constructive criticism given<br>● Positive attitude<br>● Open communication<br>● Observant | ● 8 mins: discussing personal lives | ● Direct eye contact when asking & answering question<br>● Varying tones of voices, but no yelling or anger<br>● Relaxed body language | ● Jenny makes a graphic organizer differentiated for ELL, SPED and general education students |

| | | | | |
|---|---|---|---|---|
| **#2: Mid-October (halfway point of study)** | • Friendship<br>• Open communication<br>• Growth together<br>• flexible | • Dispersed throughout with side banter and jokes.<br>• Most of the meeting is just Harry and I talking back and forth like friends. | • Relaxed body language<br>• Serious tone conveyed via eye contact & hands on table<br>• Sighing<br>• Nodding<br>• Laughing<br>• Speaking quickly with excitement | • Vocabulary lesson - share ideas, compromise<br>• Role Switching discussed<br>• Working together to created differentiated handouts |
| **#3: End of November (2 weeks before end of study)** | • Trust<br>• Friendship<br>• Open communication<br>• Listening<br>• Positive attitude | • 10 mins at beginning talking about upcoming holiday plans<br>• easily off topic throughout with little comments or jokes | • Laughing<br>• Sitting back in chair<br>• Excited voice<br>• Drinking coffee while pointing at book<br>• Leaning into table to join conversation<br>• Eye contact<br>• nodding | • Unit outline given<br>• Differentiation strategies discussed<br>• Harry suggested going into Ron's room while I stayed in our room so he could co-teach Ron to start this unit. I was ok with this. |

**Table 4.1. Summary of Co-planning Observations with Collaboration Traits**

## Theme Three: Team Goals

During our first interview for this study Harry alluded to the development of our working relationship during the previous year when he stated, "The good part is, I had a friend that I got to work with who had the vision and ideas very similar to mine." Harry and I knew before the end of last school year that we would be partners again for this school year. We worked together over the summer to write two grants from private organizations who support science activities in public schools to get hands-on resources for our students. We wanted to have more opportunities for our students to work collaboratively and in small groups with hands-on materials this year. These materials would also allow us to explore implementing different co-teaching strategies throughout the year.

In my first interview I was reflecting on our first year together as co-teachers and pondering how I was going to change my role in Harry's classroom. It was during this reflection that I stated my goal for the year as a co-teacher.

I'd really like to find my voice and take more of an active role. I really want to see us start to share our division of teaching in the classroom switching roles and both things. We've got two hours together, and I really want to see us take it to the next level. I want to see us get better at both of us being in front of the room and feeding off each other.

Since I had a goal and we had these grants to create more collaborative opportunities in our classroom, I asked Harry what his co-teaching goals were. Harry's teaching goal for this year was

> ...to be more collaborative in terms of the design and co-teach models with kids moving up and moving about the classroom reflectively, coming in and having you meeting with one table group as I'm meeting with another table group as we constantly confer with students and give them feedback in a timelier fashion.

My teaching goals were similar to Harry in that I stated I wanted both of us to be teaching together. Harry and I knew even before the study began that we wanted to be more collaborative in our teaching together.

Midway through the study in October I checked in with Harry to see how he thought we were doing in meeting our goals. "In terms of getting up and moving as often, we're not doing that as often. But it depends on the activities we're doing. We are actively talking and engaging and talking [with students]." In my own self interview I stated,

> We have done a better job at giving the students a chance to think and answer questions, wait time. We have added collaborative hands-on learning every week. We have been working hard to

> meet Harry's goal. I have a voice in the classroom and the students see me as the teacher in the class. I'm not just a para who comes into the room. I am a teacher in the room.

At the end of the study, I interviewed Harry one final time. I reminded him of our goals we set in August and asked him how he thought we did in meeting our co-teaching goals.

> I think once the semester got rolling. And we got used to our systems. I think we pretty much did. We're in a system to do what our goals were set out to be. We can interchange, and either of us can start the class. Either of us can go ahead and be whatever role we need to be.

In my own reflection over the study, I had this to say,

> I think overall, we did a pretty good job meeting both of our goals. So, in terms of taking a more active role I have no problem just walking into the class and starting the class. Harry may be in the hall wrapping up stuff and I just come in and say I got this.

### Theme Four: Team Identity

Just as a teacher's identity does not develop overnight and is ever changing, the same can be said for a co-teaching team's identity (Erikson, 1968). When this co-teaching team first came together it was two teachers, a sixth-grade science teacher and an EL teacher both occupying the same classroom. Each person had defined roles and preconceived notions about the other person's responsibilities in the classroom. In the first interview, both Harry and I responded with the same answers when we were asked to describe our team identity from last year during the pilot study. Harry's role was that of teacher and designer of lessons. I was the EL Newcomer supporter and there to assist Harry during instruction.

The team identity was based on the roles assumed during our first year together. The responses here are the starting point of this study. Two teachers are in a classroom where one is

viewed as the teacher and the other is viewed as the assistant. In my first interview I stated about my time during our first year together, “I definitely never felt as a full equal in the class, but I also didn't feel like I wasn't respected in the class.”

A few weeks into the school year during a co-planning meeting, Harry looked at me and said, “Your role is to come in with ideas, visions, ways to make adaptations and modifications for our students that need the content presented in slightly different ways, to present your learning and knowledge and share it with me.” Harry made me his coach. He also took all the traits that I mentioned in the teacher identity theme (helper, advocate, and problem solver) and allowed me to use them in a coaching capacity with him because he wanted me to share my knowledge and skills with him. With that one sentence, Harry demonstrated trust and a willingness to grow as a team. We began to move away from being two individuals working together in a classroom to a team working collaboratively in a classroom.

One of my co-teaching goals for this year was for us to share our division of teaching in the classroom by “switching roles.” In our second interview we talked about this goal, and I asked him if it felt like he was giving up power in his classroom. His response was, “I’m not giving up control, it just looks different. The control looks different. Whether the situation, - you take the lead, and I take the inverse role or working collaboratively at the same time- it’s the co-teaching design.” I reflected on this question prior to asking Harry because I asked myself all the same interview questions. Knowing Harry was such a laid-back, easy-going person, who had numerous student teachers during his career, I didn’t think he would see it as relinquishing control. But I also thought of myself when I was a general education teacher with my first student teacher. I remember that in the beginning of establishing our relationship I was leery of

relinquishing control to them. There was a level of trust that had to be established first, more on my part than theirs to allow me the courage to let them take that leadership role.

In our final interview I brought the question up again because we were switching roles and I wanted to get Harry's final thoughts on it and his reflection through the process. His response made me chuckle a little, but it was honest. "I enjoy it. I sit back and watch you do your thing. At first, I was like, 'Okay this is different' but now I enjoy it." By the end of this study Harry and I were switching roles and team teaching without planning it. One of us would walk into the room and start this class and the other would jump in when ready or needed.

We "kind of jibe together" (Harry during the final his final interview) and feed off each other during each hour and during planning. We joked with each other one day that both of our names should be outside the door because we are both teachers in the classroom. It is our space and our classroom.

> If district personnel came into our room, and they didn't look at the name on the door, or they didn't know who Harry and I were (which is difficult because Harry's been in the district for a really long time), but if they just came in they would see two teachers working collaboratively in this classroom.

In the beginning, Harry and I viewed each other as individuals in the classroom and described our team identity as individual roles in this collaboration. At the end of the study our descriptions of our team identity changed. We both described our team identity and roles as coaches. Harry stated, "we're more coaches together and effectively teaching our kids and leading our kids….to be successful." In my final interview I described our team identity using an analogy, "It's like an offensive coach and a defensive coach in football. He's learned to trust me and that allows us to be coaches together."

