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**BUILDING COMMUNITY: STRENGTHENING STUDENT CONNECTEDNESS  
AND SENSE OF BELONGING IN OUR SCHOOLS**

SHANNAN D. PERRY CARLSON

A DISSERTATION

In the  
Isabelle Farrington College of Education and Human Development  
Presented to the Faculty of Sacred Heart University  
in Partial Fulfillment of the Requirements for the  
Degree of Doctor of Education  
2024

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**BUILDING COMMUNITY: STRENGTHENING STUDENT CONNECTEDNESS AND  
SENSE OF BELONGING IN OUR SCHOOLS**

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SHANNAN D. PERRY CARLSON

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**ABSTRACT****BUILDING COMMUNITY: STRENGTHENING STUDENT CONNECTEDNESS AND  
SENSE OF BELONGING IN OUR SCHOOLS**

SHANNAN D. PERRY CARLSON

Dr. David Title, Ed.D., Dissertation Chair

All students want to attend a school they feel a sense of belonging to, one with caring adults and shared experiences for our young learners. Research shows that student connectedness and the quality of student–teacher relationships are associated with students’ engagement in school and academic performance (Bosman et al., 2018) and significantly impact student outcomes (Settanni, 2015). This Improvement Science Dissertation in Practice (ISDiP) investigated the impact intentional professional learning for teachers focused on social and emotional competencies and increased shared experiences for students has on students’ sense of belonging and connectedness in a middle school. With a two-pronged intervention driven by professional learning workshops for adults and a shared experience for students (Wingman), this action research study utilizes the Improvement Science model and a mixed-methods explanatory sequential design. As part of the Improvement Science process, the researcher identified a problem of practice, conducted end-user consultations, reviewed existing data, completed a root cause analysis, reviewed relevant literature, and developed a working theory of improvement. The researcher developed three professional learning workshops that embedded social-emotional

learning (SEL) competencies throughout, followed by self-reported feedback slips. Students participated in a shared experience through Wingman; the research team conducted walkthroughs using a walkthrough tool to collect data on the implementation and fidelity of Wingman for students. After a thorough data analysis, findings revealed that teacher professional learning focused on social-emotional learning and providing students with shared experiences significantly improves student sense of belonging and connectedness to a school community.

*Keywords:* middle school, social-emotional learning, SEL, student connectedness, belonging, professional learning, shared experiences

## **DEDICATION**

This dissertation is dedicated to my family – my parents, husband, and children. My family has made many sacrifices these past three and a half years, yet never spoke a word of it. I drew strength and courage from their unwavering support, commitment, and genuine love and pride in me. To my children, Caitlin and Christopher, thank you for never giving up on me and for your patience, love, and belief in me. I am who I am today because of you – thank you for that.

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## DEFINITION OF TERMS AND ABBREVIATIONS

**CPS:** Chapel Public Schools, a pseudonym for the district name of the research site.

**Empathy Interviews:** interviews with stakeholders affected by the problem of practice to gain their insight into and perspective of the problem.

**ISDiP:** Improvement Science Dissertation in Practice.

**PDSA:** Plan-Do-Study-Act, the method for designing, implementing, and evaluating a continuous improvement process.

**Professional Development (PD) or Professional Learning (PL):** Learning opportunities for educators that include in-person learning. The purpose of PD is to grow the skills and knowledge of educators.

**Social Emotional Competencies (SEC):** Social and emotional competencies describe the skills reference applied abilities that one uses to execute observable prosocial behaviors through managing emotions and navigating social contexts.

**Social and Emotional Learning (SEL):** The process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and express empathy for others, establish and maintain supportive relationships, and make responsible decisions (CASEL, 2021).

**SMS:** Seabreeze Middle School, a pseudonym for the research site.

**Wingman:** Dylan's Wings of Change is a non-profit foundation. Wingman is an experiential learning program based in CT that takes place in schools across the country. Wingman's mission is to nurture, empower courage, and inspire hope in people of all ages. This organization was founded by Ian Hockley, whose son was killed at Sandy Hook on December 14, 2012.

## **CHAPTER 1: THE PROBLEM OF PRACTICE**

In schools, classrooms, and learning communities, establishing and maintaining positive teacher–student relationships is linked to developing social and emotional learning skills and student performance (Poulou, 2018). A strong sense of connectedness for students can result in academic motivation and student psychosocial well-being (Mazyck, 2021). Research has shown that students need at least one supportive, trusting adult in the school (Fisher, 2021), and the strong relationships developed between students and teachers are foundational to strong schools (Hammond, 2020).

The purpose of this Improvement Science Dissertation in Practice (ISDiP) is to improve students' sense of belonging and connectedness in a middle school through 1) intentional professional learning for teachers focused on social and emotional competencies and 2) increased shared experiences for students (Wingman). With a two-pronged intervention driven by professional learning workshops for adults and a shared experience for students (Wingman), this action research study utilizes the Improvement Science model and a mixed-methods explanatory sequential design. As part of the Improvement Science process, the researcher identified a problem of practice, conducted end-user consultations, reviewed existing data, completed a root cause analysis, reviewed relevant literature, and developed a working theory of improvement. Following this analysis, the researcher conducted a two-pronged intervention to address the problem of practice.

### **Background of the Problem**

This research project investigated the damaging impact of student disconnectedness and lack of belonging in a school community, which consequently impacts teacher efficacy and students' academic and non-academic performance. Disengaged teachers result from low

collective efficacy (Donohoo & Katz, 2017) and overall burnout (Nguyen & Kremer, 2022). Students' non-academic performance includes social-emotional skills. Therefore, teacher–student relationship quality is related to students' affective and cognitive outcomes (Scherzinger & Wettstein, 2019). Relationships with teachers or other adults in school are the strongest predictors of emotional well-being, with children viewing school-based relationships as even more important than familial support (Obsuth et al., 2017). Teachers can fulfill these needs by respectfully showing involvement (caring for and expressing interest in the student), providing structure (establishing clear rules and consequences), and supporting autonomy (giving students the freedom to make their own choices) (Bosmanet et al., 2018).

*Connectedness* is defined as a measure of how well students can sense and feel that they belong to schools or learning communities, coupled with a connection of value to that community (Datu & Yuen, 2020). Positive emotional reactions to experiences and individuals can make students feel a greater sense of belonging at school. Having a sense of belonging and connectedness refers to feeling included, accepted, and valued by individuals at school (Lee, 2014). Providing students with a culture of high expectations equips students with the tools they need to learn how to bounce back and conquer challenges or hurdles when teachers expect students to do more. They cultivate positive relationships with students (Hansen, 2018).

When connected to school, students are more likely to experience numerous benefits. Research shows that a lack of student connectedness and belonging impacts student performance in schools, as shown by attendance, engagement, and behavior. Student connectedness and belonging is a place where individuals fit in and feel safe (Riley, 2019), accepted, and respected (Allen et al., 2018). Teacher support (Allen et al., 2018) and a feeling of trust between teachers and students (Zee et al., 2021) lead to a greater sense of belonging and happiness for students in



school. Research has shown that overall school climate shapes students' self-efficacy (Datu, 2020), and student–teacher relationships impact student achievement (Lee, 2014). Students who do not fit in or feel they do not belong or are cared for begin to withdraw and do not engage in the learning or school community (Grossman & Portilla, 2022). Student agency and engagement increase student efficacy and empower the student voice (Riley, 2019). Students who feel a sense of belongingness in school have higher academic achievement (Wallace et al., 2012). Experiencing all this *often* or *very often* clearly matters for positive youth development, as our research and the other studies cited here show (Scales et al., 2023).

Positive, strong student–teacher relationships impact student performance and a sense of belonging (Allen et al., 2018). Teachers who care for their students have students who show more robust academic bandwidth and drive to learn (Settanni et al., 2015), as well as greater positive social and emotional well-being (Longobardi et al., 2016). Studies have found that students who feel safe and cared for by a teacher view themselves as more academically competent (Zee et al., 2021). Teachers can positively and negatively impact students' performance and outcomes (Bardach, 2020). A positive teacher–student relationship leads to higher student outcomes and performance (Goktas & Kaya, 2023). Student connectedness and the quality of student–teacher relationships are associated with students' engagement in school and academic performance (Bosman et al., 2018) and significantly impact student outcomes (Settanni, 2015).

All research in this dissertation was conducted at Seabreeze Middle School (SMS) in Chapel, CT (both the school and district names are pseudonyms). Chapel Public Schools (CPS) comprises 14 buildings, 5,500 students, and 650 certified staff. SMS is one of the three middle schools in the district, covering grades six through eight, with about 400 students and 44 certified

teachers. Eight of the staff each have over 25 years in education with CPS, and the remainder have between 1 and 20 years of experience. Certified staff are 94% white, and the remaining 6% are Latino/Hispanic. Student demographics include 78% white, 7% Latino/Hispanic, 0.3% Black, 6% Asian, and 0.2% American Indian (see Table 1).

**Table 1**

Student Demographics and Enrollment Data

Race	Enrollment 2019–2020		Enrollment 2020–2021		Enrollment 2021–2022	
	School Count	Percent of School	School Count	Percent of School	School Count	Percent of School
American Indian or Alaska Native	0	0.0	1	0.2	1	0.2
Asian	25	6.1	22	5.4	21	5.1
Black or African American	26	6.4	15	3.7	19	4.6
Hispanic/Latino of Any Race	33	8.1	28	6.8	43	10.5
Native Hawaiian or Other Pacific Islander	0	0.0		0.00		0.00
Two or More Races	7	1.70	6	1.50	10	2.4
White	318	77.80	316	77.30	312	76.30
Grand Total	409		388		406	

The three years of data in Table 1 show enrollment changes in certain demographics and percentages of population. Enrollment shifts also happened due to COVID-19. Gaining an understanding of the demographics of the student population is important in data collection and

analysis. This data helps the reader understand the impact of COVID-19 and fluctuations in enrollment.

While demographics are important, a deeper look into achievement was essential to the research. Table 2 illustrates the decrease in overall school performance data in all areas and academic growth from 2019-2020 to 2021-2022. This data shows student performance on the Smarter Balanced Assessment (SBA), an individual adaptive computer-based assessment. By federal and state law, all Connecticut students take a universal student assessment in English language arts and mathematics in grades 3 through 8. The Connecticut State Department of Education (CSDE) requires that all students in grades 3–8 be assessed through the SBA. The performance index is the average performance of students in a specific subject area: math, science, or English language arts. Points earned are 0–100, represented by percentages in the table. Academic growth measures the pace of student learning in a school year.

**Table 2**

*School Performance Data*

	2019–2020	2020–2021	2021–2022
	% Points Earned	% Points Earned	% Points Earned
ELA Performance Index	98.3	Due to COVID-19 all statewide assessments were waived.	90.4
Math Performance Index	90.5		79.2
Science Performance Index	94.1		87.4
ELA Academic Growth	61.6		54.9
Math Academic Growth	49.5		47.7

*Note:* Sourced from Edsight.gov

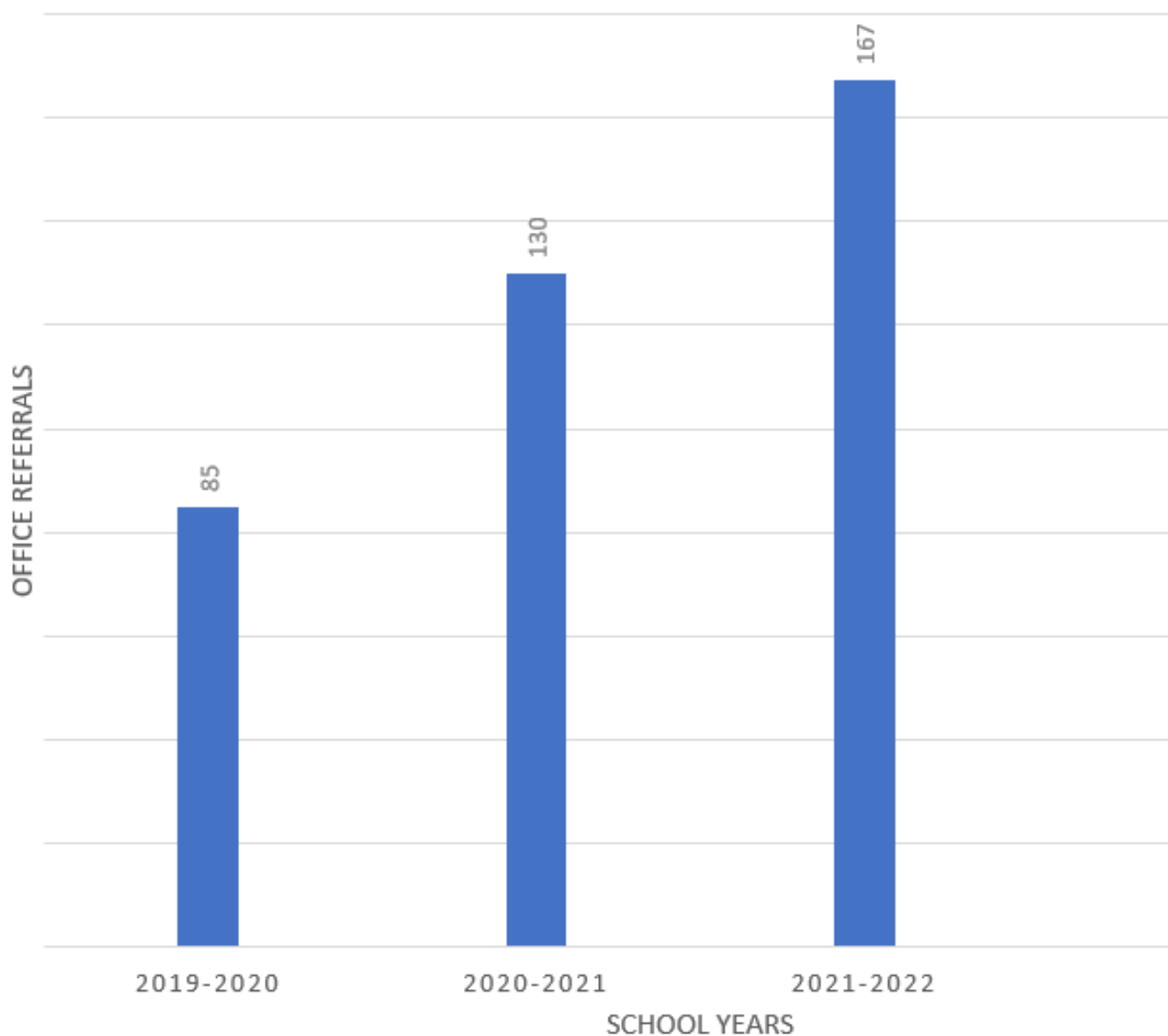
This table illustrates the decrease in overall student achievement from 2019 to 2022. The data show a decrease in all three areas: math, English language arts, and science. To calculate an index, a student's score in each subject on the SBA, SAT, or the CT Alternate Assessment

(CTAA) must first be transformed into an index score. School Performance Indices (SPIs) are calculated by averaging a given school's valid and non-excluded student IPIs for the applicable subject. Only students enrolled in the school on October 1st of the testing year are included in SPI calculations. While COVID-19 hindered student test taking and, therefore, there is no data from the 2020–2021 school year, there is a significant decrease in scores from 2019 to 2022.

### **Statement and Definition**

The problem addressed in this study is inconsistent student connectedness to the school community. In classrooms characterized by more emotionally supportive teacher–student interactions, students experience higher levels of autonomy and more supportive peer relationships, and these structural features are, in turn, predictive of student engagement gains (Martine, 2019). Teachers create the conditions in a classroom and learn to understand their students best.

One way to measure classroom environment or conditions is the management of student behaviors and discipline issues. Figure 1 displays the number of office referrals from the 2019/20 to the 2021/22 school years. The teachers or students complete an incident report and submit it to the office. The office team reviews these referrals, and then the assistant principal determines the level of the behavior or incident. Adult responses to student behavior data vary within each grade level team. Many teams oversee discipline within the team, while others forward the issue to the main office.

**Figure 1***Office Referral Data, 2019-2020 to 2021-2022*

The Search Institute's Developmental Relationship Framework (DRF) elements offer tools and resources for teachers to help students cultivate the skills they need to develop healthy developmental relationships (Search Institute, 2018). When students experience healthy developmental relationships with their teachers, social and emotional competencies, such as

motivation and responsible decision-making, are strong, and risk behaviors become less common, even in the most challenged and unmotivated students (Search Institute, 2018). A vital element of student connectedness is the relationship between students and adults in a school. Families participate in a yearly school climate survey that is then disaggregated, analyzed, and embedded within the individual school continuous plans and teacher goals for the year. The climate survey is a recommended survey from the CSDE, and districts must utilize a certain number of questions from the survey when developing their own. Table 3 displays four of the questions connected to the problem of practice. The percentage shows the families who marked “strongly agree” or “agree” on a Likert scale of 1 to 5 and represented by the percentage for each year.

**Table 3**

*Family Climate Survey Data, 2019-20 to 2021-22*

<i>Questions</i>	<i>2019–2020 Strongly Agree/Agree</i>	<i>2020–2021 Strongly Agree/Agree</i>	<i>2021–2022 Strongly Agree/Agree</i>
My child’s teacher(s) focused on maintaining a strong relationship with him/her this school year.	78.7	76.5	77.3
My child’s teacher(s) helped me understand how I can best support my child’s learning at home.	62.3	70.6	60.8
At least one adult in this school knows my child well.	**	84.8	82.5
The school helped students and families learn strategies to understand and manage their emotions and actions during the school year.	56.7	63.1	50.5

*Note:* \*\* Due to COVID-19, this question was not included in the 2019–2020 Climate Survey to Families.

The CPS conducted a family survey each year from 2019 through 2022, and some of the survey questions provided evidence about the perception of their relationship with teachers. The family survey data collected from 2019–2020, 2020–2021, and 2021–2022 show inconsistencies in student–teacher relationships. The survey response to “My child’s teacher(s) focused on maintaining a strong relationship with him/her this school year” showed a decline in positive relationships and connections. In Table 3, the number of respondents who agreed or strongly agreed decreased from 2019 to 2022 by 1.5 percentage points. The table shows a decline in relationship building between students and teachers, as the percentage of families who disagreed with the statement increased between 2019 and 2022. COVID-19 exacerbated the lack of connectedness between staff and students due to online learning and a lack of in-person learning and peer interactions (An et al., 2023).

In addition to school climate, school attendance plays a vital role in student learning and a sense of belonging and connectedness. According to Table 4, the number of students absent has increased markedly over the four years. This table shows a profound increase in chronic student absenteeism from 0.02% in 2019 to 5.5% in 2022.

**Table 4***Chronic Absenteeism at Seabreeze Middle School, 2019–2022*

Race	2019–20 School Year		2020–21 School Year		2021–22 School Year	
	School Count	Percent of School	School Count	Percent of School	School Count	Percent of School
American Indian or Alaska Native	0	0.00%	0	0.00%	0	0.00%
Asian	1	0.20%	1	0.30%	2	0.50%
Black or African American	2	0.50%	5	1.30%	2	0.50%
Hispanic/Latino of Any Race	1	0.20%	4	1.00%	6	1.00%
Native Hawaiian or Other Pacific Islander	0	0.00%	0	0.00%	0	0.00%
Two or More Races	0	0.00%	0	0.00%	0	0.00%
White	7	1.70%	24	6.20%	34	8.40%
Grand Total	11		34		44	

*Note.* This data represents students who had more than 20 absences.

Figure 1, Table 3, and Table 4 illustrate the referral, climate, and absentee data that contribute to the problem of practice. The data also highlights the various stakeholders that play a part in this issue: teachers, students, and families. The theme that has emerged is a decline in the degree or quality of the data and the increase in referrals to the office. The findings show that SMS faces serious issues with what the research associates with low levels of student connectedness.

### **Purpose and Significance of the Study**

The purpose of this ISDiP is to assess to what extent ongoing professional learning, focused on social–emotional learning (SEL), impacts a teacher’s efficacy, instruction, knowledge



of the importance of teacher–student relationships, and shared experiences for students through Wingman. The overall improvement goal of this study is to cultivate a community of kindness, care, trust, and a strong school climate for students to feel connected and a stronger sense of belonging. The longer-term aim of this work is to decrease the number of office referrals and increase daily attendance for all students.

There have been previous and ongoing attempts to address the problem at the school and in the district. Before COVID-19, CPS brought together representatives from each of the middle and high schools and developed small committees to craft weekly lessons for Advisory for each grade level, for all students of grades 6 through 12. The professional learning for this small group came from the Collaborative for Academic, Social, and Emotional Learning (CASEL) (CASEL, 2003) through Yale University in New Haven, Connecticut. The goal of these committees was to turn this learning back to the buildings, work with building administration to schedule the weekly advisory meetings, train staff, and then implement with fidelity. The Advisory program was initially developed and transferred to the buildings from the district. Once the district released responsibility to the buildings, consistency and fidelity shifted. The school social worker who organized and facilitated the advisory committee left for another role; therefore, much of the work already done dwindled.

