A Middle School's Journey

from Improvement Required towards Professional Learning Communities

by

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ABSTRACT

The focus of this research study was to better understand the development of a Professional Learning Community (PLC) culture within an urban middle school campus and to analyze if the intervention, intended to develop a campus PLC culture, had any positive or negative impact on student achievement. This mixed-methods research study utilized pre and post surveys and interviews with campus educators to delve into the perceptions of the development of a PLC culture within the middle school campus. Furthermore, student academic performance was explored through the analysis of state academic performance reports.

The first significant finding of this study was that the results of the concurrent method of data analysis affirmed that, potentially because of this intervention during the 2018-2019 academic school year, the middle school of this study did commence the development of a professional learning community culture. The second significant finding was that based on the data analyzed of student performance for the three previous academic years, student achievement did increase academically when accounting all students and all contents. Furthermore, both math and English language arts had the lowest percentage of students not meeting grade level standards since 2016. Finally, the largest subpopulation within the school campus, English Learner students, demonstrated large gains at 23 percentage points over the last three years in the academic performance tier of approaching grade level or above. This increase in academic performance by the students did ultimately lead to the campus performance rating to increase positively, as measured by the state of Texas.

DEDICATION

Aprender a dudar es aprender a pensar.

-Octavio Paz

Este logro se lo debo y dedico:

a mis hermanos. Gracias por acompañarme en este camino de la vida. No importa lo que

pase, sé que siempre cuento con ustedes y al igual cuentan conmigo.

a mis abuelos. Gracias por los cuidados, cariños y consejos.

a mis hijos. Gracias por ser mi fuerza, corazón y luz durante los momentos oscuros en el

camino de mi vida. Estoy muy orgulloso de ustedes. No olviden- Be you. Be brave. Be

humble. Be relentless. Keep your eyes on the stars. I love you.

a mi compañera, mujer, cómplice y mejor amiga. Gracias por tu apoyo, comprensión y

paciencia. No hay nadie en el mundo que me conoce mejor que tú y aun así me ofreces tu

amor. Te amo.

a mi padre y mi madre. Este logro es más de ustedes que es mío. Gracias por enseñarme a

tocar puertas con valor y paciencia. Gracias por enseñarme a dudar que los límites y

expectativas que impone la sociedad eran reales para mí. Gracias por enseñarme a ser

feroz al seguir mis sueños y seguir mi camino sin excusas, con esfuerzo y humildad. La

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Con todo mi corazón,

José Antonio Herrera "MiMi el Mimoso"

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"Once social change begins, it cannot be reversed. You cannot un-educate the person who has learned to read. You cannot humiliate the person who feels pride. You cannot oppress the people who are not afraid anymore."

-Cesar Chavez

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CHAPTER 1

INTRODUCTION AND CONTEXT

Schools are a social construct, and embedded in their systems are greater problems that may appear external but that seep into those school walls because they form the daily reality for our students. Segregation, poverty, and lack of opportunities are just as much a part of education as any high stakes testing we use to evaluate our success. The reality that our students experience on a daily basis is constructed and tailored by systems and processes created by the community of parents and educators within the campus educational ecosystem.

When these systems and processes are failing students and are not producing acceptable results in Texas, the state educational agency sends a notice stating that the school campus is failing in educating its students adequately and labels the campus as Improvement Required (IR). Along with giving the label of IR to a campus, the educational agency provides lists of action items as directives to be performed by the school district and the campus. These items must be executed satisfactorily, or further action and consequences will be considered as a prescription to remedy the failing campus. The stigma and stress caused by such a label causes an environment of high stakes for the students, teachers and other stakeholders. At my current middle school, this label created angst for our educators towards the end of the spring term in 2018.

Although most hoped that our school would not get the much-dreaded label of being deemed an Improvement Required campus; we did. It was understood that this situation could have led to further consequences and an eventual takeover by the state. This is not a situation any campus wants to ever find itself facing.

This study delves deeper into the reality of a middle school campus, my campus, which has had to rebuild and reimagine itself from being labeled as an IR campus to an acceptable campus. This was the reality of Spring Woods Middle School in the Spring of 2018 and had been since 2016. Given the negative results and label of IR, educators within our campus asked themselves one question: what do we do now?

The answer to such a question is never a simple one. The challenge with trying to find action steps to rectify such an issue is the wickedity of the issue itself. By wickedity of an issue, I refer to an issue that lives in a social context and is difficult or maybe even impossible to solve given all the factors and influences, which feed into the context (Buchanan, 1992). There is no definitive path or action steps to overcome the challenges that leads a campus that has been deemed a low performing school. There are so many layers of potential issues to account for and ultimately when results are not favorable, unfortunately there is always a fair share of finger pointing that can take place. Are the teachers the problem? The students? The parents? The feeder elementary schools? The leadership team? The school district? All of the above? The list can be endless with potential issues and underlying subtleties that create complex situation.

This was the reality facing all of the different stakeholders who were vested to Spring Woods Middle School in the Spring of 2018. Ultimately, the results were in the books and the next academic year loomed just around the corner, so the question remained for all stakeholders in this undesired situation, our situation, what do we do now? The entire campus's future hinged on the decisions made by the administrative team to try to lead the campus in a successful direction, all while under the watchful eye of the Texas Education Agency.

The first action step is realizing the depth and scope of the factors that had created such a situation. Negative results on that scale are never the result of a single event or occurrence, usually the situation of an underperforming campus is a matter of consistent small flaws in teaching and therefore in the learning done by students, collectively executed every day, which over time get compounded to produce undesired results on standardized assessments. Just like no educator cannot single handedly put any campus in a situation to be labeled as IR, no educator can single handedly take any campus out of the troubling status. In our case, as a campus team, we understood that if we wanted to improve our label of underperformance as deemed by the state, the effort had to be consistent and collective as one campus and one learning community with a solid practice in teaching and learning executed daily by all educators on campus in a unified effort. Therefore, the focus in this study is on the efforts of strengthening my school's capacity through the nurturing and development of a professional learning community culture focused on improving teaching and learning practice.

Local Context

Spring Branch Independent School District, the local education agency that is the focus of this study, is a 44 campus school district rich in diversity with a student population exceeding 35,000. The ethnic breakdown of the student population includes 5% African American, 58% Hispanic, 28% Caucasian, and 6% Asian (Spring Branch ISD, 2014). Of the students across 44 campuses, 57.7% are economically disadvantaged. My campus is Spring Woods Middle School, one of the middle schools within Spring Branch ISD. Although our school system is quite diverse as a whole, our school itself is not representative of this diversity. Our student population is composed of

mostly Hispanic students; approximately nine out of ten students are Hispanic. The majority of these Hispanic students are either still classified as an English Learner (EL) or were classified an EL student at some point in their educational trajectory.

EL students compose 33% (approximately 12,000) of the entire student body in my school district (Spring Branch ISD, 2016). Furthermore, a growing number of EL students in our system are entering and progressing through our schools as what Kathy Escamilla identifies as the "new normal," that is children for whom bilingualism is their language (Escamilla et al., 2014). These children are being raised in households and communities in which they are consistently exposed to two or more languages and live in a bicultural and bilingual context. Our campus exemplifies this notion, and it is normal to hear Spanish and English spoken simultaneously by our students in their daily interactions.

Despite the great value these students bring to the classroom and campus as bicultural and bilingual students, our EL students were singled out at a recent community meeting by our school district superintendent, Dr. Scott Muri. Our cohort of EL students had the unfortunate designation as being the lowest performing cohort of EL students in our entire geographic region and ranking among the lowest compared to other districts in the state. These data had major implications for our middle school performance scores given the demographics of our students. Furthermore, these data created a bit of an uproar for a school district that traditionally has prided itself on its academic achievement and innovation. This piece of data clearly did not fit in that schema and displayed a much different reality of failure and problems.

As a bicultural member of this organization and former EL student, the findings of these data were personal, alarming, and saddening. My personal story is reflected in my current work practice and is the driving force behind the passion and dedication I feel for this particular student group and for my campus. I feel that my success and story parallels and includes the components present in the challenges these students face. My struggle and success are tied to being a part of the Hispanic community whose identity and attributes varies by the observer and according to the viewers' lens. Through one lens, my community can be defined as systematically disenfranchised and struggling academically. Through the other, I witness a community with an unparalleled wealth in cultural capital and academic potential.

Problem of Practice

I am currently the Dean of Instruction in Spring Woods Middle School (SWMS) within the Spring Branch Independent School District in West Houston with a total student population of approximately 35,000 students. My role in my school exists to support the teaching and learning of students on our campus and to support the building of capacity by our teaching faculty in the evolvement of their individual pedagogical practices. Our campus consists of 950 students within three grade levels, 6th through 8th grade. Our campus is designated as a Title 1 campus, which is the designation for campuses that have a large concentration of low-income students. Of our 950 students, 87% percent of our students are classified as Economically Disadvantaged. Our student body consists of 89% percent Hispanic students, 6% African American students, 3% white students, and 2% of another racial background. At the end of the 2017-2018 academic school year, students of SWMS were performing below their peers across the

state and the regional Houston area, based on the data provided by the results of mandatory state assessments as provided by the Texas Education Agency (TEA).

As part of the requirements for a school deemed as Improvement Required, the school district must reevaluate the principal and leadership team of the school.

Furthermore, the campus leadership team must create a Targeted Improvement Plan (TIP) on how the school is planning to improve their performance on standardized assessments as required by the state. In the case of our school, a new principal was brought on board a few weeks prior to the commencement before the 2018-19 academic school year. The new principal hired me in my new role as a part of the leadership team of SWMS. Together, our campus leadership team created and implemented the TIP for the 2018-19 academic school year. The plan envisioned and drafted had multiple components, however the overarching theme was nurturing a Professional Learning Community (PLC) culture across our campus to better support the teaching and learning of our educators and students.

We, as a leadership team, decided to leverage the opportunity of executing the TIP with the goal of not only driving student academic achievement, but to also incorporate and influence the dynamics of our school towards a professional learning community. Our middle school campus is composed of a vast majority of students that are either classified as EL or were previously classified as EL, therefore taking into consideration the needs of this special population was a cornerstone and considered critical in order to better serve and support the learning of our student population.

English Learners (EL): The National Context

In 2015, 4.6 million public school students participated in EL programs (National Center for Education Statistics, 2017). Hispanic students made up the majority of this group (77.1 percent), with approximately 3.7 million participating in EL programs. Asian and Arabic students were the second largest group participating in EL programs (6.5 percent), with about 298,000 students participating in 2015. White students accounted for 5.5 percent (252,000 students) of all EL program participants, and Black students represented 3.5 percent (161,000 students). American Indian/Alaska Native students (36,600 students), students of two or more races (27,500 students) and Pacific Islander students (25,100 students) accounted for less than one percent each of EL program participants. EL students have the challenge of not speaking the English language proficiently as well as added social and educational challenges that are the consequence of the lack of English language skills.

With the new Every Student Succeeds Act (ESSA), the federal government has made teaching English Learners a priority through stronger accountability provisions and the authorization of additional funding. Nationally, with approximately one in every ten public school students being an EL student (National Center for Education Statistics, 2017), schools face challenges of serving students with vastly different backgrounds and needs. English Learners face many challenges in school and test results show they are behind their non-EL peers.

On recent assessments, 14 percent of fourth-grade English Learners were proficient in math (compared to approximately 40 percent of non-EL students). EL students also have lower graduation rates than their peers. EL students are less likely to

graduate in four years, at approximately 63% (compared to a national average of 82%) (Lathram & Vander Ark, 2016).

In addition to the linguistic limitations that come with being an English Learner, these students face a multitude of other challenges that interlace to form their daily realities. While schools are focused mainly on their academic achievements and milestones, these students require social support as they navigate different cultures than what they experience at home, have to behave abiding by different codes of conduct, face racial and cultural stereotypes that tend to increase the dire nature of their situation and can contribute in schools becoming an unwelcoming place. The EL experience can vastly differ from classroom to classroom. However, EL student backgrounds can be a strong indicator for potential academic success or failure. As explained by David and Yvonne Freeman on a national level, and also reflected in my context, EL students can be categorized into four groups (Freeman & Freeman, 2011):

Newly arrived with adequate schooling- EL students who were schooled in the United States less than five years.

Newly arrived with limited formal schooling- Immigrant EL students who were unschooled in their native countries or who have limited formal education.

Long Term English Learners (LTEL) - EL students who were schooled in the United States more than five years and who have not successfully become proficient in target language of English.

Potential long term English-learner- EL students who are recent arrivals that have indicators that could not achieve proficiency in five years of schooling.

There are three main instructional program models associated with teaching EL students. The first program model is widely known as ESL, an acronym for English as a Second Language. This model is usually a pull-out model, meaning that the EL student attends mainstream classes for part of the day and then is pulled out for ESL intervention for a portion of class time. This model is widely used in secondary schools and in campus settings where the EL student population is very diverse and different languages are spoken. The second program model is Bilingual Programs. In Bilingual Programs, both the native language and the target language are used to provide instruction to the student. As Rennie (1993, p.3) explains, "These programs are most easily implemented in districts with a large number of students from the same language background. Students in bilingual programs are grouped according to their first language, and teachers must be proficient in both English and the students' home language." The final program model is known as Sheltered English. In this model, these is no explicit ESL instruction nor native language support. Instruction in this model is usually supported with visuals, gestures and other strategies through content area teaching and learning. Unfortunately, consensus does not exist on how to best provide EL instruction.

Call for Action and Intervention

I was once one of those statistics. As a former English Learner, I have lived and understand the complexities of acquiring an education while learning to master a language. I understand the social implications of being part of a less successful minority that has many obstacles to overcome. However, I persevered but it was not an easy task and I firmly believe that schools as socially constructed systems have a greater

responsibility to serve all students- native English speakers as well as those with limited English skills.

Through my doctoral coursework the past couple years, the various cycles of research have left me with mixed emotions, doubt and uncertainty of how to address the wicked problems of educational equity for our most vulnerable of student populations. The readings and discussions from our coursework through the terms have shaken my beliefs to the core because they touched upon all of the major hot topics in education today. Locally and nationally the negative consequences of ability tracking, housing segregation, school choice (or lack of it), inequities in school funding, implicit perspectives on English Learners as deficient, and inadequate teacher training are all part of the contexts have influenced this study.

The more I dove into the weeks and months of readings and discussions, the more I realized that I had bought into the beautiful story painted by politicians and leaders that who taught us that each individual can overcome any obstacle in their way with determination and perseverance. Furthermore, I had internalized the idea that education, which is equally available to all, is one avenue for every person in this great nation to attain success.

Believing firmly that education is the pathways for all is a hard belief to hold onto when you are tasked with supporting academic achievement for all students, especially a population such as ours that faces so many obstacles. These students, in addition to being economically disadvantaged are EL learners who must overcome a myriad of obstacles if they are to complete high school and become successful contributing members of society. It became very clear that the plethora of challenges faced outside the home and

the opportunity gap for our students needed to be addressed in a much greater scope. As Patricia Gandara (2014, p. 166) explains,

We must address the broader needs of students that impede student learning- poor health care, poor nutrition, excessive residential mobility, isolated and risky neighborhoods, lack of models of academic success in their communities, and overstressed parents-before assuming that language is the primary problem they face.

As my thinking has evolved, I began to wonder what aspects of students' lives could be addressed in my intervention. It became clear to me that addressing academic gaps is essential but the weight of all of these problems prompted me to look more critically at the situation as a whole. The needs seemed endless and required actions beyond the scope of this research study. Therefore my hopes for this study is to lay the foundation for further strides in how to better close the achievement and opportunity gap in our school for all students.

Given the despair I felt as my coursework progressed, I shifted towards a different focus that could make things better at that time for the teachers and students that I serve. I started simply by asking questions. How could we nurture an environment and climate that would support teachers to improve their practice and in turn provide better learning experiences for students? How could we promote collaboration among our campus staff to ensure that the needs of our students were being met? How could we nurture a campus ecosystem where staff could maximize collaboration time to design impactful learning for our individual students?

Intervention

This study is a result of a reflective and retrospective journey by our campus leadership team. As the 2018-2019 academic school year began, in my current role as Dean of Instruction, I had become part of a leadership team in a middle school that was not meeting the needs of most of our students as deemed by state standardized assessments. Understanding that this situation is a complex problem, our leadership team facilitated the design of a multi-prong approach to support our teachers and students. This design and supports were a part of the overall work of the TIP to nurture a PLC on our campus and to improve student performance.

The nature of this type of PLC work is cyclical in nature, but due to the time limitations of this study, this study will focus on the foundational work of PLC cultural development as the 2018-19 school year evolved and the plan, as set forth by the leadership team, was executed. The methodology that our team used as a catalyst to better understand how to improve education, advocacy and support for our students was the design thinking process, specifically the three-step process of inspiration, ideation, and implementation (Brown, 2008). In Chapter 2, I will take a closer look at the intricacies of design thinking. In regard to the process for our campus at the beginning of the school year, we navigated through the first two steps of inspiration and ideation, which resulted in a design proposal to be reviewed and endorsed by the Texas Education Agency to be adopted as our Targeted Improvement Plan. Once approved by our district school board and the state, then our campus moved forward to the third step of implementation, which took place throughout the 2018-19 school year.