## Co-teaching in Action: Putting it all together

Harry and I are working jointly in a middle school science classroom to instruct all students using co-teaching strategies. Throughout the study and the previous pilot study, a common lesson type was repeated multiple times. This lesson was embedded in each curriculum unit used by the district. The district also has a science writing goal for all students in grades six to twelve. Students in grades six to eight (those in our middle school) are expected to write a scientific argument following a Claim - Evidence - Reasoning (CER) model. The goal for sixth graders was to be able to write *one,* two to three paragraph CER by the end of the school year. There are four main units during a school year. During this study, Harry's and my students completed two units, and therefore two CERs.

The chart below provides a glimpse into the collaboration between Harry and I as we developed a gradual support release model specific to the CER goal and how we implemented the CER with co-teaching strategies during Units One and Two. The development and implementation with co-teaching strategies mirrors the journey Harry and I took from 1T, 1A to TT. The sequencing of events was determined using information from my researcher's journal, meeting observations, co-teaching observations, posting of assignments in Google Classroom, and confirming dates with Harry's own planning calendar. The journey of this single repeated lesson through the study exemplifies the purpose of this study for observing co-teaching with EL Newcomers, for its uniqueness of two content teachers working together, and for it occurring in a secondary school.

### CER #1 - 1T:1A with Role Switching

| Date | Agenda | Observation |
|---|---|---|
| August 16 | • 1st CER discussion<br>• Use FlipGrid from Pilot Study as | • Each of us had a voice and actively participated in the |

| | | |
|---|---|---|
| | practice CER, change videos<br>• Create Packet | planning |
| August 28 | • Teaching strategies - parallel teaching using two classrooms<br>• Create practice writing Template | • Harry has taken the leader role<br>• I created the template, highly scaffolded, ELL in native language<br>• Lots of discussion by everyone |
| September 8 | • Review Practice CER data<br>• Commit to Gradual Release CER<br>• PBS video graphic organizer to support CER | • Lots of side conversations, developing relationships<br>• Not much time was given to CER discussion, but everyone agreed that gradual release was a good idea. |
| September 11 | • Creating the CER by Harry, modified by Jenny<br>• Journal notes indicate this would be highly scaffolded "flexible sentence stems"<br>• claim sentence is a fill-in-the-blank<br>• first paragraph is fill-in-the-blank<br>• 2nd & 3rd paragraphs have sentence stems & need PBS graphic organizer | • This meeting went bell to bell<br>• My field notes show that we went back and forth on how much scaffolding to provide.<br>• Harry wanted the most scaffolding<br>• Compromise was to start the CER with fill-in-the-blank and end with sentence stems<br>• I added more support for ELL and SPED students<br>• Open communication was key in this meeting |

Table 4.2. Co-Planning with Harry and Jenny

***Co-teaching CER #1 with Harry***

Harry and I began teaching our students about CERs using FlipGrids. We took a lesson we did together the previous year and expanded it to include writing a claim statement. We finalized our plans on Monday, including the EL modifications and co-teaching strategy we were going to do on Friday. Tuesday during class, Harry **(**1T, 1A**)** spent the final fifteen minutes of class introducing claim, evidence and reasoning vocabulary to the students. In their student books he had them highlight the key parts of the definition for each word. He then read aloud our unit question. On the page in their book the students had to choose which Earth landform picture looked like a picture taken on Mars. They then had to write the reason they chose that picture. He gave them a sentence frame to use for their reason. While they were writing, Harry and I went

around the room and helped students with their responses. At this point it did not matter whether the students were right or wrong, just that they were writing a response.

Wednesday was a recorded observation day. Harry and I worked collaboratively to get the students to "answer why with reasoning" to the question "Which is a better pet - Cats or Dogs?" For part of the lesson, we had the kids up and moving into groups; they were talking with each other while Harry and I **(**1T, 1A - Harry T, Jenny A**)** were facilitating conversations and debates. After the debate we had the students return to their seats so they could write their claims and reasonings on their handouts. An unexpected twist in the plan happened when I suggested that we needed to write the responses on the board, because the kids asked how to spell so many words. Harry quickly became the scribe, and I continued to facilitate the students' collection of reasons (role switch: Jenny T: Harry A). We were able to use these model sentences when we went to the next question, "Which is better - Football or American Football?" This time the kids wrote their claims and reasoning *before* we had the class discussion.

I was able to preview this lesson with my EL Newcomers prior to class. They knew what the questions were going to be and had already constructed part of their responses to the second question prior to class. I wanted to make sure they had plenty of time to think and write, because class would move faster for them. Before class began, I let Harry know I had previewed that material with them. When we began rotating around the room to work on the second question, Harry was able to work with them to write in English because they already had an understanding in their native languages.

Friday was a very smooth day. The plans we made on Monday made everything work out well. Harry let me lead (1T, 1A, Jenny T**)** the class for both hours "since I was the one in the video." Harry passed out the sheet for the students to write their claim and reasonings. As the

first round of students got ready to record, I took them to the other room to make their videos (Parallel teaching). Before Hour 7, I previewed the videos with the EL Newcomers. I asked them to select one video of a place they wanted to visit. In class they would write their claims and reasoning. Harry and I agreed that for this assignment we would be ok if they did this all in their native language since they were only two weeks into language learning.

A few weeks after the completion of the practice CER, we had the students ready to write their first unit CER. The week before, they completed a graphic organizer as they watched a PBS video that outlined the unit we were studying. This organizer would be used to help them in their writing. The CER was started and took three class periods to complete. At the beginning of class each student received their own accommodated version of the CER (general education, SPED, EL). All three versions looked the same for paragraph one's expectations. The claim, evidence and reasoning sentences were all fill-in-the-blanks.

For paragraph one, Harry and I put a word bank on the board to allow the gifted students to work ahead of us. (There are no notes on who suggested the word bank; I asked Harry and he does not recall either.) The EL students received this document in their native language with the same word bank. During Hour 3, I noted that Harry led the class with me chiming in **(**1T, 1A - Harry T, Jenny A**)** with discussion on completing paragraph one. We then circled the room helping students write their next two paragraphs for the remainder of the hour. During Hour 7, I led the class discussion (role switch-1T, 1A - Jenny T, Harry A**)**.

I provided Harry with the EL word bank translated, so he could make sure they had the correct answers. As we circled the room, I helped EL students. We pre-selected their evidence to use prior to class, so they could focus on writing during class. Because it took a good twenty minutes of class to get through the first paragraph with most students, that left about twenty-five

minutes of writing for the final two paragraphs. We really thought this would be enough time. But most students in both hours got only one more paragraph completed during that time.

The second day was spent with us circling around the room, sitting at tables helping students. As students finished writing we had them go into the assignment in Google Classroom and begin typing their CER. The typing took longer than the writing, but it was good practice because they must type assignments in ELA, science and social studies.

**Reflection:** Neither of us realized it would be so hard to complete some sentence stems with students and ask them to write them again in paragraph form. We spent some time in the halls during passing periods discussing the CER going forward. EL students completed this in their native language. I had them type it in Google Docs and translate it into English to verify the idea and structure were correct. I worked on this during our EL hour, and I had another EL teacher help them during their English language hour to work on writing basic sentences in English.