CPS also started to work on professional learning infused with social and emotional competencies for all staff during the 2021–2022 school year. The district supervisor collaborated with a small committee to develop workshops to bring back to all staff. This learning started with the science behind emotionality, the importance of learning focused on SEL, and how to best support students. Workshops included the introduction of a class charter, the use of mindfulness, and an overview of self-care strategies. In March of 2020, COVID-19 disrupted all schooling,

and this professional learning stopped. At this point, all learning focused on SEL explicitly shifted to the responsibility of the buildings. The previous professional learning intended to strengthen and improve the SEL-focused professional learning for all certified teachers at SMS consistently.

If successful, this Improvement Science study will impact other educators in middle schools across CPS. As teachers develop their awareness and understanding of SEL and work to cultivate stronger relationships with students, students feel a greater sense of connectedness and belonging. Studies show that positive student–teacher relationships are often characterized by student perceptions of feeling cared about by teachers, getting along with teachers, and being treated fairly (Joyce, 2015). Students and teachers can benefit from a program that allows for greater student agency and implementation of student-learned SEL skills to create a greater sense of belonging. Research has shown that negative experiences related to a sense of belonging during adolescence can profoundly affect psychosocial adjustment (Allen et al., 2014) while having a positive sense of belonging can aid successful psychosocial adjustment (Allen, 2016; Sari, 2012).

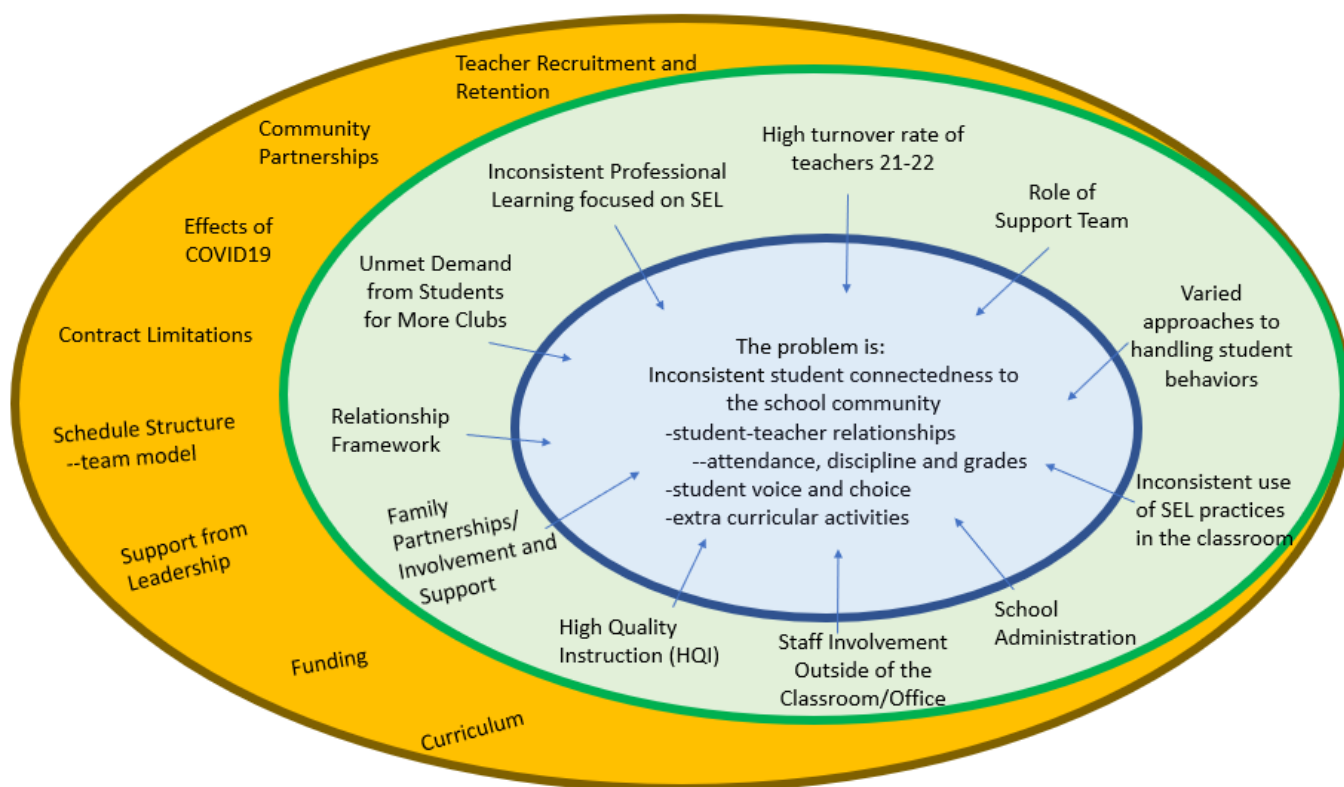
CPS is committed to a district focus on high-quality instruction (HQI) for all students, which has driven professional learning at SMS. Relationships are critical to HQI and have been woven throughout professional learning over the past five years with the DRF as the framework. The district's and school's focus on HQI is part of the school-level improvement plans and goals. The district expectation is that all teachers' goals reflect the core components of HQI, which integrate the relationship framework throughout teacher practice.

If this issue is left unaddressed, discipline referrals will continue to rise, attendance will continue to decline, and overall academic and non-academic student outcomes will decline. This

study's data and findings can help other educators and districts better understand the importance of teacher–student connections and their overall impact on student performance and outcomes. This study also aims to provide educators with strategies to be shared and utilized within school communities to improve students' sense of belonging through SEL practices in and out of the classroom. While the school for this study is one middle school in a district with three middle schools, the study can be replicated and used with other schools in this district and middle schools in other similar districts.

### **The System**

Many components contribute to a student's feeling of belonging and connectedness to a school community. The researcher developed the systems map shown in Figure 2 while discovering the root causes of student disconnectedness and the structures that contribute to the problem. After the researcher observed the SMS community and worked with others to define the actionable problem of practice, a systems map was developed to better understand the nature, roots, and severity of the problem as it exists in the local context (Perry et al., 2020). The systems map illuminates the factors contributing to the problem within the school community. The issues in the outer yellow ring are district level, the second ring shows specific middle school issues, and at the core are the most prevalent issues.

**Figure 2***Systems Map*

The intentionality and development behind all professional learning is to provide adult learners with meaningful, relevant, high-quality learning experiences that transfer back to the classroom the next day. The outcome of all professional learning is to improve experiences in academic and non-academic areas for all students. At the core of this systems map is the inconsistent student connectedness to the school community and the factors that contribute to this: student voice and choice, attendance, extra-curricular activities, and student-teacher relationships.

The inner circle of the map identifies the contributing factors at the heart of the problem. These factors include a need for more student voice and choice, better shared experiences for students, and a greater understanding of SEL with a focus on the power of teacher-student

relationships. The researcher conducted empathy interviews (Table 4) with eight certified teachers across each grade level and content area; each confirmed the numerous causes identified in the system map. Root causes are a subset of this and are shown in the fishbone diagram. During the empathy interviews with certified teachers, one eighth-grade teacher shared the need for “professional learning focused on SEL” and “stronger relationship building—student to student and student to teacher.”

### **Research Design for the Root Cause Analysis**

From the systems map, the researcher identified the root causes of the problem and conducted a study using qualitative and quantitative data. Root cause analysis was used to answer the Improvement Science question: *What is the exact problem I am trying to solve?* (Hinnant-Crawford, 2020). This allows the researcher to look below the surface at the “roots” of the problem, diagnose the situation, and identify the root causes (Hinnant-Crawford, 2020). Educational research utilizes Improvement Science due to its problem-specific and user-centered approach (Bryk et al., 2015). This dissertation consists of two phases of study: one to determine the root causes of the problem and an intervention. Phase 2 includes conducting the intervention and analyzing the results to determine effectiveness and next steps.

### **Data Collection**

The design of this study was to determine root causes and collect data that would inform teaching practices that strengthen student–teacher relationships. For students to engage in an enriching, meaningful school experience that ensures they feel a sense of belonging and connectedness to the school community, students must know that adults care about them. An exploratory case study provided the platform to access this information (Yin, 2014), suggesting that evidence for case studies may come from many sources of evidence. Consistent with a case

study design, the primary sources of information for Phase 1 of this Improvement Science inquiry were interviews with various stakeholders, observations of student-led programs such as Advisory and Wingman, and documentary information (Yin, 2014).

Through semi-structured interviewing, the study extracted insights into the perceptions of student–teacher connectedness and student belonging at SMS (Yin, 2014). The small focus groups, comprised of eight certified teachers, lasted 30 minutes on average. The student focus groups, consisting of four to six students from each grade level, lasted about 30 minutes.

### ***Interviews With Teachers and Coaches***

Interviews with middle school teachers and instructional coaches comprised a teacher from each grade level, different content area disciplines, and three different coaches—numeracy, literacy, and instructional. Table 5 provides the demographic data for teachers and coaches. Each stakeholder agreed to a date and time that was convenient. The interviews took place individually in their respective offices, conference rooms, or classrooms. The interviews lasted approximately 30 minutes. The researcher used the interview guide and protocol to guide the interviews (see Appendix C). The interview consisted of multiple questions to gain an in-depth understanding of the respondents’ perceptions of student connectedness and belonging and factors that impact students’ perception and sense of belonging in a school community (see Appendix C for interview questions).

**Table 5***Characteristics of Interview Participants*

Participant	Role	Education Level	Grade Level	Years in MS Role	Years in Education
Teacher A	Teacher	Master's plus 15	7	15	15
Teacher B	Teacher	Master's	6	14	18
Teacher C	Teacher	Master's plus 15 Nat'l Board Certification	6, 7, 8	19	35
Teacher D	Teacher	Master's Plus	8	22	22
Teacher E	Teacher	Master's	7, 8	12	15
Teacher F	Teacher	Master's	7, 8	20	24
Teacher G	Coach	Master's and 092	6, 7, 8	18	4
Teacher H	Coach	2 BA, Grad, 6 <sup>th</sup> Year	6, 7, 8	14	7

***Observations***

Observations at school events and tours of the school environments provided an element of triangulation for the research. Direct observation occurred on-site to perceive relevant behaviors or environmental conditions relevant to the study (Yin, 2014). The observations were non-participatory and allowed the researcher to be an outsider. Therefore, she could record data without direct involvement (Creswell, 2013). During four different Wingman experiences, eight to ten classroom walkthroughs were completed. Data were collected on a Google Form (Appendix H).

***Document Review***

Documentary information explored included the school district's family handbook, brochures, newsletters, handouts from CPS, the district's strategic plan, the CPS strategic plan, the district's website, and each school's website (both computer and phone application versions). The researcher used a consistent protocol to review the documents. Based on the purpose of the research, the areas considered were (a) the original purpose of the document, (b) whether the document was available in other languages besides English, (c) its relevance to student

connectedness, (d) whether the document was current or outdated, and (e) was the document connected to the larger vision of the district's strategic plan and focused on student connectedness.

The advantage of using multiple sources of evidence was to develop converging lines of inquiry and enhance the ability to find more convincing conclusions (Yin, 2014). Rossman and Rallis (2016) explain that using multiple sources allows the reader to interpret and decide the applicability of the case learnings to another setting.

### **Data Analysis**

The case study analysis guided the theoretical proposition that led to the study (Yin, 2014). Rossman and Rallis (2016) present a generic process for data analysis: organizing the data, becoming familiar with the data, generating themes, coding the data, interpreting, searching for alternative interpretations, and, finally, writing the report.

### **Generating Categories and Themes**

The researcher reviewed printed paper transcripts for each interview, identified noteworthy statements pertaining to the research, and formulated meanings. The expressed meanings were sorted into categories, and the literature review was used as a guideline. The difference between a category and a theme is that the category provides direction for data gathering. In contrast, the theme emerges as a sentence, word, or phrase that describes the subtler and tacit processes (Rossman & Rallis, 2016).

### ***Coding***

The researcher found coding appropriate for this study since coding is the formal representation of analytic thinking (Rossman & Rallis, 2016). The researcher devoted meticulous



attention to the data so that she could symbolically assign summative, salient, or evocative attributes to the data (Saldaña, 2013).

### **Interpretation and Finding Alternative Understanding**

Interpreting the data involves moving from thematic analysis to attaching significance, offering explanations, making inferences, and making sense of the findings (Patton, 2015). The researcher had to pay meticulous attention to the language used by each participant as she immersed herself in profound reflections on the emerging patterns and meanings of the experiences of her participants (Saldaña, 2013). Validation of the findings from the research participants, observations, and documents was disaggregated and compared to the researcher's results.

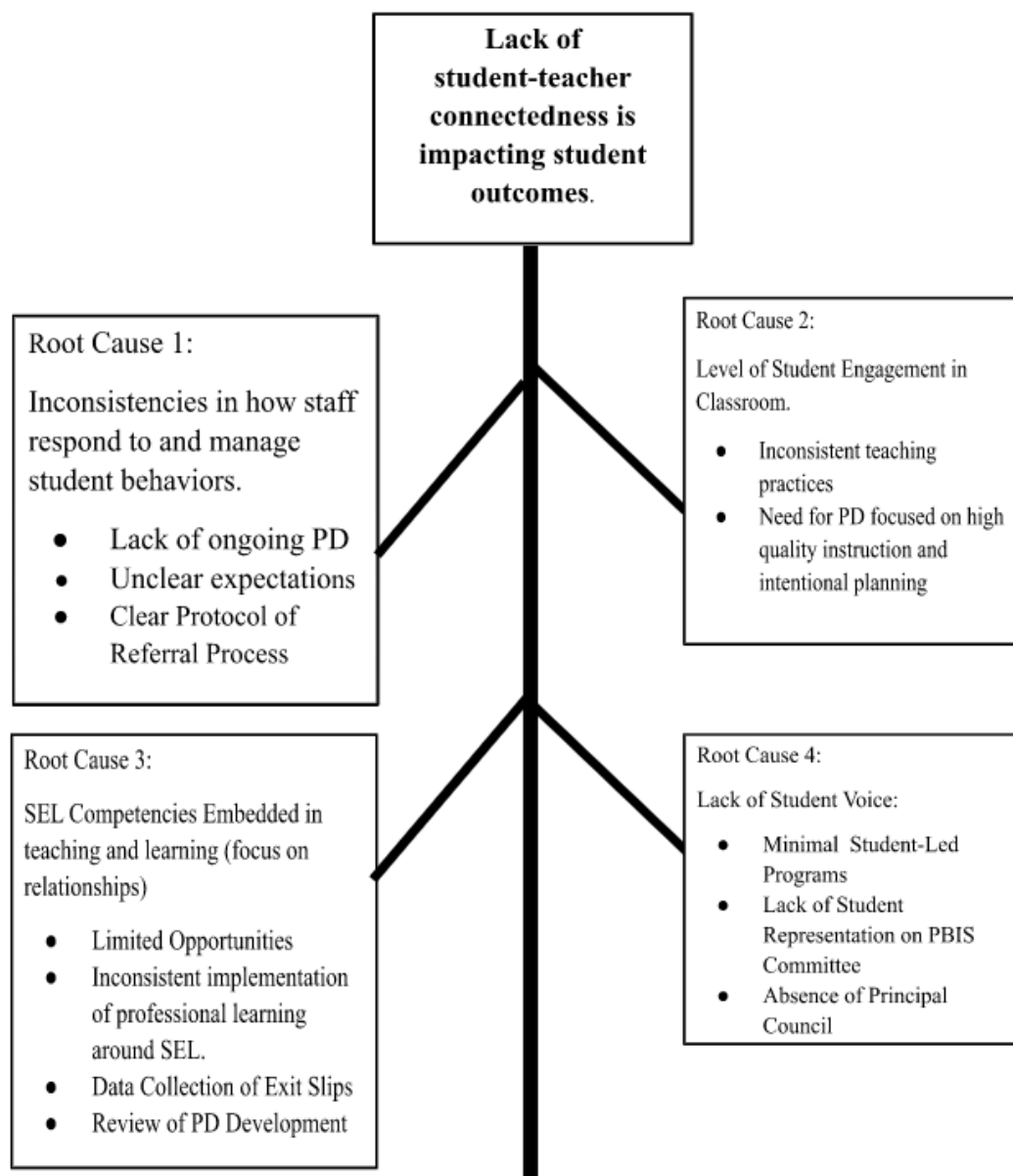
### **Findings**

This study aimed to understand the root causes that serve as generative mechanisms creating a weak student–teacher relationship that results in undesirable student outcomes. The study sought to uncover the student–teacher relationship's impact on student outcomes, performance, and overall social and emotional well-being. In understanding the individual and structural drivers, the impact of student–teacher connectedness, and its impact on student outcomes. The researcher theorized that the analysis would validate the problem of practice and provide guidance for an intervention specific to the localized context. This section presents the findings of the case study that explored the impact of student–teacher relationships on student outcomes and performance at Seabreeze Middle School. All sources contributed to a rich and in-depth understanding of the impact of student–teacher relationships on student outcomes and performance. The researcher discusses these narratives through main categories along with

themes and sub-themes that emerged. The closing section of the chapter provides a summary of the findings as well as a working theory of improvement.

### **Root Cause Analysis**

At Seabreeze Middle School, the researcher identified several root causes that led to the fishbone diagram (Figure 3). The fishbone diagram is a visual aid that helps better understand the root causes of a problem, allowing for a diagnosis of the problem rather than a list of solutions. This helps the researcher to find opportunities for improvement and narrow down the root causes. The problem is situated at the top of the fishbone, and the root causes branch out along the “body” of the diagram. The three critical steps of the fishbone diagram include determining the problem you want to solve/improve, identifying the factors causing the problem, and identifying the detailed factors that may contribute to the broader factors (Hinnant-Crawford, 2020).

**Figure 3***Fishbone Diagram*

**Root Cause 1**

The first root cause identified was the inconsistencies in how staff respond to and manage student behaviors due to the need for more professional learning focused on SEL. During one empathy interview, a teacher shared: “Sometimes I feel left on my own to learn about SEL and how to use it in my teaching. I wish I knew more.” There was inconsistent professional learning around SEL, and not all staff are included in the professional learning when it is offered. During the 2018–2019 school year, the only team members trained in SEL were the Pupil Personnel Services (PPS) department, representing only 15% of staff. Expectations could have been more explicit regarding outcomes, staff commitments to SEL, and what it means for specific roles. Some classroom teachers expected SEL to be implemented only by the support team staff, and SEL appeared to be outside the realm of the role of a classroom teacher. There needed to be a straightforward process or protocol for the behavioral referral process. A teacher’s ability to empathize with a student could impact their approach to the student’s behavior and their response (Wink, 2021). Some teachers emailed the assistant principals, others sent students straight to the office or to the school counseling department, and others handled everything within the grade-level team or in their classrooms. The teachers responded differently to each infraction. Research demonstrates that SEL skills must be a part of the school’s daily life for everyone—students, teachers, staff, and administrators (Jones, 2013).

**Root Cause 2**

A second identified root cause was the level of student engagement in the classroom. Student engagement levels vary from classroom to classroom: classroom walkthroughs, high-quality instruction lab sites, and informal and formal observations. The level of student engagement can be seen as evidence of students’ efforts required for their cognitive development

and ability to create their knowledge, leading to high student success (Martin, 2018). Teacher practice and student behavior expectations fluctuate from classroom to classroom. Research shows that “rapport and collaboration between students and instructors in an interactive and cohesive environment, including group work and instructive feedback, are important for student engagement resulting in learning success” (Martin, 2018, p. 208). Individuals felt comfortable sharing and reflecting on their practice in small settings. The district rolled out a 2021–2022 school year schedule, an 80-minute block schedule for all SMS students and staff. Many emails, calls, and anecdotal data collected at all three middle schools highlighted dismay at the schedule. This increase in block time required teachers to spend more time planning and required professional learning around block scheduling. Hybrid learning during the 2020–2021 school year increased teacher-centered instruction to support both in-person and at-home learners. There was never intentional professional learning for teachers around planning for a student-centered 80-minute instructional block. The longer instructional blocks led to an increase in unstructured time in the classrooms, which increased poor student behavior. A sense of belonging was undoubtedly lacking in the classroom, evidenced by the data collected in the school climate survey.

### **Root Cause 3**

A third identified root cause was the need for more engagement and attendance of staff in professional learning focused on SEL and implementation in teacher practice. There were varied levels of understanding and knowledge of the SEL competencies amongst certified staff. There were no baselines or formative assessments of staff and their knowledge and understanding of SEL competencies. Due to COVID-19, the CSDE developed flexibilities offered by the state, which included goals focused on SEL. In response to these flexibilities, CPS developed an SEL

vertical framework during the 2020–2021 school year as a supporting resource for certified teachers to support teacher evaluation. Three members of the PPS team took part in SEL training through the YALE Center for Emotional Intelligence in RULER in 2020–2021. Ruler stands for the five areas of emotional intelligence: Recognizing, Understanding, Labeling, Expressing, and Regulating emotion. However, after this initial implementation from the district, the expectation was that schools would continue with SEL learning. The three staff trained in RULER have all left the district as of September 2022. The pandemic necessitated the prioritized focus on health, safety, and SEL. This varied level of understanding and application of the SEL competencies led to a broad range of teacher responses to student behaviors in the classroom. Some teachers handled student issues in the classroom on their own; many classroom teachers shared student concerns within a team and problem-solved, and a small percentage of staff submitted student behavior problems to the office, which led to an increase in office referrals, as mentioned during the empathy interviews.