The culminating proposal, which became our campus TIP, consisted of three systemic foci and accompanying actions. In order to better serve and meet the needs of our students and work towards better addressing our campus's strategic priorities of increasing levels of academic achievement by state standards and nurturing a professional learning community culture, the foci of the TIP were to (a) build teachers' capacity in the areas of content, instruction, and assessment, (b) meet the diverse academic needs of our students, and (c) meet the diverse behavioral needs of our students, by taking the following actions:

- 1. Design a Response to Intervention (RtI) system that clearly outlined the processes for three tiers of intervention.
- Provide professional development for teachers on quality instruction with emphasis on critical learning standards, instructional strategies to meet diverse learners, and formative assessment.
- Develop and implement processes that exemplify best practices in behavioral support and management for students, including protocols and navigating a behavior management system.

Purpose and Research Questions

In order to scale best practices to better serve our student population and our community, it was crucial to build a strong culture of collaboration and candid discourse among educators and all stakeholders. With that in mind, the purpose of the study was a deeper dive into two of the components from our campus teaching and learning environment that could be influential in building such a culture to provide a world-class education for every student we served.

The first component speaks to the professional practice of educators on our campus, the daily intricacies of our teaching and learning process and delivery through the development and implementation of the Targeted Improvement Plan. The second component speaks to the less tangible driver in educational institutions, more specifically, our campus cultural shift towards the conventions of building and enhancing a Professional Learning Community mindset. To better understand the dynamics of these two components, the following research questions guided this study:

- RQ1: How does Spring Woods Middle School's faculty develop as a Professional Learning Community during the implementation of the Targeted Improvement Plan?
- RQ2: How does the implementation of the Targeted Improvement Plan affect student achievement at Spring Woods Middle School?

CHAPTER 2

THEORETICAL PERSPECTIVES AND GUIDING RESEARCH

This research study was grounded in a Social Constructionist perspective. My intervention, and future iterations of the work commenced through the culmination of this study, includes three major aspects that I hope will lead to greater success for our middle school students on our campus. It is also my hope that this study provides insight to other schools in our school district with a similar demographic of a high concentration of English Learner students. In Chapter 1, this research study is explained, along with the goals of strengthening my school's teaching capacity through the nurturing and development of a professional learning community culture focused on improving teaching and learning practices to better serve our teachers, students, and community.

In this chapter, I will first describe Social Constructionism as an epistemological lens and theoretical foundation as well as other existing research and literature that provide the ideas, perspectives, and basis of support for the work that was undertaken on my campus during the 2018-2019 academic school year. The second section of this chapter will underscore the importance of creating a voice and a culture of advocacy for ELs given this special population's history of challenges in educational institutions. Being part of the campus leadership team, whose charge is to support teachers and students, led me to believe an innovative approach was needed given the failing results we were achieving for two consecutive years with the systems and processes we had in place.

The school campus, despite its best intentions and support from district leadership, had not been meeting the expectations set forth by our school district or the

metrics for students to meet standards as placed by the state. Therefore, in the third section, a literature review of design thinking and the redesign process that served in the creation of the intervention for this research study will be explored. This will lead to the exploration of the theoretical background and research supporting a key component in this study, which is the concept of Communities of Practice (CoP) and the morphing of CoPs into the structure of a culture of Professional Learning Communities to improve teaching and learning practices. Lastly, previous cycles of research that I have engaged in throughout my doctoral coursework and research implications will be reviewed as they pertain to the evolution of my study.

Social Constructionism

Social Constructionism is the theoretical paradigm on which my study is based. It provides the foundational element for using a community of practice model as a major construct because of its emphasis on the interaction between human beings as central to the creation of knowledge, values, and practices. If one subscribes to such a viewpoint and theoretical perspective, attention must be given to human beings in their social context. Social constructionism in its essence propagates the notion that meaning is constructed through social interactions (Crotty, 1998). As stated in *The Concise Oxford Dictionary of Sociology* 'social worlds are created and constructed by individuals and groups, or as they state it, are 'interpretive nets' (Marshall, 1994, p.484). Social constructionism does not exclude the existence of an objective reality, but asserts that people jointly construct beliefs about the world that shape their collective perceptions of a "social" reality. Hence, the name social constructionism (Crotty, 1998).

People as subjects who construct meaning through interactions with others in the context of broader socially accepted belief system is an integral idea for my study (Berger and Luckmann, 1966). Berger and Luckmann (1966) go so far as to state that 'knowledge itself is socially constructed and facts are social products.' In addition, we are also shaped and molded by our interactions with each other and the social environment (Cunliffe, 2008). Therein lies the power of this theoretical lens. Social interactions have the power to transform not only our perception but also our sense of self and vice versa (Cunliffe, 2008). This is significant when we consider the needs of our students, the special population of English Learner students, and how much our school systems and specifically how our school is currently failing them.

However, one must be careful not to take the constructionist perspective and apply it to view the construction of meaning in a strictly linear and chronological sense as Crotty (1998) explains. He argues that humans do not create meaning based on each singular interaction, one at a time, but rather their culture has a significant role in acquiring and constructing meaning of the world. Crotty cautions that this cultural endowment of attributing significance to symbols can be a double-edged sword given its power to limit our understanding of the world around us.

This can cause an exclusionary perspective that molds a person's understanding of others and the world. Overcoming the limitations of such exclusionary perspectives becomes a central rationale for the need to give a group outside of the hegemonic culture a voice through the creation of, as is the case in my study through our leadership team, an advisory group. This notion of trying to avoid an exclusionary perspective influences my action research approach by encompassing an opportunity for voice from multiple

stakeholders within the school campus ecosystem to be heard. As educators and administrators, we can fall into the trap of linear constructions of meaning in our practice, therefore listening to perspectives of counselors, instructional coaches, principals, behavior specialist and deans who can voice the perspectives of parents and community members whose world has been constructed differently, can be crucial to meeting the needs of our students.

Each classroom functions as its own micro learning ecosystem with the teacher and their students. Teachers individually each constructed their own ecosystem and in doing so would be influenced by their own biases. This was obviously not leading to student success and needed to be addressed. Therefore, the idea of a professional learning community with the underlying Social Constructionism theoretical framework became crucial to my work. We, the leadership team, needed to build learning communities that we could influence and support so that teachers created new meanings within the group while setting aside their previous biases. This process of enhancing practice through new meaning being co-constructed by educators can be tricky. As the designers of the learning communities, we wanted to encourage our teachers to see students differently, but at the same time be respectful of teachers' current perspectives and not alienate our teachers by simply criticizing their current beliefs and biases.

English Learner Students, Voice & Advocacy

Given the subordinate and sometimes marginalized position of EL students, one of the goals of this study is to create a space for the voice and needs of ELs to be heard and addressed. This is a group that has substantial hurdles to overcome, both in life and in the school system that places many students in a path full of disadvantages and risks

(Anyon, 2014). Despite the many resources that are available for ELs, these resources do not give these students a voice nor approach their education from an advocacy standpoint (Fenner, 2014). These students end up as failures on school rosters due to their low performance on state assessments and continue to be a negative statistic. This is currently the position of the ELs in my school district and within my middle school campus. From a social constructivist perspective, understanding EL students' experiences and perceptions is essential for teachers who wish to support their success in school. An advocacy standpoint assumes that both students and teachers need to be actively involved in challenging the inequities that face ELs at all levels of the school system.

It is well known and has been well documented through research and studies in this area that ELs face an uphill battle and a difficult road in our educational system that makes achieving what we define as success a challenging endeavor at best (Carter and Welner, 2013). Language is an indicator of background and is a legacy that is obtained from parents, families, and community. Many of the students in our educational systems today are children of immigrants and enter the system with the richness of another language and culture. Almost a quarter of children in the United States, 23.7%, start their life as speakers of another language and about half of these, 10.7%, get labeled as English Learners due to their lack of proficiency in English (Gandara, 2014). This label focuses on what they are lacking, skills in the English language without emphasizing their rich linguistic backgrounds. As Gandara so eloquently states, "Current language-education policies are squandering an asset-students who have the potential to be bilingual and biliterate- and turning it into a deficit" (Gandara, 2014, p.157).

The situation for these students generally does not start well. The various educational options for EL students nation-wide set them up to be deficient in core content while the focus is on the students' acquisition of English. Students typically do not make up this learning gap and therefore will continue to underperform when compared to their peers (Gandara, 2014). Awareness of this issue is not the problem, since the high-stakes accountability system requires that these students' needs to be taken into account but does not specify a plan of action that will enhance their achievement, furthering this negative cycle of failure (Carter & Welner, 2013). As Carter and Welner (2013, p. 10) point out, "High expectations become a punitive false promise if combined with low resources, low opportunities, and low support." Knowing these students are not succeeding has not solved this equity gap. This is why I am facilitating an innovative approach in my study to enhance the view of this situation through a different angle and perspective.

The aim of my study is to approach our students with a focus on advocacy for their needs that is translated into action (National Education Association, 2015). In this study, advocacy is defined as acting on behalf of ELs both inside and outside the classroom. I will define advocacy using Fenner's definition of focusing on "equitable and excellent education by taking appropriate actions on their behalf" with the goal of giving these students a voice (2014, p.7-8). Our EL students have lacked a voice due to their marginalization within society and lack of agency in a school system that is based on a language system, culture, and values that are imposed on them by the hegemonic majority.

ELs need programs that meet their needs and that allows them access to the curriculum so that they can meet the expectations set forth for the majority, thereby eliminating the learning gap the system has de facto created. This would all have to start with not placing a label on these students that stems from a deficient view of their skills. In addition, a space would need to be provided within the educational system where their home languages were validated and their skills nourished, giving these students an opportunity to start their education on an equal footing (National Education Association, 2015).

This study sought to accomplish advocacy, voice, and systemic change in our middle school by creating a focal lens for each action that would ensure equal opportunity and access to a quality education for our English learner students. On my campus 9 out of 10 students were part of the linguistic minority and were not accessing a quality education due to factors outside of their control. This study put an intervention in place that sought to give them the access they deserved.

Redesign through Design Thinking

As discussed in the previous chapter, the intervention of this action research was the culmination of a redesign journey through the design thinking process by our campus leadership team. Design Thinking as a term was first used in 1987 by Rowe when he published a book titled *Design Thinking* (Rowe, 1987), a seminal piece of work in the field of architecture. There are different variations of design thinking that spread across an array of industries. In its essence design thinking is creating solutions or prototypes that are human-centered (Friedland and Yamauchi, 2011).

The innovative redesign of this study has been heavily influenced by several concepts and models from design thinking. One such influencer was the design model used for solving what Rittel and Webber termed "wicked problems" (Rittel & Webber, 1972). In my context, improving academic achievement by our student population, which is composed of a large concentration of EL students, is a wicked problem. The wickedness lies in the difficulty or maybe even impossibility to solve such a problem given all the factors and influences that feed into the context.

Following this model, the first part of my study focused on identifying the problem and all of the compounding factors and elements that are a part of this situation. Afterwards, in the problem-solving phase, different ideas were compared and analyzed with the end result being the selection of a final solution (Buchanan, 1992). Using this model, no one solution is touted as right or wrong and therefore, divergent and creative thinking is welcomed and fostered. An integral element of this process and solution developing model is the collaborative nature in which ideas are explored. This allows for people to share their own experiences and let their creativity reign while using their critical thinking skills to communicate their ideas (Luka, 2014).

Another way to view design thinking is by using Brown's three-step process of inspiration, ideation, and implementation (Brown, 2008). Solutions are explored and their implementation is a crucial piece of this process. Implementation adds a critical phase to Buchanan's original proposal of design thinking. With time, different design-thinking centered models have emerged. In 2000, the Stanford Institute of Design made additional changes in their process by adding empathize as the first step or mode. This mode adds an emphasis and value to the user's perspective and behavior thereby creating a more

user-centered experience and focus (Plattner, 2009; Plattner, 2010). Since Stanford design thinking is focusing on the end user, the experience of the user and unintentionally how they construct meaning is central to creating a solution. This melds perfectly with the Social Constructionism theory as both the Stanford Design Thinking and this theoretical perspective focus on people, their experiences, and the meaning they derive from social interactions. This is what we needed to change as an administrative team for our teachers, as teachers in their learning communities, and teachers changing the experiences of the students so that they could be successful ones. All of this user centered thinking and using a framework that emphasized the interactions between users would shift our focus toward successful practices that would ultimately be seen in student achievement.

In *Innovation as a Learning Process: Embedding Design Thinking*, Beckman and Barry (2007) extend the observation, or empathy phase to include multiple tools that can be used in the process such as participant observation, informant diaries and even formal ethnographic interviews. The constant development of the design thinking process and models has introduced new practices and added elements and different perspectives as well as ways to approach this process (OECD, 2014).

In this study, the design thinking process has been instrumental in focusing the problem as well as creating a solution. Our school's journey through the design thinking process led us through the three stages of inspiration, ideation, and implementation for the intervention that is the basis of this study. We arrived at the third stage of implementation early in the 2018-2019 academic year with hopes to shift the direction positively for our wicked problem. We, as the leadership team who designed the

intervention, focused on building a community and a culture of collaboration and shared practice with the hope of shifting the failing dynamics towards success, yielding positive results in quality teaching and learning.

Communities of Practice

In many models of collaboration, being a part of a community inherently means that a shared practice will develop. At least, that is usually the initial intent of establishing a community. However, that is not always the case. To have a shared practice does not necessarily mean that you have community, and vice versa. It is at that nexus of community and practice that interested me. I was especially interested in having communities of practice that would develop as groups of people with a shared passion around an area of practice to engage in collaboration regularly to improve that practice (Wenger, 2004). What could be viewed as a subtle difference between community and communities of practice plays a large role in this study.

The subtleties of being both a community and having shared practice are the ideas and concepts that will be explored in this intervention. Although characteristics of effective communities of practice seem subtle upon first glance, the features are clearer upon further observation of group dynamics. I became interested in this nexus and posited that creating a community of practice would lead to innovative change through collaboration thereby creating a culture within the group of both a community and an economy of meaning (Wenger, 1998). This economy of meaning that Wenger (1998) refers to is the result of a negotiation of meaning that the community engages to better understand their context. The negotiation of meaning can evolve through three dimensions which Wenger outlines as (1998, p.84):

- Through mutual engagement, participation and reification can be seamlessly interwoven.
- 2. A joint enterprise can create relations of mutual accountability without ever being reified, discussed, or stated as an enterprise.
- 3. Shared histories of engagement can become resources for negotiating meaning without the constant need to "compare notes."

Communities of practice operate under three fundamental characteristics: Domain, Community, and Practice (Wenger, 2004). A community of practice is not just a network, it revolves around something, an area of knowledge and action. The joint-enterprise in this area of knowledge is in its essence the domain of a community of practice (Wenger, 1998). Moreover, the group of people who are engaged in this joint-enterprise of the domain and the relationships between the cohorts of members is what Wenger (2004) refers to as community. Lastly, the focus and engagement by the community to improve practical knowledge in the domain of all methods, tools and processes, collectively and collaboratively, is what describes practice (Wenger et al., 2000).

An element that originally defined communities of practice (CoP) and contrasted with other groups or teams was the notion that these groups would emerge spontaneously and informally from groups of people with shared interests (Swan et al., 2002). However, the intervention for my study is a result of a shift in discourse in regards to structure, performance advantages, and management of CoPs (Cantu & Willmott, 2000). Advantages that have been outlined in research are that positive CoPs can share best practices and provide effective problem solving swiftly. Furthermore, CoPs can support and increase retention and recruitment of talent (Wenger & Snyder, 2000). These

advantages and positive outcomes have led the scholarship of communities of practice into how to strategically design an environment to nurture CoPs and take advantage of the spontaneity of capacity-building discourse and increased collaboration that can reap tremendous benefits for improving organizational practice and knowledge (Brown & Duguid, 2001).

Exploring the strategic nurturing and development of an effective CoP is a focus of this study. Developing a CoP through professional learning communities is one of the main pillars of my intervention that had as a goal to leverage the designed targeted improvement plan into the collective and collaborative shared practice of our cohort on our school campus. This cohort of educators was a group of people that were on-boarded through the targeted intervention to work together to evolve into an effective CoP. The elements of an effective CoP would be engagement in the domain, a sense of community, and a collaborative desire to improve the practice of quality and equitable education for all our students, including our special population of English learner students. In the design of a successful community of practice, three main guidelines were followed: focus resources on communities that have strategic implications; provide the community with time and space to interact; designate roles and responsibilities to support the community (Lesser & Everest, 2001).