**CER #2 - Team Teaching**

| **Date** | **Agenda** | **Observation** |
|---|---|---|
| October 16 | • Select a Claim & give a reason | • Harry and I are bouncing ideas on how we can create an activity and accommodate ELL & SPED students |
| October 23 | • Prewriting/graphic organizer | • I was able to share ideas from 8th grade science to create a document that met 6th grade needs.<br>• Trust in my science knowledge and open dialogue |
| October 30 | • Stair Stepping the Scaffolds<br>• Give 3 Claims, students select their choice<br>• Every sentence began with a sentence starter | • Harry and Ron disagree on the amount of scaffolding necessary<br>• Lots of calm conversations back and forth<br>• No one left angry |

| | | |
|---|---|---|
| November 8 | • Review graphic organizer & CER- accommodations this time were student specific<br>• Teaching strategies - goal was team teaching for the entire lesson both hours | • I was going to be absent for the graphic organizer, I made sure Harry had everything he needed.<br>• Harry didn't want me to worry about school while I was gone<br>• Strong, trusting relationship |

Table 4.3. Co-planning with Harry and Jenny

***Co-Teaching CER #2 with Harry***

Tuesday morning before school, I stopped in Harry's room just to quickly go over things for the day and to see how things went on Monday since I was unable to be at school when the students completed the graphic organizer. I noted in my researcher's journal that Harry stated that most students had been able to complete the assignment in class. We talked about what team teaching would like while students were writing. Harry wanted to spend the first few minutes of class going over the handout and discussing the three claim options with the students. I said I could go over the sentence stems if he wanted to do the claims. Then we agreed that the hour would be us moving around the room just continuously helping those who needed it. We would guide but let them make their choices. If they picked the wrong claim, we would just try to help them write the best we could.

According to my journal notes for this day, Hour 3 went pretty much the way we discussed it would before school. Harry (TT) read over the three claim choices (I can almost predict that he would have emphasized the correct answer with the tone of his voice because he did that all the time, but the students never seemed to pick up on it) and then had students make their selections. I did make a note that for Hour 3 we had the students switch groups based on the claim that they picked, so each group all had the same claim. This made it easier as we circled around helping to help more students at the same time. I (TT) also did my team teaching job of

going over the sentence stems. I tried to give the students clues that specific sentence stems told them which column to refer to on their graphic organizer.

I previewed the CER with my EL students in our hour together before class. I showed them the choices for the claim and had them select their claims. For this CER we were asking students to submit their paper in English. The language support and expectations were a little different for each student, but most of the EL Newcomers had been in class since the beginning of the year and we believed they could do this. My EL colleague worked with them on Monday helping them complete their graphic organizer and I followed up with them when I was back on Tuesday. I then had my students highlight their evidence and reasoning they would use from their graphic organizer.

Hour 7 had a few changes to the set up and implementation of the lesson. Harry and I made the decision to limit the claim choices to two options because of the number of SPED students in class. I (TT, began the class) also had the students go to the top of their graphic organizers and label the sentence starters that went with the respective column. Harry (TT- did claims second) and I stayed in our team teaching roles for the beginning of the class as we went over the claims and sentence starters. Harry and I circled the room helping all the students. When Harry and I worked with the EL students, our goal was to help them construct their sentences in English. We provided them vocabulary word banks, Google Translate, and sentence stems (e.g.The _____ evidence supports the claim because_____.) instead of sentence starters (The evidence....). Harry had a separate sheet of paper that he would leave with the student where he would help them construct the sentence, then they could copy that sentence into their document.

**Reflection:** Most students were able to finish writing by the end of the hour. It took one additional day for them to type their final document. We were nearing a weeklong break and did

not dedicate a full class period as we also needed to complete our unit exam, but we did allot enough time that all students had their typed papers submitted before the break on Friday. We felt this CER went a lot smoother than the first one. The graphic organizer was better suited for supporting writing. Previewing writing with ELs and providing Harry with specific translation support enabled him to work easier with EL Newcomers during the writing phase of the CER. The development of our relationship and trust enabled us to have tough conversations during the co-planning phase, so we could create documents that met the needs of *all* students, made our jobs easier and let us focus on co-teaching more.

## Summary

The data presented from this case study documented our journey in co-teaching with EL Newcomers in a middle school science classroom. Harry and I started our journey in co-teaching as two individuals who relied on 1T, 1A as our go-to strategy. Harry and I came together with a common role, identity and goal. We both knew the importance of "open communication and trust between us" and the role they have played in allowing us to "flow off each other" and to "jibe together." Without these collaboration traits we would not have been able to meet our new team goals of continuing to co-plan (fighting for that time), so that we could "bounce ideas off each other through our dialogue and conversations and we can identify how it would better help all students be successful."

# Chapter 5 - Discussion and Conclusion

## Introduction

This qualitative case study explored the evolution of co-teaching as an EL program model of instruction with English language newcomers in a suburban Title 1 middle school. The goal of this case study was to provide firsthand experiences illustrating how two middle school educators implemented co-teaching strategies in a science classroom with a mixed ability student population that also contained EL newcomers. I, the researcher, was interested in understanding the two educators' perspectives as they went through their co-teaching journey, specifically their perceived impact of co-teaching on teacher identity and how they developed their co-teaching partnership so they could effectively support EL newcomers.

The development of a co-teach team and implementation of the program model was obtained through participant face-to-face semi-structured interviews, recorded classroom observations, and recorded co-planning meeting observations. The interview responses were coded into categories and narrowed down into four themes as was shared in Chapter Four. Coding of recorded observations depicted the journey of the development of the co-teach team as equals in the classroom and provided concrete evidence for the four themes. Revisiting the study, the four themes were: teacher identity, necessary traits for collaboration, team goals and team identity.

This last chapter puts all the pieces of the study together from the beginning to the end to present a completed picture of the journey of Harry and I as we became co-teachers. It connects the dots between data and theory to explain how we got to team teaching and the perceived impact we had with EL newcomers. Finally, this chapter looks to the future and the possibilities for further research and the implications that could have on co-teaching with EL newcomers in

secondary education at North Middle School, the Unified School District and secondary schools in general.

## Summary of the Study

This study may have ended as I sit here and write this final chapter. I am finding myself thinking back to how it all began. It started with a simple desire to be a better teacher and buying *Co-Teaching for English Learners* (Dove and Honigsfeld, 2017) off Amazon. One book led me down a rabbit hole of literature research trying to find a way to help my entire EL team be more effective in co-teaching with our core content counterparts. The further I dug into co-teaching literature the more I learned that my school was doing something different, that our EL program model didn't match any examples in literature.

I did the pilot study during my first full year working with middle school science teachers. I interviewed my colleagues in science and the other core content areas trying to understand their perspectives on co-teaching with EL newcomers. Some participants had been with their EL counterparts for numerous years and others were just starting out. The pilot study yielded interesting results. Core content educators liked having an EL partner who was knowledgeable in their content and could also support EL newcomers by making content accessible to them (Arkoudis, 2006; Chandler-Olcott & Nieroda, 2016). It was important for the core teachers to work in collaboration with an EL teacher who was knowledgeable about their content, especially when co-planning was not occurring. The pilot study results and the administration's support for the co-teach program model enabled me to continue research into implementation of the co-teach program model with EL newcomers in a secondary school.

For this study I chose a qualitative, case study approach. Case study offers an in-depth study of an issue bounded by parameters established by the researcher (Bhattacharya, 2017). For

this case study the focus is on co-teaching with EL newcomers. This case study was bounded with the following parameters: 2 participants in a single science classroom at a suburban Title 1 middle school. The science teacher for this study was also a participant in the pilot study and I was the EL teacher who is also certified in science.

This study has been guided by the following research question: "*How do middle school science educators implement a co-teach model of instruction with EL Newcomers?*" The co-teaching program model was the setting for this research but in order to establish the how implementation occurred, it was essential to consider the five necessities for a successful co-teach team: supportive administration, co-planning time, training in co-teaching strategies with time to practice implementation, volunteerism, and compatibility between partners (Scruggs, Mastropieri and McDuffie, 2007). Each necessity was observed in the data that was collected, either directly like the recorded co-planning observations or indirectly like the compatibility between partners which is woven into the journey of team teaching during the study.

Implementation was not that easy and just because the program model was implemented does not mean it was or is successful. Success can be defined in different ways in co-teaching in terms of being "effective" in implementation, co-planning, student achievement, collaboration, educators' attitudes, administrative support, and teacher preparedness for co-teaching. Collaboration was dependent on compatibility between partners. When partners perceive compatibility, they find value in co-teaching and experience professional knowledge growth (Scruggs, Mastropieri and McDuffie, 2007). "I had a friend that I got work with" (Harry during 1st interview). From the very beginning of the study, Harry and I viewed each other as friends because we had built a foundational working relationship the previous year during our first year together. Our friendship enabled us to have a positive attitude towards co-teaching together.