#### **Root Cause 4**

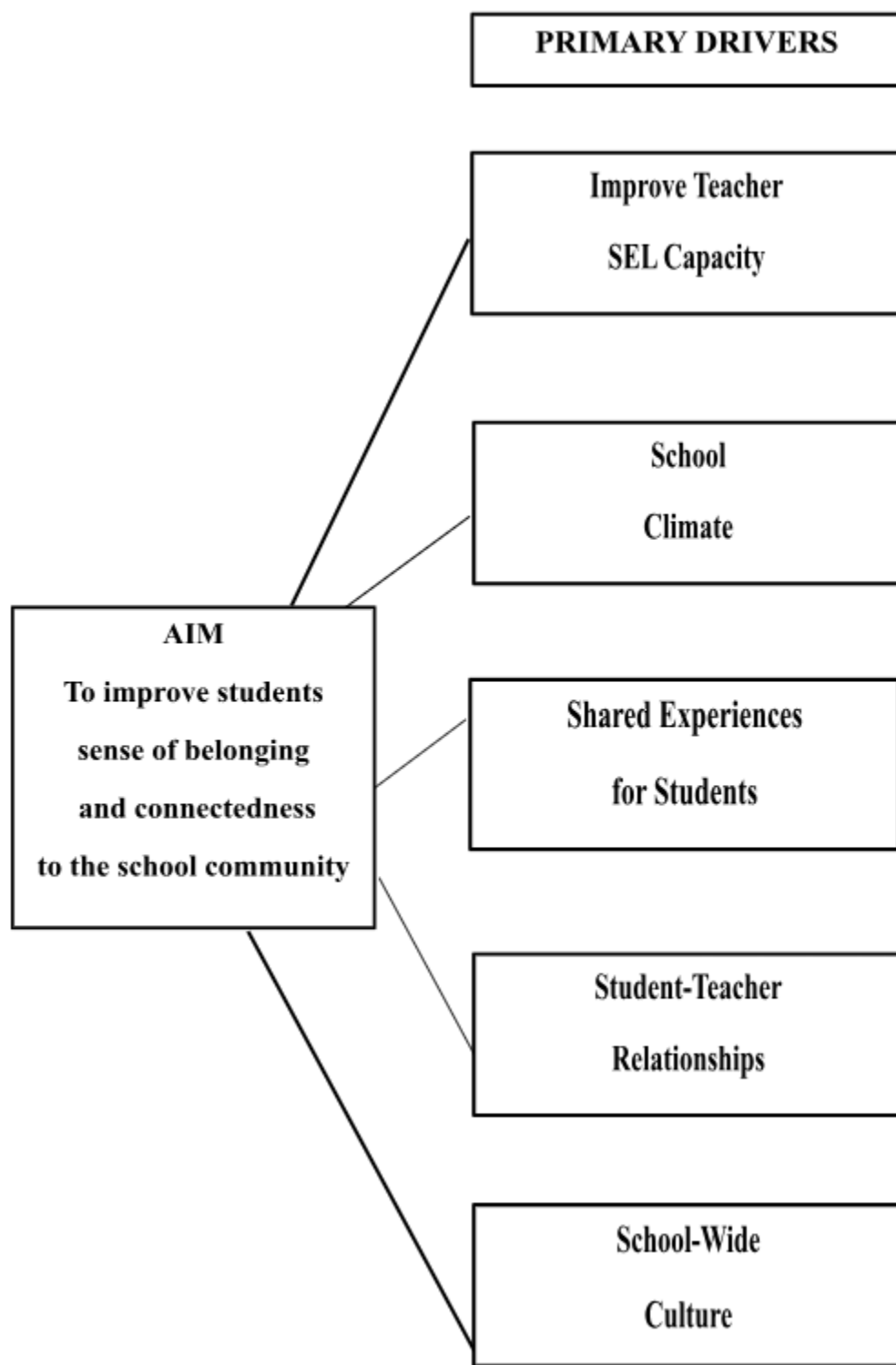
A fourth root cause was the need for more student voice and choice. Due to COVID-19, the Principal's Council stopped meeting and has yet to resume. These small group meetings were an opportunity for the principal to meet with students from all grade levels once a month, eat pizza with the students, and hear first-hand what was happening in the school. Three key questions drove the conversation for the small group meetings: "What is going well?" "What can we do better?" and "What would your ideal school look, sound, and feel like?" After-school clubs were at an all-time low due to the inability to staff clubs for students. One eighth-grade student said, "We need more clubs and ways to get us involved outside of our core academic classes." SMS was missing a student-led program or club that provided students with voice,

choice, and an outlet for them to showcase the SEL skills they would be learning from teachers following professional learning. During one interview, the SMS teacher shared with the researcher that there was a “need for more shared experiences for students, and more non-academic opportunities will help our students grow socially and emotionally.” Having a sense of choice and control is linked to prosocial behaviors such as empathy, moral reasoning, and better relationships with others (Scales et al., 2022).

## **Discussion**

The researcher sought to gather a cross-section of perspectives and experiences from the teachers at SMS. This section will discuss the findings, implications, recommendations, and areas for future research. The data analysis led to the discovery of several observations collected during this research study.

Some implications for policy and practice regarding the current research emerged during the study. As mentioned in the statement of the problem, school districts need to explore and develop a culture around student connectedness and the impact of student–teacher relationships on student outcomes. The researcher further analyzed the root causes to develop the initial driver diagram, Figure 4, focusing on teacher professional learning, school climate, shared experiences for students, and a deeper analysis of the power of student–teacher relationships. The researcher has further expanded this Improvement Science study from the root causes to the development of a working theory of improvement. The first step was to determine the main drivers that could influence the Problem of Practice (PoP). Figure 4 presents an initial, partial driver diagram, whereas a full driver diagram will be presented at the end of Chapter 2.

**Figure 4***Partial Driver Diagram*



The partial driver diagram identifies potential drivers aimed at improving students' sense of belonging and connectedness in the school community. This diagram focuses on the adult actions that need to occur to improve student connectedness. In Chapter 2, a full driver diagram is presented that includes actions that influence the primary drivers.

### **Positionality**

I am a cisgender married white female with a son and a daughter. I grew up in Orange, CT, and was the youngest of two children, having one older brother. I grew up with hard-working parents who did not go to college, yet both worked two or three jobs to provide my brother and me with experiences they were not fortunate enough to have. At the age of 16, my father came home from school one day to find his father had died from a cerebral aneurysm. He dropped out of high school to care for his mother and four siblings. My parents were handed nothing, and later, they shared with me the sacrifices they made through life to provide for my brother and me. My lived experiences as a daughter, wife, mother, student, and educator have shaped who I am today as a professional educator.

I have personally and professionally seen a teacher's positive and negative impacts on a student. I am an educator today because of two teachers who had a tremendous impact on me, one positive and one negative. I received reading support through middle and high school, and when asked what I wanted to do when I grew up, I shared that I wanted to be a lawyer or a teacher. The reading teacher responded quickly and told the class I needed to "greatly improve my reading skills if I ever thought I could be one of those." I always remembered that moment, feeling, and the teacher's voice. In the classroom across the hall, I had a history teacher who made instruction come alive every time I entered the classroom, and she made me feel cared for, loved, brilliant, and so much more. I knew at the time that I was not brilliant, confirmed by my

IQ, but in her presence, in the four walls of the classroom, she had this way about her, making every individual in the class want to be there. Throughout my professional career, in many different roles as middle and high school classroom teacher, district coordinator, assistant principal, district instructional supervisor, and principal, I have seen day in and day out the tremendous impact a teacher can have on a child and their overall well-being. I observe students in one classroom engaged in learning, the teacher, and peers. The very next day, I walked down the hall to see the same group of students with another teacher, and the students were disengaged, disrespectful to one another, and misbehaving.

My position within the organization as building principal provides teachers with comfort and ease as we meet, and teachers participate in my research. Teachers have been supportive and encouraging, as most are aware of the work I am engaged in and know the purpose is to improve education. My role also allows me insight into the organization and the historical background of SMS. I have cultivated strong relationships with teachers at SMS and a culture of ongoing collaboration. These relationships help the participants feel more comfortable in the interview and more willing to be honest and open. I feel very strongly about the power of the teacher and the impact that teaching has on young learners. As a student, I found that the connection to specific teachers or professors impacted course selection, level of performance, engagement, and connection to the community. I place great emphasis on relationships and the power of relationships for all students every day.

### **Chapter Summary**

This chapter focused on the first stage of the ISDiP study, the problem of practice. The researcher provided the purpose and significance of the study, a comprehensive systems map, data collection methods, a root-cause fishbone diagram, and a partial driver diagram that

included primary drivers. The researcher included both qualitative and quantitative evidence through climate surveys, attendance data, and referral data. There were previous attempts to address the problem of practice: students' sense of belonging and adult SEL practices. This is a high-stakes issue. Chapter 2 will provide the reader with the purpose and significance of the study through the lenses of both adults and students. The researcher will identify a high-leverage intervention that has the potential to impact the problem of practice.

## **CHAPTER 2: REVIEW OF SCHOLARLY AND PROFESSIONAL KNOWLEDGE**

This research consists of two phases: a review of scholarly literature and a review of professional practice. In this chapter, the researcher analyzes both parts in relation to students' impact on the problem of practice and then adult actions contributing to the problem of practice. Finally, the researcher examines the potential interventions based on the research. In Phase 1 of this study, the researcher provided a comprehensive explanation of the background of the problem, the purpose and significance of the study, and a detailed systems map that highlighted the layers of the problem. The researcher then shared an overview of the research design to conduct the root cause analysis, which included numerous data collection methods. After the root cause analysis, the researcher identified three potential ways to influence the problem of practice. The next phase of an Improvement Science dissertation is to conduct a review of relevant literature and professional practice. The chapter concludes with a working theory of improvement, which guided Phase 2 of this dissertation.

This review consists of scholarly research and professional practice research about the PoP practice through both the student and the adult lenses, and then potential interventions relevant to the school district as it considers student connectedness and belongingness and its impact on positive student outcomes, both academic and non-academic. To strengthen student connectedness and belonging, the researcher will look at several research-based approaches to best determine the change effort that will have the greatest impact on student connectedness to the school community. While all these interventions are research-based and represent an improvement strategy, the researcher can only implement some of them. Therefore, the final change idea will be high leverage and have the greatest potential to impact the root causes.

Langley’s model of improvement, Plan, Do, Study, Act (PDSA) (Crow, 2020) includes a literature review and research into current education practice through an environmental scan. The researcher conducted a scan with six building administrators, all from suburban areas across the country, to see if they are struggling with the same problem of practice: the lack of student connectedness and belonging. See Table 6 for demographic data of environmental scan participants. Identical questions were asked during each scan, focusing on issues that led to a lack of student connectedness and belonging in individual schools. Once all the data were collected, the researcher analyzed the data, uncovered overarching common themes, and then supported these themes with research-based evidence. The researcher completed a thorough literature review to better understand the problem of practice.

The sense of belonging and connectedness in schools provides students with opportunities to engage in experiences that lead to greater social, emotional, and academic gains. The researcher analyzed and disaggregated several data sources, such as student enrollment and demographic data, discipline data, office referral data, school performance data, family climate survey data, absenteeism data, and environmental scan data. The data justifies the greater need for an improvement in student connectedness and a sense of belonging at SMS.

**Table 6**

*Demographic Data of Environmental Scan Participants*

Participant	Role	School Population	Grades
June	Principal	400	5–6
Steve	Principal	365	6–8
Holly	Assistant Principal	450	6–8
Jose	Principal	689	9–12
Rose	MS PPS Supervisor	402	6–8
John	Assistant Principal	501	5–6

The next steps are the literature review and exploring the research behind this problem of practice through the lenses of the students and the adults, looking in depth at the problem. The chapter is organized to help the reader understand best practices through the purpose and significance of the review, which allows the reader to better understand from a local level context. The review of scholarly literature and professional practice leads to the identification of the interventions. The researcher shared if an intervention is effective and the anticipated observable improvements. Finally, a set of research-based actions that are most promising to address the problem of practice were developed and shared. A full driver diagram was developed to show a set of change ideas that could address the problem of practice and a single change idea that will be implemented as part of this study.

### **Purpose and Significance of this Review**

The purpose of this ISDiP is to assess to what extent ongoing professional learning, focused on SEL, impacts a teacher's efficacy, instruction, and knowledge of the importance of student connectedness and a sense of belonging to their school community. The overall improvement goal of this study is to cultivate a community of kindness, care, trust, and a strong school climate for students to feel connected and a stronger sense of belonging. If this problem were addressed, one would expect to see an increase in the overall school climate, which would lead to greater student engagement, a decrease in office referrals, an increase in daily attendance, and an improvement in student involvement in the school community.

### **Student Lens**

The problem of practice impacts students in several ways. The researcher conducted a scholarly review and a review of professional practice through the lens of the students. The

researcher then synthesized the research to identify what is consistent between professional practice and scholarly research.

### **Scholarly Review**

The lack of student connectedness and belonging impacts student performance in schools through attendance, engagement, and behavior. Student connectedness and belonging is a place where individuals fit in and feel safe (Riley, 2019), accepted, and respected (Allen et al., 2016). Teacher support (Allen et al., 2016) and a feeling of trust between teachers and students (Zee et al., 2021) lead to a greater sense of belonging and happiness for students in school. Research has shown that overall school climate shapes students' self-efficacy (Datu, 2020) and that student–teacher relationships impact student achievement (Zee, 2021). Students who do not fit in or feel as though they do not belong or are not cared for begin to withdraw and not engage in the learning or school community (Grossman, 2022). Student agency and engagement increase student efficacy and empower the student voice (Riley, 2019).

When students have greater agency (Riley, 2019) and opportunities to shine in school, their overall mental health improves, and their sense of belonging flourishes (Garcia-Moya et al., 2019). Increased levels of school belonging for students are connected to positive academic, social, and mental health outcomes (McBeath, 2018). Students who are less connected in school have a greater likelihood of experiencing poor mental health, substance abuse, or even violence (CDC, 2022). Schools play vital roles in cultivating a community that is conducive to inclusivity and connectedness for students (Pikulski, 2020). For students subjected to negative school climates, including teacher-centered settings, students create resistance and demonstrate difficulty interacting with peers (Angus, 2017).

## Review of Professional Practice

The researcher conducted an environmental scan with six administrators across the country. The researcher sought out colleagues who were in similar districts with similar demographics and asked the following questions:

- Is lack of student connectedness and belonging an issue in your school (if not in a school/district)?
- What structures or systems does your school have in place that help strengthen student sense of belonging and/or connectedness?
- Do you think there is anything that can be done in addition to the above? If so, what?
- What do you think are the greatest factors that impact students' sense of belonging and connectedness in a school community?
- How has your school used social emotional learning skills and competencies to improve teaching practices that lead to an increase in students' sense of belonging and connectedness?
- Have you engaged in professional learning relevant to this topic? If yes, what was it, and how has it helped strengthen student belonging and/or connectedness?

Analysis of the data revealed that all but one interviewee stated that a lack of connectedness and belonging was an issue in their school community. Principals stated that there was a lack of student connectedness and sense of belonging, with one sharing that “not all students can identify a trusted adult they can connect with in my school through climate survey data.” Another principal shared that there were “not enough opportunities for students to engage in experiences that help them build the skills they need to understand the feelings of belonging.” A principal of one middle school stated: “When the school creates opportunities for students to



interact with other students that they may feel more comfortable with, their sense of belonging increases. We need to offer more opportunities for students to feel ‘seen’ or ‘heard,’ and this will impact their sense of belonging.”

### **Synthesis**

An emerging theme that arose was the lack of shared experiences for students and its impact on students’ sense of connectedness and belonging to a school community. A middle school principal in a suburban community noted that students needed more opportunities to get involved and feel a sense of belonging and connectedness. She mentioned that she felt her district did not offer or provide students with experiences that allowed students to gain a sense of acceptance, trust, and respect. During one environmental scan interview with a middle school principal, “Our students need experiences and opportunities that allow them to be seen, feel valued, and cared for by the adults in the building and have built a trusting relationship with at least one adult, I believe their sense of connectedness grows.” Many students participated in after-school clubs; this was their only extracurricular activity outside of school.

A second theme was the need for students to have at least one caring adult in the building they can go to that they trust. Another principal from a suburban middle school shared that students who find an adult who has invested in them as a human, beyond a student, one who really cares about them, will feel a greater sense of safety and care. There is a need to operationalize humanizing schools, which leads to cultivating a community of care, kindness, inclusivity, and compassion for all students (Mehta, 2020). Research shows that when the psychological needs of students are met, teachers can fulfill these needs by showing involvement, providing structure, and supporting autonomy (Roorda, 2017). An overall decrease in student engagement, performance, and motivation is especially common across the transitions

to middle school and high school (Scales, 2020). Students who perceive teachers as caring are more likely to report engagement in school (Klem & Connell, 2004).

### **Adult Actions**

Adults in schools impact the problem of practice through their actions. The researcher conducted a scholarly review and a review of professional practice through the lens of adults. The researcher then synthesized the research to identify what is consistent with professional practice and what is not.

### **Scholarly Review**

Positive, strong student–teacher relationships impact student performance and sense of belonging for students (Ma et al., 2021). Teachers who provide care to their students cultivate students who have stronger academic bandwidth and drive to learn (Fraire et al., 2013), as well as greater positive social and emotional well-being (Longobardi et al., 2016). Studies have found that students who feel they are safe view themselves as more academically competent (Zee et al., 2020). Teachers have the power to both positively and negatively impact students’ performance and outcomes (Bardach, 2020). Positive teacher–school community relationships lead to higher student outcomes and performance (Goktas, 2023) for students. Student connectedness and the quality of student–teacher relationships are associated with students’ engagement in school and academic performance (Bosman et al., 2018) and have a substantial impact on student outcomes (Hughes, 2018).

### **Review of Professional Practice**

Through research and the environmental scan, several themes emerged. The first theme was the need for more structure in the school day for student-initiated clubs or programs. One middle school principal shared his concern about the lack of student voice and, since COVID,

the shift back to more teacher-centered instruction. Another middle school assistant principal shared that “student clubs and after-school programs have dwindled since COVID as teachers are too burned out to stay after school and serve as club advisors.” Studies have shown that COVID-19 had a tremendous impact on teacher well-being and teacher performance (Padmanabhanunni, 2023; Shimony et al., 2022). Therefore, student choice in clubs is minimal, and students leave school directly after homeroom and tend to utilize social media more. This time out of school leads to a decline in social and emotional skills and control for students (Yin, 2023).

A second theme throughout the interviews was the need for more professional learning focused on social-emotional learning for adults in a school community. One school administrator shared that their “district provides zero support, and it is up to the individual buildings to learn, develop, implement, and sustain all professional learning focused on social-emotional learning.” Providing staff with full implementation of SEL training is critical to the well-being of adults (CASEL, 2020) and students in a school community (Shakman, 2017).

A final theme that emerged through the research, empathy interviews, and the environmental scan is the importance of the student–teacher relationship. One teacher from a middle school said that connecting with students is foundational to the content. This teacher also said connecting and getting to know the students must begin during the first few weeks of school and continue throughout the year, and healthy, appropriate information about the teacher should be shared with the students. Sharing information about the teacher allows the students in and makes them feel important. This same teacher also said she captures as many teachable moments in her classroom as possible to pull the students in and allow them to connect with their peers as well. Studies have shown that students with positive student–teacher relationships have higher academic outcomes (Ma et al., 2022) than those who do not, who have a greater chance of

dropping out of school (Krane, 2018). Middle school is a critical year for student development, socially, emotionally, and academically; therefore, student connections to teachers and peers are vital to their success. One middle school principal shared that he has observed students firsthand feeling a sense of success and how that impacts the student's overall well-being and performance.

### **Synthesis**

While SEL reduces risky behaviors and improves mental health (Taylor et al., 2017), the impact is maximized when systemic SEL becomes a coordinating framework that transforms all aspects of schooling—from how staff collaborate to how classroom instruction is delivered (CASEL, 2022). Educators must be equipped with SEL tools to respond to provide for and meet the needs of all students. Research has shown that there is a varied level of understanding and belief of SEL (Bailey, 2022) and how to implement it to best meet the needs of the teacher and students. Ensuring all students have the SEL competencies and skills they need also leads to better attendance than students who do not have the skills (Yin, 2023).