The value of an effective CoP cannot be underscored and hence has been included as a major part of my intervention. Increasing our students' achievement, specifically in the sector of EL student subpopulation, was a strategic priority for our organization that led to an allocation of significant resources in order to develop a community of practice with the shared focus through the professional learning community lens. In the design of

onboarding and capacity building for the members of our middle school campus, time and space allocations, as suggested by Lesser and Everest (2001), were closely taken into consideration to successfully nurture the CoP and PLC culture. Furthermore, to better engage the members the design took into account the findings of Giacobbe and Corso (2005, p.15-16). In their study they articulated that an "organization that wants to foster the members' involvement and participation in the community's activities with the purpose of improving the effectiveness of the learning and knowledge management processes, can concentrate its efforts on: improving the individual involvement, enhancing social relations, improving the connectivity, and improving the communality." Moreover, Zboralski (2009) made the case in her findings that members of CoPs should be encouraged to interact with each other with the incorporation of two main features: first, an active and supportive leader with expertise in CoPs and secondly, appropriate management support with the attributes of an encouraging environment and a culture of knowledge sharing.

Our school leadership team's belief in the potential positive effects of community of practice through the professional learning community structure was so strong that we incorporated the supports and resources to enhance and nurture this PLC mindset for our entire staff of educators and administrators. The goal was to create an environment where shared practice and collaboration were the cornerstone and the basis for the work we do to ensure that we improve the quality of teaching and learning for our students every day.

Before we delve deeper into the PLC conversation in this chapter, I want to examine the relationship between PLCs and CoPs a bit. As Blankenship and Ruona (2007) discuss

in their paper Professional Learning Communities and Communities of Practice: A
Comparison of Models, Literature Review:

it is clear that the two concepts have been conceived in a variety of ways, which may account for the inability of school leaders to define and operationalize these concepts. Not only are the two concepts distinctly different, but also the models within each concept vary in terms of membership, leadership, and knowledge sharing. Although the PLC models address team or group learning that is focused on student needs and increasing student achievement, the models seem to place greater emphasis on the organizational level in terms of building a culture of collaboration that would lead to school improvement. While the CoP models address the need for alignment of the CoPs to the organization strategy, they are more focused on improvement of practice. Finally, PLC's in general seem to emphasize the role of the leader external of the community while the CoP literature seems to downplay that role in favor of a more "grassroots" leadership from within the community (p.7).

On our campus, both CoPs and PLCs existed during the scope of this study and beyond. A large focus of this study was providing the systemic supports needed to nurture a PLC culture on campus that would ultimately drive improvement in student academic performance. Furthermore, the hope was that these systemic supports and shifting practices towards PLC would subliminally support the practices of CoPs to work for the benefit of our students.

Professional Learning Community

The most promising strategy for substantive school improvement is developing the capacity of school personnel to function as a professional learning community (Eaker

et al., 2002). A PLC is an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve (DuFour et al., 2016). The PLC conceptual framework can be grouped into three major themes that are evident in the policies, programs, and practices of the school. The themes are: (1) a solid foundation consisting of collaboratively developed and widely shared mission, vision, values, and goals, (2) collaborative teams that work interdependently to achieve common goals, and (3) a focus on results as evidenced by a commitment to continuous improvement.

DuFour et al. (2016) articulate three big ideas that drive the work of the PLC process. The three big ideas are consistent with the three major themes presented through the PLC conceptual framework. The three big ideas as presented by DuFour are: (1) a focus on learning, (2) a collaborative culture and collective responsibility, and (3) a results orientation. It is these three big ideas that guide the work and efforts of the intervention of this research study. The first of the big ideas is based on the premise that the fundamental purpose of the school is to ensure that all students learn at high levels (DuFour et al., 2016). It is crucial that the principal and other school leaders nurture a context wherein continuous learning is the modus operandi for staff and students and provides a broad range of structures and resources to support the staff in learning their new practices (Hord and Sommers, 2008). Whereas many schools operate as if their primary purpose is to ensure that students are taught or are merely provided with an opportunity to learn, PLCs are dedicated to the idea that their organization exists to ensure that all students acquire the essential knowledge, skills, and dispositions of each unit, course, and grade level (DuFour et al., 2014).

Schools that function as professional learning communities are always characterized by a collaborative culture (Eaker et al., 2002). The second big idea driving the PLC process is that in order to ensure all students learn at high levels, educators must work collaboratively and take collective responsibility for the success of each student (DuFour et al., 2014). The powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice. Professional learning communities judge their effectiveness on the basis of their results. Thus, teachers in a PLC move beyond the pious, affirmation, "We believe all students can learn" found in the mission statements of schools around the world (Eaker et. al., 2002). The third big idea that drives the work of PLCs is results orientation through evidence of student learning (DuFour et al., 2014). The focus on results forces educators to go a little deeper and through the analysis of the evidence of learning, educators can ensure that all students are actually learning.

Previous Research Cycles & Research Implications

Throughout my doctoral studies, I have engaged in various action research cycles that have helped shape my current research study. These cycles have allowed me to test some of my hypotheses, engage with the environment in which this study will be taking place, and have led to growth on my part. All of these experiences led me to my current path, armed with the learning and knowledge I have acquired from the previous cycles.

Cycle 0. Cycle 0, as my first cycle, showed my naiveté in approaching a larger problem with a small-scale solution that would not have a significant impact overall. My plan was to impact English learners' achievement by supporting their teachers and introducing adaptive software to their daily learning environment in the classroom. The

focus of this study was mapping and implementing a design to incorporate language acquisition adaptive software into a blended model of teaching and learning to address the individual needs of newcomer students with a focus on student-centered practices. This was my solution to help with the vast discrepancy in literacy skills in this group of students, which has long been an issue.

Throughout this cycle, I was impressed by the success that occurred when the few teachers who were part of this study started collaborating on their own to problem solve and improve their practice. This became indelible in my mind and led me to focus on professional learning communities in my current research study. I was able to see firsthand, how effective and important fostering a collaborative environment could be, and this stayed in the back of my mind throughout my studies.

In addition, the clear need for a community of shared practice and the need for instructional support crystallized during this cycle. The teachers were very receptive and benefited greatly from my presence as an instructional leader during this time. I acted as an instructional coach providing support, ideas, knowledge and engaging them in professional discourse with a focus on improving their practice and ultimately student achievement. This also stayed with me and is evident in the current study, as is evidenced by the addition of campus based instructional support for English learner students. All of the major lessons from this study were incorporated to a larger scale in my current study. I took all of these lessons and have added them in the scope necessary to seek to improve the educational experiences we provide to all of our students campus wide and not just a small pocket of a special populations as occurred in this study.

Cycle 1. After Cycle 0, I was hopeful because of the success that those endeavors had. In Cycle 1, my pursuit was to scale the successes of Cycle 0 to more classrooms in more schools. During this time, I was in a role within my school district in which I served as instructional support for all secondary campuses with a focus on student performance of EL students within secondary campuses. I moved forward with the scaled intervention in Cycle 1 but was met with apathy and resistance. All of this ultimately led me to understand that in order for change to truly occur on a campus, campus leadership teams needed to buy into the plan completely and partake in implementation of any intervention. During Cycle 1, I was looking to replicate and scale my work of Cycle 0 that took place within three classrooms with a focus on developing district-wide communities of practice and bringing in the adaptive software to all EL classrooms. In my mind, this would solve our problems and lead to greater student success in an efficient and concrete way.

Cycle 1 was outwardly a failure in terms of immediate results but led to the heart and focus of this study. As I tried to scale this work to all campuses in the district, I was met with resistance from campus leaders and with logistical and system blockades that impeded my efforts from moving forward. It became evident early on that a district-wide community of practice was not achievable due to logistical issues or campus support. Teachers did not have time to meet and create community due to a lack of vision and systemic structures by all stakeholders involved. Each campus had their own priorities and needs and there was no alignment between them that put ELs on that priority list. That ended my ability to establish district-wide communities of practice.

However, I was still clear that building learning communities would be a necessary piece for us to truly impact student learning. I learned that structural change of time allocations would be needed so that teachers would be given the time and access to have and engage in these rich conversations. This is present in my current study by focusing the professional learning communities at the campus level and reiterated by the presence of targeted instructional support and professional development at my campus during the duration of this intervention. I learned to change my scope and focus to a learning community within a campus, with an added layer of targeted implementation of teacher and student supports.

The other major breakthrough during this cycle came to be after my project was met with resistance and valid questions from campus leaders. They argued that we did not have a process nor proof that all of these changes we were proposing would be beneficial to their campus, staff, or students. They questioned the need, the process we were proposing, and the results. In trying to validate my work and answer their questions, I came across design thinking and the need for it in educational settings. I could see how design thinking would engage the end user to help solve their own problems and have buy-in. This would also help me look at this problem through the lens of principal and campus administration, which I need in order to create a plan that would move forward.

I started researching how to create system changes and found rich resources coming from industries, especially disruptive innovations in the technology sector. This in turn led me to Stanford University's model of design thinking in education, which is taking the process that has been so successful in other industries in making disruptive change and bringing it to the educational sector. From this point forward, design thinking

became an essential piece of the core of my work. Approaching complex problems with a human-centered approach was the starting point for all of my work thereafter. The change that needed to happen was in the end user. We need to take their perspectives, that they had constructed, and realigning them to see a new reality where they were empowered and supported to create better learning experiences for their students.

I started collecting data from multiple sources and was able to present this to campus leadership. Looking back, these were the first steps in my current study and have led me to formulate a complete plan and process that was endorsed by all stakeholders including the Texas Education Agency. This learning process set me on the path to a clear vision and implementation plan of goals with metrics and a clear process that could potentially impact and change the learning and performance of our students.

Cycle 2. During Cycle 2, still operating from a district level, I shifted my focus from the problem of practice to try to address the underlying apathy from campus leaders. During Cycle 1 it had become clear that ELs were not their priority over other campus initiatives. Without campus leader support, any kind of structural or system change would not succeed as evident in Cycle 1's failure. I started with the idea that their apathy was not without merit and developed a research study asking what their perceptions were of ELs and of the work done by the Bilingual/ESL department.

Many tools and instruments were used including interviews and surveys to receive their thoughts and feedback on this department. It became evident that they did not perceive that the ESL/Bilingual Department was effective because of the lack of staff and resources available to EL teachers, and the disconnectedness in communication, professional development, collaboration and engagement between central office staff and

teachers. Therefore, we were not successful in effecting change or having any impact in improving classroom practices. This breakdown was negatively impacting student experiences and achievement. Their perceptions led me to create a framework for the ESL/Bilingual department and all of our operations. We took their feedback and started making small changes. The important part of this cycle was that I had captured campus leaders' voices and in the process had obtained their support, a crucial element that had been missing. However, this proposal came with a human capital investment of three million dollars yearly, which would add at least one EL instructional support specialist on every campus in our school district. Although this proposal was endorsed by senior staff members of my school district, it was ultimately not approved by our school board due to the fiscal situation of our school district at that time.

Cycle 3. Through the learning of the first three cycles of research, it became apparent to me that positive change and improvement of student learning and academic performance is complex. Although change can be influenced from a macro level, the truth is that the power of more immediate change lies on a level closer to the students, on the day-to-day systems and processes delivered on a school campus by the learning experiences students have in their classrooms. This newfound understanding through my doctoral coursework motivated me to relinquish my role on a school district level and move my efforts on an individual campus, my middle school campus, which at that point in time was underperforming and failing according to the state standards. Cycle 3 of my research and the intervention of this study is a result of a reflective and retrospective journey by our campus leadership team with a clear end goal in mind; to improve the

quality of teaching and learning in classrooms which in turn would improve student academic performance.

The culminating design for our journey, which became our campus targeted improvement plan, consisted of three systemic foci and accompanying actions. In order to better serve and meet the needs of our students and work towards better addressing our campus's strategic priorities of increasing levels of academic achievement by state standards and nurturing a professional learning community culture, the foci of the TIP were promoting to (a) build teachers' capacity in the areas of content, instruction, and assessment, (b) meet the diverse academic needs of our students, and (c) meet the diverse behavioral needs of our students, by taking the following actions:

- Design a Response to Intervention system that clearly outlined the processes for three tiers of intervention.
- Provide professional development for teachers on quality instruction with emphasis on critical learning standards, instructional strategies to meet diverse learners, and formative assessment.
- Develop and implement processes that exemplify best practices in behavioral support and management for students, including protocols and navigating a behavior management system.

The results of these actions are analyzed in the later chapters of this study through the overarching research questions as identified in chapter 1.

Summary

In conclusion, my action research design was influenced both by my previous action research and published scholarship. Both of these elements, the theoretical and my

research cycles, provided the necessary information and framework from which this study was built. I aimed to achieve improved learning environments for our middle school students by implementing an innovative approach to learning communities through a targeted improvement plan based on social constructionism that left a footprint on practice on my campus. This along with the diligent efforts by our entire staff of educators and leadership support potentially created a vastly superior learning experience for our middle school students, including our EL students, in our classrooms that could lead to our students' academic success in our school system and beyond. The methods for this study are presented in the next chapter and the results and finding of this intervention have been explored in Chapter 4.

CHAPTER 3

METHODS

In order to execute this research study, the setting, participants, and data collection instruments will be carefully structured and developed. In this chapter, the methodology that supports these aspects of the study will be discussed. In addition, the role of the researcher in the various groups that are the cornerstones of this study will be explored.

Setting

The setting for this study is Spring Woods Middle School in Spring Branch Independent School District, a school district in West Houston that is best described as a suburban area of town that has rapidly grown to become urbanized. Spring Branch Independent School District (ISD) is a 44 campus school district rich in diversity with a student population exceeding 35,000. The ethnic breakdown of the student population includes 6.5% African American, 56.6% Hispanic, 30.3% Caucasian, and 6.4% Asian. Of the entire student population, 57.7% are economically disadvantaged across the 44 campuses. Within the school district, there are both very affluent neighborhoods and very impoverished areas. Spring Woods Middle School, the local context of this study, is composed of 950 total students, with 87 % of our students classified as economically disadvantaged. Our student body consists of 89% percent Hispanic students, 6% percent African American students, 3% percent white students, and 2% percent of another racial background.

It is important to understand where the story of this research study began, which was at the culmination of the 2017-2018 academic school year, specifically when the

publishing of the Texas Academic and Performance Report. The TAPR pulls together a wide range of information on the performance of students in each school and district in Texas every year. Performance is shown disaggregated by student groups, including ethnicity and socioeconomic status. The reports also provide extensive information on school and district staff, programs, and student demographics (Texas Education Agency, 2019).

For this study, I focused on assessment results in the subjects of Reading and Math, as these two subjects are the only two subjects assessed yearly in the middle school grades 6th through 8th. Science and Social studies are only assessed by the state at the end of 8th grade. A student taking any state assessment can be categorized as one of the following four categories: 1) Student did not approach grade level of content assessed; 2) Student *approaches* grade level of content assessed; 3) Student *met* grade level of content assessed; 4) Student *masters* grade level of content assessed. The lingo in our schools in Texas when educators are quickly referring to a student's performance level during a teacher planning meeting is on whether a student is at approaches, meets, or masters. Therefore, the objective is to move every individual student along the continuum year by year through their educational journey with a hope of reaching mastery in different content areas.

In regards to state accountability for schools, the campus goal is to have as many students as possible fall into the categories of meets and masters and fewer students fall into the approaches and did not approach categories. When the results show that a campus is not having enough students approach or meet grade level, then the campus is

labeled Improvement Required as opposed to the desired label of Met Standard. As for the 2017-2018 TAPR, my campus was designated IR, however due to a severe tropical storm named Harvey that academic year the rating was an unofficial rating. If this would have been an official rating, then this would have been two consecutive years that Spring Woods Middle School would not have Met Standard. These consecutive years of a failing status gives TEA the option to start putting harsher measures in place that can lead to an eventual takeover of the campus by the state.

Participants

The participants of this research study were the teaching faculty, a librarian, and the campus leadership team of Spring Woods Middle School. The campus leadership team consists of administrative and instructional support staff. Student scores were analyzed in this research study, however students were not direct participants in the study. The teaching faculty consisted of 62 teachers. The campus leadership team consisted of thirteen members, one head principal, three assistant principals, one dean of instruction, three counselors, four instructional coaches, and one behavioral specialist.

The new head principal of our campus was assigned a mentor in the summer of 2018, Patricia Thomas, who was a retired principal of Spring Branch ISD. The role of the mentor was to help the new principal navigate the processes of the school system, support in planning for the new year, and to support in executing requirements as needed for an IR school. The official head principal of our campus had to take medical leave starting in September of 2018 and did not return until the summer of 2019. Mrs. Thomas, the mentor, served as the Interim Principal for the majority of the time frame in which this study took place. She was also a participant in this study.