Collaboration was at the heart of co-teaching in that it required two educators to come together for a common reason - educating their students. Collaboration implied that communication and social interaction must have occurred between the co-teaching team. Symbolic interactionism is how individuals make meaning from their interactions with others and then use that meaning to reconstruct their current understanding into a new understanding or viewpoint (Blumer, 1969; Fink, 2015). For this study, teachers who were part of a co-teaching team attached meaning to the interactions they had with their partner which impacted how they interpreted (how they made sense of) their collaborative experience as a member of the co-teach team. This was also how the team was able to move from a co-teaching strategy that did not always allow both members to feel as equals in the partnership to a strategy that presented both teachers as having the same status.

In addition to making meaning of their co-teaching experience, they underwent a change to their teacher's professional identity. A teacher's professional identity can change because of influences from others during a social practice (Karolis & Philippou 2019). As teachers moved from an individualistic perception of self to that of a team sense of self, it was inevitable that their identity would change too. The perceived self becomes a team identity, and each teacher brought to the team a perceived team self. By the end of the study, both participants were using the same adjectives to describe their teacher identity and were describing the co-teach team identity the same.

## Summary of the Results

The act of co-teaching in a secondary science classroom was a journey that took time to reach its destination of having two teachers who managed to collaborate and implement strategies that allowed both to be viewed as equals (by students and by each other) in the

classroom (Scruggs et al., 2007). This case study followed the journey of two educators to answer the research question, "*How do middle school science educators implement a co-teach model of instruction with EL Newcomers?"* Using data analysis methods as explained in Chapter four, the following four main themes emerged:

- Teacher Identity
- Necessary traits for collaboration
- Team identity
- Team goal

These four themes, in conjunction with the analyzed observational data, depict the co-teach journey my colleague and I underwent as our views changed from individuals to teammates and as we left behind the 1T, 1A strategy and embraced team teaching in our co-teach science classroom with EL newcomers.

**From "I" to "We" - Individuals to a Team**

Before becoming co-teachers together, Harry and I were individual educators with our own classrooms. We were both experienced teachers with more than thirty years of teaching between the two of us. We described our teacher's professional identities at the beginning of the study with no pause to think. Each of us listed traits based on the roles we had in our respective classrooms and within our jobs. When we described our team identity, we both described the role each person had in the co-teach classroom - "Harry was the teacher, and I was the EL supporter." This individualistic viewpoint made it very easy for us to adopt the 1T, 1A strategy during the pilot study and to continue those roles at the beginning of the study.

The downfall to not branching out to different strategies, especially different co-teaching strategies that allowed both teachers to share responsibilities in the classroom equally, was that one teacher began to feel like a paraprofessional (Wexler et al., 2018). This was a sentiment that

I felt during the pilot study and expressed at the beginning of this study. It became a motivational reason for my goal of wanting to have a more active role and to find my voice in the class at the beginning of the semester. When Harry learned of my goal, he took it to heart and made sure my voice was heard. He was always asking for my thoughts about activities and lessons during co-planning meetings and asking if I wanted to do something during class at the beginning of the year before we really began role-switching.

I don't know if I ever explicitly told Harry how I felt about our first year together but observing him actively trying to make me a part of the class meant something. Harry would make little comments to the students that were 100% not true but were meant to give me authority. For example, he would say, "Mrs. Havermann does a wonderful job of picking groups and so everyone get ready to get the best partner for you." These little interactions always made me smile and, in the moment, seemed trivial. In the grand scheme of things, they were huge and the beginning of a turning point of acknowledging that I was a teacher in the room, of showing everyone else that I was important. It was in those moments that I started to become active, to find my voice and assert myself as a member of the co-teach team.

Collaboration is not something that will occur naturally in secondary schools because educators are specialized within their content areas (Dellicarpini & Gulla 2009). In order for it to work during the school day, collaboration, specifically co-teaching, requires administrative support and dedicated time for co-planning (Pratt et al., 2017; Sinclair et al., 2018). In Chapter Two, a successful co-teach implementation was defined to include a positive attitude towards co-teaching by both educators and positive attitudes were more often expressed when co-teaching strategies that were implemented involved shared responsibilities, like team teaching as opposed to 1T,1A (Scruggs, Mastropieri and McDuffie, 2007). Harry and I set goals that included

incorporating more co-teaching strategies and sharing responsibilities more equally during teaching. These goals were established on our own, not influenced by the study, but they show that both of us were committed to co-teaching and wanted to make our collaboration as successful as we possibly could during the entire school year, we were together, not just for the duration of the study.

Co-planning meetings were the time that Harry and I spent together multiple times a week constructing lessons, talking about accommodation for all students and discussing co-teaching strategies. These meetings were also the time that furthered our relationship as collaborators and friends. The greater our trust grew in our relationship, the more we trusted each other in the classroom when we began to role switch. It became easier to switch roles because we were also friends working together in the classroom. As all these pieces began to fall into place - we were meeting our goals, we were collaborating, developing trust and friendship, and role switching - our team identity began to emerge.

Somewhere between halfway and the end of the study, Harry and I start viewing ourselves as a "we" instead of an "I". Harry and I, independent of knowing what the other said in their final interview, used the same adjectives to describe our individual and team identities - coach. For all four themes, we both used a lot of the same phrases and words. We had grown a lot together through the study and were exemplifying positive attitudes towards co-teaching because we had been given the time to co-plan by supportive administration.

**From 1T,1A to TT - The role relationships played**

Results from this study indicated that if the co-teach team spent more time together in co-planning and collaborating, their positive outlook towards co-teaching and future collaborations appeared to grow as the team spent more class time team teaching and less time in 1T,1A. There

are studies in literature that speak about elements necessary for effective co-teaching (Murawski, 2006; Sinclair et al., 2018) and that they have benefitted professionally from co-teaching (Scruggs et al., 2007), but the correlation found in this study has not been mention in literature. Symbolic interactionism suggests that without interactions, individuals are not able to make meaning or gain understanding of the person they are working with. Without the opportunity to collaborate, for instance during their co-planning meetings, these two educators may not have made the journey to team teaching.

It was during co-planning that Harry and I were able to communicate about professional topics and personal topics. Co-planning was a time for us to share ideas, argue occasionally and compromise. The time was vital in developing our relationship with each other. We were afforded the time to get to know each other professionally and personally. It was during these meetings that Harry and I always took time to share what was happening with our families. We became invested in each other's lives. It gave us the ability to understand when the other had to be absent unexpectantly with a sick kid or other family emergency. This allowed us to develop a relationship that involved trust (Rytivaara & Kershner, 2012; Miesner et al., 2022).

Trust was key in our ability to role switch during classroom time. Role switching was the beginning of our transition from 1T, 1A to TT. Trust, just like communication, is a two-way street. One must give trust to receive trust. Role switching required trust from both Harry and I. Harry had to trust me to be the lead teacher, to know that I would not do things just like him, but that I would still teach the lesson. I had to trust Harry to let me be the lead teacher and show my confidence but also, I had to trust him to support the EL newcomers while I was leading the whole class. In the first few weeks of school, Harry was called out of our co-taught hour to go to another classroom to cover for a teacher. The previous year, Harry would have asked me to go

cover that class so that he could stay and make sure instruction went just the way he wanted it to go. This time without pause or thought he left the class instruction to me and went to cover the class. He didn't even ask if I wanted to go to cover the class.