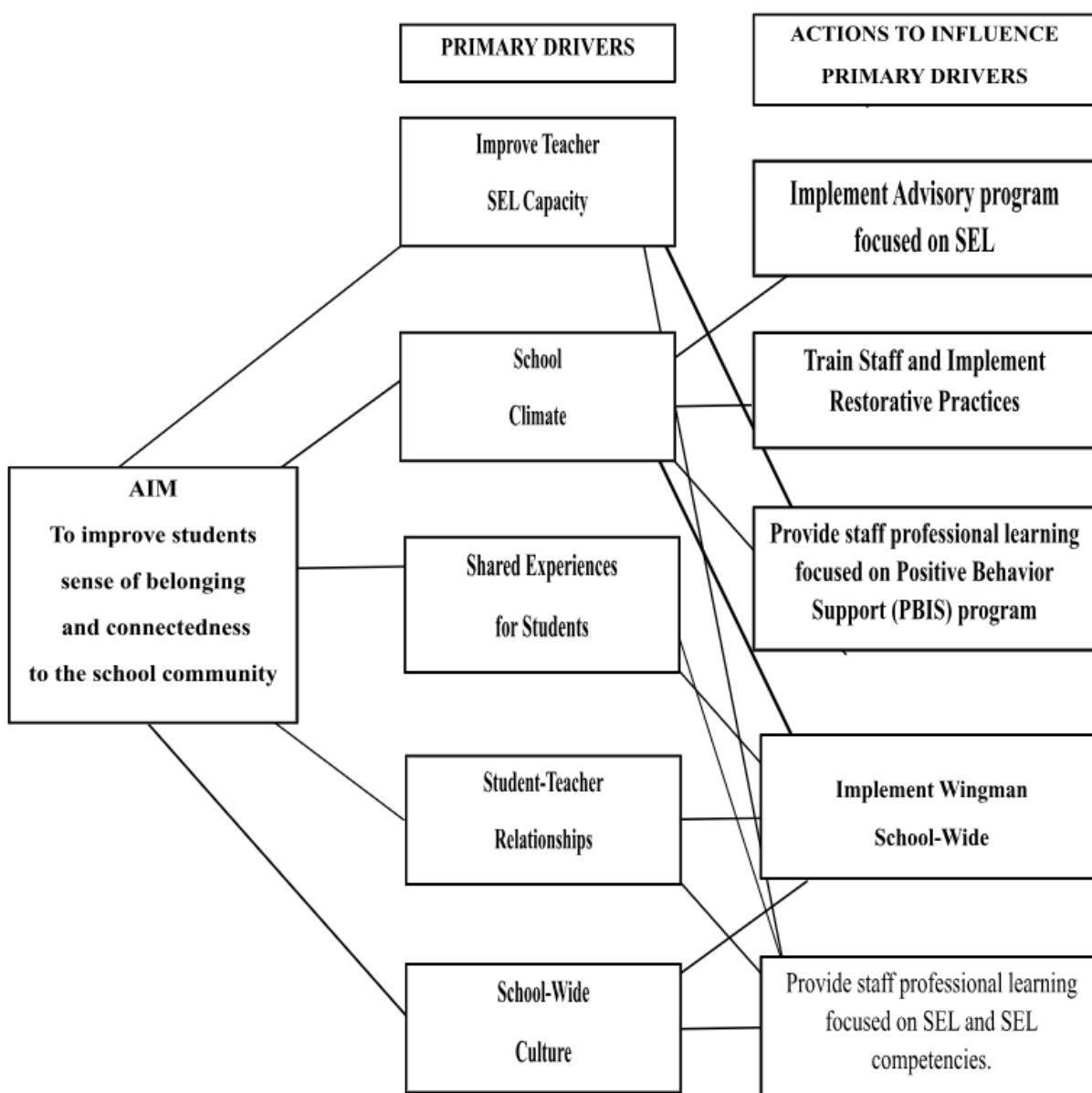
### **Working Theory of Improvement**

During the Improvement Science journey, a working theory of improvement is identified. This is done through weaving together the observations, empathy interviews, environmental scans, fishbone diagram, and research. The theory of improvement explains how the researcher shifts from the analysis of the problem to taking the problem on (Perry et al., 2020). The initial root causes identified in the fishbone diagram focus on the problem of practice: the lack of a sense of belonging to a school. These root causes included varied levels of teacher knowledge and application of SEL in practice, multileveled student performance and behaviors in the classroom, inconsistencies in how staff respond to poor student behaviors and issues, and a lack

of student voice and shared experiences within the school community. While the perfect solution has yet to be identified, the researcher has identified testable change ideas. The driver diagram, Figure 5, is a visual representation that includes a measurable aim that student connectedness and sense of belonging at SMS will improve by November 2023.

**Figure 5**

*Driver Diagram*



After consultation with other educators and teachers within SMS, interviews, and a thorough review of the extant literature and research, it is clear to the researcher that the problem of practice is the need for student connectedness and a sense of belonging at SMS. The root causes led to several drivers, all supported by research. The need for ongoing, intense, relevant professional learning focused on SEL is important for teacher success and daily practice. This professional learning will strengthen teacher practice in the classroom and impact students. Research through CASEL done by Bridgeland shows that “55% of teachers receive some form of SEL training, 23% of them in-service. Four in five teachers (82%) report wanting further training on SEL, with 61% fairly or extremely interested” (Bridgeland, 2018, p. 33). Many teachers view a lack of training and knowledge on how to teach social and emotional skills as a barrier to implementing SEL in their classrooms (Bridgeland, 2021). Through the work of the Collaborative for Academic, Social, and Emotional Learning (CASEL), much research has been done on social-emotional learning and the understanding that SEL is vital to student success in school, work, and life (CASEL, 2018).

### **Advisory**

A comprehensive action and change idea to influence the primary driver would be an advisory program for all students. A component of the problem of practice is the need for shared experiences for students and the need for greater student voice, choice, and leadership opportunities. Providing students with more opportunities and greater experiences around leadership will cultivate leadership skills within our students and help them gain the dispositions and skills they need after middle school and high school. Opportunities like these allow a school culture to flourish and peer-to-peer relations to birth organically. During an interview, an assistant principal expressed growing concerns about the “lack of student opportunities to work

with peers, engage in leadership experiences, and problem-solve collaboratively in a non-academic setting.” This assistant principal explained that moments within the school day or even after school that offer SEL and relationship-building skills will help our students develop more of the skills they need to be successful in life. Studies show that character and SEL development contribute to positive youth advancement (Hatchimonji et al., 2022).

### **Implement a Positive Behavior Intervention Support System**

The planning and implementation of a Positive Behavior Intervention Support (PBIS) system will strengthen adult management strategies and responses to poor behaviors and improve overall student behaviors. If implemented, a committee would comprise certified teachers, social workers, the school psychologist, the instruction specialist, and the assistant principal. The intended outcome of this committee would be to cultivate a community of kindness and inclusivity by strengthening social, emotional, and academic outcomes for all ages, aligned to the Developmental Relationship Framework (Search Institute, 2018), the CPS model for High Quality Instruction (HQI), the CPS Portrait of the Graduate (CPS, 2020), and the later developed SMS Value System. The PBIS committee would develop a timeline and professional learning for all staff that begins with a needs assessment inventory that all staff would participate in and submit. The committee will then analyze the data collected from the needs assessment and develop an immediate action plan that includes areas of focus, the development of advisory lessons for staff and students, the design of a positive reinforcement system, the identification of progress monitoring tools, and the launch of the initial work.

The next steps in this PBIS change idea are the expansion of the committee and the invitations for students, families, cafeteria workers, and bus drivers' voices. Students and families would be a part of the needs assessment survey, provide feedback on the positive

reinforcement system, and give insight and feedback on the schoolwide development of the value system through a behavior matrix. All students would be given a survey asking for their input on the SMS value system, and then small subgroups by grade level would be pulled together for one small group work and the design of a visual representation of the value system. Research has shown that PBIS, implemented with fidelity, establishes a positive and productive learning community (Lewis et al., 2015) and results in improved student behaviors and academic gains (Yeung et al., 2015).

The PBIS work would be applicable to SMS. While this would be valuable to SMS, it will not be included as part of the research due to funding, as the Board of Aldermen has requested a 1.8 million dollar cut from the overall \$106 million budget. It would be fiscally irresponsible for the researcher to request funding during these tough times in the community. Therefore, creative access would need to happen in how the small committee work takes place. Most of this work would have to happen during the school day rather than after contracted school hours. If time could be embedded in the contracted school day, the above timeline and work could happen. The cost of this implementation renders the idea unfeasible within the timeframe of this dissertation, but it could be done in the future as part of a comprehensive plan to address the problem of practice.

If an intervention were implemented, effective, and successful, the overall school climate would improve. This would be evidenced through a whole-school value system created through a small committee. Once a draft of this value system was developed, student feedback and input would be elicited. After student feedback is embedded within the values, a small parent group would be invited to provide feedback.



### **Implement Restorative Practices**

Another change idea is the strengthening of the SMS school climate through improved responsiveness to poor behaviors. Research shows that students who feel a sense of belonging or connectedness to a school have lower odds of getting suspended (Bell et al., 2022). Currently, suppose a student violates a Board of Education policy and is given a consequence of in-school suspension (ISS). In that case, the student spends the day in a classroom isolated from the rest of the student body. While in this space, the student logs into Google Classroom and completes assigned work from his classroom teachers. If the student's classroom teachers have time, they will stop in at the classroom and check in on the student. The student also eats lunch in this classroom with the ISS monitor.

The change idea is the paradigm shift from a traditional suspension model, which is punitive, to a more restorative approach where students identify what happened, the harm they caused, what they learned from the experience, identify their emotions, and then how they make it right. With a restorative model, positive behavior results from the opportunity for the student to make amends and honorably reintegrate back into the learning community. The restorative model is a three-tiered approach: repair harm and relationships, maintain relationships, and restore school or classroom practice through developing relationships. This would provide students with a wraparound approach and support from a school counselor or social worker. The ISS monitor would be trained in how to support and assist the student through a self-reflection document, and the hope is that the student could engage in a restorative circle with the student to whom they may have caused harm. This would be done with the facilitation of a trained staff member. Research shows that suspensions are not making schools safer (Amstutz, 2015). This approach also shifts from being reactive and putting out fires to a more proactive approach,

which helps develop character and creates a more positive climate. Restorative approaches reduce negative behaviors, encourage reflective practice for students, and reinforce positive values (Amstutz, 2015).

Research through the International Institute for Restorative Practices (IIRP) emphasizes that the most critical function of restorative practices is truly restoring and rebuilding relationships (IIRP, 2021), which is vital for students as they are strengthening their own SEL skills and competencies. Research shows that humans are happiest, healthiest, and most likely to make positive changes in their behavior when those in authority do things *with* them rather than *to* them or *for* them (Wachtel, 2022). This approach would allow the student voice to increase, and students would be able to share their feelings and emotions and problem-solve how to make things right with those they may have hurt. During an interview with one middle school teacher, she shared the need to validate and honor the student voice more, and the shift to restorative does this. Research also shows the power of circles in the classroom and the improvement of peer-to-peer relationships, problem-solving skills, listening skills, and increase in engagement (Parker & Bickmore, 2021). Due to the timing of this Improvement Science study and intervention, training all staff on IIRP would not be possible but could be done later as part of a more comprehensive plan.

### **Implement Wingman School-Wide**

While the above ideas are valuable, they cannot be done in the timeframe allotted. The next two change ideas are part of a two-pronged intervention. The first prong is an increase in student voice and choice with the implementation of the Wingman program. Research through CASEL has shown that young people have a perspective that adults do not, and their perspectives should be welcomed and heard (CASEL, 2016). A student-led program would be

Wingman through Dylan's Wings of Change. Wingman teaches students how to build community through experiential learning and inclusivity with other students and faculty. The focus for students is the training in the Wingman program. Wingman, founded in experiential learning (inspired by experiential researcher and trainer Jennifer Stanchfield), models the high-impact instructional practices that accelerate learning and are correlated to achievement (Wingman, 2022). According to the Search Institute's research on the most effective way for young people to develop positive relationships, a person must feel cared for, their growth must be challenged, support must be provided, power must be shared between adults and young people, and expanded opportunities must be provided (Search Institute, 2018). Research shows that thriving schools are those that focus on relationships (Mehta, 2020). Wingman expands the opportunity for peer-to-peer relationship building through engaging collaborative activities revolving around problem-solving with follow-up transferable reflections. The power of community and positive climate building is shifted to the students. Students provide care for each other, and training is founded on first-person behavioral shifts and impacts (*What can I do/what can I change?* and *What can we do/what can we change?*). The program provides students with the opportunity to serve as resources as well as providing services to others while establishing a safe relational environment.

The Wingman program was developed in honor of Dylan Hockley, a first-grader who was killed in the mass shooting at Sandy Hook Elementary School in 2012. His father started the program using the "butterfly effect," thinking one small change could have a magnitude of impact on others (Wingman, 2015). This program is now in over 55 schools across 28 school districts in Connecticut, New York, and New Jersey. Wingman's focus is on shifting school climate and culture and strengthening social and emotional skills for young people. The overall

goal of bringing the Wingman program to our schools is not only to grow our students into leaders but also to create a school and classroom culture that is inclusive and in which the climate is warm and welcoming to all (ongoing). Knowledge and understanding of the SEL competencies—self-awareness, self-management, social awareness, relationship building, and responsible decision-making—is minimally evident at SMS. Initially, this will be a small group of staff and student ambassadors, but over time, students will train their peers, and the group will grow. Eventually, all students would have access to this program once it has been implemented fully.

This professional learning and implementation of the program would lead to a more inclusive learning community, one made up of caring, kind individuals who embody the social emotional skills needed to thrive in society and life. The focus of the professional learning would also include ways that SEL can advance greater equity in our schools and support ways to better humanize the fiber of our schools. This opportunity would be done through family/school partnerships, rigorous curriculum and instruction, and cultivating collaborative, trusting relationships. Research shows that smart schools are making substantial organizational changes to become more human (Mehta, 2020), and all three middle schools in CPS have developed a new schedule to allow for more voice and choice. Our schedule allows for movement breaks and invites students to engage in mindful moments and/or use the mood meter as needed. School counselors are each teaching a course to all students on student development aligned to the SEL skills and competencies.

### **Implement Professional Learning Focused on SEL**

The second prong of the intervention is the development and implementation of professional learning focused on social and emotional learning. A small cadre of teachers would

come together as a committee, along with a social worker, special education teachers, content area teachers (English, social studies, math, science, or world language), an instructional specialist, and a principal, to review and design adult professional learning focused on SEL. This professional learning would include modeling specific SEL strategies adults would engage in together and then transfer to their planning and instructional practices with students. A timeline would be developed that would include a collection of baseline data from all staff on their knowledge, understanding, and comfort level of SEL competencies and skills (CASEL, 2017).

A few of the research-based strategies modeled for and utilized with staff include RULER, mood meter, development of a staff charter, and mindfulness techniques (CASEL, 2017). This change idea will strengthen the climate of the classroom and then the entire school community after utilizing this new learning and applying it to daily practice. Teachers who create healthy emotional climates—those who demonstrate warmth, care, and respect toward their students; who are responsive and caring to their students' needs; and who demonstrate a genuine interest—lead quite different conversations about emotions than teachers who are not as knowledgeable in SEL (Durlak, 2015).

The theme of professional learning emerged through the environmental scan. One principal from a suburban district shared that there is a need for greater district support and expertise around the topic of SEL. Some consultants can be hired through CASEL (CASEL, 2018), who will provide ongoing professional learning workshops and seminars at YALE, and staff can then transfer this back to the buildings.

This research and these resources would be invaluable to SMS. Funding for outside training is not possible, so professional learning workshops developed by a small group of staff, comprised of the assistant principal, a literacy specialist, and an instructional specialist, would

not be applicable in the setting of SMS. The school staff would be responsible for working with the research, free available resources, neighboring districts who are engaging in this work, and district instructional supervisors to engineer this professional learning.

The professional learning focused on the five social-emotional competencies to build teacher capacity, knowledge, and understanding of SEL. Through professional learning, certified teachers engaged in four workshops that modeled thinking experiences with embedded SEL competencies. The presenters also debriefed and shared how they planned and instructed using the SEL competencies. Certified teachers are committed to trying something following each workshop and prepare to reflect and share the outcome for themselves and their students at the subsequent workshop. Teachers will begin to embed the SEL competencies into daily planning and instructional practices.

### **A Two-Pronged Intervention**

The researcher has concluded, from the many possible change efforts explained, that the strongest change idea to address the problem of practice at SMS would be a two-pronged intervention. Part 1 of this intervention is adult professional learning embedded with social emotional learning. The school has dedicated considerable time to strengthening student and teacher relationships so that students feel cared for and know they have at least one trusting, caring adult in our learning community they can go to at any time. Research has found that when teachers believe in their students' abilities and think students are capable, they are more likely to persist, perform better, innovate, and accept challenging tasks (Thornton, 2020). Part 2 of the intervention is to increase shared experiences for students through the Wingman program. Research has found that caring is central to the shaping of relationships that are meaningful, supportive, rewarding, and productive (Elias, 1997). The Wingman program uses experiential

educational pedagogies to foster empathy and empower people with the belief that they matter (Wingman, 2017), and this would be a part of the student experience at SMS. The goal is for students and staff to grow their understanding of SEL through Wingman and the explicit SEL professional learning opportunities, which would transfer to the real-world setting. Creating a classroom culture that supports a model of collective well-being requires an ongoing commitment to building positive social relationships, a sense of self-efficacy for teachers and students, and an environment that supports the flourishing of individuals (Cunningham, 2021).

Observable improvements include teachers planning and instructing with SEL skills embedded in their practice. Students can engage in a student-led program that allows each to demonstrate SEL and leadership skills with their peers, confidence, voice, and choice. Through adult professional learning and student shared experiences, students and teachers will strengthen their understanding of SEL competencies. Overall, with an increase in knowledge, understanding, and application of SEL, connectedness and belonging to the school community will improve. This intervention will be two-pronged: adult professional learning focused on SEL and a shared experience for students focused on Wingman.

### **Chapter Summary**

As evidenced by years of research, student connectedness and a sense of belonging make a difference in the lives of students. Research has shown that relevant, meaningful, professional learning can impact teacher performance (CASEL, 2020) and contribute to more positive social and emotional well-being for students (Longobardi, 2016). The overall goal of this dissertation in practice is to improve students' sense of belonging and connectedness in the school community. Primary drivers that impact this aim include professional learning, school climate, shared experiences, teacher–student relationships, and school-wide culture. After a thorough research

study, a two-pronged intervention approach was used to address the PoP: SEL embedded professional learning for adults and Wingman, a shared experience for students.



### **CHAPTER 3 RESEARCH METHODS**

Utilization and application of the research-based SEL competencies through CASEL provide a foundation for effective social adjustment and academic performance for young learners (Li, 2023). Relevant, meaningful, professional learning can impact teacher performance (CASEL, 2020) and contribute to more positive social and emotional well-being for students (Longobardi, 2016). This study targeted adult practices and greater opportunities for shared student experiences to improve students' sense of belonging and connectedness in school. Based upon an intervention driven by teacher professional learning focused on the social-emotional competencies and skills in the classroom and student shared experiences through Wingman, this action research-based study utilized the Improvement Science framework. The researcher employed a mixed methods design to examine this problem of practice and determined that one data source may be insufficient and that quantitative and qualitative sources needed to be compared to fully understand the results (Creswell & Plano Clark, 2018).

As part of the Improvement Science process, the researcher identified a problem of practice, conducted end-user consultations, reviewed data, completed a root cause analysis and a review of relevant literature, and developed a working theory of improvement. As this ISDiP evolved to its next phase, the researcher gathered data on a research-supported intervention at Seabreeze Middle School. An analysis of the data gathered through qualitative and quantitative processes helped answer the following research questions.

#### **Research Questions**

1. In what ways does professional learning focused on social-emotional learning and the facilitation of Wingman impact teacher practice? Why?

2. Does participation in adult professional learning focused on social-emotional learning result in a statistically significant change in teachers' perceptions of their ability to implement SEL strategies? Why or why not?
  - $H_0$  Adult professional learning focused on social -emotional learning results in no statistically significant change in teachers' perceptions of their ability to implement SEL strategies.
  - $H_a$  Adult professional learning focused on social-emotional learning results in a statistically significant change in teachers' perceptions of their ability to implement SEL strategies.
3. Does participation in the Wingman shared experience, along with teacher implementation of SEL strategies, result in a statistically significant change in students' sense of belonging and connectedness in school? Why or why not?
  - $H_0$  Participation in the Wingman shared experience, along with teacher implementation of SEL strategies, results in no statistically significant change in students' sense of belonging and connectedness in school.
  - $H_a$  Participation in the Wingman shared experience, along with teacher implementation of SEL strategies, resulted in a statistically significant change in students' sense of belonging and connectedness in school.
4. What aspects of the intervention led to the observed changes? Why?

### **Target Population and Participants**

There are two types of participants in this Improvement Science study: adults and students. Part 1 of the intervention involves the certified teachers who took part in professional learning. Part 2 of the intervention is the Wingman experience for students.

## **Adult Participation**

This study included all certified teachers at Seabreeze Middle School. All certified teachers included content areas (social studies, science, math, English, and world languages), specials (art, music, physical education, technology education, and health), and related services (special education, school counselors, psychologists, and social worker). All certified teachers participated in this professional learning as part of the required learning that took place during the contractual day. The intervention workshops happened during the Wednesday professional learning block that takes place after school. In this research study, educators participated in professional learning exercises, with an opportunity for reflection. The target population in this study is all certified teachers in the school. There was no sampling as all members of the target population participated in the professional learning.

Six to eight certified teachers were invited to participate in a structured focus group. To form the teacher focus group, the researcher used a two-dimensional sampling procedure. The teacher focus group included certified teachers selected through non-probabilistic sampling to involve selected individuals who were available and could be studied (Creswell & Clark, 2018). To obtain specific characteristics in the sample, the researcher used a stratified sample to ensure representation from every grade level and department. This was voluntary for all certified teachers, who gave their consent, with anonymity promised, as referenced in Appendix J.