Intervention

As a school, our students were performing below their peers across the state and the regional Houston area in regards to state standards and assessments. Furthermore, our EL students, which is a vast majority of our student population, were performing below their peers across the state and the regional Houston area. Our school campus goal was to provide high quality learning opportunities for our students, while meeting the individual needs of our students, and consequently improving student achievement on state assessments, which could remove our school from the lists of schools that are not performing satisfactorily according to the Texas Education Agency.

In order to better serve the needs of our students and address our campus goal to exit an improvement-required status, priorities were identified and addressed through the three stages of the design thinking process. As discussed in chapter 2, the three stages of the design thinking process we executed were inspiration, ideation, and implementation. During the first stage of inspiration, our team had one focus. We wanted to better understand why our academic performance was not up to par and articulate our campus priorities. Our leadership team was very inquisitive and open minded in the journey through the first stage. We looked at performance data from a plethora of perspectives, such as contents, teachers, special populations, and many other data perspectives. We did a root cause analysis. We did a strengths, weaknesses, opportunities and threats (SWOT) analysis. We did focus groups with teachers and parents. Through these activities of the first stage of inspiration, our leadership team collaborated for many hours of analyzing data and gathering input from stakeholders. The priorities that surfaced through the first stage of the design thinking process became the campus priority needs of the Targeted

Improvement Plan, which were to provide support in (a) building teachers' capacity in the areas of content, instruction, and assessment and (b) meeting the diverse needs of our students, both behavioral and academic. These needs were undergirded by the understanding of the composition of our student population, a majority of our students are classified as economically disadvantaged and EL's.

During the second stage of the design thinking process, as a campus leadership team, we had candid discourse with teacher leaders and amongst our team to ideate how to best address our campus priority needs and ultimately draft the TIP proposal, which was endorsed by TEA in the fall of 2018. The improvement plan included taking the following actions:

- Design and implement a Response to Intervention system that clearly outlined the processes for three tiers of intervention.
- Provide professional development for teachers on quality instruction with emphasis on critical learning standards, instructional strategies to meet diverse learners, and formative assessment.
- Develop and implement processes that exemplify best practices in behavioral support and management for students, including protocols and navigating a behavior management system

More concretely, these three actions explicitly stated in the TIP, became the groundwork initiatives to begin nurturing a Professional Learning Community culture on our campus.

For the third and final stage of the design thinking process, there were three major and sequential intervention phases that were identified in the TIP to ensure adequate

implementation of the intervention throughout the academic school year. The three phases overlapped within the timeline of implementation. The phases were identified as Short Term, Intermediate, and Long Term. The Short Term phase was geared towards providing training and skills acquisition. The Intermediate phase was designed to be the implementation phase. The focus during the Long Term phase was more on analyzing results of the previous two phases. The first two phases identified a set of activities that needed to be executed, along with a timeline for execution of the intervention activities within the individual phases. The final phase, Long Term, is the final phase of a cyclical process that could inform the beginning of another cycle of intervention implementations over longer periods beyond the scope of this study.

Intervention Activities & Timeline

Our campus leadership team adopted the definition of a PLC from DuFour et. al. in their book *Learning by Doing* as an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve (DuFour et. al., 2016). Nurturing this PLC process and the collaborative spirit to achieve better outcomes for our students was the ultimate goal of our school and the foundation for this research study. Along with intervention activities, there were also time structures for PLC work that were built into the master schedule to enhance the evolvement of a PLC process. The intervention activities were designed to be experienced by our entire staff within weekly professional development sessions that were held every Wednesday after all students went home for the day. Our students had an early dismissal day every Wednesday to allocate enough time for professional learning for our campus educators within their normal contract

hours. Furthermore, on another day other than Wednesdays, our content teachers had PLC time one class period per week for collaborative discourse on individual student performance and academic design and assessment. These two weekly experiences for teachers of professional development and weekly PLC time worked in tandem. These structured times for joint learning and discourse were designed to support a learning community culture both as a whole campus and within content area departments.

The first phase, the Short Term, set the initial activities for our school's three areas of focus; English Language Arts, Mathematics, and Response to Intervention. In the Short Term phase, the intervention activities and timelines are outlined below in Table 1. A label identifying the area of focus preceded each activity.

Table 1

TIP Short Term Phase

Intervention Activity	Timeline
English Language Arts (ELA)-Train/review with 6-8 ELA teachers in the processes of ELA Foundational Elements, i.e., running records, data binders.	August - December 2018
ELA- Introduce/Investigate the concept of small group instruction (via articles and excerpts, materials) in order to maximize each ELA student's achievement.	August 2018-February 2019
ELA- Review the components of the Unit Planner, highlighting unpacking the ELA TEKS and rigor of instruction/assessment.	August 2018-November 2018

Math- Train teachers in the concept of small group instruction in order to maximize each student's achievement, with teachers receiving articles and materials.	August 2018 – March 2019
Math-Train/review with all math teachers in the importance and use of daily number routines in order to improve numeracy.	Sept 2018 – October 2018
Math- Train/Review with all 6-8 math teachers in the concept of concrete/representational/ abstract (CRA) with the use of manipulatives/models.	Sept 2018 – December 2018
Math- Review the components of unpacking the TEKS and rigor of instruction/assessment document.	August 2018 – November 2018
Response to Intervention (RTI) - Design a RTI system that clearly outlines the processes for three tiers of intervention.	August 2018
RTI- Train teachers and staff on RTI model and processes that exemplify best practices as well as the current Behavior Management System/protocol.	August - December 2018
RTI- Train teachers and staff on Quality Tier 1 Instruction, with emphasis on the following supporting documents: visual, cheat sheet, common vocabulary.	August 2018 - May 2019

The intervention activities in Tables 1 and 2 were designed to provide opportunities for teachers to collaborate in collective inquiry to sharpen their teaching practices and solidify the methods of teaching the essential concepts of units of study. Furthermore, the weekly allocation of PLC time supported teachers to be able to look at student formative data to differentiate teaching and learning for individual students. This

collaborative time was essential to allow teachers time to incorporate themselves into elements of action research in their own teaching practice. For example the fourth activity in Table 1, outlines the concept of small group instruction to maximize student achievement. In this example, teachers gathered the student performance data on essential math concepts through a data tracker. Then, during collaborative PLC time weekly, teachers were able to create small groups of students within each of their class periods to reteach and reassess for learning gaps. Reteaching and reassessing did not necessarily mean that teachers worked in silos and was not the exclusive responsibility of the teacher of record. Teachers worked collaboratively to ensure that all students received the instruction needed in small groups to connect concepts and clear any learning gaps. On small group instructional days, teachers could be instructing students from other math teachers and vice versa. These methods of collaboration really promoted to shift our teacher ideology of MY students to a more holistic ideology of OUR students.

Once the initial activities in the Short Term phase were executed by the campus leadership team and all staff had participated, then our efforts moved towards the next phase, the Intermediate phase. It is important to note that most of the activities from the Short Term phase were continuous, as they were constantly being revisited at department and planning meetings. The Intermediate intervention activities were merely an effort to implement and monitor fidelity of the skills and initiatives acquired during the first phase of the intervention. The Intermediate phase intervention activities are outlined below in Table 2.

Table 2

TIP Intermediate Phase

Intervention Activity	Timeline	
ELA- Assess all ELA students as to their current reading level utilizing running records.	August 2018- May 2019	
ELA- Implement and monitor small group instruction in the ELA classroom.	October 2018- April 2019	
ELA- Implement and monitor the components of the Unit Planner	September 2018-May 2019	
Math- Implement, support, and monitor the instructional process using CRA.	October 2018- March 2019	
Math- Implement and monitor small group instruction in the mathematics classroom.	September 2018 – April 2019	
Math- Continue to implement, support, and monitor the use of daily number routines via lesson plans.	October 2018 – May 2019	
Math- Monitor the components of the unpacking the TEKS/rigor document via PLC and lesson plans.	October 2018 – May 2019	
RTI- Implement and monitor the academic multi-tiered system of support via the creation of an RtI framework and revision/update of STAAR-based interventions.	October 2018 – May 2019	

The final phase of this intervention, the Long-Term phase, is directly tied to chapter four of this research study. The Long Term phase speaks directly to data analysis and determining the effectiveness of the intervention activities executed during the Short Term and Intermediate phases, specifically in regards to the three areas of focus of ELA, Math, and RTI. The results from the data analysis of this study have informed the intervention activities for academic year 2019-2020 for our middle school.

Role of Researcher

This intervention had multiple phases and intervention activities. While my role in each of these components shifted slightly, overall in the study I served in two main roles, as a facilitator and as a participant. In my first role, as facilitator, I coordinated intervention activity sessions as outlined above in the Short Term and Intermediate phases of the intervention. As a facilitator, I also served as a presenter in the large cohort of whole staff and in smaller departmental groups of teachers. Furthermore as facilitator, I drafted sections of the Targeted Improvement Plan that served as a blueprint for the entire intervention during the academic school year. Finally, as facilitator, I supported the flow of communication and collaboration through the facilitation of discourse within semi structured learning experiences for our teaching faculty.

In my second role in this study, as a participant, I went through the phases of this intervention just like all my colleagues in my school. I engaged in the teaching and learning experiences and built my own capacity to better understand and construct

meaning through the intentional sessions and activities designed to enhance a professional learning community culture. I do understand that my participation created positionality implications, given my role as a member of the campus leadership team. Furthermore, given my vast engagement in the intervention and context through full participation and facilitation, it is important to understand that as a researcher I did not have an objective perspective in this study. My perspective was subject to feelings, emotions, and opinions that potentially influenced my explanation of the findings. These potential subjectivities and potential biases were explored and mediated throughout the course of this study. As a researcher, the first thing I did to identify and mediate such biases was to determine which datasets might be particularly open to my own interpretation. Much of the data gathered in this study was quantitative, however there was a set of interviews that were transcribed and coded. To mediate personal bias, I ensured that as I analyzed the transcriptions, I really focused on the data when identifying meaning units and codes that reflected the essence of the response provided by interviewees. This process has been elaborated further in the data analysis portion, which is presented later in this chapter. The research questions for this study are:

- RQ1: How does Spring Woods Middle School's teaching faculty develop as a Professional Learning Community during the implementation of the Targeted Improvement Plan?
- RQ2: How does the implementation of the Targeted Improvement Plan affect student achievement at Spring Woods Middle School?

The research questions guiding this study focus on enhancing practice through the evolvement of a professional learning community culture as the designed improvement

plan was implemented. These two guiding questions reinforced the need for collection and analysis of both quantitative and qualitative data. The research plan for this study used mixed-methodology action research with concurrent methods of analysis.

Methodology and Data Sources

The entire intervention for this study revolves around a series of workshops and intervention activities executed in three implementation phases that were experienced by campus staff, both in large and small group settings. The research design was triangulation mixed-methods, in which both quantitative and qualitative data were collected at about the same time and were given equal emphasis (Mertler, 2014). Table 3, below, presents the data collected in this study along with an approximate timeline of collection.

Table 3

Data Collection Timeline

Data Collected	Timeline
Quantitative Data- Pre Survey Questionnaire	August 2018
Qualitative Data- Interview Recordings	April 2019
Quantitative Data- Post Survey Questionnaire	May 2019
Quantitative Data- Assessment Results through Texas Academic Performance Reports (TAPR)	August 2019

The primary source of qualitative data for this study was observations by the researcher and transcriptions of interviews with educators from my school. Quantitative data for this study consists of a Likert-scaled survey that was administered as a pre-

intervention survey for educators at the beginning of the academic school year and as a post intervention survey that was administered at the end of the academic school year. The survey was designed to measure three components of a culture that nurtures professional learning communities.

Furthermore, quantitative data from the Texas Academic Performance Report was analyzed to better inform this research study as well. In regards to data provided within the school, data collection commenced with the first onboarding sessions that took place at the beginning of the school year and concluded at the end of the academic school year. The TAPR report for the academic year of this intervention was populated in August of 2019 and is the last dataset that was compiled and analyzed for this study. The purpose of this research study was to better understand the development of PLC culture within our school and to analyze if this intervention had any positive or negative impact on student achievement. Action research greatly suited this type of study, due to the nature of an effort to better understand the evolvement or lack thereof of the PLC culture within or school faculty. The intervention activities delivered in the three phases of this intervention served as checkpoints to capture the pulse of the developing community and to analyze the relationship between the intervention and student academic performance.

Instruments

Surveys. A Likert-scaled survey questionnaire was administered in the initial and final phase of the intervention as a pre and post intervention survey. The questionnaire's focus was on measuring the main elements of a developing professional learning community. I developed the questionnaire through the analysis of multiple questionnaires focused on PLCs. The most influential work on the development of my survey was the

work of Olivier and Hipp (2010) in their chapter titled Assessing and Analyzing Schools as Professional Learning Communities, within the book *Demystifying Professional* Learning Communities: School Leadership at Its Best. In this chapter Oliver and Hipp present multiple constructs with belief statements to be used to capture the perceptions of multiple stakeholders within a school. The survey questionnaires presented in this chapter are on a 4-point Likert-scale. Due to the inclusion of new campus staff in the pre survey, I opted to design a 5-point Likert-scaled questionnaire to include an option of "I don't know" which was treated as a missing value and had no weight attributed to results. After review of current literature and multiple instruments focused on the measurement of PLC elements, I decided to consolidate the findings to three constructs for this survey instrument. The three constructs for the survey were shared and supportive learning community, academic design, and teaching and learning beliefs. Each construct consisted of three questions for a total of nine questions. Although the questions in my survey instrument were not directly adopted from other survey instruments, the questions I created for the survey instrument were directly influenced by other research studies and questionnaires. See Appendix A for a copy of the questionnaire. In Chapter 4, I will discuss reliability and validity through the incorporation of the Cronbach's Alpha coefficient in the findings for each survey construct.

Texas Academic Performance Reports. TAPR reports are easily accessible to the public for any public school in the state of Texas through the Texas Education Agency public website. These reports were gathered from previous years for our campus, Spring Woods Middle School. The reported data from previous years was compared to the data of the academic year in which the intervention took place. The data analyzed was

academic achievement data in different academic content areas as reported by the Texas Education Agency.

Interviews. The intervention consisted of three phases, each phase consisting of multiple intervention activities. The interviewees who were selected as a sample for this study were purposefully selected to potentially capture the perspectives of the large array of participants across different content areas, from different grade levels, and with different roles within the school. These interviews were recorded in digital format using a mobile device and transcribed using a word processing software. Interview sampling for this study was purposeful. Interview participants had features or characteristics which enabled detailed exploration and understanding of the central themes (Ritchie, Lewis, & Elam, 2003, p. 78). There were seven participants from the entire cohort of participants mentioned above who were selected to be interviewed. The interview participants selected were four teachers, one sixth-grade science teacher, two seventh-grade mathematics teachers, and one eighth-grade mathematics teacher. In addition to the teachers, the librarian, interim principal, and instructional coach of English Language Arts were also selected for interviews.

The interviews were conducted in April 2019, near the end of the academic school year and towards the end of the timeframe of the scope of this study. I scheduled a slot of approximately thirty minutes with interviewees and followed a semi-structured format. The interview followed the sequence of an interview guide consisting of nine guiding questions that prompted interviewees to provide their beliefs and thoughts in regard to the systems, practices, and structures that were put in place throughout the scope of the study. The questions intended to capture the beliefs of staff on the development, or lack

thereof, of our campus as a professional learning community. The interview guide used for these questions can be located towards the end of this study in Appendix B.

Alignment to Research Questions

RQ1: How does Spring Woods Middle School (SWMS)'s faculty develop as a Professional Learning Community (PLC) during the implementation of the Targeted Improvement Plan (TIP)?

As stated previously, a culture of PLC is one in which the campus educators partake in an ongoing process of working collaboratively in recurring cycles of collective inquiry and action research to achieve better results for their students (DuFour et al., 2014). In the previous chapter, I outlined the three big ideas that drive the work of professional learning communities: focus on learning, collaborative culture and collective responsibility, and a results orientation. Each of these three components were explored to better understand the development of SWMS as a professional learning community as the implementation of the intervention took place during the 2018-2019 academic year. The identity of a professional learning community stems from a shared commitment to a focus on learning, and in the case of this study the context was our campus that has a vast majority of El students and students previously labeled as EL. Therefore, the focus on learning included the focus of quality teaching and learning for our English Learner students.

The joint enterprise between the faculty at SWMS was the collaborative culture and collective responsibility of all members to improve shared practice through the efforts of a professional learning community. Finally, the focus and engagement by the community to improve the results of all methods and practices, collectively and

collaboratively, is how we describe the component of being results oriented. For this research question, through the gathering of the data in all three phases of the intervention, I investigated how the SWMS faculty developed in relation to all three components of the work of a PLC: focus on learning, collaborative culture and collective responsibility, and being results oriented.

RQ2: Does the implementation of the Targeted Improvement Plan increase or decrease student achievement at Spring Woods Middle School?