One of the first times that Harry and I trusted each other in the classroom, I wrote about it in my journal and mentioned it to Harry in an interview. It was a day when everything worked. We switched roles and I got to observe Harry working with my EL newcomers. For me, it was like a proud parent moment where you just stand back and watch your child do something for the first time. In awe, you hold your breath, hoping everything goes perfectly. It did! That set the precedent for it to happen repeatedly in the future. Harry never called it a proud dad moment, but that day, I jumped in and took the lead. I was excited about the activity, and I took over putting my own Jenny touch on the lesson. But with me in the lead, Harry was free to engage with the EL newcomers.

Trust and co-planning led to Harry and I purposefully planning times for us to role switch using the 1T, 1A strategy. There were days that I would tell Harry that I was going to take the lead in an activity, and he would find students to support. As time went on, we stopped purposefully planning and just began trading off naturally. During this time, Harry was in the assistant role, noticing he was hovering in the front of the room or near the front half. I was also doing the same. With both of us in close proximity to the front of the room, we began to feed-off each other. One would be leading and the other would chime in with an add-on and then take over. This began our transition to team teaching.

Role switching became the norm and it easily led to both of us being in front of the classroom team teaching together. It was something that just happened over time. We led ourselves in this direction through role switching and became a good fit for us. It started with a

goal, a relationship and a little trust in the other. I saw Harry work with (at the time I would have said my EL newcomers, but even today we say our EL newcomers) our EL newcomers and he saw me take the lead in class so that we learned the other was fully capable of doing the job. The leap to team teaching was not that hard once we both realized and accepted that each other could do both jobs in the classroom.

Team teaching was a natural result for Harry and I given the progression of our relationship and role switching. If neither of us had had a positive attitude or desire to be a part of this co-teaching team, we would still be where we were at the beginning of the study, with me feeling like a paraprofessional and only using the 1T, 1A strategy. The results support the necessities for a successful co-teach team evidence that was presented in Chapter 2:

- Co-planning time between content and EL teacher
- Collaboration and volunteerism in co-teaching
- Administration support

Team teaching was not our explicit goal when Harry and I established our goals at the beginning of the school year and study. But it was one of the strategies that we talked about in the beginning when we discussed co-teaching together. In the literature, co-teaching and team teaching are used interchangeably, even though there are multiple strategies given for co-teaching. The journey of Harry and I demonstrated that two veteran teachers, both content experts and one EL specialist, cannot come together and just team teach. The journey to team teaching goes beyond co-planning, administration support and collaboration. It also involves communication, growing together, trust, and friendship.

The journey Harry and I took to team teaching did not begin when this study started, nor did it end when the study ended. It began the year prior and continued for at least one additional year after the study ended. Murawski (2009) described the co-teaching relationship as one of a

"marriage". Our relationship was dependent on more than the words associated with education – co-planning, administration and collaboration. Our "marriage" was dependent on our ability to communicate, grow together, trust and be friends. All these things we could have accomplished outside of co-teaching, but it was co-teaching that brought us together. It was because of our relationship that we could teach as a team so fluidly and "jibe together".

### Developing a co-teaching partnership to support EL Newcomers

The end of unit **Claim, Evidence, Reasoning (CER)** writing task that every middle school science student is asked to write in the district started the collaboration journey for Harry and me. It was the first time I was able to contribute to a lesson in a way that felt like I was part of the team and not just responsible for the EL students or just a paraprofessional in the class. This lesson happened during our first year together and would be repeated during this study. During this study these lessons served as the springboard for us to put co-teaching into full effect by focusing on a common educational goal of teaching students how to write a CER by the end of the school year.

Co-planning was where we built our relationship, discussed co-teaching strategies, and developed our team identity. Co-planning meetings were dedicated to conversations and thinking about how we could take Harry's elementary writing expertise and my EL accommodation expertise and merge them together to create a gradual support release CER for all students throughout the entire year. Chapter Four presented how the planning and implementation went for the first two units of the CER. I want to take this section to share the final two units of the CER (as summarized in Table 5.1) and dive deeper into how this exemplifies co-teaching supporting EL Newcomers in a middle school science classroom and the implications this can have to the profession.

| | General Education Supports | EL Newcomer Supports | Additional Information |
|---|---|---|---|
| **CER #1** | CLOZE writing, sentence stems, word bank. Guiding students from beginning to end through the process. | Students did this CER in their native language to demonstrate understanding of writing in general and content material. Designed to let them try some on their own. | We did paragraph 1 together as a class. 2 & 3 students could use word bank to help finish sentences. Multiple answers or could use their own words to complete sentence stems. |
| **CER #2** | 2 Claim choices, Every sentence begins with a sentence starter | Previewed material in advanced, highlighted notes for material related to Claim selected. Submitted final paper in English | Students completed a graphic organizer prior. Labeled top of organizer with clue words related to sentence starter |
| **CER #3** | Claim was a separate sentence that students wrote based on 2 choices. 4 sentence paragraphs, (hint what each sentence was), | Previewed material. Gave students a personal handout of helpful sentence starters. Selected starters they wanted to use and connected them to notes by highlighting | Having students create a graphic organizer as we went through the unit was very helpful. Doing the 1st paragraph together was helpful for all students. Left helpful sentence starters on Word Wall. |
| **CER #4** | Gave students 3 choices for Claim. Students were then left to write their own CER. | Students pre-wrote paragraph 1 in advance. I graded and returned after conversing with them. Gave individual copies of word wall content. | On the board: Paragraph outline with hints what each sentence is about. Sentence starter still Word Wall. |

**Table 5.1. Summary of CER Supports for Students**

Co-planning meetings involved discussions not only about how Harry and I would create a gradual release in writing with all students, how we would use co-teaching strategies during classroom instruction but also how we would make the CER accessible to EL newcomers. Table 5.1 provided a summary of the support given to general education students, EL Newcomers and additional information related to each CER. Co-planning involved collaboration and communication. These meetings involved lots of back-and-forth discussions that often resulted in compromises after multiple days of discussions. It was through this process of collaboration and communication that Harry and I grew to understand how to work as a team by utilizing each other's abilities.

In the classroom, we were role switching, developing trust and making our way to team teaching. The CER lessons were an extension of our team teaching. We used the lessons we learned about each other during role switching – that each of us can do the other's job and trusting each other do to that job – and applied them to our co-planning meetings, relationship and group identity development. This occurred in an unplanned and unintentional manner. Harry and I had our educational goal of creating and teaching the CER lessons so that students could build their writing skills towards independence. We did not develop all four CER lessons at the beginning of the year but reflected after each lesson to evaluate how to progress towards that goal of independence. Each lesson meant we spent more time together as a team, our relationship was further along, and by the end of the second CER we established our group identity of coaches. As coaches, we shared our expertise with each other and supported each other as we both reached our educational goal teaching all students how to write a CER.

The CER lessons not only exemplified the journey of Harry and I, but they also exemplified co-teaching in a science classroom with EL Newcomers. Through co-teaching and

utilizing my EL expertise, language accommodation was made to each CER lesson that enabled EL Newcomers to participate in the writing process and progress towards independent writing for the final CER. Though the EL Newcomers were provided with more support in the beginning to accommodate their language learning, by the end of the year, they were able to complete the same writing task as their English-speaking peers with the same accommodations as their peers.

The EL Newcomers demonstrated similar struggles as their English-speaking peers during the writing of the final CER. They were getting their sentences out of order or selecting the wrong evidence to support their claim.

The CER lessons were just one focus and one goal that Harry and I had throughout the entire year. We took this one USD expectation and set out to make it accessible and attainable by all students. We were not sure how to do this or what the product would like but we both knew that we did a co-teach lesson the year before and wanted to repeat it. This one lesson led us down a path of collaboration, which enabled us to become better friends and colleagues, and allowed us to grow together as teammates.