## **Student Participation**

All students participated in the schoolwide Wingman experience. Between 45 and 50 students were trained as Wingman ambassadors. Students interested in being a Wingman ambassador completed an application that included a thorough review by a teacher, a review of academic and behavioral standing, and a parent signature. Once students submitted applications,

the core Wingman adult facilitators, comprising three certified teachers, selected the student Wingman ambassadors. The Wingman ambassadors facilitated and led the Wingman experiences for their peers. During the Wingman experience, data was collected through a walkthrough tool (Appendix G).

A small student focus group followed the Wingman experience. The researcher used stratified convenience sampling in this study for the student focus groups because the population to be sampled is heterogeneous (Martella et al., 2013). The researcher asked the team leader of each grade level to discuss a core team and, select three to four students and consider the following criteria: include each grade level (six, seven, and eight), represent all genders, and include students who were willing to speak up and provide honest feedback. The sample size for the quantitative portion of this study is large; therefore, convenience sampling is appropriate (Creswell & Clark, 2018). Participation was voluntary for all students, and the researcher promised anonymity.

### **Intervention**

With a goal to improve student sense of belonging and connectedness to school, the researcher selected an intervention with two parts: 1) teacher professional learning focused on social-emotional competencies and skills in the classroom and 2) students' shared experiences through Wingman. All teachers at the school participated in three professional learning workshops led by the instructional specialist and assistant principal.

#### **Professional Learning**

Part 1 of the intervention was adult professional learning focused on the CASEL SEL framework. The first workshop focused on the five SEL competencies. Teachers engaged in an independent quick write-down of their initial understanding of SEL, small group work, viewed a

CASEL video on the competencies, and then worked in groups of three to focus on an assigned competency, answering the following questions: 1) How do you model this for students? 2) How do you intentionally plan for opportunities with your daily instruction? and 3) How does this look in your classroom?

The principal provided the teachers with a timeline of the professional learning (Appendix D) during the introduction. Workshops took place during the contracted school day. The instructional specialist and assistant principal facilitated the professional learning. All certified teachers engaged in this professional learning, and the intent was for certified teachers to conclude each workshop with a new strategy to bring back and try in the classroom. The focus of this professional learning was on RULER (Recognizing, Understanding, Labeling, Expressing, and Regulating emotions), “a systemic approach to SEL that supports entire school communities in understanding the value of emotions, building the skills of emotional intelligence, and creating and maintaining positive school climates” (Brion-Meisels et al., 2021, p. 344).

Teachers engaged in three 60- to 90-minute professional learning workshops focused on SEL. The initial workshop focused on understanding “What is SEL?” and the research behind SEL. Teachers learned the SEL framework, also known as the CASEL 5, and spent time learning about each of the five competencies in detail. Teachers worked independently and in small groups, collectively brainstorming how adults can model each competency in their interactions with students. Following this workshop, teachers reflected on their takeaways, new learning, and implications on their practice. Workshops two through four focused on various strategies and tools to embed in teacher practice and use with students.

Some of these tools provided to teachers during the professional learning included the design and development of a class charter, use of the mood meter, implementation of meta

moments, utilization of mindfulness in the class, development of a calming corner in the classroom for students to access, implicit teacher moves that include standing at the threshold to greet students as they enter and exit the room, and many more. All certified teachers learned about the SEL framework, strategies, and tools and reflected on each on an exit Google Form.

### **Optional Pre/Post SEL Self-Assessment Tool**

At the start and end of the six-week intervention period, all certified teachers participated in a pre/post-SEL self-assessment tool (Appendix F). This personal SEL reflection tool is a valid data source through the Collaborative for Academic, Social, and Emotional Learning (CASEL). This was not collected and was used for ongoing personal self-reflection. Teachers referenced this weekly as they reflected during the workshop or as they completed their workshop exit slip through Google Forms. All teachers participated in the reflection to identify areas of strength and growth, and they engaged in this new learning. Teachers took the SEL reflection form on their own at the start of the workshop series in September and then again during the last workshop in November. The tool supported planned strategies to promote growth across areas of social competence. Teachers also plan to return to this reflection throughout the year to revisit personal goals and mark progress. This tool is lengthy and was used as a resource for certified teachers; this was optional for certified teachers. The researcher wanted to avoid causing an additional burden on the participants and therefore chose the eight-question SEL pre- and post-assessment tool for data collection, which was much less of a burden to complete.

The tool utilized a five-point Likert scale, from *Strongly Disagree (1)* to *Strongly Agree (5)*. The reflection included all five of the CASEL competencies: *Self-Awareness*, *Self-Management*, *Social Awareness*, *Relationship Skills*, and *Responsible Decision-Making*. Under each of the competencies were three focus areas with specific statements relevant to that topic.

For example, self-awareness focuses on emotional social awareness, identity and self-knowledge, and growth mindset and purpose. Once the reflection was complete, all teachers identified their own personal strengths. Teachers also identified areas of growth or challenge.

### **Student Shared Experience**

Part 2 of the intervention was the shared experience for students through Wingman. Three certified teachers, Wingman trainers, conducted the training of the student Wingmen. Teachers participated in a two-day summer training course, and student Wingmen were trained for one full day in September. Wingman is a nonprofit foundation dedicated to the memory of Dylan Hockley, a first-grade victim of the Sandy Hook mass shooting that took place in 2012. This leadership program, founded in 2015 by Dylan's family, focuses on student leadership and relationship-building revolving around activities and experiences (Dylan's Wings of Change, 2022).

Teachers received training specific to their role as facilitators in the classroom while the student wingmen led the activity. The training for both teachers and students consisted of an overview of Wingman, experiencing every Wingman activity that students would lead in the classroom with their peers, and planning for the school year. Some of the activities that teachers and students engaged in included name toss juggle, mastermind, card games, traffic jam, keyhole punch, and key punch memory. More detailed specific information on Wingman is in Appendix N.

All teachers learned about the Wingman activities prior to the activity taking place schoolwide, either through an overview or engaging in the activity themselves. The first Wingman training focused on "getting to know you" through various games such as rock, paper, scissors, entourage, consensus, and tin can pass. Wingman ambassadors learned how to play and facilitate all the games and activities they would lead with their peers prior to the Wingman scheduled

sessions. Teachers engaged in as many of these activities as possible prior to rolling them out to the entire student body.

### **Student Training**

Student training consisted of the students envisioning their school climate and building their dream school. The intention of the task was for students to identify and learn ways to engage people, build community, and cultivate relationships through experiences and reflective questioning. Wingman hopes that these experiences lead to stronger problem-solving when issues come up during class or with their peers. Wingman runs one to two times per month, and it is a modified school schedule. The Wingman experience takes place as the last block of the day.

### **Teacher Training for Wingman**

The teacher training of three certified teachers who lead Wingman is a recertification type of training and planning session for two full days. Teachers learned new experiential activities and honed the practice of marrying reflection and community bonding with the activities. Teachers also discussed ways to improve teachers' engagement and the balance of support for student leaders (equalizing power). The goals for the adult Wingman training included strengthening the Wingman community with a focus on inclusivity, building empathy, and providing opportunities for students to collaborate and thoughtfully plan for their classroom activities. Table 7 provides a timeline of the professional learning for certified teachers and the Wingman experience for the entire learning community.

### **Table 7**

#### *Timeline*



Month	Action Item
August	Professional Learning Workshop #0: Provide Teachers with an Overview of the Research Adult Pre-Assessment (SEL)
September	Student Wingman Training and Wingman Welcome
September	Professional Learning Workshop #1: What is SEL? Personal Self Reflection & Pre SEL-Inventory Five Core Competencies Utilize the CASEL Resource: TOOL Modeling SEL for Students
September	Wingman #1 Welcome/Building Community
October	Professional Learning Workshop #2: Five Core Competencies How Do They Connect to Student Outcomes and Lifelong Success? Thinking Experience w/Embedded SEL Competencies
October	Wingman #2Wingman Walkthrough Tool
October	Professional Learning Workshop #3: Thinking Experiences w/Embedded SEL Competencies Feedback Exit Slip POST SEL – Assessment
October	Wingman #3 What’s Your Ideal School? Wingman Walkthrough Tool

### Research Methodology

Improvement Science served as the basis for this dissertation in practice. Following the Improvement Science model, the researcher identified a significant problem found in the organization and worked toward a solution with the goal of strengthening the students’ sense of belonging and connectedness (Bryk et al., 2015). Using qualitative and quantitative data, the researcher, also serving as the principal, identified students’ lack of belonging to the school community as a problem of practice. Following a process based on the Carnegie Foundation’s six core principles of improvement, the researcher, through a collaborative approach with colleagues, identified the root causes of the problem and analyzed the system that impacts the problem (Bryk, 2015).

This process uncovered several factors contributing to the problem, including a lack of student voice and choice; a lack of SEL knowledge, skills, and competencies for the adults in the school community; a lack of student engagement in the classroom; and inconsistencies in how teachers respond to student behaviors. In addition to this data, the school asked all families to complete a climate survey (see Table 3), of which the response to “at least one adult in this school knows my child well” decreased from the previous school year. This evidence led the researcher to identify the lack of student connectedness and sense of belonging as an urgent issue. Through a collaborative effort with input solicited from several empathy interviews and a comprehensive environmental scan, the researcher developed a working theory of improvement. The researcher then identified a specific change idea to improve student connectedness and sense of belonging in the school (Bryk et al., 2015; Perry et al., 2020).

With an opportunity to address an everyday problem, Improvement Science intentionally follows a “systematic, systems-changing discipline inquiry process” while encouraging researchers to become scholarly practitioners (Perry et al., 2020, p. 28). Improvement Science dissertations in practice provide researchers with the opportunity to identify a specific and actionable problem in their organization and understand its causes by completing empathy interviews with those in the community along with a review of existing data (Perry & Crow, 2020). Through conversations with a sampling of teachers at Seabreeze Middle School, the researcher built a better understanding of issues surrounding students’ sense of disconnection in the schools using action research. A review of the literature justified the PoP and explained its connection to prior research. The Improvement Science process also allowed the researcher to gather professional knowledge from colleagues in similar settings to understand the identified problem further (Bryk et al., 2015).

This ISDiP includes the implementation of the intervention, gathering and analyzing data, and reflecting upon the process (Perry et al., 2020). To determine the most impactful and meaningful opportunity to address the problem, the researcher developed a theory of improvement along with a realistic and measurable time-bound goal to improve student connectedness. Through the development of a driver diagram, Figure 5, a visual representation of the theory of improvement, the researcher identified several change ideas before selecting a specific driver upon which to base the intervention to mitigate the PoP (Perry et al., 2020).

### **Action Research**

This study used participatory action research, which addresses everyday problems in a real-life setting such as a classroom, school, or district through the scientific method, implementing an instructional strategy or technique and measuring its effects (Martella et al., 2013). The purpose of action research is to determine what is happening in a specific setting, the impact on individuals in that setting, and why it occurs (Martella et al., 2013). Five key characteristics define action research: 1) purpose and value choice, 2) contextual focus, 3) change-based data and sense-making, 4) participation in the research process, and 5) knowledge diffusion (Martella et al., 2013). This study includes all five of these characteristics, which must all be present for an investigation to qualify as action research (Martella et al., 2013).

In this ISDiP, the researcher identified the lack of student sense of belonging and connectedness as the problem of practice. The contextual focus was SMS, as the issue occurred within this school. The action research methodology aligns with the Improvement Science process as the researcher identified an organizational issue with input from the people experiencing the problem (Martella et al., 2013; Perry et al., 2020). As outlined in this chapter, change-based data collection occurs throughout the intervention implementation. As this study

focused on a real problem in a local setting, the researcher gathered quantitative and qualitative data to make data-driven decisions regarding implementing and refining the intervention (Clark & Creswell, 2015). This action research design involved the important decisions of who would be selected for both interventions, the size of the samples, the design of data collection, and different data collection forms; this is known as participatory action research.

Sense-making will occur through the data analysis process in Chapter 4. The researcher's direct involvement in the study and with the participants mirrored one of the key action research characteristics: participation in the research process (Martella et al., 2013). Active involvement in the study allowed the researcher to capitalize on the action research cycle of collecting data, acting, and reflecting (Clark & Creswell, 2015). Finally, knowledge diffusion will occur upon completion of the action research process, as reported in Chapter 5. The study results will contribute to an improvement in students' sense of belonging and connectedness in the school community.

### **Research Design**

This study uses the action research methodology, grounded in an Improvement Science framework (Elden & Chisholm, 1993; Martella et al., 2013) and an explanatory sequential mixed-methods research design (Creswell & Plano Clark, 2018). This research design uses both quantitative and qualitative data to answer the research questions, first by collecting and analyzing quantitative data and then collecting and analyzing qualitative data. After this analysis, a synthesis of quantitative and qualitative data follows to answer all elements of the research questions. This allows the researcher an opportunity to see if the data confirm or disconfirm each other (Creswell & Plano Clark, 2018).

The essential features of this research design included a two-pronged intervention, adult

professional learning, and the shared experience for students through Wingman. Both interventions included data collection in the form of qualitative and qualitative data. In the explanatory sequential mixed-methods design, data collection includes both qualitative and qualitative data collection, with an analysis of each (Crewell & Plano Clark, 2018). Therefore, while Phase 1 of the intervention took place, teachers' professional learning and quantitative data were collected. Following Phase 1, the qualitative data were collected. This research design brought the researcher to the research questions outlined in Table 8, which displays each research question along with the corresponding data sources used to answer them.

**Table 8**

*Summary of Research Questions and Measures*

Research Question	Measurement Instrument
In what ways does professional learning focused on social emotional learning and facilitation of Wingman impact teacher practice? Why?	Wingman Walkthrough Tool (Quantitative)
	PD Exit Slips (Qualitative)
	Structured Adult Focus Group (Qualitative)
Does participation in adult professional learning focused on social emotional learning result in a statistically significant change in teachers' perceptions of their ability to implement SEL strategies? Why or why not?	Pre/Post SEL Self-Assessment Tool
	(Quantitative)
	Structured Adult Focus Group (Qualitative)
Does participation in the Wingman shared experience, along with teacher implementation of SEL strategies, result in a statistically significant change in students' sense of belonging and connectedness in school? Why or why not?	Milford Measures Data (Quantitative)
	Structured Student Focus Groups (Qualitative)
What are the aspects of the intervention that led to observed changes? Why?	PD Exit Slips (Qualitative)
	Structured Adult Focus Group (Qualitative)

**Data Collection: Quantitative**

Throughout this Improvement Science study, data collection consisted of both qualitative

and quantitative data. This section details the quantitative data tools and the data collection procedures for each one.

### ***Adult Pre- and Post-SEL Assessment***

Teachers took the Adult SEL pre- and post-assessment, which included eight statements about their current knowledge, skills, and understanding of SEL. The researcher used this tool to collect baseline data and better understand the teachers' prior knowledge of SEL. Teachers reflected on their skills using a five-point Likert scale, from Strongly Disagree (1) to Strongly Agree (5), in a Google Form. In September, the assistant principal administered the Google Form, and then again during the last workshop in November. This tool measured the overall growth of knowledge and understanding of SEL and the competencies from CASEL. This tool differed from the tool teachers completed following each of the three workshops.

### ***Wingman Walkthrough Tool***

During the student Wingman block period, the instructional specialist and assistant principal walked through and utilized the Wingman walkthrough tool, looking at student engagement, peer-to-peer relationships, application or use of SEL skills, and interactions between teacher and student (Appendix H). Observers visited eight to ten random classrooms during each Wingman experience, and observers utilized Google Forms to collect the data using a five-point Likert scale to see if there was little or no evidence (1) to strong evidence (5). Over the course of the three Wingman visits, six of the same homerooms were observed. During the classroom visits, the walkthrough tool focused on the following four areas: student engagement, peer-to-peer relationships and dialog, application or use of SEL skills, and interactions between teacher and student. The researcher, assistant principal, and instructional specialist developed the walkthrough tool. So, while Wingman did not develop this tool, there is hope that this tool might be reviewed by the Wingman team and adopted

by other schools. As a result, there are no validity or reliability studies.

### ***Sense of Belonging Tool***

All middle school students participated in a yearly district survey focused on 10 areas, one of which was student belonging and connectedness. The five questions within the category of student belonging were:

- Overall, how much do you feel like you belong at your school?
- At your school, how accepted do you feel by the other students?
- How well do people at your school understand you?
- How much respect do students in your school show you?
- How connected do you feel to the adults at your school?

All students accessed these five questions through Google Forms in November. This survey, CPS measures, was developed within the district, and all students completed it. There are no studies on the reliability or validity of this tool as the district developed it. The sense of belonging and connectedness data is meaningful in the district and to individual school communities. This tool was given to students in May of 2023, prior to this study, and was given to all current grade seven and eight students again in October of 2023 to capture any changes in the construct of a *sense of belonging*. This tool has credibility in the district and allows for data analysis and the development of action plans.

### **Data Collection: Qualitative**

The researcher collected both qualitative and quantitative data for this Improvement Science study, using multiple data sources to answer the research questions. Data tools varied from Likert scale responses to open-ended responses.

### ***PD Adult Exit Slip***

To gather data about their new learning and any application of this learning, all teachers completed an exit slip, including their reflections on the following (Appendix I):

1. What social-emotional learning (SEL) strategy did you try?
2. What was the outcome for students?
3. What will you try next time?
4. How does this connect to the elements of high-quality instruction (HQI)?

The data tool all certified teachers completed was selected to highlight new learning competencies embedded into their practice and the outcome for each participant. Facilitators administered an exit slip that participant completed at the close of each professional learning workshop. Question four was added to the tool to make visible the connection to the work already happening in the district. High Quality Instruction (HQI) is the focus of the entire district in every classroom, in all 14 buildings.

### ***Structured Adult Focus Group***

The assistant principal interviewed a small group of teacher volunteers to gain a greater understanding of the new learning, intervention implemented, connection to Wingman and HQI through a focus group of eight certified teachers. The questions asked were:

- What has been your greatest learning focused on SEL these past 6–8 weeks?
- How did you implement these new strategies? What went well? What was challenging? How has this shifted your practice?
- Have your interactions with students changed? How so?
- Has Wingman created a stronger community here at SMS? How so?
- Have you seen a greater sense of belonging in the student body? Why?
- Did this new learning change how you cultivate conditions in your classroom to



ensure overall student success, both academic and non-academic? How so?

- Did you find the SEL reflection tool helpful? If yes, how so?
- Does this new learning connect to our focus on HQI? How so?

This data collection aimed to measure growth from the beginning of the intervention to the close of the intervention and the transfer to practice. The focus group took place in a quiet setting, ran for 45 minutes, and was transcribed. The purpose of the adult focus group was to gain a greater understanding than what the survey yielded and generate a theory or pattern of responses that may explain the survey results (Creswell & Plano-Clark, 2018).

### **Structured Student Focus Groups (Appendix K)**

Focus group interviews attempt to elicit multiple meanings from participants to build a deeper understanding of a particular phenomenon and generate a theory or identify a pattern in the phenomenon (Creswell & Plano-Clark, 2018). Additionally, focus groups are a widely accepted tool to enhance program development and evaluation (Kitzinger, 2006; Stewart & Shamdasani, 2015; Wentink et al., 2019). The assistant principal and instructional specialist met with a random sampling of students from grades 6, 7, and 8, totaling 18–20 students, to conduct a small focus group. Data collection included notetaking by the instructional specialist while the assistant principal asked the questions and conversed with the students. Note taking was the least invasive and more personal for students. The small focus groups lasted no more than 15 minutes for each group. The focus group facilitators asked the following questions:

1. How has the Wingman experience been for you?
2. How does Wingman make you feel?
3. What skills have you learned during Wingman?
4. How has Wingman helped you feel more connected to school?

5. Did you notice any differences in the classroom after the Wingman experiences? Tell me more.

### **Summary of Data Collection Tools**

Multiple measures determined if the selected change idea improved the PoP: a pre/post-SEL inventory, exit slips following professional learning using Google Forms, the Wingman walkthrough tool, structured adult focus groups, and student focus groups. Data collection tools were both qualitative and quantitative.

### **Confidentiality**

Throughout the intervention, participant data remained confidential, with all information stored on the Sacred Heart University OneDrive, a secure online platform. As this is a longitudinal study, each participant was given a unique identifier at the conclusion of the intervention. The names of individuals were removed using a simple alphanumeric system. Any references to their organization, self, community, or other individuals within the documents were also de-identified and given pseudonyms. The data set for each participant represented all written communication provided as part of the study. Any reporting resulting from this study and data was reported in the aggregate using pseudonyms where appropriate. Data from the study was secured in a secure online platform and will be destroyed no more than three years after the study's conclusion.

### **Data Analysis Plan**

The researcher used an explanatory sequential design for data collection. The quantitative and qualitative data are relative to one another, and the focus was on the connection between the two phases (Creswell & Plano Clark, 2018). The data, both qualitative and quantitative, consisted of exit slips, walkthrough tools, focus groups, and interviews. The qualitative data

analysis included an inductive approach to collecting, organizing, preparing, analyzing, and interpreting data (Creswell & Plano Clark, 2018). Coding is the process of grouping evidence and labeling ideas to understand broader perspectives (Creswell & Plano Clark, 2018). Coding assisted the researcher in developing a more specific focus or more relevant questions (Glesne, 2006). The researcher used an explanatory sequential design for data collection. The qualitative data helped the researcher answer all elements of the research questions (Creswell & Plano Clark, 2018).