This research question addressed the potential relationship between the implementation of the intervention as outlined in the designed targeted improvement plan and the student achievement attained. The student achievement data was compared to the student achievement data of previous years, both holistically and in subsets. Besides analyzing the performance data as an entire campus on all tests and all students, specific target areas of student data were also analyzed. The target areas of focus were the English Language Arts and Mathematics standardized assessments, as each of the contents had specific intervention activities designed to support our educators in increasing the performance of our students in regards to knowledge and skills in these two areas. Furthermore, another target area of focus was performance data for English language learners and by racial groups, as specific pedagogical strategies were disseminated and demonstrated through intervention activities to support these subgroups to have better access to the curriculum and concepts.

Data Analysis Process

The mixed-method data collection in this study provided both quantitative and qualitative outputs of data that were investigated separately and then triangulated to better

understand the results. Quantitative data from the survey instrument for faculty was analyzed by using descriptive statistics for both the pre and post administration of the survey instrument. Qualitative data from the interviews with educator participants were merged into a word processing document and analyzed to better understand the development and the findings of the study data.

The first research question was analyzed through mixed methods incorporating both quantitative survey data and qualitative interview data. The survey instrument had three constructs embedded; each of these constructs was analyzed independently using descriptive statistics both pre and post intervention. These results were analyzed separately from the qualitative interview data and eventually both quantitative survey data and qualitative interview data were triangulated to better support the findings of the study.

The method of analyzing the interview data was informed by grounded theory, through its systematic, yet flexible guidelines for analyzing qualitative data to construct theories from the data itself (Charmaz, 2014). Following this methodology, the compiled datasets, consisting of each interview transcription, were first segmented, line-by-line, into initial meaning units. Next, I used focused coding to organize the data around key themes or categories. Focused coding is a significant step towards organizing and interpreting your data (Charmaz, 2014).

Once focused codes were attributed to the data, I applied an additional level of coding to conceptualize how the focused codes might relate to each other and to better synthesize my findings around key ideas (Charmaz, 2014). This process of coding was derived from theoretical coding. In my study, I used theoretical coding to construct major

themes from the focused codes. In order to relate focused codes to each other, I used multiple highlight colors in the document to visually create relationships of focused codes to each other. Once the colored codes were grouped together, I was able to see themes or patterns across codes. This process of theme identification through focused codes for my study is presented in Appendix C.

Once the major themes were attributed to the groups of focused codes, I constructed statements to capture the common meaning across the focused codes. These statements I named the theme components. The theme components undergird each of their individual overarching major theme. Finally, the major themes were also analyzed to understand any relationships among them to better understand the results from interview data.

For the second research question, the student achievement data was compared in relationship to the student achievement data of previous years, both holistically and in subsets using the data provided by the Texas Academic Performance Reports over several academic years. Besides analyzing the student data based on overall campus performance, the student data was also analyzed specifically for English Language Arts and Mathematics test results. The Targeted Improvement Plan, which served as a blueprint for this intervention, was designed so that each of the two content areas had specific intervention activities designed to support our educators in increasing the performance of our students in regards to knowledge and skills in these two subject areas. Furthermore, data were also analyzed for the English Learner special population, as specific pedagogical strategies were disseminated and demonstrated through intervention activities to support this subgroup to provide better access to the curriculum and concepts

and ultimately increase their comprehension, language acquisition, and academic performance.

These multiple data points provided a comprehensive look at this intervention, along with the implementation phases and the nestled intervention activities, in order to analyze the effectiveness of the reconceptualization of our campus and its professional learning operations. Two goals were in play within this research study. First, that the faculty of our campus could make strides to evolve towards a culture that embraces the mindsets of a professional learning community and, second, that through our targeted plan of strategic interventions our students could demonstrate academic growth within this new learning community realm. These efforts resonated inside the classroom, within our campus as a whole, and to a certain extent in the community at large so that we as an educational institution became better equipped so that we could better serve our purpose and educate each and every child.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

Introduction

This research study sought to better understand the dynamics and development of a professional learning community culture within Spring Woods Middle School through the implementation of a targeted improvement plan that focused on improving academic performance of our students. In the following three sections, this study will present the results of the mixed methods data collected in order to understand the impact of this intervention.

The first section includes the results from quantitative data collected from a pre and post survey done by SWMS staff that asked about their perceptions on professional learning communities. The second section includes the results of the qualitative data collected through individual interviews of SWMS staff participants in order to understand their perspective on the development of our campus professional learning community culture. The last section includes a discussion of the quantitative student academic performance results we received from the Texas Education Agency. In this chapter, I analyze the results of the mixed methods data collected to better answer the research questions that guided this study:

- How does Spring Woods Middle School's faculty develop as a Professional Learning Community (PLC) during the implementation of the Targeted Improvement Plan?
- 2. How does the implementation of the Targeted Improvement Plan affect student achievement at Spring Woods Middle School?

In this chapter, I present the findings of the study, which I have sequentially articulated according to the order of the research questions. The data analysis and findings of this research study were conclusive enough that I am able to make two affirmations based on the results obtained to correlate with each of the research questions. The affirmations are as follows:

- RQ1: The results of the concurrent mixed method of data analysis for this study
 affirms that as a result of this intervention, during the 2018-2019 academic school
 year, a culture aligned with professional learning communities was initiated and
 developed at Spring Woods Middle School.
- RQ2: Spring Woods Middle School, as stipulated in the campus's targeted improvement plan, did increase student academic achievement when compared to the previous two academic school years.

Research Question: Professional Learning Community Development

Both quantitative and qualitative date collection, through a concurrent mixed methods design, provided evidence to answer this research question. To better understand the development of a PLC, a pre and post survey was administered. The survey consisted of three constructs, which are the pillars of professional learning communities. The survey results are presented in the following section followed by analysis of the qualitative data. The qualitative data is a compilation of seven interview transcripts that were analyzed through several stages of coding to identify common topics to better construct meaning and illustrate findings.

The quantitative data set, that includes both pre and post survey data, consisted of responses from 54 participants for the pre survey and 57 participants for the post survey.

The survey participants were educators on my campus who opted to partake in the survey at the beginning and the end of the intervention of this study, which aligned to the 2018-2019 academic school year, respectively August 2018 and May 2019. Our entire campus educator faculty consisted of 62 educators across sixth through eighth grade levels. Both surveys were identical and were composed of nine statements that were measuring three survey constructs (see Appendix A for the full version of the questionnaire). The survey constructs were: Shared and Supportive Learning Community, Academic Design, and Teaching and Learning Beliefs. Each survey construct was measured by three statements to better understand the participant's perception of the construct. The participants were given five response choices and each choice had the following score: Strongly Agree "1" Agree "2" Disagree "3"Strongly Disagree "4", and I don't know "no value."

Survey Results

Results of the quantitative data collected from the educator participants are presented in the following three sections. The pre and post survey data were analyzed using SPSS and the results for each construct are outlined within the tables below. The first analyses reported in Tables 4 and 5 below are reliability analyses through Cronbach's Alpha for both pre and post surveys. Next, the pre and post survey results of each construct were explored individually through descriptive statistics in each of the following sections titled: Shared and Supportive Learning Community, Academic Design, and Teaching and Learning Beliefs. Finally, I conducted a paired samples t-test for each survey construct (see Table 9 below) to assess the shifts in perceptions by our campus staff during the pre-intervention phase as compared to the post intervention phase.

Cronbach's Alpha. The reliability analyses for the pre survey in Table 4 below presents a range of coefficients ranging from α =.660 to α =.713. The alpha coefficient was largest for all items combined at α =.713. The reliability analysis for the post survey in Table 5 below presents a range of coefficients ranging from α =765 to α =.942. The alpha coefficient for all items combined was α =.929. The Cronbach's alpha coefficient was higher in all constructs, including all items for the post survey compared to the pre survey. Overall, the coefficients indicated an acceptable level of internal consistency for all constructs as assessed by the survey instrument.

Table 4

Pre Survey- Cronbach's Alpha Reliability Analysis

Survey Instrument Construct	Items	Chronbach's Alpha (α) Coefficient
Shared and Supportive Learning Community	1,2,3	.660
Academic Design	4,5,6	.701
Teaching and Learning Beliefs	7,8,9	.685
All Items	1-9	.713

Table 5

Post Survey- Cronbach's Alpha Reliability Analysis

Survey Instrument Construct	Items	Chronbach's Alpha Coefficient
Shared and Supportive Learning Community	1,2,3	.765
Academic Design	4,5,6	.774
Teaching and Learning Beliefs	7,8,9	.942
All Items	1-9	.929

Shared and Supportive Learning Community. Table 6 presents the mean and standard deviation individually for each of the three indicators that provide quantitative measures within the Shared and Supportive Community construct of the survey.

Participants were asked to rate their feelings for each survey indicator on a continuum of a score of 1 for "Strongly Agree" to a score of 4 for "Strongly Disagree." The three survey indicators for the Shared and Supportive Community construct were as follows:

- Collegial relationships exist among staff members that reflect commitment to school improvement efforts.
- 2. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.
- Shared values support norms of behavior that guide decisions about teaching and learning.

Table 6
Shared and Supportive Community- Descriptive Statistics

Survey Indicator	Pre Mean	Pre SD	Post Mean	Post SD
Collegial Relationships	2.22	0.86	1.89	0.96
Shared Responsibility	2.48	0.79	1.82	0.71
Shared Values	2.19	0.78	1.61	0.73

The descriptive statistics of Table 6 outline the means and standard deviations of both the pre and post survey in regards to the indicators for the survey construct. In the Shared and Supportive Community construct, the lowest means for both pre (2.19) and post (1.61) survey indicators was Shared Values. As a reminder, lower numbers indicate more agreement that the attribute was true of the school community. The biggest

difference among indicators between pre and post mean was Shared Responsibility with a .66 difference in mean shifting towards the direction of "Strongly Agree." The standard deviation, which indicates how closely the responses are centered on the mean, was smallest in Shared Values (SD= .71) in the Post Survey. The largest array of responses according to the standard deviation was in the Collegial Relationships indicator (SD=.96). In the continuum of "Strongly Agree," with a score of 1, and "Strongly Disagree," with a score of 4, all means shifted towards "Strongly Agree."

Academic Design. Table 7 presents the mean and standard deviation individually for each of the three indicators that provide quantitative measures within the Academic Design construct of the survey. Participants were asked to rate their feelings for each survey indicator on a continuum of a score of 1 for "Strongly Agree" to a score of 4 for "Strongly Disagree." The three survey indicators for the Academic Design construct were as follows:

- 1. Staff use multiple sources of data to make decisions about teaching and learning.
- 2. Professional development focuses on teaching and learning.
- 3. The school schedule promotes collective learning and shared practice.

Table 7

Academic Design- Descriptive Statistics

Survey Indicator	Pre Mean	Pre SD	Post Mean	Post SD
Data Driven Instruction	1.93	0.64	1.56	0.66
Professional Development Focus	2.07	0.67	1.65	0.67
Collective Learning and Shared Practice	2.04	0.70	1.67	0.66

The descriptive statistics of Table 7 outline the means and standard deviations of both the pre and post survey in regards to the indicators for the survey construct. In the Academic Design construct, the lowest means for both pre (1.93) and post (1.56) survey indicators was Data Driven Instruction. The biggest difference among indicators between pre and post mean was Professional Development Focus with a .42 difference in mean shifting towards the direction of "Strongly Agree." The standard deviation, which indicates how closely the responses are centered on the mean, was smallest in Data Driven Instruction (SD= .64) in the Pre Survey. While the largest array of responses according to the standard deviation was in the Collective Learning and Shared Practice pre survey indicator (SD=.70). In the continuum of "Strongly Agree," with a score of 1, and "Strongly Disagree," with a score of 4, all means shifted towards "Strongly Agree."

Teaching and Learning Beliefs. Table 8 presents the mean and standard deviation individually for each of the three indicators that provide quantitative measures within the Teaching and Learning Beliefs construct of the survey. Participants were asked to rate their feelings for each survey indicator on a continuum of a score of 1 for "Strongly Agree" to a score of 4 for "Strongly Disagree." The three survey indicators for the Teaching and Learning Beliefs construct were as follows:

- 1. Core instruction should be effective enough to result in 80% of the students achieving grade-level educational standards.
- All students can achieve grade-level educational standards if they have sufficient support.
- The goal of assessment is to generate and measure effectiveness of instruction/intervention.

Table 8

Teaching and Learning Beliefs- Descriptive Statistics

Survey Indicator	Pre Mean	Pre SD	Post Mean	Post SD
Effective Core Instruction	1.91	0.81	1.60	0.70
Student Achievement	2.09	0.90	1.63	0.75
Assessment as Measure of Effectiveness	1.76	0.82	1.58	0.73

The descriptive statistics of Table 8 outline the means and standard deviations of both the pre and post survey in regards to the indicators for the survey construct. In the Teaching and Learning Beliefs construct, the lowest means for both pre (1.76) and post (1.58) survey indicators was Assessment as a Measure of Effectiveness. The biggest difference among indicators between pre and post mean was Student Achievement with a .46 difference in mean shifting towards the direction of "Strongly Agree." The standard deviation, which indicates how closely the responses are centered on the mean, was the smallest in the indicator of Effective Core Instruction (SD= .70) in the Post Survey. While the largest array of responses according to the standard deviation was in the Student Achievement pre survey indicator (SD=.90). In the continuum of "Strongly Agree," with a score of 1, and "Strongly Disagree," with a score of 4, all means shifted towards "Strongly Agree."

Paired Samples T-Test. A paired sample t-test was conducted to analyze the means of each construct by comparing pre and post survey results and determine possible significance. When analyzing data from a paired sample t-test, a significant *p* value suggests that the results obtained are not due to chance (Mertler, 2014). When a p value is

less than .05, then the difference is determined to be significant and the intervention may be causation for the change in results.

Table 9

Paired-Samples T-Test

Construct	Measure	n	Mean	Dev	Std Diff	Mean df	<i>t</i> -stat	<i>p</i> -value
Learning Community	Pre Survey	54	6.89	1.88	1.63	53	4.53	.000
	Post Survey	54	5.26	1.80	1,00			.000
Academic Design	Pre Survey	54	6.04	1.59	1.19	53	3.78	.000
Design	Post Survey	54	4.85	1.57	1.17	33	3.70	.000
T & L Beliefs	Pre Survey	54	5.76	1.98	1.02	53	2.45	.017
Delicis	Post Survey	54	4.74	1.98	1.02	33	2.43	.017

As depicted in Table 9, the p value for all three constructs of the survey were less than .05; therefore, the intervention may have been the influencer in change for the results of the survey data. Given the p values and the shift in means as present in the tables within this chapter, there was evidence to suggest that the change in staff survey results from pre to post survey were statistically significant across paired tests. Although the pre survey responses were fairly positive, the change in staff responses to the surveys was meaningful across the three survey constructs measured through the survey instrument.

Interview Results

To better answer the first research question on the development of a professional learning community within our middle school campus a second qualitative data set was collected to cross reference with the quantitative data from the pre and post survey results

outlined in the previous section. The interviewees for this study consisted of seven participants across the spectrum of our campus, the head interim principal, librarian, English Language Arts instructional coach, one sixth grade teacher, two seventh grade teachers, and one eighth grade teacher. The interviews were recorded using my mobile device with an integrated recorder application.

Data Analysis Process. All transcriptions of the seven interviews were merged into a word processing document. Following the methods of analysis as aligned through grounded theory, the document with all data was printed and focused coding was applied to the meaning units of interview data. The focused codes generated from the data were entered into a word processing document. Then, the focused codes were analyzed and clustered. I used multiple highlight colors in the document to visually relate focused codes to each other, I designated one color of highlight per cluster. Each of these clusters of focused codes were attributed an overarching code that related them together. This overarching theoretical code became the major theme for the cluster of focused codes. Finally, the cluster of focused codes were analyzed and compiled to develop statements that captured the focused codes as they relate to the theme. These statements are identified as theme components in this study. The major themes were mapped out in multiple mind maps to depict relationships to better address the research question and I ultimately determined that the best-suited mind map to capture essence of the data was the mind map depicted in Figure 1 presented later in this chapter.

Through the coding of the focused codes, I derived six major themes to better characterize the development of a professional learning community from the perspective of the participants. Each of these six themes consisted of five major theme components

that were a result of the cluster of focused codes. The six themes with each of the five theme components are depicted below in Table 10. In total, there were three formal layers of coding that took place with a culminating mind map (Figure 1) of major themes.