## Theoretical Framework assistance in data analysis

This research was about co-teaching between two middle school science educators who collaborated and communicated daily. The interactions that occurred between both educators during collaboration and communication became the foundation for how the two functioned together as co-teachers. Each educator must continuously interpret and make meaning from the interactions. This meaning making was at the heart of symbolic interactionism, one of the theoretical frameworks for this case study.

Symbolic interactionism is “a relatively distinctive approach to the study of group life and human conduct (Blumer, 1969 p. 1).” It is composed of three premises, but for data analysis

purposes, only the second premise was used. (The other two premises were used during the meaning making process of the results.) The second premise states “the meaning of such things is derived from, or arise out of, the social interaction that one has with one’s fellows “(Blumer 1969, p2). In this study, Harry and I worked as a co-teaching team that required us to communicate with each other during co-planning and co-teaching. The way in which we communicated was vital. Through the process of communicating, we had the opportunities to use a variety of means to communicate with each other - tone of voice, written form, gestures, and feelings. During the analysis of data, I analyzed the conveyed meanings of ideas and interactions during co-teaching and co-planning (social interactions).

Data analysis involved watching video recordings of Harry and I co-teaching and co-planning. The recordings provided concrete evidence of co-teaching and co-planning occurring. During these recordings other events were also occurring, like meaning making from communication. These events were forms of communication and reception of communication between Harry and me. The application of symbolic interactionism to data that was collected allowed for the analysis of common meaning making and the significance attached to these meanings that has occurred during co-teaching. It was through this analysis that I could observe the growth of our friendship and the trust being built between us. Harry and I would use strong “teacher” voices with each other when we were passionate about something during our meetings, but never once did we leave a meeting angry or mad at one another.

The usage of our “teacher voices” with each other during our meetings to convey passion or place importance on an idea is one way that helped advance our relationship. Harry and I both wanted to do what was best for students but at times we had different ideas about how to do that. Communication of our ideas with each other and an understanding that we wanted what was best

for students helped in the meaning making process. The other person knew that the "teacher voice" was being used in anger but to convey passion and importance. There was no reason to think about being anger or to respond with anger.

By the end of the study, we were a team that had developed a relationship of trust and friendship. One of the traits we both stated was necessary for a co-teaching team was the ability to grow together. Listening to the other as they communicated their thoughts and ideas led to us being able to reach compromises during our planning, which was key during the creation of the CER unit.

## Co-teaching perceived impact to Teachers' Professional & Group Identity

Social interactionism has been a part of the scenery for this entire case study because co-teaching involves collaborating between two educators. It was a feature in the theoretical framework that was used to help explain the results - a teacher's professional identity (TPI). A teacher's professional identity is organic, ever evolving through social interactions (Beijaard et al., 2004). The results of this study showed us how two educators added to their professional identity while participating in co-teaching and developed a team identity.

A teacher's professional identity was simultaneously "a product and a process" (Karolis & Philippou 2019). Harry and I began the study as individuals with a firm grasp on our TPIs. Through a series of social interactions, co-planning and co-teaching, our senses of self were being influenced by the other. "The understanding one has of oneself at a certain moment in time (product), as well as the fact that this product results from the ongoing *process* of making sense of one's experiences and their impact on the self (Kelchtermans, 2009, p.261)." The perceived selves became the team identity, and each teacher brought to the team a perceived team identity.

In the beginning of the study, Harry and I both identified our TPI. Harry identified facilitator and coach as characteristics of his TPI. I identified problem solver, advocate and helper as my TPI characteristics. The perceived identities that Harry and I brought to the team identity were that that Harry was the teacher, and I was the EL supporter. These perceived team identities aligned with our TPI but did not necessarily support team teaching because we viewed each other as having different roles and identities. The perceived identities we brought to our collaboration supported us in implementing 1T, 1A strategy during co-teaching.

The more Harry and I were together, the more we adopted traits of the other as part of our TPI. This happened because we were role switching. During role switching we were experiencing teaching from the other person's point of view. We were "walking a mile in their shoes." As we reflected as a team on our role switching and observed that the other did not feel threatened by a loss of power but viewed it positively, we incorporated those associated traits into our TPI. Thus, in our final interview, Harry and I were able to describe our TPI using some of the same adjectives.

"Identity is an integrative concept, and it is developed in the space between the individual and the social context. It is a source of meaning as well as a product of meaning-making" (Flum and Kaplan, 2012, p.244). Team identity begins with two individual TPIs and then through collaboration they develop their team identity. Thanks to role switching, we incorporated new traits into our TPI and brought those with this into our team identity as it forms.

Our team identity was based on trust, communication and friendship. Flum and Kaplan (2012) state that identity formation is connected to being a member of a group and interacting with them in a social environment. Our team identity was described as coaches who are compatible together. Harry and I were able to reach the point of describing ourselves as coaches

because we had gone through the process of incorporating each other's traits into our identities. We also supported each other and grew together as a team. We coached, helped each other, become better co-teachers and thus better at team teaching.

## Limitations

When looking at the limitations of this study, it is important to remember that this is a case study. Bhattacharya reminds us that "a case study involves an in-depth contextual study of a person, issue and place within a predetermined scope of the study (2017, p.26)." This case study was focused on a single classroom within a single school in a suburban midwestern school district. While these findings for implementing a co-teach program with EL newcomers support the literature, this must still be taken with caution because it is just a single case (Stake, 1995).

These findings cannot be generalized to other schools and other situations. They can serve as a model or starting point for other secondary schools interested in implementing the co-teaching program model with the caveat that schools must have the necessities for co-teaching included in their program model design. The results from this study added to the limited literature on co-teaching in secondary schools and with EL newcomers.

I had a dual role during this case study as a researcher and a participant. I have been cognizant of my duality from the very beginning and implemented methodological procedures, intersubjectivity and reflexivity to help mitigate bias during the study. For all interviews, I interviewed myself first before I interviewed Harry. I did not want any answer Harry would give to influence how I would respond to the same questions. I was not concerned about Harry responding the same because he did not have two roles as I did.

When I interviewed Harry, it was difficult at times to maintain the role of researcher. Because I was aware of intersubjectivity, "the interchange of thoughts and feelings between

individuals" (Poerwandari, 2021, p.315), I did not stress if we got off topic during the interview. I knew the interview was being recorded and I could transcribe the entire conversation. One time during an interview, I asked Harry to tell me about a time when he felt like we were firing on all cylinders co-teaching together. He commented with a generic answer, and I gave a specific answer from a recent class lesson. I would do that frequently in hopes of eliciting more from him during our interviews. In this example, it did just that and we were able to talk about role switching and how I felt about him working with the EL Newcomers.

Reflexivity, my influence on the outcome of the research, was mitigated with triangulation. I used three different forms of data: semi-structured interview, recorded observations, and research journal to verify my results. At one point while I was analyzing recording observations, my own intimate knowledge of the situation and participants played a role. It was because I had an insider's perspective as a participant and colleague to Harry that I was able to interpret his tone of voice and body language. My dual role made me worried that I would create a bias in my data analysis, and it made me question my analysis. I would only do a partial analysis of transcripts just to make sure that the next time I started I was still analyzing the same way.