### **Quantitative Data Analysis**

All 44 certified teachers participated in a pre-and post-assessment of social-emotional learning at the start of the intervention and the close of the intervention. The reflective survey used a five-point Likert scale, from *Strongly Disagree (1)* to *Strongly Agree (5)* (see Appendix F). The web-based Google Form asked teachers to self-assess and rank themselves on their current knowledge, skills, and understanding of SEL. This tool collected baseline data to better understand teachers' prior knowledge of SEL and collected the same data at the conclusion of the intervention so the researcher could compare the results and answer the first research question. The researcher used a paired sample t-test to compare the means of two sets of data to determine whether any difference between the two is statistically significant. This paired sample t-test is appropriate for this study as it compares the means of two sets of scores to determine whether the difference between them is statistically significant at the chosen alpha level or if it is likely due to chance (Martella et al., 2013).

### **Sense of Belonging Survey**

All seventh and eighth grade students completed a district survey focused on 10 areas, one of which was on student belonging. Students reflected on the questions referenced in Appendix M and used a five-point Likert scale, from *Strongly Disagree (1)* to *Strongly Agree (5)*. The web-based Google Form asked students to self-assess and rank themselves on their sense of belonging in the school community and their feelings of acceptance, level of respect within the school, and the connection the students felt toward adults at SMS. Seventh and eighth grade students took this survey again in November. The researcher compared the 2022 survey to the 2023 survey data. The data from this tool answered research question three. The researcher conducted a paired samples t-test because there was no way to match the identities of the respondents from one administration to the next. As a result, this analysis contained an N of 2, the current 7th graders and the current 8th graders as groups. This was a limitation in finding statistical significance.

During the Wingman experience, three members of the SMS teachers, the assistant principal, the instructional specialist, and the literacy specialist individually visited three to four teachers' classrooms to observe and collect data using a Wingman walkthrough tool. This team used a Google Form for each classroom they visited. The form focused on five specific areas: student engagement, whether the teacher was supportive, respectful student–student interactions, inclusion of all students, and SEL competencies observed. The tool included a five-point Likert scale, from *little or no evidence (1)* to *strong evidence (5)*.

The analysis of the quantitative data includes descriptive statistics followed by a t-test to determine if the differences in scores from pre- to post are statistically significant. Seventh and eighth grade students took the survey that they originally took last school year, and, therefore, a

paired samples t-test was utilized. The data from May of 2022 was compared with data from October of 2023. To analyze the impact of the Wingman experience, descriptive statistics were used to analyze the walkthrough tool data. This analysis was selected because it was not the same classroom and group of students each walkthrough. The tool was used with different classrooms for each observation. The data collected was still meaningful, as observed in the follow-up through the student and adult focus groups.

### **Qualitative Data Analysis**

In addition to the initial and end-of-intervention survey, the researcher had certified teachers complete an exit slip following each of the professional learning workshops to collect data on workshop implementation (see Appendix I). The researcher also conducted semi-structured adult and student focus groups. The adult focus group comprised certified teachers and used non-probabilistic sampling to involve selected individuals who were available (Creswell & Clark, 2018). The researcher used an explanatory sequential design for data collection, both qualitative and quantitative, and merged the data to identify the differences the intervention had on the school community. The assistant principal conducted a structured adult focus group and student focus groups. After each question, the assistant principal scribed summative notes following the participants' responses and feedback. The researcher analyzed the responses for similarities and themes. Coding was done to link thoughts and actions across bits of data (Glesne, 2016). Patterns and themes from the data emerged, and data displayed were developed. The researcher analyzed the responses for similarities and themes. The researcher merged the data from the responses and coded for themes. The researcher also gathered evidence from all the data to connect both parts of the intervention.

### **Limitations**

The researcher was thorough in explaining the details of the limitations to better understand the data (Glesne, 2018). One limitation of this study involved the role of the researcher. The researcher is the principal of the school where the research took place. Therefore, certified teachers might alter their responses out of fear of what the researcher might think of the individual, or it might be what the participant thinks the researcher wants to hear. To mitigate this limitation, the researcher did not collect any of the data but had the data collected by the assistant principal and/or the instructional specialist. The researcher also shared with certified teachers the confidentiality of the research study and the use of pseudonyms throughout this Improvement Science study.

The transferability of the study may be limited because of the self-reporting and self-reflection of the participants. Someone from another school might need help replicating this study due to the personalization of the needs of SMS. This may transfer to other middle schools in CPS but might be a challenge for learning communities outside of CPS.

Individuals completed exit slips and reflection forms. Individuals may have been reluctant to give honest feedback because of the researcher's position as principal of the school. To mitigate this limitation, the researcher reassured certified teachers that all data would be collected by the assistant principal and/or the instructional specialist in the building. The researcher also shared with certified teachers the confidentiality of the research study and the use of pseudonyms throughout this Improvement Science study. The researcher understood her position and committed herself to the integrity of the study and those who agreed to be a part of it.

Many of the tools utilized to collect data were homegrown and validated through the fidelity of the implementation and data collection and analysis. The researcher developed the tools and the SMS team and did not have a formal validity or reliability study. The tools were adjusted after the initial use to best answer the research questions.

Another limitation was the timing of the sense of belonging survey administered to students. The initial survey was administered in May 2023 after students had been in school with teachers and peers for 171 school days. It was close to the end of the 2022-2023 school year, when students would be out of school for the summer, and the weather was warm and beautiful on this day. The same questions were administered to the same grade level of students in November 2023. Students had only been in school for 46 days and had only known their teachers for one-fourth of the school year, and it was a brisk, cold fall day. These differing conditions may have impacted the study's results.

### **Chapter Summary**

To strengthen student connectedness and sense of belonging at Seabreeze Middle School, a two-pronged intervention was considered and designed. This study used an action research methodology grounded in an Improvement Science framework, with a target population of about 44 certified teachers, 40 Wingman student ambassadors, and all 355 students in the school. The study collected both qualitative and quantitative data through a two-part intervention with a focus on four research questions. Data collection included a pre- and post-SEL self-assessment tool (quantitative), professional learning exit slips (qualitative), a structured adult focus group (qualitative), a Wingman walkthrough tool (quantitative), district measures data (quantitative), a structured adult focus group (qualitative), and structured student focus groups (qualitative). The Improvement Science study gathered and analyzed data to answer the three research questions. The researcher

was thorough in explaining the details of the limitations to better understand the data (Glesne, 2018). In Chapter 4, the researcher presents the results from the data collected during and after Part 1 and Part 2 of the intervention.



## **CHAPTER 4: FINDINGS**

The researcher designed and implemented job-embedded professional learning focused on SEL and shared experiences for students through the Wingman program with the goal of strengthening students' connectedness and sense of belonging at SMS for this ISDiP. The researcher developed a two-pronged intervention consisting of professional learning for certified teachers focused on SEL and a shared experience for all students schoolwide through the Wingman program. Quantitative and qualitative data aligned with each of the four research questions, and the researcher collected data using self-reported teacher feedback slips, pre- and post-intervention surveys, a student survey focused on sense of belonging, a Wingman walkthrough tool, and structured focus groups for certified teachers and students. Chapter 4 describes the findings, data analysis, application of the research methods, overall results of these data, and answers to all research questions.

### **Participants**

Both teachers and students participated in this research. All certified teachers and students are members of the SMS school community. All 44 certified teachers, 30 females, and 14 males, participated in this study during contracted workdays. The study included about 355 student participants in Grades 6, 7, and 8.

#### **Adult Participants**

Certified teachers engaged in professional learning workshops embedded with SEL and feedback slips following each workshop. During Workshops 1 and 2, 40 certified teachers were present; during Workshop 3, 44 certified teachers were present. The researcher asked all certified teachers to submit the SEL pre-post assessment; 42 submitted the pre-, and 43 submitted the post. For the adult structured focus group, the researcher invited all certified teachers to

participate; 25 offered to participate, and eight were selected to achieve the goal of broad representation of all grades across content areas; see Table 9. The Wingman walkthrough tool asked five questions, one of which focused on the role of the teacher in the classroom. Over the three different walkthroughs, this included 28 certified teachers.

**Table 9**

*Characteristics of Adult Participants in Focus Groups*

Teacher	Grade(s)	Subject
Marsha	6	Math
Bobby	6	Social Studies
Katrina	6	Science
Maryland	7	Math
Ashley	7	ELA
Krista	8	Math
Charlie	6,7,8	Special Education
Jackie	6,7,8	Art

*Note.* Teacher names are pseudonyms.

### Student Participants

The entire student body participated in Wingman, and the daily schedule included a 60-minute block on Wingman days. Wingman occurred on September 14 with 355 students participating, on October 5 with 354 students participating, and on October 26 with 355 students participating. The Wingman walkthrough tool served to collect data regarding students and the role of the teacher. Sixth- and seventh-grade students completed surveys in May 2023 and November 2023, and each survey contained a section regarding sense of belonging. In May 2023, 116 sixth-grade students and 118 seventh-grade students took the survey, and in November 2023, the same cohort engaged in the survey, including 129 seventh-grade students and 131 eighth-grade students. Students gathered as structured focus groups with four participants from

each grade. The researcher included four participants from each grade to ensure broad representation (Table 10).

**Table 10**

*Characteristics of Student Participants in Focus Group*

Student	Grade	Gender	Ethnicity
Gabby	6	Female	White
Eric	6	Male	White
Erin	6	Female	White
Irvin	6	Male	Mixed Race
Isaac	7	Male	Black
Colleen	7	Female	White
Henry	7	Male	Asian
Linda	7	Female	White
Mary	8	Female	Asian
Ted	8	Male	White
Arianna	8	Female	Black
Thomas	8	Male	White

*Note.* Student names are pseudonyms.

### Research Questions

1. In what ways does professional learning focused on social-emotional learning and the facilitation of Wingman impact teacher practice? Why?
2. Does participation in adult professional learning focused on social-emotional learning result in statistically significant changes in teachers' perceptions of their abilities to implement SEL strategies? Why or why not?
3. Does participation in the Wingman shared experience, along with teachers' implementation of SEL strategies, result in statistically significant changes in students' senses of belonging and connectedness in school? Why or why not?
4. What aspects of the intervention led to the observed changes? Why?

## Statement of Results

Improvement Science involves a systematic approach to enhancing processes, outcomes, and overall performance in various settings. When presenting the results of an Improvement Science project, it is essential to include both qualitative and quantitative aspects to provide a comprehensive understanding of the impacts and changes achieved. Providing a balanced view with both quantitative and qualitative evidence enhances the credibility and richness of the findings.

### Research Question 1 Quantitative Data

The research team conducted walkthroughs while students and staff engaged in Wingman. The form focused on five specific areas: student engagement, whether the teacher was supportive, respectful student-student interactions, the inclusion of all students, and SEL competencies observed. The tool included a five-point Likert scale from *little or no evidence* (1) to *strong evidence* (5).

The researcher then collected and analyzed pre-test and post-test survey data using the Wingman walkthrough tool on Google Forms. For overall survey results and summary statistics, see Table 11.

**Table 11***Wingman Walkthrough Tool: Overall Summary Statistics*

Question	Pre-Test ( $n = 10$ )		Post-Test ( $n = 21$ )		Difference
	$M$	$SD$	$M$	$SD$	
1	4.300	1.567	4.905	0.301	0.605
2	4.200	1.619	4.571	0.870	0.371
3	4.800	0.422	4.571	0.676	-0.229
4	5.000	0.000	4.810	0.402	-0.190
5	4.200	0.789	4.619	0.509	0.419
6	2.500	4.619	4.143	1.526	1.643
Overall	4.167	0.272	4.603	0.609	0.436

*Note.* This is the overall summary of the classroom data collected by question.

Questions 1, 2, 5, and 6 saw increased average scores from pre-test to post-test across classrooms. The other two questions saw a slight decrease. In addition, classrooms experienced an increase in overall average scores from pre-test to post-test. These data represent the overall heartbeat of the school during Wingman.

The researcher applied inferential statistics to investigate if the differences between the first Wingman walkthrough (pre-test) and the third and final Wingman walkthrough (post-test) responses were significant for any individual question for the seven classrooms with matched pre-test and post-test results. Using the XLMiner Analysis ToolPak, the researcher completed a series of paired  $t$ -tests for each survey question. Table 12 summarizes the results of these tests. The researcher specified significance at .05 ( $p < .05$ ) for all tests in the study.

**Table 12***Paired t-tests: Wingman Walkthrough Tool: Pre-Test and Post-Test Analysis*

Question	<i>M</i>		<i>SD</i>		Difference	<i>t</i>	<i>p</i>
	Pre-Test ( <i>n</i> = 7)	Post-Test ( <i>n</i> = 7)	Pre-Test	Post-Test			
1 Engagement	4.85	5.00	0.37	0.00	0.14	-1.00	0.36
2 Teacher	4.14	4.57	1.86	0.79	0.43	-0.55	0.69
3 Interactions	4.85	4.57	0.37	0.79	-0.29	1.00	0.36
4 Inclusivity	5.00	4.86	0.00	0.38	-0.14	1.00	0.36
5 Competency	4.28	4.57	0.75	0.79	0.29	-0.80	0.46
6 Specific SEL Competencies	2.14	4.14	0.69	1.86	2.00	-2.90	0.03
Overall	4.21	4.61	0.30	0.71	0.40	-1.68	0.14

The responses are paired with the seven classrooms that were visited all three times. The mean score increased from the first walk-through to the final walk-through; therefore, the difference is moving in the desired direction. The data showed a significant difference in SEL competencies displayed only for Question 6. Questions 1 through 5 indicate the differences between the first walkthrough (pre-test) and the third walkthrough (post-test); average responses are not statistically significant. Question 6 indicates that the differences between the first walkthrough (pre-test) and the third walkthrough (post-test) are significant ( $t = -2.89$ ,  $p = .03$ , two-tailed). Therefore, for Question 6, we can reject the null hypothesis; for all other questions, we cannot reject the null hypothesis.

The researcher also applied inferential statistics to investigate if differences between pre-test and post-test responses were significant for the overall survey responses. Using the XLMiner Analysis ToolPak, the researcher completed paired *t*-tests for the subjects' average pre-test and

post-test survey results. The test did not indicate a statistical difference ( $t = -1.68$ ,  $p = 0.14$ , two-tailed) in the average responses from the pre-test to the post-test in the Wingman walkthrough tool. Therefore, we cannot reject the null hypothesis.

The researcher did recognize a substantial increase in the number of SEL competencies observed in the classroom from the first walkthrough to the third walkthrough. Initially, a classroom visit included an observation of one to two competencies, typically relationship skills, and self-management, 40% in total. By the third walkthrough, the SEL competencies observed increased to 76.9% and included four to five of the competencies exemplified in the classroom. Table 12 showcases this information for Question 6, with a pre-test score of 2.14 and a post-test score of 4.14.

This data supports Research Question 1, related to professional learning focused on social-emotional learning and the facilitation of Wingman. It is evident from the data in Table 12 that SEL competencies were observed more often over time. Question 5 asks if SEL competencies were observed at all. Question 6 demonstrates robust evidence of the specific SEL competencies. Question 2 asks if the teacher is supportive of Wingman, as the data shows an increase from pre-test to post-test.

### **Research Question 1 Qualitative Data**

Following each Wingman experience, each student received a Google Form to provide the Wingman facilitators feedback to plan for the following Wingman activity. All certified teachers, student participants, and student Wingmen received this form. The feedback forms included responses from 290 individuals following the first Wingman session, 265 individuals following the second Wingman session, and 153 Wingman following the third session. This form comprised two questions:

- How did today’s Wingman session make you feel?
- What else would you like the Wingman and the Wingman Advisors to know?

Students were very candid and open when providing feedback. After first- and second-level coding, three major themes emerged: a sense of belonging, relationship building, and students acknowledging their emotions during the Wingman experience (see Table 13).

**Table 13**

*Student Voice: Wingman*

Common Themes	Exemplar Student Quotes
Sense of belonging	<p>“I think it made me feel more <b>connected</b> to my assigned homeroom because they became comfortable with us.”</p> <p>“It made me feel <b>included and connected with my peers.</b>”</p> <p>“This Wingman session made me feel happy, empathetic, and <b>connected to others.</b>”</p> <p>“It made me feel <b>closer to the class</b> and get to know them. And excited because I think I will have an amazing year with my class.”</p>
Relationship building	<p>“It made me feel happy/excited because I really enjoyed the game and working with people who I don’t work with often.”</p> <p>“I feel like I finally have friends.”</p> <p>“It made me feel like I could work with other people in a group.”</p> <p>“I met a new friend, in a different grade—it was great!”</p> <p>“A bit awkward when I had to work with someone I was not great friends with but it ended up she was really nice, and we had fun.”</p>
Emotions	<p>“This made me laugh and so happy—our group had a blast! Everyone was cheering for me!”</p> <p>“Way more confident, comfortable, and happy with our homeroom.”</p> <p>“Made me feel happy and kind of energized in a way.”</p> <p>“Made me feel very excited.”</p> <p>“I feel proud—my partner and I did a great job leading the activity and we were very nervous at first.”</p>

The researcher collected data from the structured focus groups that support the implementation and facilitation of Wingman, aligned to research question one. The common



themes from the experience were the powerful relationships students cultivated with their peers, the sense of belonging and acceptance students experienced during Wingman, and the emotions that students experienced when engaging in Wingman activities. Isaac, a seventh-grade student, said, “Wingman is the best part of my day!” and Gabby, a sixth-grade student, shared that she now has “many new friends because of Wingman.”

Implementation of Wingman is challenging if not done well. It is clear from the student feedback and the Wingman walkthrough tool that Wingman has been implemented with fidelity and thoughtfulness. The entire SMS school community has engaged in Wingman, and its daily block school schedule embeds this time block. The time is protected and valued. Arianna, an eighth-grade student, said, “Wingman is a guaranteed part of the day when everyone is a part of something together, and students *and* teachers are smiling!”

### **Research Question 2 Quantitative Data**

Each certified teacher participant completed a pre-test and post-test SEL reflection on Google Forms. Table 14 displays the sample statistics from the survey results. Survey results were anonymous; thus, further analysis was not possible. The average differences from pre-test to post-test results increased both per question and overall.

**Table 14***SEL Reflection Pre-Test and Post-Test Sample Statistics*

Question	Pre-Test		Post-Test		Difference	<i>t</i> (41)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
1 Confident in SEL	4.07	0.71	4.42	0.59	0.35	-2.46	.02
2 Framework	4.33	0.82	4.58	0.88	0.25	-1.35	.02
3 Research	4.02	1.02	4.37	0.73	0.35	-1.81	.01
4 Model SEL	3.91	0.80	4.09	0.47	0.19	-1.13	.26
5 Strategies	3.98	1.02	4.12	0.66	0.14	-0.75	.05
6 SEL Competencies	3.79	0.92	4.21	0.71	0.42	-2.37	.02
7 Transfer to Students	4.10	0.72	4.28	0.63	0.18	-1.24	.22
8 SEL Integration	3.93	0.86	4.02	0.67	0.09	-0.56	.56
Overall	4.01	0.60	4.26	0.52	0.25	-9.26	0.02

The researcher measured growth from the initial SEL survey administered in September to the post-survey administered in October. The researcher specified statistical significance at .05 ( $p < .05$ ) for all tests in the study. Of the survey's eight questions, five indicate that the differences between the pre-test and post-test average responses are statistically significant. The largest improvement was in Question 6, which focused on teacher confidence in comfort level and knowledge of SEL competencies.

This data correlates to Part 1 of the intervention; the professional learning focused on SEL. All three workshops had a direct link to SEL competencies and modeling of how teachers can embed these SEL competencies in daily planning and instructional practices. Aligned to Research Question 2, participation in adult professional learning focused on SEL does, in fact, result in a statistically significant change in teacher practice. Question 8 included teacher

responses around comfort level and confidence in integrating SEL into instruction; this showed marked growth. This also supports the next level of work, which the researcher will discuss later in Chapter 5, the need to continue with this professional learning focused on SEL.

### **Research Question 2 Qualitative Data**

All certified teachers completed an exit slip following each professional learning workshop. The exit slip (Appendix I) focused on the SEL competencies that teachers committed to trying in their planning and instructional practices and, most importantly, highlighted the outcomes for their students. The researcher developed three workshops during the 6-week intervention and, over the course of the three workshops, collected 124 feedback slips. During Workshops 1 and 2, 40 certified teachers completed the exit slip, and 44 certified teachers completed the exit slip during Workshop 3. The exit slip also asked participants to share how the new learning connected to the district focus of HQI and what would help certified teachers expand their knowledge and understanding of SEL in future workshops.

Table 15 summarizes questions one and two from the exit slip, which focused on the frequency of the SEL competency modeled, the specific SEL competency modeled, and the outcomes for students. Certified teachers self-reported and self-reflected on how often they embedded SEL competencies into their planning and instructional practices and how if at all, these changes impacted student outcomes, both academic and non-academic. Table 15 includes individual certified teacher responses and summarizes the common outcomes for students when teacher planning and instructional practices embedded specific SEL competencies. The researcher did not share specific names or further information with individual quotes, as feedback forms were confidential. Table 15 demonstrates the transfer of this new learning to students' outcomes, both academic and non-academic.