Table 10

Qualitative Interview Data: Themes and Theme Components

Major Theme	Theme Components
Commitment to Academic Growth	 Focus on student academic growth by every stakeholder. Individual content departmental learning communities focused on one common goal related to student academic growth.
	 Collectively worked together to ensure that every teaching and learning action was focused on student academic growth.
	4. Promoted a whole staff mindset that every student is capable of learning and growing academically.5. Commitment to diligently executing the cyclical work of
	teaching, assessing, re-teaching, and re-assessing.
Professional Learning	Teachers became leaders in their own professional learning communities.
Community Culture	2. Commitment to collaboration and flexibility from all campus stakeholders to work as one team.
	3. Developed a very candid climate within professional learning community meetings to share thoughts, practices, and resources.
	Increased opportunities for school connectedness for both faculty and students.
	5. Nurtured an environment where teachers and students learned to take ownership of their own learning through data analysis.
Intentional Professional	 Professional development focused on student priorities and pedagogical needs.
Development	2. Provided professional development aligned to campus demographics. SWMS focused on English Learner students.
	Found a balance between too much and too little professional development.
	4. Front loaded professional development that prioritized

	improving teaching practices at the beginning of the academic school year.5. Differentiated and provided multimodal learning experiences for teaching faculty.
Supportive Environment	 Nurtured a climate of collaboration within the school that created a sense of team or family. Provided continuous support to new teachers that were either in their first, second, or third year teaching. Created a safe and welcoming environment for students and teachers. Promoted a mindset that every person on campus is important and can make a difference. Developed a support system focused on teacher growth and non-punitive feedback.
Student Centered Practices	 Focused on student learning outcomes, such as products and artifacts. Teachers and departmental learning communities reflected on formative data that outlined student performance to better prepare and inform their teaching practices. Collectively worked together to ensure that every action was focused on students' best interests. Prioritized student progress and growth while not focusing on student grades. Implemented continuous cycle of teaching and learning through: providing instruction then checking for understanding, gathering data, then remediating or enriching the understanding.
Consistency (Structures, Expectations, Practice) leads to Outcomes	 Consistent protocol for professional learning community meetings and responsibilities. Consistent review of campus priorities, challenges, goals, and celebrations in whole faculty and departmental meeting or professional development sessions. Consistently provided quality learning interactions for teachers and students focused on student centered practices. Consistent communication of all school information, expectations, professional development opportunities, and professional practice feedback. Consistent systems and processes for all teaching, learning, and behavior practices related to students and staff.

Review of Findings: Professional Learning Community Development

As discussed in the previous chapters, DuFour posits three big ideas as the anchors of PLC development. The ideas are: (1) a focus on learning, (2) a collaborative culture and collective responsibility, and (3) a results orientation. Therefore, the key to better understand the development or lack thereof a professional learning community culture within my middle school, is to explore the results through the lens of each of the three big ideas.

Big Idea 1: Focus on Learning. The survey construct that honed in on this big idea was the Academic Design construct. The first item on the survey spoke to the use of student data to drive classroom instruction. The second item of this questionnaire construct outlined the use of professional development throughout the academic year and if it aligned directly to a focus on learning. The third item spoke to the allocation of time to share practices with the learning community to focus on learning. The mean responses from Table 7 depict that educator beliefs changed towards a Strongly Agree on the practices being in place for Spring Woods Middle School from the beginning the year to the end of the school year. It is important to acknowledge that although the change was significant, the initial survey responses were relatively positive. Furthermore, with a p value for this construct of the survey was 0.000, as presented in Table 9; the intervention may have been the influencer in change for this big idea. This type of change cannot be attributed to one single incident or point in time. Therefore, the quantitative data depicts that our educators' beliefs shifted towards a positive direction in the continuum of our practices being focused on learning.

The qualitative data analysis of interview responses reinforced the quantitative findings from the survey data. For example, during the interview an instructional coach stated, "This year has been amazing, because teachers are more comfortable having academic conversations during PLC meetings. They are more comfortable looking at data and using that data to inform the learning in class." Each of the six major themes had theme components that reinforced the notion that the development of the Focus on Learning big idea evolved throughout the school year. The entire theme of Commitment to Academic Growth reflects this big idea of focus on learning. In her interview, our interim principal alluded to this focus by stating, "Our focus this year was mainly on student products and artifacts and how we demonstrate growth and enrich the individual student." Furthermore, many of the theme components in Table 10 above reflect the alignment to a focus on learning. Three key example statements of theme components that intersect with the big idea of focus on learning are:

- 1 Promoted a whole staff mindset that every student is capable of learning and growing academically.
- 2 Professional development focused on student priorities and pedagogical needs.
- 3 Consistent systems and processes for all teaching, learning, and behavior practices related to students and staff.

Big Idea 2: Collaborative Culture and Shared Responsibility. The survey construct that honed in on this big idea was the Shared and Supportive Learning Community construct. The first item associated with this survey construct sought to assess the perception of whether collegial relationships existed among our campus staff with a commitment to school improvement. The second item of this construct intended to

capture the sense of shared responsibility and accountability for student learning. The third outlined the sense of shared values that support norms to guide decisions about teaching and learning on our campus. The mean responses from Table 6 depict that educator beliefs on our campus changed from pre survey mean responses between within the range of Agree and Disagree (means=2.19-2.48) towards a range of means of Strongly Agree to Agree (means = 1.61-1.89). This shift suggests that the practices that were in place for Spring Woods Middle School from the beginning of the year to the end of the year were perceived to be in stronger agreement post intervention. Furthermore, the *p* value for the paired t-test of these means was 0.000, as presented in Table 9, indicating a statistically significant change in perceptions of practices associated with this big idea of Collaborative Culture and Shared Responsibility. This type of change cannot be attributed to one single incident or point in time. Therefore, the quantitative data depicts that our educators' beliefs shifted towards a positive direction in the continuum of our practices reinforcing a collaborative culture and shared responsibility.

The qualitative data analysis of interview responses reinforced the quantitative findings from the survey data. For example, during the interview a sixth grade teacher stated, "I feel very supported by our professional learning communities. I'm able to bring my own best practices, our thoughts, our resources to the group and then also receive that back as well. It feels comfortable and doesn't feel forced. I feel very comfortable to speak about what's going on in my classroom or ask for support. Yeah, it's wonderful."

Another participant compared experiences over multiple years of school mindset by stating, "The school went through some changes. I think the years before, it was top down, and where the administration team would kind have run the learning meetings. It

was more of a kind of tell you what to do situation. I think that this year we saw a big shift in the notion that we had more buy-in from teachers in each content area. The teachers saw themselves as leaders in their PLC."

Each of the six major themes had components that reinforced the notion that the development of the collaborative culture and shared responsibility big idea evolved throughout the school year. The intersection of the big idea of collaborative culture and shared responsibility and the six major themes is visible through the components in Table 10. Three key theme component statements that illustrate the intersection to the big idea are:

- Collectively worked together to ensure that every teaching and learning action
 was focused on student academic growth.
- 2. Nurtured a climate of collaboration within the school that created a sense of team or family.
- Collectively worked together to ensure that every action was focused on students' best interests.

Big Idea 3: Results Orientation. The survey construct associated with this big idea was the Teaching and Learning Beliefs construct. The first item associated with this survey construct sought to better understand the perception of educators on whether core instruction should be effective enough to result in at least 80 percent of the students achieving grade level educational standards after instruction. The second item associated with this construct intended to capture the beliefs of our educators on whether they felt that every student can achieve grade level educational standards with enough support. Finally, the third item outlined the consensus of the goal of assessment as a way to

measure effectiveness of instruction or intervention. The mean responses from Table 7 depict that educator beliefs on our campus changed from an Agree range (means = 1.76-2.09) towards a Strongly Agree range (means=1.58-1.63). The p value for this construct of the survey was 0.017, as presented in Table 9; therefore, this p value suggests that the change in perceptions was significant for this big idea of Results Orientation. However, when the change in perceptions is tested for each individual indicator, the p values for two of the three indicators are below the .05 threshold, Effective Core Instruction (.035) and Student Achievement (.005). The p value for Assessment as Measure of Effectiveness does not fall under the threshold at a p value of .222. Notably, participant agreement with this item was already high (mean of 1.76) at the pre-survey, and did go up slightly in the post-survey (mean of 1.58), suggesting that the lack of a significant change might be attributed to the already strong support for this belief.

The qualitative data analysis of interview responses does depict development of the Results Orientation big idea. For example, during the interview, a 7th grade math teacher stated, "As a teacher you can either see what you do as whether you're going to your job or you're going to work. Here, we are coming to work every day knowing we have to get our hands dirty, whether that means re-teaching, whether that means learning, listening, supporting or whatever it means. We do what it takes." This idea of being laser focused on results was echoed by another participant by stating, "Even though we had PLC meetings by department, it felt like we almost also had a weekly PLC as a school. We continuously reviewed our school goals and our focus, recognizing our celebrations and our challenges. I think our success was a global effort by our whole school in pushing the boat forward in the right direction." Each of the six major themes had

components that reinforced the notion that the development of the result orientation big idea evolved throughout the school year as presented in Table 10. Three key example statements of theme components that intersect with the big idea of results orientation are:

- 1 Commitment to diligently executing the cyclical work of teaching, assessing, reteaching, and re-assessing.
- 2 Nurtured an environment where teachers and students take ownership of their own learning through data analysis.
- 3 Teachers and departmental learning communities reflected on formative data that outlined student performance to better prepare and inform their teaching practices.

Affirmation of Professional Learning Community Culture at Spring Woods

Middle School. The results of the concurrent method of data analysis for this study

affirms that, potentially as a result of this intervention during the 2018-2019 academic

school year, Spring Woods Middle School did commence the development of a

professional learning community culture. Furthermore, the qualitative data explicitly

outlines six major themes that served as the pillars of the intervention of this study.

Figure 1 below depicts the relationship that I extracted from the data analysis into a

visual PLC model that depicts the PLC development at SWMS.

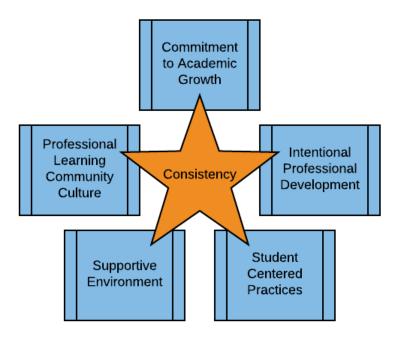


Figure 1. Spring Woods Middle School PLC Model

All six major themes are interrelated. Commitment to academic growth, professional learning community culture, intentional professional development, a supportive environment, and student-centered practices were all clearly articulated in the data as clear cut and concise elements in the pedagogical practices on my campus. The sixth theme however, was not as independent as a single standalone theme. The sixth theme, consistency, was a major aspect of the other five major themes that drove the work on campus. During his interview, a teacher reinforced this notion by stating, "I think consistency was a big push this year. Our lesson planning being consistent, child redirection being consistent, expectations being consistent, discipline being consistent. Therefore, very early on, I was hearing that nonstop. That idea was ingrained in my head and still is ingrained in my head. So, I kept on telling myself, I need to be consistent in thinking what is best for our students. And every time I wanted to fold, I would go back

to thinking what is best for our students and being consistent with my teaching and learning." Therefore, consistency, as the sixth theme, is in the heart of the other five themes and the other five themes might not have had the same effect if consistency had not been present.

Review of Findings: Student Achievement at Spring Woods Middle School

In order to better answer this research question, I analyzed quantitative data from the results of the State of Texas Assessments of Academic Readiness, which is administered yearly across the state. Three years of assessment data were analyzed. The Targeted Improvement Plan emphasized three areas of focus in regards to improving student achievement: Mathematics, English Language Arts (ELA), and English Learner (EL) students. In order to better understand if student achievement increased or decreased upon execution of measures as described by the TIP, I compared four STAAR data sets for performance over three consecutive years. The four data sets were assessment performance by students in math, performance in ELA, performance by EL students, and performance by all students in all subjects. All state assessment data is part of the yearly Texas Academic Performance Report.

STAAR Performance: Mathematics. Table 11 below presents the performance data from our state assessment in the mathematics content area. The data is disaggregated by the four possible tiers in which a student can be placed when taking a STAAR state assessment. The four tiers of student performance are students that: did not meet standard, approached meeting the grade level standard or above, met standard or above, and mastered standard. It is important to note that if students mastered a standard, then they are also included in the met standard and approached standard tier. The same

applies for students who met standard, who are then included in the approached standard numbers. Therefore, when data of this assessment is analyzed the approached standard tier percentage added to the did not meet standard tier should equal one hundred percent.

Table 11
STAAR Performance Data Mathematics

		Students that Did Not Meet Standard		Student that Approached Meeting Standard or Above		Students that Met Standard or Above		Students That Mastered Standard or Above	
School Year	Total Student Assessments	#	%	#	%	#	%	#	%
2016-2017	867	405	47%	462	53%	93	11%	25	3%
2017-2018	798	408	51%	390	49%	177	22%	46	6%
2018-2019	781	268	34%	513	66%	241	31%	67	9%

In mathematics, for the category of "Students that Did Not Meet Standard," our student failure rate was at the lowest percentage within the three academic years from 2016-2017 to 2018-2019. In the three tiers that count positively towards a campus student performance analysis by the state, our student performance achieved its highest percentages in 2018-2019 compared to the previous two years of students' performance data. The largest percentage increase in performance occurred in students meeting

standard with a change of 20 percentage points from 2016-17 to 2018-19 academic school years.

STAAR Performance: English Language Arts. Table 12 below presents the performance data from our state assessment in the ELA content area. The data is disaggregated by the four possible tiers in which a student can be placed when taking a STAAR state assessment. The four tiers of student performance are students that: did not meet standard, approached meeting the grade level standard or above, met standard or above, and mastered standard. It is important to note that if a student is part of the cohort that mastered standard, then they are also reflected in the met standard and approached standard tier. The same applies for a student that met standard, then the student is also reflected in the approached standard. Therefore, when data of this assessment is analyzed the approached standard tier percentage added to the did not meet standard tier should equal one hundred percent.

Table 12

STAAR Performance Data English Language Arts

		Students that Did Not Meet Standard		Student that Approached Meeting Standard or Above		Students that Met Standard or Above		Students That Mastered Standard or Above	
School Year	Total Student Assessments	#	%	#	%	#	%	#	%
2016-2017	862	441	51%	421	49%	151	18%	47	5%
2017-2018	792	397	50%	395	50%	169	21%	64	8%
2018-2019	781	363	46%	418	54%	186	24%	62	8%

In ELA, for the category of "Students that Did Not Meet Standard," our student failure rate was at the lowest percentage within the three academic years from 2016-2017 to 2018-2019. In the three tiers including students who approached meeting standards or higher, our student performance achieved its highest percentages in 2018-2019 compared to the previous two years of students' performance data. The largest percentage increase in performance occurred in students meeting standard or above with a change of 6 percentage points from 2016-17 to 2018-19 academic school years.

STAAR Performance: English Learner Students. Table 13 below presents the performance data from our state assessment in regards to the special population of EL students. The data is disaggregated by the four possible tiers in which a student can be

placed when taking a STAAR state assessment. The four tiers of student performance are students that: did not meet standard, approached meeting the grade level standard or above, met standard or above, and mastered standard. It is important to note that if a student is part of the cohort that mastered standard, then they are also reflected in the met standard and approached standard tier. The same applies for a student that met standard, then the student is also reflected in the approached standard. Therefore, when data of this assessment is analyzed the approached standard tier percentage added to the did not meet standard tier should equal one hundred percent.

Table 13
STAAR Performance Data English Learner Students

		Students that Did Not Meet Standard		Student that Approached Meeting Standard or Above		Students that Met Standard or Above		Students That Mastered Standard or Above	
School Year	Total Student Assessments	#	%	#	%	#	%	#	%
2016-2017	1123	832	74%	291	26%	29	3%	6	1%
2017-2018	1540	929	60%	611	40%	236	15%	81	5%
2018-2019	1500	707	47%	793	53%	353	24%	109	7%

In regards to our EL students, for the category of "Students that Did Not Meet

Standard," our student failure rate was at the lowest percentage within the three academic years from 2016-2017 to 2018-2019. In the three tiers that count as positive in a campus student performance analysis by the state, our student performance in 2018-2019 achieved its highest percentages compared to the previous two years of student performance data. The largest percentage increase in performance occurred in students approaching standard or above with a change of 27 percentage points from 2016-17 to 2018-19 academic school years

STAAR Performance: All students in All Subjects. Table 14 below presents the performance data from our state assessments in all subject areas tested and with all

students that completed the assessments. The data is disaggregated by the four possible tiers in which a student can be placed when taking a STAAR state assessment. The four tiers of student performance are students that: did not meet standard, approached meeting the grade level standard or above, met standard or above, and mastered standard. It is important to note that if a student is part of the cohort that mastered standard, then they are also reflected in the met standard and approached standard tier. The same applies for a student that met standard, then the student is also reflected in the approached standard. Therefore, when data of this assessment is analyzed the approached standard tier percentage added to the did not meet standard tier should equal one hundred percent.