## Co-teaching recommendations for the future

Co-teaching as a program model was not just a fad that will be gone in a few years, as it has already been in education since the 1960s (Trump 1966). Its ability to impact secondary education has not been heavily explored. This one qualitative case study adds to a handful of other studies that exist related to co-teaching with EL Newcomers in secondary schools (Russell, 2012; Davila et al., 2017; Williams & Ditch, 2019; Pellegrino & Brown, 2020; DeRosia et al., 2021). Chapter 2 explored co-teaching in special education, student teaching and elementary

education with EL Newcomers; it also presented the gaps in secondary education in special education and EL Newcomers. Given the current literature, the gaps in the literature and the results of this study, there are three main areas that I would recommend for future research:

- Co-teaching with EL Newcomers other content areas like Math, Social Studies, Language Arts
- Implementation of co-teaching program model from secondary administration perspectives
- Quantitative study looking at the impact of co-teaching with EL student achievement

**Co-teaching in other content areas**

Co-teaching with EL Newcomers is an opportunity to allow EL Newcomers to be in a learning environment with their English-speaking peers – the least restrictive environment (LRE). This philosophy is currently held by the administration and staff at NMS and the Unified School District (USD). Chapter Two has established that co-teaching can involve different strategies and that the easiest strategy to implement is 1T, 1A (Scruggs et al., 2007). This strategy, often referred to as the push-in strategy, is one of the easiest strategies to implement because it requires the least amount of time commitment (can be accomplished without co-planning) from both teachers. However, as Chapter Two also noted, 1T, 1A also has one teacher feeling less like an equal in the classroom and that there isn't a feeling of shared responsibility or power (Wexler et al., 2018). This study has shown that co-teaching that utilizes team teaching more than 1T, 1A leads to both educators feeling as equals and having a shared responsibility in the classroom. This has been a single classroom study and to repeat the study in more content areas in secondary schools would add to the data and validity of this study.

This would be a simple study to replicate and implement at NMS because I have colleagues who are already co-teaching in Math, Social Studies, and English Language Arts. It would be interesting to learn about their perspectives and compare Harry's and mine. To

replicate this study, one would just need to follow a similar data collection timeline as was done during this study. Interviews and observations would need to occur almost on a monthly basis. A difference between this study and the continuing to collect data at NMS would be that I, the researcher, would no longer be a participant. I would only have the role of researcher. The results from continuing this research could be used to inform building decisions regarding future co-teaching partnerships and/or expanding co-teach program model to include special education. This research could also serve as a means to support teacher retention within the EL department since it has had a high turnover during the 1T, 1A strategy.

In addition, there are three additional middle schools in USD that are EL Newcomer site schools (These are the middles schools that have EL Newcomers. There are six middle schools that do not have EL Newcomers). It can also be used to further the case for other secondary schools in the district to adopt a co-teach program model with a focus on equal partnership between co-teachers and utilizing strategies beyond 1T, 1A. The co-teach teams from NMS could serve as mentors and trainers for the other schools who adopt or wish to transition from 1T, 1A. A key factor with any co-teaching program model is going to be meeting the criteria in advance for a successful co-teach implementation - administrative support, time for planning, training, volunteerism and compatibility (Scruggs et al., 2007; Sinclair, 2018). NMS met these key factors before starting the study, hence leading to the ability to do the study and explore implementation, perceived impact to teach identity, and collaboration partnership development. The results of this study explored the role of teacher professional identity to the development group identity and how the co-teach team was able to go from viewing ourselves as individuals working together in a 1T, 1A to a “we” team teaching. A study at any of the 3 EL Newcomer site schools in USD would allow for similar analysis work.

Any additional data that can be gathered following a similar methodology as this case study and ending up with similar results, would validate even further this study and the results are not just a fluke that happened by accident. Those studies would be introducing new co-teaching teams, core content teachers and EL teachers. The length of time the teams have been working together would vary as educators move around between different buildings and districts. The above-mentioned are small variations to the boundaries that make this case study unique. But having a site that is truly 100% identical to NMS would be almost impossible. An attempt to collect data on co-teaching teams that are in their second year of partnership would eliminate one variation. Also, EL teachers in USD are considered itinerant employees and can be moved around to different buildings based upon EL Newcomer needs and therefore do not always have control on where they work from year to year. But learning how to develop a successful co-teach team is a necessary skill if the district continues to implement the co-teach program model in the secondary site schools.

The CER presented in Chapters Four and Five is just one example of all phases of co–teaching coming together – planning, collaboration, implementation and reflection. One aspect the made the CER planning and collaboration work so well for Harry and I was that we both are certified in science. This enabled us to take the focus off explaining the science concepts to one another, and we could focus on writing accommodations for EL Newcomers, special education students and the general education students.

In future studies, especially those that would be replicating this study, the EL specialists would be certified in the same core content as the teacher they are co-teaching with. USD has district wide requirements for all secondary core classes. It would easy for any of the co-teaching teams to pick one of these requirements that they must do in their course and see how they can

use co-teaching strategies with EL strategies to implement the district task in their courses. In addition to replication of this study with other EL Newcomer middle schools in USD, exploring co-teaching with EL Newcomers in other secondary schools and content areas can give further qualitative insight to co-planning and lesson development.

### Co-teaching from the Administration Perspective

A necessity for a successful co-teaching program model is administration support. Administration that supports LREs and have EL Newcomers in general education courses with their English-speaking peers establish a school culture of acceptance of all (Russell 2012). Adopting a co-teaching program model at the secondary level is no small feat. From personal experience I know that it creates many constraints on the master schedule. This past spring I was invited as EL Team Lead to be a part of the master schedule planning meetings. The EL administrator asked me to join, telling me that our schedule greatly impacts the master schedule and that my problem-solving skills would be useful during this process. I sat in three meetings where I got to hear how those involved (two counselors and two assistant principals) with making the master schedule went through their process. I won't gloss over the schedule and say it was perfect, because it wasn't. In fact, the first time it came out, over 75% of my EL Newcomers would be in a core content course without an EL teacher.

I wonder what implementing a co-teach program model looks like from the administrative perspective. I want to know what their thoughts and ideas are as they go through the implementation process. A series of studies that explored how administrators implemented co-teaching program models in secondary schools would add to the literature and profession. Co-teaching strategies are not only used to support EL newcomers, but also special education students in their least restrictive environments and cross-curricular between teachers as they plan

projects like between ELA and Social Studies. Studies that contributed to literature by informing the profession about the reality of master schedule creation with the constraints of a co-teach program would benefit all. In addition, administrations are influential in deciding or influencing which teachers will be working together as a co-teaching team. Administration also determines when co-planning will occur, at least when it occurs during school hours.

A study focused on the perspective of those who make the decisions and support those who implement co-teaching would provide a unique perspective. In a building like NMS or a district like USD, there are 4 middle schools that implement co-teach program model with their EL Newcomers. (As a side note, they also use the same program model with their special education department.) As a researcher thinking of all the possibilities, the data could be immense. A comparative study, a narrative study, the list could go on and on. Contribution to literature to increase our knowledge and understanding of co-teaching would be invaluable. The data could be from a study that not only looks at co-teaching implementation with EL Newcomers but also with special education students

**Student achievement with co-teach program model**

Up until this point, I have focused on qualitative studies. But at some point, someone wants to see the numbers. They want to know, "Are students learning?" or "How do these students compare to their peers at _____ school?" The answer to those questions lies in a quantitative study that compares student data from before a co-teach program model to after the program model is implemented. In an ideal world, this would be the exact same set of students, but this is not an ideal world, and students are promoted to the next grade level.

The data from NMS pertaining to EL students on state language arts and math assessments from 2017-2022 (the first year implementing co-teaching program to the spring

before the case study began) show that five years after implementation, EL students are performing higher than the district and state averages. The state assessment data indicates the co-teaching program model is showing success with EL students in ELA and Math because "Beyond Level 1" means that students are performing at or above grade level for that content area.

| ELA - ELL Beyond Level 1 | | | | Math - ELL Beyond Level 1 | | |
|---|---|---|---|---|---|---|
| **Year** | **School** | **District** | **State** | **School** | **District** | **State** |
| **2017** | 54% | 51.0% | 46.9% | 51% | 55.0% | 51.6% |
| **2022** | 26% | 18.2% | 17.4% | 33% | 27.9% | 27.1% |

**Figure 5.1. NMS State ELA and Math Assessment Data**

NMS is just a single secondary school, and this is also prior to the program model shift of partnering a core teacher with an EL teacher with the same core certification. One can only assume that NMS will continue to show growth in Level 1 with their EL students in the years to come. A school new to implementing the co-teaching program model would have longitudinal data for mathematics and language arts before comparing it to new ones. New trends would be able to be established within a few short years. Its impact would be noticeable possibly at the end of the first year and most definitely by five years.