**Table 15***SEL Feedback Exit Slips: Professional Learning (N = 124)*

SEL Competency Modeled by the Teacher	Common Outcome for Students	Frequency, n (%)
Relationship Skills	<p>“Students feel very welcomed now...”</p> <p>“Students have made progress building their relationship skills with each other when working cooperatively.”</p> <p>“Students have used language modeling after me while working with new classmates, and it is wonderful to watch.”</p> <p>“I see students modeling leadership and working through problems in small groups; they have seen me do this.”</p>	33 (26.6)
Social Awareness	<p>“Students gained a better understanding of how their words and actions impact others around them.”</p> <p>“Students are continuing to develop skills for perspective-taking and empathy. Students struggle to recognize how their words impact others differently.”</p> <p>“Students were able to cue from each other and deepen their thinking in small group discussions.”</p> <p>“Greater empathy for others and experiences.”</p>	18 (14.5)
Self-Awareness	<p>“Students were receptive and even supportive of me.”</p> <p>“I saw students balancing between comfortability and un-comfortability.”</p> <p>“Students could articulate their struggles so we could work through them.”</p> <p>“My students have a growth mindset now.”</p> <p>“I see my students identify emotions more regularly.”</p>	17 (13.7)
Self-Management	<p>“My kids now understand themselves and their emotions so that they can make positive choices on how to manage them.”</p> <p>“Students were able to understand their current skill in managing their behaviors in a small group...”</p> <p>“Students watch me and now are much more reflective.”</p> <p>“When I am calm, they feed off my energy and calm down so much quicker.”</p>	15 (12.0)
Responsible Decision-Making	<p>“Students continue to work taking accountability for our choices, I see a big shift in student ownership.”</p> <p>“I see students showing greater interest and curiosity in class.”</p> <p>“I see students more open to work with all peers.”</p> <p>“Students are more aware of self and the role their actions make.”</p>	14 (11.2)

Table 15 provides examples of how teachers' perception of their ability to implement SEL strategies improved and impacted students over time. According to the data collected, teacher planning and instructional practices incorporated all competencies. Teachers implemented the competency of "relationship skills" with the highest frequency, with 33 (26.6%) of the certified teachers reporting that they had used this competency in their classrooms.

Question 5 on the SEL feedback slip asked certified teachers to share what might be helpful in expanding their understanding of SEL at our next professional learning workshop. Responses included, "more examples and modeling, it is very helpful," and "more thinking experiences aligned to SEL like these." Certified teachers were honest in feedback and their need for more professional learning. The above data, Table 14, Table 15, and additional teacher responses on the SEL feedback slips are important for Research Question 2, which focused on teachers' perception of their ability to implement SEL competencies into practice.

### **Research Question 3 Quantitative Data**

Participants completed the Student Belonging Survey during the spring and fall of 2023. Table 16 displays the descriptive statistics for each question, including the mean and standard deviation. The table displays the results by cohort based on student grade level in the 2023–24 academic year.

**Table 16***Summary Descriptive Statistics: Sense of Belonging, 2023–2024 Current Students*

Seventh-Grade Students			Eighth-Grade Students		
<i>M</i>			<i>M</i>		
Question	Spring 2023	Fall 2023	Question	Spring 2023	Fall 2023
1	4.17	4.18	1	3.90	3.79
2	3.97	4.05	2	3.56	3.65
3	3.75	3.58	3	3.47	3.33
4	3.74	3.82	4	3.24	3.26
5	3.93	3.78	5	3.42	3.23
Total	3.91	3.88	Total	3.51	3.45

Note. Current SMS 6<sup>th</sup> grade students were not included in this survey as they did not participate in the test as 5<sup>th</sup> graders in Spring 2023.

A paired sample *t*-test determined if these differences were statistically significant. Because individual student responses could not be paired, the *t*-test used a sample size of 2 (one for each cohort). There were no statistically significant differences in the responses to any of the five questions. Therefore, the null hypothesis cannot be rejected.

### Research Question 3 Qualitative Data

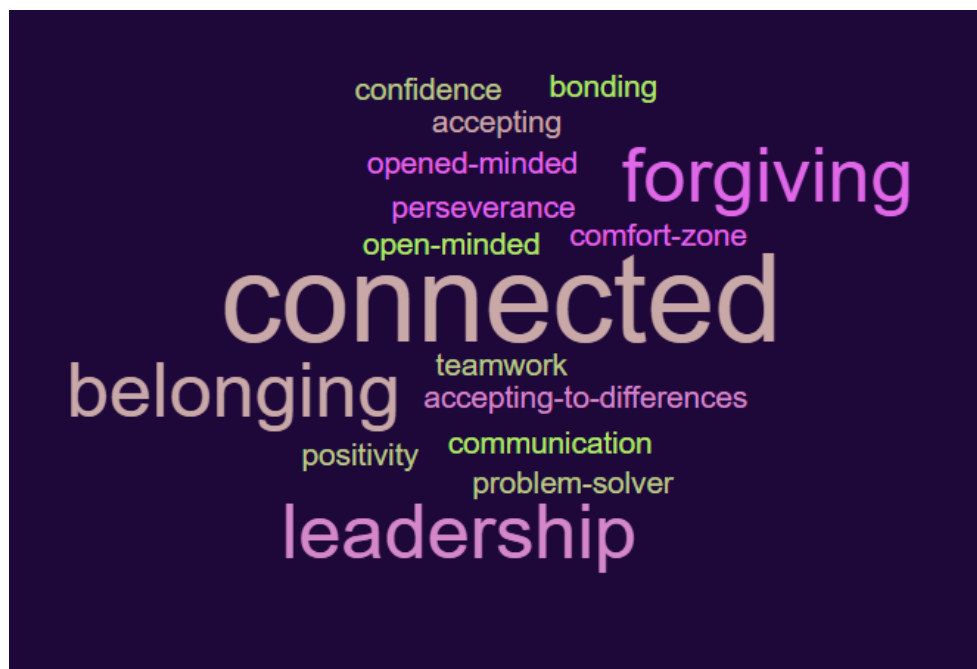
Twelve students participated in the structured student focus group. They participated in a 20-minute focus group according to grade level. The researcher felt it was better for students to meet by individual grade levels instead of all three grade levels together so they would be more comfortable talking and free to share more honest responses.

One of the questions students were asked was, “What skills have you learned during Wingman?” Figure 6 represents student responses to this question, and the word sizes represent

the number of times students mentioned this skill or word. The data is from all three focus groups.

**Figure 6**

*Word Cloud of Student Responses*



When students stated what they had learned during Wingman, the most frequent responses involved leadership, how to be connected to peers, how to forgive others, and feelings of belongingness. Other statements, skills, and terms the students shared during the focus groups included perseverance, teamwork, open-mindedness, communication, confidence, problem-solving, and accepting others and their differences. Table 17 presents quotes from student responses to the question of what skills they learned during Wingman. While some students described feelings in lieu of skills, the lessons learned during the Wingman program were meaningful to students and related to the research question regarding the impact of Wingman on students' sense of belonging and connectedness in school. During the structured focus group, the

assistant principal asked students to elaborate when talking about their feelings or used the phrase “tell me more” to encourage students to share more freely.

**Table 17**

*Student Voices: More Detailed Information Regarding Word Cloud*

Skills	Supporting Quotes
Belonging	<p>“It made me feel great and <b>included</b> others I don’t normally talk to.”</p> <p>“It made me feel <b>included</b> in the activities and <b>connected</b> to my peers.”</p> <p>“Today’s Wingman made me feel happy because <b>everybody was included!</b>”</p> <p>“Today’s session made me feel like I <b>belong</b> and am more <b>connected</b> to my class.”</p>
Forgiving	<p>“I learned to be more patient and not get angry at my classmates.”</p> <p>“I learned to forgive, and I think I got better at it every time.”</p> <p>“I agree, I realized I get mad at people when I should just try to work it out.”</p>
Leadership	<p>“I became more confident leading my friends and even kids in my homeroom that I never knew before.”</p> <p>“Leadership, because you get more confident every Wingman to speak up and say how you really feel.”</p> <p>“I think I became a leader and the others looked to me, especially when it would be quiet in the beginning.”</p>

Research Question 3 looked at participation in Wingman as a shared experience and how that impacted students’ sense of belonging in school, as well as teacher implementation of SEL. When students stated what they were learning from Wingman or how they felt about Wingman, belonging was a theme that came up numerous times during the focus groups. Students in all three grade levels mentioned the words “belonging” and “included” throughout each focus group. During the eighth-grade focus group, the assistant principal asked the students a few follow-up questions about how Wingman has made them feel more connected to the school. In the student response, a student shared, “Wingman is a structured way to help me meet others without feeling awkward. I can be me, and I feel like I belong here more.”

#### **Research Question 4 Qualitative Data**



The researcher designed Research Question 4 to better understand what aspects of the two-prong intervention led to any observed changes. The descriptive analysis showcased the learning that was acquired and implemented following the SEL professional learning workshops, shifts in teacher practice, and impacts on students. During the structured adult focus group, eight certified teachers participated in a 50-minute conversation with a focus on eight questions (Appendix L):

- What has been your greatest learning focused on SEL these past 6–8 weeks?
- How did you implement these new SEL competencies? What went well? What was challenging?
- How has this shifted your practice?
- Have your interactions with students changed? How so?
- Has Wingman created a stronger community here at SMS? How so?
- Have you seen a greater sense of belonging in the student body? Why? PD? Wingman? How were they connected?
- Did this learning change how you cultivate conditions in your classroom to ensure overall student success, both academic and non-academic? How so?
- Does this learning connect to our focus on HQI? How so?

During the conversation, the facilitator recorded the discussion, and a secretary transcribed the discussion verbatim. The purpose of the conversation was to gather data on the SEL-focused professional learning and the shared experience for students through Wingman. After first- and second-level coding, the following themes emerged: changes occurred in thinking, planning, student interactions, and student connectedness (Table 18).

**Table 18***Narrative Voices: Certified Teacher Themes*

Changes in...	Supporting Quotes
Thinking	<p>“SEL is and should be embedded in everything we do in our classrooms. I’m starting to notice ways to be more intentional in my lesson planning and focusing on building those relationship skills and how I can share that with the students.” Marsha</p> <p>“I think for me, now that we’ve dove into this work, I’m seeing there is <b>such</b> a need for it. It is important that we are learning and embedding SEL in everything we do throughout the day.” Bobby</p> <p>“I have completely shifted my thinking to more intentional use of language, actions, and just being more transparent with my feelings and types of questioning I use with students.” Katrina</p>
Planning and instructional practices aligned to the SEL competencies	<p>“I am now incorporating elements of SEL into my lessons every day in some way. I make a point to ensure there are opportunities for students to reflect on themselves, interactions with others, and their decision-making skills.” Maryland</p> <p>“I’ve also noticed this is a great learning experience for <b>me, more than our students</b>, and for managing my own emotions. Today, I had an incident where I got a little upset and I recognized that I was frustrated. I feel like I was modeling behavior. I recognize and model the behavior when we make our own mistakes. Our students cue from us.” Jackie</p> <p>“I never considered SEL competencies until now; it has really changed the outcomes for kids in class.” Ashley</p>
Interactions with students	<p>“I’ve gotten to know students better than ever before as human beings. And for them to get to know me more as a human being.” Charlie</p> <p>“I’m more aware of emotions than ever before. Keeping a look-out for anyone who seems to be anxious. Checking on well-being and working on strategies. Thinking about the competencies in my own interactions with our kids—this has certainly been a shift for me.” Charlie</p> <p>“I had a student who I just knew something was off ... to the point ... I called Mom .... Come to find out there’s all this stuff going on at home. It’s a big shift from where I was a couple, five, ten years ago because now my first instinct was to be worried for him, not mad. That’s big for a lot of us.” Marsha</p>
Student connectedness	<p>“From this new learning, we work hard implementing SEL into our lessons and daily interactions with students. I do believe that the students are showing a greater sense of belonging and connectedness. Students are becoming more flexible in their thinking and cooperative, choosing their words carefully and are opening up to adults when they need to. They are working more as a ‘team’ from these team-building activities. I think that if the students see and feel the effort that adults are putting in place, they are more likely to believe that the adults want to connect with them and will rise to that occasion.” Krista</p>

The quotes reflected in Table 18 summarize changes in teacher thinking and practice during this 6-week intervention window. Following the structured focus group, the researcher identified common themes throughout, which included major changes in teacher thinking about SEL, planning and instructional practices aligned to SEL, how teachers interact with students, and the impact teachers have on the feeling of connectedness a student has when they enter the doors of a school community each day. Initially, many teachers felt that SEL was a thing and something that was done. Later, Marsha shared that “SEL is and should be embedded in everything we do.” Teachers recognized a change within and felt more confident in understanding and knowledge of SEL. Jackie shared, “I’ve also noticed this is a great learning experience for me, more than our students.”

The data above reflected the aspects of the intervention that led to observed changes, specifically in the adult structured focus group. The intentional, embedded professional learning focused on SEL contributed to teacher knowledge and understanding of SEL competencies and the impact teacher actions, planning, and instruction have on students. In an SEL exit slip, a teacher shared that “Students have used language modeling after me while working with new classmates, and it is wonderful to watch.” Another teacher said, “I see students modeling leadership, working through problems in small groups, and this is something they have seen me do!”

### **Summary of Results**

The data analyzed in this chapter provide unambiguous evidence that teachers’ professional learning with embedded SEL and consistent shared experiences for students improved students’ belongingness in school. Quantitative data collected to understand the effectiveness of professional learning focused on SEL and shared student experiences suggest

that this two-pronged intervention enhanced students' sense of belonging in school, even though there was no statistical significance. Qualitative data collected through the feedback exit slip, teacher focus groups, and student focus groups support the quantitative data and indicate improvements in the students' sense of belonging.

## CHAPTER 5: DISCUSSION

This chapter includes an analysis of the results, implications for practice, and future research. Through the PDSA (Bryk et al. 2017) cycle, the researcher was able to answer the Improvement Science question: how will I know my change is an improvement (Hinnant-Crawford, 2020)? The researcher followed this framework to tackle this problem of practice to improve student connectedness and sense of belonging in school. The researcher studied the impact of a two-prong intervention focused on professional learning for certified teachers and shared experiences for students through the Wingman program during the *study* phase of the PDSA cycle. This chapter will discuss the results of the two-pronged intervention and recommendations for practice and future research.

### Discussion of the Results

This study used the action research methodology, grounded in an Improvement Science framework (Elden & Chisholm, 1993; Martella et al., 2013) and an explanatory sequential mixed-methods research design (Creswell & Plano Clark, 2018). This research design used both quantitative and qualitative data to answer the research questions, first by collecting and analyzing quantitative data and then collecting and analyzing qualitative data. After this analysis, a synthesis of quantitative and qualitative data followed to answer all elements of the research questions. This allowed the researcher an opportunity to see if the data confirmed or disconfirmed each other (Creswell & Plano Clark, 2018).

### SEL Job-Embedded Professional Learning

The researcher sought to make schools a better place for students to be by strengthening teachers' understanding and implementation of SEL (Part 1) and providing students with greater shared experiences (Part 2). The researcher initially designed professional learning workshops

focused solely on SEL and realized that certified teachers learned best through authentic thinking experiences with SEL competencies embedded throughout. Throughout the intervention, the SEL feedback slips from certified teachers helped guide the design of the workshops to be more aligned with what the teachers would be doing with students and how to design lesson plans that incorporate the SEL competencies. Modeling the SEL competencies for staff and making thinking visible for certified teachers, with a debrief following each workshop, makes learning meaningful and valuable.

### ***Results***

After the final workshop, during the structured focus groups of certified teachers, Charlie shared that his “greatest takeaway from the professional learning workshops is that SEL should be embedded in everything, and the power of relationships is critical to what we do!” Another teacher from the focus group, Krisa, shared, “I have now made it part of my everyday practice to incorporate the competencies and have noticed students open up to me more and seem more trusting with me.” Student connectedness and the quality of student–teacher relationships are associated with students’ engagement in school and academic performance (Bosman et al., 2018) and have a substantial impact on student outcomes (Hughes, 2018).

The quantitative data, specifically the SEL pre- and post-survey in which all certified teachers participated, showed statistical significance over time. The certified teachers acknowledged their individual growth in knowledge and understanding of SEL. In addition, the qualitative data showed the genuine reflection in which staff engaged throughout the six weeks. Certified teachers shared that they now understood the importance and value of SEL connected to student belonging and how it should be part of everyday practice. During the structured focus

groups, students spoke about the observed change in their teacher during Wingman and the level of involvement from the teacher.

### ***Reflection***

What was most surprising to the researcher was teacher vulnerability and honesty. Certified teachers were brave, trusting, and willing to take risks. The CASEL SEL tool that staff received as a resource at the start of the intervention was a four-page, in-depth, personal SEL reflection document that asked certified teachers to assess themselves from *very easy to very difficult*. After completing the tool, staff acknowledged individual strengths and areas of challenge, and certified teachers then identified their focus area and revisited the tool over the course of six weeks as a formative self-assessment. In hindsight, the researcher should have asked participants to complete it with an identifier and then revisited this exact tool at the end of the intervention, which would have allowed for a more in-depth analysis.

The researcher, in her role as the school's principal, was surprised at the initial level of confidence certified teachers had in their knowledge and understanding of SEL. A few told the researcher that they over-inflated their self-reported score on the initial survey. As the understanding and knowledge of SEL grew, certified teachers came to understand that there was so much more to learn, and they did not know otherwise. Six weeks is not long enough to change teacher practice and impact student connectedness and belonging to a school in a long-lasting way. The researcher would have a greater chance of making larger gains over a longer period with more formative benchmarks along the way. Immediate changes in adult behavior can be slow.

The researcher found tremendous difficulty in showing the transfer of SEL competencies teachers were learning linked to students. This was a surprise to the researcher as the initial

thinking was that this would be easily identifiable; this was a challenge for the researcher and the assistant principal. When conducting the focus groups with students, the assistant principal tried pushing students to elaborate on their daily classroom experiences. Still, students kept wanting to speak to their feelings about Wingman. The translation to the student body was difficult due to random groupings, anonymous survey data, and the timing of the sense of belonging survey.

This research found a strong relationship between the implementation of SEL and students' sense of belonging in the classroom. During the structured student focus groups, the assistant principal asked if the students noticed any differences in their classes outside of Wingman. Specific to the teacher, a sixth-grade student, Eric, said, "I feel like this strengthened everything in the classroom, and I now see my teacher as a real person." The research shows that schools play vital roles in cultivating communities that foster connectedness for students (Pikulski, 2020). A seventh-grade student, Ariana, shared that she "sees her teachers now differently, more relaxed, and more approachable." Krista, a certified teacher, said, "Following this new learning around SEL, staff work very hard every day incorporating elements of SEL into our lessons and daily interactions with students. I do believe that the students are showing a greater sense of belonging." Data collected from certified teachers following each professional learning workshop showed a positive outcome for students (Table 15), aligned with the SEL competencies. A teacher shared that she has seen "an increase in empathy from my students and a greater care for others around them." Another teacher shared that he "recognized when modeling care for students, they cue from me."



### **Shared Experiences for Students: Wingman**

After identifying the need for greater shared experiences for students, the researcher collected data on the overall Wingman experience and gathered data from students and certified teachers on Wingman to improve student connectedness and sense of belonging. The qualitative data from the students clearly magnified the relationship between meaningful, shared experiences for students and the feeling of connectedness and belonging in a school community. Students having a sense of choice and control is linked to prosocial behaviors for kids (Scales et al., 2022), and having a sense of belonging refers to feeling included and accepted (Lee, 2014).

### ***Results***

While the quantitative data did not show much, the qualitative data was very meaningful. Students were honest during the structured focus groups and the Wingman feedback form (Table 13 and Table 18) about how they felt during and after Wingman. A sixth-grade student, Gabby, said that Wingman helped her “have stronger relationships with friends in her class and made me feel more accepted.” An eighth-grade student, Mary, said, “Wingman helped me meet friends in different grades and also taught me how to be more patient with people.”

The Wingman walkthrough tool illustrated statistical significance in one area, from the first Wingman to the third Wingman, and showed growth over time. This surprised the researcher. The data showed the increase in SEL competencies observed each time a classroom visit took place. While other areas from this tool did not show statistical significance, it did show marked growth. Certified teachers found value in this shared experience for students, evidenced by the data collected during the structured focus group, as a certified teacher shared that this shared experience alone would not “transform the school community, but with the help of adults in the building and classroom experiences, student belonging has improved.”

## ***Reflection***

When conducting the focus groups with students, the assistant principal tried pushing students to elaborate on their daily classroom experiences. Still, students kept wanting to speak to their feelings about Wingman. The translation to the student body was difficult due to random groupings, anonymous survey data, and the timing of the Sense of Belonging survey. The researcher was surprised by the challenge of students seeing the work on Wingman transfer to the classroom experience. Despite this surprise, a certified teacher, Krista, shared that “Wingman has created a stronger sense of community in our building, on both ends, and the Wingman leaders continue to be cultivated as student body leaders and role models.” This study illuminated the need for SEL in the classroom and out of the classroom. The voices of students and certified teachers shared the positives of the SEL competencies.