Table 14
STAAR Performance Data All Students and All Subject

		Students that Did Not Meet Standard		Student that Approached Meeting Standard or Above		Students that Met Standard or Above		Students That Mastered Standard or Above	
School Year	Total Student Assessments	#	%	#	%	#	%	#	%
2016-2017	2619	1416	54%	1203	46%	343	13%	85	3%
2017-2018	2422	1368	56%	1054	44%	455	19%	145	6%
2018-2019	2280	1025	45%	1255	55%	570	25%	174	8%

As a whole, in all subjects and over all student assessments, for the category of "Students that Did Not Meet Standard," our student failure rate was at the lowest percentage within the three academic years from 2016-2017 to 2018-2019. Conversely, the proportion of students in approached meeting standards or above achieved its highest percentages in 2018-2019 compared to the previous two years of students' performance data. The largest percentage increase in all student performance occurred in students meeting standard or above with a change of 12 percentage points from 2016-17 to 2018-19 academic school years.

Affirmation of Student Achievement at Spring Woods Middle School. Based on the data analyzed of student performance for the three previous academic years, student achievement did increase when accounting all students and all contents.

Furthermore, both math and ELA had the lowest percentage of students that were classified as students that did not meet grade level standards since 2016. Finally, the largest subpopulation within our campus, English Learner students, demonstrated large gains at 23 percentage points over the last three years in the academic performance tier of approaching grade level or above. This increase in academic performance by our students did ultimately lead to our campus performance rating to increase positively, as measured by the state of Texas. For the 2019-2020 academic school year, our campus is longer labeled as Improvement Required.

Conclusion

This chapter presented the mixed methods approach to study design, processes, and data analysis in order to better understand the results and findings of the two research questions guiding this study. Ultimately, the findings from the data allowed me, as the

researcher, to create two affirmations in regards to the research questions. The first affirmation is that Spring Woods Middle School did start to develop as a professional learning community through practices that focused on the six major themes as outlined in Figure 1.

The second affirmation is that Spring Woods Middle School did increase academic achievement through its teaching and learning practices as compared to the previous two academic school years. When student achievement increases in this manner it is difficult if not impossible to attribute it to a single action. However, my intervention was a multi-prong approach that resulted in endless actions on behalf of the staff. This leads me to be able to attribute the success of our campus to this intervention and all its parts.

I believe that this specific intervention led to this positive outcome because the intervention targeted why we were implementing changes, had very specific steps to accomplish our why and through professional development and professional learning communities we, as a campus, dedicated ourselves to improving our how, meaning our practices. This intervention was specific and planned. Through the surveys, I was able to gather qualitative data that supports the boost in staff morale and their buy in to the professional learning community model. This was only possible, I believe because from the onset we were clear not only about what we were going to accomplish but why. We focused on developing the mindset that our students deserved and needed to achieve more and that we, as the Spring Woods Middle School staff could deliver this by executing our plan. The staff committed to engaging in the work, as evidenced by the surveys. This established a clear purpose. The meticulous nature of the intervention gave

everyone the space and tools to be able to do so. Consistent systems, consistent structures, consistent expectations, consistent practice leads to consistent outcomes. In the next chapter, I have articulated my personal lessons learned, discussion, and interpretation of findings of this study.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Equity and educational access for all are phrases, common rhetoric that underlie common held beliefs for most Americans. This country prides itself on everyone having an equal access to the path that leads to the American Dream. We educate all of our people, men, and women regardless of social class, race, levels, or any disability. This country is a utopia, at least according to the rhetoric. However, dig deep into any issue and the dream dissipates easily and swiftly as the truth of what is available to the people of this great nation and what we as a society are producing is unearthed.

My study focuses on education and on two seemingly simple research questions about school improvement and the efficacy of a well-thought out and designed intervention. In my study, the tale of a failing school that undergoes an intense year of transformation and in the end has positive results that will improve the educational experiences, the learning, and ultimately the future of a lower socio-economic status group of students, including many English language learners, is told. However, in this chapter I want to conclude with the idea that while this study culminated with a positive result for our campus and could be replicated to diminish the achievement gap for struggling students, there is much work needed to truly honor the vision of equity and opportunity for all students.

Summary

This study was born out of the need, as mandated by the Texas Education

Agency, for Spring Woods Middle school to turn itself around after having been

designated as a failing school or in their words, an Improvement Required campus. I

joined the staff of SWMS in the summer of 2018 and rapidly realized that as an educational institution we were failing students each and every day as shown by their lack of success or progress on our mandated state assessments. Students came to school every day but left not acquiring the basic skills set forth by our state standards. Teachers held classes and prepared lessons that did not support or facilitate student learning according to state assessments.

I became part of the administrative team as the Dean of Instruction and influenced by experiences in other roles, other interventions, and ideas from my doctoral studies chose to pursue and implement an innovative intervention that I hoped would move this campus forward as evidenced by students' performance on the mandated state assessments later on that school year.

My school's demographics consists of mainly racial and ethnic minority students and English Language Learners. The school had been failing for a couple of years so I took a 3-prong approach in my intervention to attempt to produce new results. Together with my administrative team, we used design-thinking elements to establish our plan of action, or Targeted Improvement Plan, for that school year. We chose to establish a Response to Intervention system, provided focused professional development for teachers on quality instruction, and implemented a behavior management system school wide. My research however focused mainly on the efficacy of the professional development component and development of our Professional Learning Communities. The two research questions that I explored were concerned with the success and development of this collaborative Professional Learning Community and inquired if these interventions would result in an increase or decrease in student achievement.

Much of my time as the Dean of Instruction was spent on the design and delivery of professional development throughout the school year. Due to our status as an Improvement Required campus, students were released early one day each week so staff could focus on improving instruction. Our campus, through our Targeted Improvement Plan, chose to provide professional development with a focus on supporting our English Language Learners and on best practices in the core areas of Math and English Language Arts. Teachers were then give the time and supports to engage in deep reflection in their Professional Learning Communities. During this collaborative time of professional learning, content instructional coaches and content administrators supported teachers in the facilitation of their collective inquiry and action research activities. Teachers looked at individual student academic performance, methods of teaching by their teammates and colleagues, and compared teacher performance based on student results to refine their own teaching methods. Furthermore, this time was used to, ultimately, reimagine how we, as teachers, transcend the ideology from being my students to being our students, and we create a teaching culture were we are responsible for the teaching and learning of each and every one of our students in our school.

This was a yearlong process where the staff of Spring Woods Middle School committed to implementing high leverage teaching practices that would ultimately result in an increase in student learning. Throughout the intervention, I took the pulse of the campus culture and perspective of the campus by administering one pre-and post-questionnaire and conducting a series of interviews with a sampling of participants. Both of these instruments showed the success of the interventions according to the participants. In general, the staff at SWMS felt that the intervention had been helpful and that they

were better equipped to provide the necessary and expected learning experiences for their students. The staff enjoyed the consistent support and the safe environment we created on our campus.

However, success had to be demonstrated with students in order for this intervention to be considered a success. In August of 2019, our campus's greatest hope became a reality when we received the official report from the Texas Education Agency. Our scores showed student growth across every content area. Our students had improved enough to remove our Improvement Required designation which meant we were no longer a campus that continuously and consistently failed to reach state established levels of achievement as evidenced by student's performance on the mandated state assessments.

Overall, this leadership team-led intervention was a successful one that met its goal of improving a campus, not only for the students but also for the staff. Our intervention has led to positive change in the way our teachers approach instruction, collaborate with one another and most importantly in how they design and deliver instruction so that student learning is guaranteed. This is the minimum quota for every school. Schools are institutions that are supposed to result in student learning.

Discussion of Findings

This study provides support for the potential value of cultivating a professional learning community with educators within my school campus and potentially other schools. This potential value and cultivation of PLC in my school was a focus in my research questions, intervention, and questionnaires. The success of the scope of work in this study was measured by the results of the student's success on a standardized state

assessment. On the surface, these results could be used to initiate a greater discussion about best practices for administrators and how a solid leadership team with a clear, well-designed intervention can vastly influence the outcomes for staff and students. I cannot state that all campuses should implement the intervention of this study, as there are many factors that play into the local context of each school ecosystem. However, I can state that this is an intervention that was implemented for a campus with a majority minority, English learner population and that, given the hard work by all teachers, students, and stakeholders, was significant enough to remove our campus from the Texas Education Agency's list of failing schools.

However, reflecting on this intervention and the impact it had on our campus, I cannot separate the faces of my students from the actual numbers that are represented in the quantitative data in Table 14. Every number represents a student each with their unique story and circumstances. The story must include the idea that even the year of this study, our most successful one in recent times, only one out of every four students that walked through our doors at the beginning of the year walked out at the end of the year at grade level proficiency. This fact is greatly upsetting given the marginalized population of students that we serve. Therefore, technically, we are not failing in the eyes of the state, but I do not know how many passionate educators in our profession would call these numbers a success. This issue reminds me of the point made by Carter and Welner (2013, p.10) where they state, "High expectations become a punitive false promise if combined with low resources, low opportunities, and low support." I wonder, with our school data consistent for years, if we are part of the false promises. Most of our students are Hispanic and EL's, are we truly serving them as best we can? And if we are, is our

best good enough? Or are we playing into the notions that Gandara presented and squandering our students' linguistic assets and turning them into a deficit (Gandara, 2014)? Our students show up at our school with the potential of becoming bilingual and biliterate, given their native language. However, I cannot help but think that not only are we not reinforcing their literacy skills in their native language and English, but also we are not supporting them to close achievement gaps across the board.

While I am not denying the positive outcomes and the potential for this study to be replicated as a recourse for a similar campus or one with similar needs, the findings from my study speak to a much greater conversation. My findings show that a one-year PLC-focused intervention can make a dramatic difference in test scores. However, the success of the intervention raises the issue of why the students' performance was so poor to begin with. Why weren't they getting the education they deserved? Another issue is that many of our students still did not perform as well as we might hoped, and the goal is to have just as high expectations for these students as any others. Could it be that the zip code of birth or home street address determines the learning expectations of any given student in our country? Let's start by calling out the elephant in the educational world. Let's openly discuss the segregation by socio-economic status that exists in our schools. Let's discuss demographics, the social strata that this student population represents and how their tale is not an uncommon one. Let's be open and transparent about the multitude of students that our systems are failing and how we take a Band-Aid approach to make ourselves, as a society, feel that we are giving everyone an equal opportunity and access to success in this great nation.

I am proud of the progress we have made at SWMS but know that down the road is another campus in my same school district with the same problems that is still struggling and that, according to state standardized assessments, is failing students every day. How do you reconcile that story with that of another campus in our district that only has amazing stories of great student success and financial wealth? How? We are a nation of unequal opportunities, unequal access, and unequal pathways to the American Dream. Anyon in her seminal work *Radical Possibilities* made a plea and clear case for the need for sweeping change across all of our social institutions in order to create that mythical nation we claim to be.

Yes more students were successful on our state assessment, but can we discuss why the expectation of performance is significantly lower for Hispanic students at my campus and at similar schools across the state? We know minority students underperform on these assessments, that our educational system consistently produces these results. Our legislators and the agencies that set forth these policies have chosen to create different standards for different groups instead of having an honest conversation about what is needed to create equal results for all. Why aren't we spending our time working towards implementing a system redesign that would impact economic and social policy to create a more equitable starting and end point for all students? We know there are many faces of poverty, and that socio-economic status is one of the greatest predictor of student success or failure.

Yet, these issues are not addressed, but are masked under a high stakes testing environment and accountability system that would tout results like the one of this study as a solution when all they demonstrate is that our students are still failing, just at an

acceptable rate, despite not learning the expected standards. Despite this group of students' race, and the historical, consistent failure of the school they can attend this would still be called a success. This is ultimately the gnawing question that I am left with as I rejoice in the progress we have made. However, I cannot lie to myself and accept this small success as the sign that our students are being served as they should by the institutions our society upholds and creates to prepare them for a successful, honorable life. This continues to be out of reach for them and for many of the students that attend schools with similar conditions to Spring Woods Middle School.

Implications and Limitations

Although I am immensely pleased with the findings of my research study, I am fully aware of the limitations of this study. This study provides a one-year snapshot of the journey of a campus that has been opened 58 years, since 1961, and has in its recent past been a campus that has struggled to provide students with an acceptable academic experience. My study provides insight only into the very recent past of this campus and in doing so tells only part of the story. It is clear that to understand how the school could reach this point of failure, a more in depth and longitudinal study would need to be done on the area, the community, the local, national, economic and social policies that led to SWMS becoming a low socio-economic campus where students enter bringing with them all the issues that go hand in hand with poverty.

My study is limited because the factors and issues explored were limited to the staff's perception of our campus. The voice of the students was not included, and their experiences were only included in the results of their scores on the state assessment. I wonder what the voice of a now sophomore in high school, who went through our middle

school, would sound like compared to that of one of our seventh graders who experienced our campus for the first time during the scope of this study. How did their experience differ? How were they the same? These stories of SWMS learner journey would be powerful insights to inform practices at my school. My study excluded not only student voices but also the voices of our community members. Ultimately, if this intervention and study was to be more substantial, significant elements that contribute to the academic success of the students, such as their home life, their families, the community environment, and extracurricular experiences would need to explored in order to provide a more accurate depiction of the challenges these students need to overcome to achieve success.

Furthermore, in order for a study to truly provide insight into factors affecting student success, the students' development would need to be followed for a much longer time period. A longitudinal, multi-factor approach would be needed in order to provide information that could have a lasting impact on educational design. The cohort of students could also be increased to include a more significant number of students other than the small number of students at a small middle school.

The same could be said of the sample size of participants that were chosen to be interviewed. Only 7 staff members were chosen to represent the experiences and perspectives of the SWMS staff regarding the intervention. The small sample size, while representative of all major groups involved, provided only a limited perspective given the overall number of participants. This study would greatly benefit from a greater sample size of participants that would be interviewed.

Another limitation to keep in mind is that as a campus leader, because of my role as the Dean of Instruction, I was in a position of power when compared to many of the participants of the study. The nature of my role caused my interactions with the participants, throughout the interventions and the interview, to not be as neutral as would be ideal. The responses were overwhelmingly positive but it cannot be discounted that some of this might be due to having one of their campus leaders asking the questions.

These positive responses can also be attributed to factors outside the intervention such as the toxic work environment teachers were possibly exposed to from the previous administrations. A new principal was hired as leader of SWMS to start the 2018-2019 school year. The previous principal had implemented policies and procedures that had created great discontent amongst the staff causing great relief when new leadership arrived. This probably explains the positive results from the pre and potentially the post survey.

What I believe to be a great asset to my role as the researcher in the study can also be considered a limitation. I am a former English Learner, former District Specialist for ELs that is passionate about this particular group of students. I cannot separate fully their experience from my own nor can disconnect emotionally from this topic. My personal story and close connections to this group surely affected the intervention, the choices I made, and the relentless enthusiasm I brought to this study. My personal bias, while a great asset, is also a limitation as it removes me from a point of neutrality.

Closing

My personal path from hopeful graduate student, while I was an employee at the district level, to an administrator striving to make a difference at a failing campus has

been an intense one. I started this journey full of passion and hope believing that I can make a difference. I end this study with the same passion and hope but have realized I need relentless determination as well if I am ever going to succeed on a large scale in creating the systemic change that is desperately needed in my school district and across this nation.

Throughout the different phases of my journey, I had some successes but also a resounding failure that led to me pivoting and turning what was supposed to be a large study at district level to a small-scale study done at a single middle school campus. This was due to the lack of support and commitment to this cause from the decision makers that failed to approve a plan that would have created a better situation for all English Learner students across our district. Despite having the data that showed that we were, as a system, failing this population consistently and continuously, leaders did not pass a multi-million dollar proposal that would have allocated the necessary resources to create a new, vastly improved instructional network for these students with the addition of staff and support to their teachers and campuses. Ultimately, the dollars were not available for the cause.

That taught me an important lesson about the nature of what I am fighting and the obstacles lurking underneath the surface in trying to create, what is promised and what shouldn't be questioned- an equitable, successful education experience for every student. Every child is one of our five core values that are supposed to be non-negotiable. This value is embedded in our school district mission but yet despite a clear need and with the resources unavailable; this plan did not move forward leaving a disenfranchised population with a guaranteed path to academic failure.

I am proud of the work, effort, and dedication we, as SWMS put forth to create a better learning environment for our students and how we came together as a Professional Learning Community to better support each other, learn and grow as a staff. I know this was valuable and that the work done in this study could be a first step for any campus that is struggling. This gives me hope that despite limitations that sometimes can't be controlled, or lack of support from those in power, that an individual person, an individual campus can make a difference. That difference stems from believing and honoring through one's work that every student deserves the opportunity to a great education so that they may fulfill their own journey and destiny equipped with the skills to create not only their, but also our society's future.