## Conclusions

As this study concludes, I hope those who continue the journey in co–teaching – educators, administrators, and university professors – will keep the following key ideas in mind. The first is that co-teaching is a commitment to a journey by all parties, educators and administrators. Those who are asked to collaborate should be willing participants and given

dedicated time to co-plan. Co-planning is where all the magic happens. It is when partners get to communicate, develop relationships with trust, create lessons, talk about implementation and strategies and establish their group identity. A co-teach team doesn't find their groove overnight, or in a month or maybe even a year. This is why it is called a journey.

Secondly, future research has many different avenues it can pursue. This was a single case study with more possibilities in the future. Co-teaching at the secondary level is still a relatively unexplored area. This study explored science in a middle school classroom. There are other content areas and grade levels that need to be studied. Schools from different socioeconomic backgrounds and in different parts of the United States would add to the literature. Implementation was studied from the educator perspective for this study, but it wouldn't have been possible without the support of administration. Their perspectives and voices need to be added to the literature. A quantitative study on the academic impact of co-teaching with EL Newcomers would be a study that would validate and support co-teaching as a program model to those who are in power to make decisions.

Lastly, this study started as a desire to be a better teacher in the classroom. It grew into a series of questions that pondered how two educators use co-teaching strategies to effectively teach EL Newcomers in a middle school science classroom. It became a case study the explored the importance of relationships and group identity to teaching. Somewhere in all of this, the study transformed from just being a study to being a journey. It was a journey that I, the researcher and participant, made with my friend in his science classroom. I began my journey with Harry, we began as two individuals with a desire to be better teachers for our EL Newcomers using co-teaching strategies. We never planned on this journey to become more than colleagues or to make team teaching one of our main strategies. But here we are today, in the

beginning of a new school year, still co-teaching together, continuing our journey to be even better teachers for our EL Newcomers.

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# Appendix A - Semi-Structured Interview Protocol

**August Questions**

- How would you describe your teacher's identity?
- What traits do you believe help you work well in a collaborative team?
    - Elaborate. Ask questions for clarification.
- Will you tell me about a time that you were a member of a collaborative team as a teacher?
    - Ask questions to get as much detail as possible from him.
- What was it like as a member of a co-teach team last year?
    - How was it successful? (the good)
    - What didn't work well? (the bad)
    - How could it be better this year?
- How would you describe your team identity from last year?
- What roles did each of you have?
- How would you describe your partner's personality?
    - Tell me about a time your partner exhibited that trait.
- What are your co-teach goals for this year?
    - This might be a time when I switch roles from interviewer to participant and we discuss them as teammates. We have not discussed them yet.
- Do you feel that by participating in a co-teach team that you are giving up control or power in your classroom?
    - Elaborate. Ask questions for clarification.
- What do you think the EL teacher's role is in your classroom?
    - Elaborate. Ask questions for clarification.

**October Questions**

- How do you think we did in meeting our CT goals? Are we meeting them? Have we fallen off the bandwagon?

    - **Harry:** My teaching goals are to be more collaborative in terms of the design and CT models with kids up and moving about the classroom. Using CT strategies that have both us engaging the kids.
    - **Jenny:** Take a more active role in the instruction of the class. I want both of us to be "in front of the class" and switch roles fluidly.
    - What is one thing you are doing well?
    - What is one thing Jenny is doing well?
    - What is something you both need to work on?
    - Given the goals established in the beginning, how has co-teaching impacted you as a teacher this semester?
    - How have you changed? How have you grown?
- Think back over the semester, what is a moment where you felt the team was firing on all cylinders? A time where you felt that this was an awesome lesson?
    - How did you get to that moment?
- How has co-teaching been different this year from last year?
    - Elaborate. Ask questions for clarification.
- How does having an EL Teacher who also has a science background impact the co-teaching relationship and collaboration?
- How would you describe your co-teaching identity roles? (i.e. leader/follower, good cop/bad cop, science expert/EL expert)
    - Have they changed throughout the semester?
    - How has your co-teaching relationship grown/developed over this semester?
- How is it co-teaching with the same person twice a day?
    - Are you making changes between lessons?
    - How do your other hours differ from your co-teach hours?
- How comfortable would you be in switching roles with Jenny? Have you switched roles yet?
- How is co-planning going?
    - How do you feel collaboration is going during this time?

    - Have you and Jenny assumed roles during this meeting? (I am not sure if I will ask 2 & 3. I think I am wondering if we will assume roles in co-planning but those roles would be different during the implementation phase. Maybe?)
    - How would things be right now without the dedicated co-lanning time?
- How are the EL students doing this year compared to last year? Can you hypothesize the reason for this?
- In the future, if you had EL student but no co-teacher, how do you think you would meet the language needs of your EL students? Have you learned EL differentiation strategies?
- Thinking about the future, is this a collaboration you want to continue?
- Follow-up based on data collected so far.
    - In looking back at our recorded observation, I noticed that we are switching between different strategies pretty fluidly. I noted a question as I was watching this. I wondered why this is happening so easily this year, especially since we aren't planning it during our PLC time. Do you have any thoughts on this?
    - If an outside person were to come into our room and observe us co-teaching for multiple days, how do you think that person would describe us?
    - In August you described your teacher identity as a facilitator coach and you said that the traits that help you work in a collaborative team are being a good listener and your positive attitude towards collaboration. How have these identity traits manifested themselves during co-teaching and impacted the team dynamic so far?
    - I described myself as an advocate and problem solver, how do these identity traits manifest themselves during co-teaching and impact the team dynamic?
    - Another trait mentioned last time was reflecting on our learning together. So let's take a moment and reflect on what we have learned about each other and our team dynamic.
    - How is the co-teach team effectively pushing student learning during instruction?

- How have I challenged you to look at a lesson in a different way? To consider alternative ways of implementing a lesson.

**December Questions**

- How have you met your semester co-teaching goals?
- Given the goals established in the beginning, how has co-teaching impacted you as a teacher this semester?
    - How have you changed? How have you grown?
- Given everything you just said, how do you predict next semester going? What goals do you have for co-teaching?
- Do you think you have changed? How would you describe your teacher's identity now?
- How do you describe your co-teaching identity?
    - Have your roles within the team changed?
    - How has your co-teaching relationship grown/developed over this semester?
    - How do you think Jenny has changed/grown over this semester?
- How does having an EL Teacher who also has a science background impact the co-teaching relationship and collaboration?
- What do you think you have learned from Jenny? How has she helped you be a better teacher?
- How would things be right now without the dedicated co-lanning time?
- How was the co-teaching training you had?
- In the future, if you had EL student but no co-teacher, how do you think you would meet the language needs of your EL students? Have you learned EL differentiation strategies?
- Thinking about the future, is this a collaboration you want to continue?
- How are the EL students doing this year compared to last year? Can you hypothesize the reason for this?

# Appendix B - Observation Protocols

**Appendix Figure B.1. Co-Teaching Strategy Observation Protocol**

Co-Teaching Strategy Observation Protocol

| Date:<br>Hour:<br>Time Stamp | 1T:1A<br>(H:J) or (J:H) | Station | Team | Role<br>Switching |
|---|---|---|---|---|
| | | | | |
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**Appendix Figure B.2. Symbolic Interactions Observation Protocol**

Symbolic Interaction Observation: Classroom or Co-Planning

| Date:<br>Hour: | Classroom Observation or<br>Meeting Observation | | Location: | Present: |
|---|---|---|---|---|
| Who spoke to whom | (Premise 2)<br>Communication conveyed meaning: tone of voice, gestures, feelings | (Premise 3)<br>Reception of communication | Dialogue | Time Stamp |
| | | | | |
| | | | | |
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