Student voice and feedback were critical to the study, and the researcher recognized that the Sense of Belonging survey was not the best tool for the purpose. Students received the initial survey in May on a beautiful sunny day. Students had been in their teachers’ care for over 165 days and had spring fever. Students took the Sense of Belonging Survey in October on a cold fall day with a teacher they had only known for 31 days. If the researcher could administer the exact survey in May 2025, the validity and reliability would be improved.

## **Recommendations for Practice**

This research study has several implications for SMS, including ongoing professional learning focused on SEL, continued work on providing students with more shared experiences, and further research. The results of this study showed the potential and power of relevant, meaningful professional learning focused on SEL and teacher practice. The next steps for SMS are ongoing professional learning focused on SEL. Educators play a pivotal role in students’

social and emotional development during a critical stage of their adolescence. The study underscores the importance of continuous professional learning tailored to middle school students' unique needs and challenges.

In addition, the school can continue to work on providing students with more shared experiences. Middle school students are navigating complex social dynamics and forming their identities. Shared experiences can contribute to a sense of belonging and positive social development. Teachers should explore strategies to incorporate more collaborative projects, team-building activities, and community-building initiatives within the middle school environment. Fostering a supportive and inclusive school culture can enhance the overall well-being of middle school students.

While this study took place at one middle school, the study and intervention should be shared with the other five secondary schools in the district. The professional learning workshop materials and resources can be shared, as can training other teachers to lead this work. Student Wingmen ambassadors can also continue with this work and train additional student ambassadors. Schools and districts should prioritize the design and implementation of professional learning programs that align with the specific challenges and opportunities present in middle school settings. Recognizing the impact of such learning experiences can influence educational policies and practices to better support middle school teachers.

While Wingman was the chosen shared experience for this intervention, as mentioned in Chapter 2, there are other shared experiences that students would benefit from, and having a choice might increase the number of students who become even more involved in schools. There is a need for increased after-school clubs and after-school sports. Many middle schools in other

districts provide numerous opportunities for students to become athletes and get involved in sports. There is much research on the benefits of sports and play for students.

Research indicated that advisory and restorative practices could have been interventions, but because the district implemented both programs in all three middle schools, the researcher selected a different shared experience for students and chose Wingman. The current work focused on SEL can connect nicely to the advisory lessons and be shared with the current committee to strengthen the school community.

### **Recommendations for Further Research**

Recommendations for future research would include longitudinal studies to examine the sustained impact of SEL-focused professional learning on middle school teachers and students over an extended period. This would provide insights into the long-term effects of such interventions. A longitudinal study could follow the same cohort of teachers and the same cohort of students over the three years they are in middle school. This would provide greater paired testing, more accurate results, and stronger data.

Wingman should consider a broader study on the impact of Wingman in specific settings such as urban, suburban, and rural. There is a need for standardized instruments through Wingman to measure walkthroughs and fidelity of implementation to build upon the study. To further accelerate the Wingman program, there should be a broad presentation of certified teachers and students to ensure all are represented in the program regardless of race, socioeconomic status, gender, and academic standing.

Future research would allow the researcher more time to investigate the influence of cultural contexts on the effectiveness of SEL strategies in middle schools. Research could explore how cultural differences impact the implementation and outcomes of SEL-focused

professional learning and differentiated approaches for implementing SEL-focused professional learning in diverse middle school settings, including urban, suburban, and rural schools. Understanding how these contexts influence the effectiveness of SEL strategies can inform tailored interventions.

A valuable research topic would be a more in-depth look at the dynamics of teacher-student relationships in the context of SEL-focused practices. Research could delve into how improved teacher practices in SEL contribute to the quality of relationships with middle school students and, subsequently, student outcomes. In addition, the correlation between SEL-focused professional learning and academic achievement in middle school students merits investigation. Assess whether improvements in social and emotional skills translate into better academic performance and engagement.

Future research might include a focus on teacher collaboration and shared learning experiences for students. One could study the impact of teacher collaboration and shared learning experiences within schools on the effectiveness of SEL-focused professional learning. Understanding how collective efforts among educators contribute to a positive school climate is crucial. Research could explore strategies for seamlessly integrating SEL principles into the existing middle school curriculum. This research could provide practical insights for educators on embedding SEL into various subject areas.

Finally, parent partnership is critical to student success in schools. Researchers could investigate the role of parental involvement in supporting and reinforcing SEL initiatives in middle schools. Understanding how parents can actively promote social and emotional development adds another dimension to the research.

## **Conclusion**

The ISDiP started with an analysis of data that led to a problem practice focused on strengthening student belonging and sense of connectedness to the school community. The researcher developed four research questions to better understand the problem. After conducting a thorough literature review, the researcher identified the study's design and methodology and developed a two-pronged intervention. The intervention included both SEL-embedded professional learning for certified teachers and a shared experience for students through Wingman. Data collection tools included a pre- and post-SEL assessment for teachers, an exit slip following each professional learning workshop, a Wingman walkthrough tool, and adult and student focus groups. Analysis of the collected data used appropriate statistical, quantitative, or qualitative methods.

In summary, findings from this study reveal that SEL embedded in teachers' daily planning and instructional practices and shared experiences for students that promote SEL strengthen student belonging and connectedness in a school community. SEL is a crucial component of education for both teachers and students. SEL equips students with the skills to recognize and manage their emotions effectively. SEL fosters the development of interpersonal skills such as communication, empathy, and cooperation. Students at SMS mentioned that these skills were outcomes of Wingman. There is a positive relationship between SEL and academic success. Students with strong social and emotional skills often perform better academically and are more engaged in the learning process than those with less developed social and emotional skills. For teachers, modeling SEL skills for students is vital as teachers serve as role models. When teachers demonstrate strong social and emotional skills, students are more likely to emulate these behaviors, creating a positive ripple effect in the school community.

Students in strong SEL schools report a more positive social climate and learning environment, doing better academically, and feeling better prepared for life than those in weak SEL schools (Atwall, 2018). SMS is working toward cultivating a community of kindness, care, and inclusivity where SEL is the fiber of their being, and all students feel a sense of connectedness and belonging to the school.

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APPENDIX A: CITI CERTIFICATE



Completion Date 23-Jan-2021  
Expiration Date 23-Jan-2024  
Record ID 40274827

This is to certify that:

**Shannan Carlson**

Has completed the following CITI Program course:

**Social & Behavioral Research - Basic/Refresher**  
(Curriculum Group)

**Social & Behavioral Research - Basic/Refresher**  
(Course Learner Group)

**1 - Basic Course**  
(Stage)

Under requirements set by:

**Sacred Heart University, Inc.**



Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320  
Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Verify at [www.citiprogram.org/verify/?w58cf4b8c-fc91-4576-ab73-9d6b3ed6b76e-40274827](http://www.citiprogram.org/verify/?w58cf4b8c-fc91-4576-ab73-9d6b3ed6b76e-40274827)

Not valid for renewal of  
certification through CME.

## APPENDIX B: DISTRICT PERMISSION TO CONDUCT RESEARCH



### MILFORD PUBLIC SCHOOLS

70 West River Street • Milford, CT 06460

**Anna M. Cutaia, Ed.D.**

Superintendent of Schools

[acutaia@milforded.org](mailto:acutaia@milforded.org)

Phone: (203) 783-3433

FAX: (203) 783-3475

February 6, 2023

Mrs. Shannan Carlson  
726 Lambert Road  
Orange, CT 06477

Dear Mrs. Carlson,

The purpose of this letter is to inform you that Milford Public Schools (MPS) has approved the project titled "Relationships Matter: Positive Teacher Impacts on Student Outcomes" as described as of this date. This approval is contingent on the IRB approval from Sacred Heart University.

We have determined that this project conforms to the district's standards regarding informed consent and FERPA regulations. Additionally, you will be required to adhere to all Milford Public Schools policies to ensure maintaining the privacy rights of students and staff. Please see policy #[5145.13](#) which specifically addresses research in our schools. This letter should be available upon your first communication with school staff as it assures that the study meets the district's research protocol. District approval does not ensure research participation from faculty, given that research subjects have the right not to participate and withdraw from the research study at any point. Also, please keep my office apprised of any changes in your described research methods, your progress, and the final findings. We understand you will comply with the use of pseudonyms throughout the study.

Sincerely,

Anna M. Cutaia, Ed.D.  
Superintendent

## APPENDIX C: CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH



Sacred Heart  
UNIVERSITY

ISABELLE FARRINGTON COLLEGE  
OF EDUCATION & HUMAN DEVELOPMENT

**Title of Research Study:** Cultivating Community: Strengthening Student Connectedness and Sense of Belonging in School.

Researcher: Shannan D. Perry Carlson

Email: carlsons6@mail.sacredheart.edu

Phone: 203-506-9800

Faculty Advisor: David Title, Ph.D.

E-mail: [titled@sacredheart.edu](mailto:titled@sacredheart.edu)

Phone: (203) 365-4774

### Purpose

You are being asked to participate in a research study. By doing this research we hope to learn how to strengthen student connectedness and sense of belonging in our schools.

### Procedures

If you agree to participate in this study, you will be asked to complete the following tasks:

- Agree to participate in a professional learning designed to develop a deeper understanding of social emotional competencies and skills over the course of 8 weeks. (3 – 4 hours total)
- Agree to participate in bi-weekly exit slips to reflect upon the new learning and strategies tried in the classroom.
- Agree to participate in a pre/post reflection focused on SEL.

### Voluntary Participation

Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to participate for any reason without penalty. You will be audio-recorded during the interview/focus group process. If you do not want to be audio recorded, please inform the researcher, and only handwritten notes will be taken during the interview.

### Risks or Discomforts

We believe there are no known risks associated with this research study; the inconvenience associated with this study would be the time involved in participation in the interview.

### Confidentiality

The researcher will securely store all identifiable data collected (participant names and contact information) to keep your information safe throughout this study. Your individual identity will be kept confidential when information is presented or published about this study. Audio recordings of interviews will have identifiable data removed before storage and will be destroyed three years after completion of the study.

The research records are held by researchers at an academic institution; therefore, the records may be subject to disclosure if required by law. The research information may be shared with federal agencies or local committees who are responsible for protecting research participants, including individuals on behalf of Sacred Heart University.

### Questions

If you have any questions about this research study, you may contact me, **Shannan Carlson** at carlsons6@mail.sacredheart.edu or 203-506-9800. If you have any questions about your rights as a participant in a research study, you can contact the Sacred Heart University Institutional Review Board at alpfl@sacredheart.edu or 203-396-8241.

Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research.

**Please take all the time you need to read through this document and decide whether you would like to participate in this research study.**

If you agree to participate in this research study, please sign below. . You will be given a copy of this form for your records.

\_\_\_\_\_  
**Participant Printed Name**

\_\_\_\_\_  
**Participant Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Researcher Signature**

\_\_\_\_\_  
**Date**

**APPENDIX D: TIMELINE**

<b>Month</b>	<b>To Do</b>	<b>Calendar Dates</b>	<b>Who</b>
August	Professional Learning Workshop #0: Provide Teachers with an Overview of the Research and Research Adult Pre-Assessment (SEL)	August 28 or 29	Principal
September	Student Wingman Training and Wingman Welcome	September 11 September 12	Wingman Staff Wingman Ambassadors
September	Professional Learning Workshop #1: <ul style="list-style-type: none"> <li>• What is SEL?</li> <li>• Pre SEL Inventory</li> <li>• Five Core Competencies</li> </ul> Utilize the CASEL Resource:	September 13	Instructional Specialist, Assistant Principal, Literacy Specialist, All Certified Teachers
September	Wingman #1 Welcome/Building Community	September 14	Instructional Specialist, Assistant Principal, Literacy Specialist, All Certified Teachers
October	Professional Learning Workshop #2: <ul style="list-style-type: none"> <li>• Five Core Competencies</li> <li>• How do they Connect to Student Outcomes and Lifelong Success?</li> </ul> Thinking Experience w/Embedded SEL Competencies	October 5	Instructional Specialist, Assistant Principal, Literacy Specialist, All Certified Teachers
October	Wingman #2 *Wingman Walkthrough Tool	October 5	Instructional Specialist, Assistant Principal, Literacy Specialist, All Certified Teachers
October	Professional Learning Workshop #3: Thinking Experiences w/Embedded SEL Competencies Feedback Exit Slip POST SEL – Assessment	October 25	Instructional Specialist, Assistant Principal, Literacy Specialist, All Certified Teachers
October	Wingman #3 What's Your Ideal School?	October 26	Instructional Specialist, Assistant

	*Wingman Walkthrough Tool		Principal, Literacy Specialist, All Certified Teachers
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## **APPENDIX E: STAFF INFORMATION LETTER**

Dear SMS Teachers,

Currently, I am researching and designing a study for my Doctorate in Educational Leadership at Sacred Heart University in Fairfield, CT. My dissertation aims to analyze the impact that increased use of social and emotional learning (SEL) skills and shared experiences for students has on a student's sense of belonging and connectedness in schools. The overall goal is to strengthen student connectedness at East Shore Middle School and make this the best possible experience for our youth.

To conduct this research, a small group will provide a professional learning series on SEL and Wingman. During this professional learning series, instructional strategies will be provided, as well as a foundation of the CASEL SEL Framework and Competencies/Skills, and how they can benefit your instructional practices and outcomes. The focus of the professional learning series connects to our continued focus on High-Quality Instruction (HQI), the Developmental Relationship Framework (DRF), and the Vision of the Learner (VOL). The project will take place over six weeks from September 2023 through November 2023. The Google survey will be given as a pre and post-test, and I will use exit tickets and focus groups to collect additional information as the professional learning series continues. A walkthrough tool will be used during Wingman as well.

The findings of the research will be a critical part of my dissertation and will become a published document, however, all participants will be assigned a unique identifier to protect the identities of the participants and ensure confidentiality. There will be no names nor identifiers used and all data will be presented as aggregates and themes. All data will be kept on a password-protected computer.

Upon completion of the study, all data will be deleted. You are invited to participate in this research study. As a participant, I will conduct professional learning activities during our designated professional learning time during the contracted school day. As part of the study, you will participate in professional learning, debrief interviews, and potentially, classroom visits. There is no risk to participating in this research study. Please know that your participation will in no way impact your employment or relationship with the researcher.

This dissertation research project is supported by Dr. Anna Cutaia, Superintendent of Milford Public Schools, and approved by the Institutional Review Board of Sacred Heart University. Furthermore, I have received training through the Collaborative Institutional Training Initiative to conduct ethical research. I appreciate your consideration to participate in this study.

If you have any further questions, please don't hesitate to reach out. Thank you in advance!

Sincerely,

A handwritten signature in black ink, appearing to read 'Shannan D. Carlson', written in a cursive style.

Shannan D. Carlson



**APPENDIX F: ADULT SOCIAL-EMOTIONAL LEARNING PRE AND POST  
ASSESSMENT**

	<b>Strongly Agree (5)</b>	<b>Agree</b>	<b>Neither Agree or Disagree (3)</b>	<b>Disagree</b>	<b>Strongly Disagree (1)</b>
I am confident in my understanding of social-emotional learning (SEL).					
I understand the purpose of the SEL framework.					
I am confident in the research behind SEL.					
I know how to model SEL for students.					
I feel confident in the strategies I use in my practice to help students feel connected to the school.					
I am confident in my understanding of the SEL competencies and skills.					
I feel comfortable using my SEL knowledge and skills to help students feel included in the school community.					
I am confident integrating SEL with academic instruction.					

## **APPENDIX G: EMPATHY INTERVIEW QUESTIONS**

### **Questions:**

1. What is your current role?
2. Education level?
3. How long have you been in MS?
4. Years as an educator?
5. Share with me how you connect with and form healthy, meaningful relationships with students.
6. How do you embed social and emotional skills in your instructional and planning practices?
7. How does the professional learning you engage in, focused on relationship building and SEL, transfer to your daily practice?
8. How do you cultivate conditions in your classroom to ensure overall student success, both academic and non-academic?
9. How do you handle individual student behaviors and or concerns?
10. What do you think are contributing factors to student connectedness and a sense of belonging for students in our schools today?

## APPENDIX H: WINGMAN WALKTHROUGH TOOL

\*Wingman Walkthrough Tool -

Room <b>134</b>	little or no evidence (1)	some evidence (3)	strong evidence (5)
Are all students engaged?			
<u>Is</u> there respectful student-teacher and s:s interactions?			
Are all students included?			
<u>Is</u> the anchoring topics of discussion being used?			
Are SEL skills/competencies observed?			
Room <b>136</b>	little or no evidence (1)	some evidence (3)	strong evidence (5)
Are all students engaged?			
<u>Is</u> there respectful student-teacher and s:s interactions?			
Are all students included?			
<u>Is</u> the anchoring topics of discussion being used?			
Are SEL skills/competencies observed?			
Room <b>139</b>	little or no evidence (1)	some evidence (3)	strong evidence (5)
Are all students engaged?			
<u>Is</u> there respectful student-teacher and s:s interactions?			
Are all students included?			
<u>Is</u> the anchoring topics of discussion being used?			
Are SEL skills/competencies observed?			

**APPENDIX I: BI-WEEKLY ADULT EXIT SLIPS FOLLOWING PROFESSIONAL  
LEARNING**

1. What social emotional learning (SEL) competency will you model in your practice today?

Did you try?

2. What do you anticipate will be the outcome for students?
3. How does this connect to our model of HQI?
4. What would be helpful to us in expanding your knowledge and understanding of SEL at our next professional learning?

## **APPENDIX J: STUDY INVITATION TO PARTICIPATE IN STRUCTURED FOCUS GROUPS**

Dear SMS Teachers,

Currently, I am researching and designing a study for my Doctorate in Educational Leadership at Sacred Heart University in Fairfield, CT. My dissertation aims to analyze the impact that increased use of social and emotional learning (SEL) skills and shared experiences for students has on a student's sense of belonging and connectedness in schools. The overall goal is to strengthen student connectedness at SMS and make this the best possible experience for our youth.

To conduct this research, a small group will provide a professional learning series on SEL and Wingman. During this professional learning series, instructional strategies will be provided, as well as a foundation of the CASEL SEL Competencies/Skills, and how they can benefit your instructional practices and outcomes. The focus of the professional learning series connects to our continued focus on High-Quality Instruction (HQI), the Developmental Relationship Framework (DRF), and the Vision of the Learner (VOL). The project will take place over six weeks from September 2023 through November 2023. The Google survey will be given as a pre and post-test, and I will use exit tickets and focus groups to collect additional information as the professional learning series continues. A walkthrough tool will be used during Wingman as well.

The findings of the research will be a critical part of my dissertation and will become a published document, however, all participants will be assigned a unique identifier to protect the identities of the participants and ensure confidentiality. There will be no names nor identifiers

used and all data will be presented as aggregates and themes. All data will be kept on a password-protected computer.

You are invited to participate in a structured focus group which will include ten questions. In the group and all research, all identifiers will be deleted, and identities protected. There is no risk to participating in this research study. Please know that your participation will in no way impact your employment or relationship with the researcher.

Participation in the study is voluntary. If you prefer not to participate, that is understandable and will have no impact on your relationship with East Shore Middle School. I understand that this may not be a convenient time for you to participate in the focus group. You may stop your participation at any time and withdraw from the study. You may choose to skip any questions you prefer not to answer.

Participation in this study is not expected to present any risk. Should you experience any feelings of distress during the interview or after, I will be available for debriefing and help you find resources for further support.

Your confidentiality will be protected to the full extent of the law. You will be assigned a study code number. Any notes taken will be transcribed and deleted at the conclusion of the study. No names or other information that you could identify you or anyone else will be included in the transcribed interview.

This dissertation research project is supported by Dr. Anna Cutaia, Superintendent of Milford Public Schools, and approved by the Institutional Review Board of Sacred Heart University. Furthermore, I have received training through the Collaborative Institutional Training Initiative to conduct ethical research. I appreciate your consideration to participate in this study.

If you have any further questions, please don't hesitate to reach out. Thank you in advance!

Sincerely,

A handwritten signature in black ink, appearing to read "Shannan D. Carlson". The signature is fluid and cursive, with the first name "Shannan" being more prominent.

Shannan D. Carlson

\_\_\_\_\_ Yes, I would like to participate in this focus group.

**APPENDIX K: STUDENT STRUCTURED FOCUS GROUP QUESTIONS**

How has the Wingman experience been for you?

How does Wingman make you feel?

What skills have you learned during Wingman?

To what extent did Wingman help you feel more connected to school?

Did you notice any differences in the classroom after the Wingman experiences? Tell me more. Any changes?



**APPENDIX L: ADULT STRUCTURED FOCUS GROUP QUESTIONS**

What has been your greatest learning focused on SEL these past 6-8 weeks?

How did you implement these new SEL competencies? What went well? What was challenging?

How has this shifted your practice?

Have your interactions with students changed? How so?

Has Wingman created a stronger community here at SMS? How so?

Have you seen a greater sense of belonging in the student body? Why? PD? Wingman?

How were they connected?

Did this new learning change how you cultivate conditions in your classroom to ensure overall student success, both academic and non-academic? How so?

Does this new learning connect to our focus on HQI? How so?

**APPENDIX M: DISTRICT SENSE OF BELONGING SURVEY**

1. Overall, how much do you feel like you belong at your school?
2. At your school, how accepted do you feel by the other students?
3. How well do people at your school understand you?
4. How much respect do students in your school show you?
5. How connected do you feel to the adults at your school?