It is with this hope that I look for what could be future research done in this area. We know that in order to truly change the lives of these students, other aspects of their lives would need to be improved. Other needs would also have to be met such as their pre-educational experiences, housing, and health. A community school longitudinal study would be the next study that could provide research to further support the intent of the work done through this research study. A community school is a school that serves the student needs within the school, but also expands its footprint of support to other areas of need for its students and families. Ideally, a study done on a grander scale, including more factors other than the results of a standardized test is needed. My study was only the tip of the iceberg in terms of the types of evidence and instruments that can be used to measure student success. In future studies, the voice of the student would need to be a critical component to add a more complete picture on the perceptions of the central figures in these studies.

Ultimately, I do believe in equal opportunities for all and that the American Dream does exist. My parents are both immigrants and came to this country in search of a better life and in many ways have been successful. I went to school as an English learner and have personally reaped the benefits of an education. I am a testament to being able to reach your dream and want all of our students, especially those that have been disenfranchised and marginalized due to circumstances outside their control, to have a great education.

Interventions like these along with interventions that focus on improving life for people in the community will lead to actual change. But this study is a first step, a necessary step that has proven successful on a small scale. This study, while small in scope, is a story of hope. It is a story of the underdog, a campus with mostly low socioeconomic students, a large English learner population, a failure factory that turned itself around. We, the staff, students, and leadership team at SWMS implemented this intervention and are currently working on additional interventions to help our students achieve more this year than the last. I hope this trend continues and that that my work continues to evolve so that I may continue to positive impact more students. I can't help but think of a saying in my native language, Spanish, that says *Sí se puede!* It is possible. Success. An equal and equitable education for all.

REFERENCES

- Anyon, J. (2014). Radical Possibilities. Routledge. New York, NY.
- Beckman, S. and Barry, M. (2007). Innovation as a Learning Process: Embedding Design Thinking. California Management Review. Volume 50, Issue 1, 25-56.
- Berger, P. L. and Luckmann, T. (1966) The Social Construction of Reality: A Treatise in the Sociology of Knowledge. New York: Anchor Books, Doubleday.
- Blankenship, S. S. and Ruona, W. E. A. (2007). Professional Learning Communities and Communities of Practice: A comparison of Model, Literature Review. University of Georgia. Retrieved from: https://files.eric.ed.gov/fulltext/ED504776.pdf
- Brown, J. S. and Duguid, P. (2001) 'Structure and Spontaneity: Knowledge and Organization', in I. Nonaka and D. Teece (eds) *Managing Industrial Knowledge*, pp. 44-67. London: Sage.
- Brown, T. (2008). Design Thinking. Harvard Business Review, June 2008, 84-92.
- Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues*, *Spring*, 5-21.
- Cantu, A. and Willmott, H. (2000) 'Comment on Wenger and Yanow. Knowing in Practice: A Delicate Flower in the Organizational Learning Field', *Organization* 7(2): 269-76.
- Carter, P.L. & Welner, K.G. (2013). Achievement Gaps Arise from Opportunity Gaps. Oxford University Press.
- Corso, M. and Giacobbe, A. (2005).Building Communities of Practice that work: a case study based research. Department of Management, Economics and Industrial Engineering. Polytechnic of Milan. Milan, Italy.
- Cunliffe, A. L., (2008). Orientations to Social Constructionism: Relationally Responsive Social Constructionism and its Implications for Knowledge and Learning. *Management Learning*, Volume 39, Number 2 retrieved from: http://ejournals.ebsco.com.ezproxy1.lib.asu.edu/direct.asp?ArticleID=48A1B3D7 C3BF9A374DD6>
- Crotty, M. (1998). The Foundations of Social Research: Meaning and Perspective in the Research Process. SAGE Publications.
- DuFour, R, DuFour, R., Eaker, R., Many, T., Mattos, M. (2016). Learning by doing: Professional Learning Communities at Work. Solution Tree Press.

- Eaker, R., DuFour, R., DuFour, R. (2002). Getting Started: Reculturing schools to become Professional Learning Communities. Solution Tree Press.
- Escamilla, K., Hopewell, S., Butvilofsky, S., Sparrow, W., Soltero-Gonzalez, L. Ruiz-Figueroa, O. and Escamilla, M. (2014). Biliteracy from the Start. Calson Publishing. Philadelphia, PA.
- Fenner, D.S. (2014). Advocating for English Learners: A Guide for Educators. Corwin Sage Publications.
- Freeman, D. and Freeman, Y. (2011). Between Worlds: Access to Second Language Acquisition. Heineman. Portsmouth, NH.
- Friedland, B. and Yamauchi, Y. (2011). Reflexive Design Thinking: Putting More Human In Human-Centered Practices. Interactions, Volume 18 Issue 2, March, 2011. 66-71.
- Gandara, P. (2014). Meeting the Needs of Language Minorities. Oxford University Press.
- Hart, B. & Risley, T. (1995). Meaningful Differences in the Everyday Experience of Young American Children. Pual H. Brookes Publishing Co., Inc.
- Hord, S., & Sommers, W. (2008). Leading Professional Leaning Communities: Voices from research and practice. Corwin Press.
- Lesser, E., & Everest, K. (2001). Using communities of practice to manage intellectual capital. *Ivey Business Journal*, 65(4), 37-41. Retrieved from: https://searchproquest.com.ezproxy1.lib.asu.edu/docview/225362692?accountid= 4485
- Luka, I. (2014). Design Thinking in Pedagogy. Journal of Education Culture and Society.
- Marshall, G. (1994). The Concise Oxford Dictionary of Sociology. Oxford University Press.
- Mertler, C. A. (2014). *Action research: Improving schools and empowering educators* (4th ed.). Thousand Oaks, CA: Sage.
- National Education Association. (2015). How Educators Can Advocate for English language Learners. NEA Washington, DC.
- OECD (2014). S. Vincent-Lancrin, K. Karkkainen, S. Pfotenhauer, A. Atkinson, G. Jacotin, M. Rimini. (eds.). *Measuring Innovation in Education: A New Perspective, Educational Research and Innovation*. OECD Publishing, Centre for Educational Research and Innovation, DOI:101787/9789264215696-en.

- Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best.* Lanham, MD: Rowman & Littlefield.
- Plattner, H. (2009). *d.school Bootcamp Bootleg*. Institute of Design at Stanford. Retrievedfrom:http://dschool.stanford.edu/wpcontent/uploads/2009/12/bootcampb ootleg20091.pdf
- Plattner, H. (2010). *d.school Bootcamp Bootleg*. Institute of Design at Stanford. Retrieved from:http://dschool.stanford.edu/wpcontent/uploads/2011/03/BootcampBootleg20 10v2SLIM.pdf
- Rennie, J. (1993). ESL and Bilingual Program Models. ERIC Publications. Office of Educational Research and Improvement (ED), Washington, DC.
- Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. *Qualitative research practice*, (pp.77-108). London: Sage.
- Rittel, H.W.J., & Webber, M.M. (1972). Dilemmas in a General Theory of Planning.
- Rowe, P.G. (1987). Design Thinking. Cambridge MA: MIT Press.
- Russell, L. J. (2002). Collective Reciprocal Causation: A model of the relationships among group behavior, group environment, group cognition, and group effectiveness. Auburn University. Auburn, AL.
- Spring Branch ISD. (2014). District Profile 2014. Retrieved form: https://www.springbranchisd.com/2013profile.pdf
- Spring Branch ISD. (2016). SBISD Demographics. Retrieved from: https://cms.springbranchisd.com/district/Home/Demographics
- Swan, J., Scarborough, H., Robertson, M. (2002). The Construction of Communities of Practice in the Management of Innovation. Management Learning. Sage Publications.
- Texas Education Agency. (2007-2019). Texas Academic Performance Reports. Retrieved from: https://tea.texas.gov/perfreport/tapr/index.html
- U.S. Department of Education, National Center for Education Statistics. (2017). *The Condition of Education 2017* (2017-144), English Language Learners in Public Schools.

- Wenger, E. (1998). Communities of Practice: Learning, Meaning, and Identity. Cambridge University Press.
- Wenger, E. C. and Snyder, W. M. (2000) 'Communities of Practice: The Organizational Frontier', *Harvard Business Review* 139-45.
- Wenger, E. (2004). Knowledge Management as a Doughnut. Ivey Business Journal. Retrieved from: https://iveybusinessjournal.com/publication/knowledge-management-as-a-doughnut/
- Zboralski, K. (2009). Antecedents of knowledge sharing in communities of practice. Journal of Knowledge Management. Vol. 13. No 3. Pp. 90-101.

APPENDIX A

SWMS PROFESSIONAL LEARNING COMMUNITY SURVEY QUESTIONNAIRE

	Scale				
As a stakeholder of the SWMS community, I feel that:	Strongly Agree	Agree	Disagree	Strongly Disagree	I don't know
Shared and Supportive Learning Community					
Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	1	2	3	4	5
Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	1	2	3	4	5
Shared values support norms of behavior that guide decisions about teaching and learning.	1	2	3	4	5
Academic Design					
Staff use multiple sources of data to make decisions about teaching and learning.	1	2	3	4	5
Professional development focuses on teaching and learning.	1	2	3	4	5
The school schedule promotes collective learning and shared practice.	1	2	3	4	5
Teaching and Learning Beliefs					
Core instruction should be effective enough to result in 80% of the students achieving grade-level educational standards.	1	2	3	4	5
All students can achieve grade-level educational standards if they have sufficient support.	1	2	3	4	5
The goal of assessment is to generate and measure effectiveness of instruction/intervention.	1	2	3	4	5

APPENDIX B

SWMS PLC INTERVIEW GUIDE- INTERVIEW QUESTIONS

- 1. How long have you worked at Spring Woods Middle School? If you had to describe your overall experience working in Spring Woods in one or two sentences to someone not familiar with the school or your profession, what would you say?
- 2. Do you think Spring Woods Middle School (SWMS) is or isn't a supportive professional learning community (PLC) as a campus? Why? Can you give some examples from your personal experience?
- 3. What do you like most about being a part of the campus learning community?
- 4. What do you like least about being a part of the campus learning community?
- 5. Do you feel that the professional development you receive here on campus is supporting you and your team work better as a professional learning community?
- 6. Do you feel that your teaching and learning beliefs have changed while going through the learning community development processes this year? How?
- 7. Do you feel that the processes implemented this academic have impacted SWMS's professional learning community? Can you give some examples?
- 8. Do you have any other suggestions or comments to help us improve our functioning as a professional learning community in SWMS?
- 9. What additional support or tools would you need to continue to grow in your professional learning community in the future?

APPENDIX C FOCUSED AND THEMATIC CODES

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Very rewarding job	Group sharing ideas	Feel very connected on
Relationship building	Reciprocity from colleagues	campus
Reflective practices	on collaboration	Feel very invested with my
Focus on progress and	Environment feels	students
growth	comfortable but not forced	We are diverse but work well
Student growth	Candid conversations	together
Teacher growth	Sharing what's happening in	Friendly spirit across
Abundance of professional	classroom to improve	departments
development opportunities	This year is wonderful (multi	Interconnect teaching and learning i.e. science and art
Teacher collaboration	color)	Collaboration in pedagogy
Offering support consistently	Teacher learn on this campus	across disciplines
Feel so supported	The whole campus is a community	Communication must be
Sense of shared	Consistent learning for adults	consistent
responsibility	Love the relationships	Relationships and
Learning Community		communications are what I
supportive to teachers	Communication I like but can	like best here.
PLC supportive all the time	be a challenge too	Flexibility to work with many
Sharing practices	Great working relationships	adults and students
Sharing student resources	about practice	Being understanding

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Feel that PD is supporting us	Consistent assessment	Child expectations consistent
Very consistent PD	practice	(gray, blue and red)
First semester very strong PD	Priorities shift according to	Practices were ingrained in
Very precise agenda	needs	my head
	Taking care of priorities for	I need to be consistent
Structured discussions of	students	Student centered decisions
practice	Consistent district support	
Thought provoking sessions	consistent district support	Consistent question of what
for group and teams	Support in presenting skills	is best for students
Very informative for teachers	Student centered lessons	Consistent data analysis
Sense of responsibility	PD supported my practice	Student groups by data
Student Data support	Focus on content for	PLC student data analysis
	students	time
Data driven adjustments in		
<u>class</u>	Processes and systems have	Increased collaboration for
D. 11	supported the campus	PLC PLC
Setting and meeting learning	culture (multiple gray, green,	Interconnecting learning for
goals	purple)	students
Data across the school	Consistency was pushed this	Improving practice with
Great small group instruction	year	teachers
sessions	Lesson plans being	
	consistent	

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Love more opportunities to	Everyday commitment to	Consistent expectations for
collaborate	work hard	plc time
Continued consistency for	Supportive leadership	Open and honest to what pd
expectations	Commitment to teacher	is needed (multiple green
Tremendous levels of	support	and yellow)
support for teaching	Teachers teaching teachers	Targeted professional
Reflective practice	Consistently seeking ways to	development
Candid discussion about	support teachers	Belief that all people can
teaching	Recurring teaching and	learn
Aligning needs to practice	learning with teams	Building relationships
(multiple blue, green, yellow,	Identifying student needs	Mindset of student growth
red)	and providing support	Supports for teacher success
Flexile and open minded	Student relationships to	Consistently supporting staff
teachers and students	support academics	Growth in teaching practice
More like a family	Consistently transparent	Consistent supports and
Students desire to learn	Support students	processes over long periods
Hardworking teachers	emotionally	of time
Planning for both academics	Targeted support for	Systems for student growth
and social emotional support	students	and teacher growth

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student growth

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Culture shift to learning	Trying to include everyone in	Teacher buy-in to methods
environment	pic process	Focus on student products
Consistent message and	Hands on and interactive pd	and artifacts
vision and expectations	Focused learning for staff	Focus on growth and growth
Buy-in to vision of school	Build partnerships and	Next year stronger just
growth	groups of accountability	beginning
Possibly retaining most	Growth brings us together	Asking important questions
teachers	Students are capable	about teaching
Strong foundation on	Teachers are confident with	Outlined expectations and
learning outcomes	supporting students in	responsibilities
Hope of continuous	learning	Continuous growth in plc
improvement moving	Everyone can have positive	process
forward	impact on students everyday	Whole school one team
Safe and warm environment	Incorporating literacy across	Focused on schools clear
Teacher strategies modeled	disciplines	goal
We are family	Focused digital literacy	A collaborative school
Collectively staff collaborate	Focusing on skills students	Focusing staff for vison and
for students interest	will need	goal
Asking what is best for	Teachers as leaders of plc	

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Clear communications Weekly pic for whole school Asking teaching question (multiple gray, green, blue) according to data Staff working relationships

Celebrating and articulating Really support teachers Administrators care and

challenges A lot of caring people support

Focused in one direction Staff give their all here Positive environment

Consistent PD front loaded Belief in our work Group collaboration to

Balance of PD teaching Always learning

Intentional PD Technology integration Differentiate to meet

PD plan ahead of time students needs Ongoing support

Important needs for PD Relationships with students Expectations consistent

Students work hard to learn Very effective sessions of pd Modeling expectations in the

classroom Focus on growth Focus on ELL students pd

We have purpose here Building relationships with Students owning their data

students Serving our students is Showing growth to students

critical Small group focus So much support

We are all in to teach and Very intentional with Students connecting to

meetings school

Reflective practice Student data driving teams Staff is flexible

Appendix III. Thematic Codes

Commitment to Academic Growth Professional Learning Community Culture Intentional Professional Development Supportive Environment Student Centered Practices Consistency

Improve our practice as a Try, evaluate and refine Consistent structures

according to data team Strong relationships for

Have each others back growth Feel supported

l love our PDs Campus collaborative spirit Appreciate consistency

Very intentional PD We are her for the kids, Open and comfortable asking

everything we do questions from anyone Consistent PD

Make a difference in growing Felt like a freshman in

students college

Get our hands dirty in hard Clear learning objectives

work for our students

Teach assess re teach

Differentiated PD

Focus on important practices

Continued feedback Like the consistency this year

Consistent consistency Structured supports for

From day one consistent students

My team is my best support Less pressure on teachers

for growth Very positive climate

Cohesive working We are in it together for

relationships

APPENDIX D

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL



EXEMPTION GRANTED

Elisabeth Gee Division of Educational Leadership and Innovation - Tempe 480/965-4284 Elisabeth.Gee@asu.edu

Dear Elisabeth Gee:

On 1/9/2019 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
* 1	Path to Equitable Learning Experiences through
	Response to Intervention (RtI)
Investigator:	Elisabeth Gee
IRB ID:	STUDY00009404
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• J.Herrera- Recruitment Consent Form.pdf, Category:
	Consent Form;
	• Recruitment Consent Form, Category: Recruitment
	Materials;
	Survey, Category: Measures (Survey
	questions/Interview questions /interview guides/focus group questions);
	• Interview Questions, Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);
	• IRB Protocol, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (1) Educational settings, (2) Tests, surveys, interviews, or observation on 1/9/2019.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator