

Coaching and Professional Development Plan: Increasing Teacher Efficacy and Improving Student Outcomes in Pre-K



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EXECUTIVE SUMMARY

Research indicates that qualified teachers in early childhood programs can significantly affect the classroom environment and learning (Center on the Developing Child at Harvard University, 2007). The challenge, according to Manning, Garvis, Fleming, & Wong (2017), is that "...early childhood teaching qualifications vary between states and across countries" (p. 20). According to the Texas Commission on Public School Finance Report (2018), many students entering kindergarten lack readiness skills, so to "...close educational attainment gaps and reduce the expense of costly remediation..." (p. 19), House Bill 3 was passed by the Texas Legislature in 2019 to address kindergarten readiness skills by making changes to the Pre-K program (TEA, n.d.).

Under House Bill 3, local education agencies¹ (LEAs) were required to offer high-quality, full-day Pre-K to eligible four-year-old children, effective September 1, 2019. By changing the Pre-K requirements from half-day to full-day, the hope is that the Pre-K students would enter kindergarten with readiness skills in literacy and math and be successful in school (TEA, n.d.).

Since many LEAs did not have the resources or space to accommodate the transition from half-day to full-day Pre-K, LEAs were allowed to file exemptions to gain additional time to meet the full-day Pre-K requirement. Although the State Board of Education sets standards for teacher qualifications and certifications, these requirements alone are not enough to determine teacher effectiveness. In order to ensure that students receive quality instruction, many LEAs have invested in some form of instructional coaching to support professional development (PD) and improve teacher practice (Gallucci, DeVoogt Van Lare, Yoon, & Boatright, 2010).

Depending on how one defines coaching, the coaching role can look very different among LEAs and even within campuses in the same LEA. Knight and Van Nieuwerburgh (2012) emphasize that "...the instructional coaching process is not...a blueprint to be followed step by step, but...a framework to be adapted by the coach so as to fit each coaching situation" (p. 105). Although

¹ Local Education Agency (LEA) refers to school districts or open-enrollment charter schools.

PD alone has minimal effects on improving instruction, a coaching model that supports PD can bridge theory and practice and increase teacher efficacy and student outcomes (Kraft, Blazar, & Hogan, 2018).

Four research questions guide this capstone project. First, what are the perceptions and beliefs of Pre-K teachers regarding their impact on the academic and social development of students? Second, to what extent do Pre-K teachers engage and collaborate with colleagues? Third, what are the PD needs of Pre-K teachers? Fourth, how can coaching increase Pre-K teacher's efficacy and improve student outcomes?

Data was collected using a mixed-method approach from surveys and interviews to answer the four research questions. The survey had both open-ended and Likert scale questions. The Likert scale questions measured a teachers' sense of efficacy on student engagement, instructional strategies, and classroom management. The open-ended questions gave insight into teachers' perception of collaboration opportunities and PD and coaching needs. The interviews were coded, which revealed reoccurring themes. The following findings are a result of the mixed-method approach:

- Finding 1: Pre-K teachers have a high sense of efficacy and believe that they make a positive difference in their students' academic and social development.
- Finding 2: Pre-K teachers' desire to collaborate was evident, but the collaboration did not occur regularly since collaboration opportunities varied across campuses.
- Finding 3: Overall, the Pre-K teachers found the PD in the district relevant to their needs but prefer modeling or small group as the PD delivery method to support their learning.
- Finding 4: Pre-K teachers value the coaching relationship but desire more frequent feedback to grow.

Based on the four findings, the following recommendations are made:

RECOMMENDATION 1:

Implement a peer coaching model that includes collaboration opportunities and facilitation by the Pre-K coach as needed.

The findings showed that Pre-K teachers desired more time to collaborate. The peer coaching model provides an opportunity for Pre-K teachers to collaborate and learn together. By having the Pre-K teachers participate in the peer coaching model, they will tap into the experiences and strengths of one another to support one's learning, along with the Pre-K coach's assistance.

RECOMMENDATION 2:

Pre-K teachers will create a professional development plan used to design and offer choices in professional development.

The findings revealed that teachers want choice when it comes to PD. The teachers indicated that they want PD that addresses their different needs, can be easily implemented in their classroom, and is relevant to their students' needs. By having teachers create a PD plan, the district will be able to gauge each teacher's needs and align them with the district initiatives for PD.

RECOMMENDATION 3:

The Pre-K coach will offer virtual coaching and feedback sessions to meet the needs of the Pre-K teachers.

The findings showed that Pre-K teachers wanted frequent feedback to help them to grow as practitioners. Many Pre-K teachers stated that they had a positive relationship with a coach or would like to build a coaching relationship if they did not already have one. Since there is only one Pre-K coach, the virtual coaching sessions would allow Pre-K teachers and cohorts to access the Pre-K coach from any campus, further promoting collaboration and opportunities for frequent feedback.

INTRODUCTION

The benefits of quality early intervention, especially for economically disadvantaged children, are well documented. Children who attend quality Pre-K show “...positive effects on important adolescent and young adult outcomes, such as high school graduation, reduced teen pregnancy, years of education completed, earnings, and reduced crime” (Yoshikawa et al., 2013, p. 4). In 2019, the Texas Legislature passed House Bill 3, addressing four major policies that impact the educational landscape.

1. Supporting Teachers and Rewarding Excellence in Teaching
2. Focusing on Learning and Increasing Student Achievement
3. Increasing Funding for Schools and Equity
4. Reducing Property Taxes through Reform and Recapture

This capstone project will focus on the second major policy, *Focusing on Learning and Increasing Student Achievement*, and its implication for the Pre-K program. The major change under House Bill 3 for Pre-K is that the LEAs are now required to provide a full-day Pre-K program to eligible four-year-old children starting in the 2020-2021 school year. The eligibility criteria for Pre-K is that the child must be either homeless, economically disadvantaged, have limited English proficiency (LEP), in foster care, be a child of an armed force member (active, injured, or killed), or a child of a Star of Texas Award Recipient². The LEAs must also meet the teacher qualification option, which requires Pre-K teachers to have the appropriate certification in early childhood education (ECE) and meet one of the seven options listed below to meet the teacher qualification requirement for Pre-K (TEC §29.167b & TAC §102.1003e). The LEA in this study chose option 7. According to the Texas Education Agency (TEA), most LEAs have chosen option 7 to fulfill the teacher qualification requirement since it represents the majority of the Pre-K teachers in K-12 public schools (TEA, n.d., HB3). The following are the seven options offered by TEA.

² Child of a Star of Texas Award Recipient refers to a child of a firefighter, police officer, or first responder who was killed or injured in the line of duty while serving their community.

Option 1: A Child Development Associate (CDA) credential.

Option 2: A Montessori certification.

Option 3: Teaching in a nationally accredited childcare program for at least 8-years.

Option 4: A degree in early childhood education (ECE), or EC Special Education, or if in a non-ECE degree program, they must have a minimum of 15 units of ECE coursework completed.

Option 5: Completion of the Texas School Ready (TSR) program with the necessary documentation.

Option 6: If the Pre-K teacher is already employed in the LEA, the Pre-K teacher has already completed a minimum of 150 hours of PD relevant to ECE, and half of the PD hours are in a mentoring/coaching relationship.

Option 7: If the Pre-K teacher is already employed in the LEA, the Pre-K teacher will complete 30-hours of PD relevant to ECE every year, in which 15-hours must be in a mentoring/coaching relationship until a minimum of 150 hours is completed.

CONTEXT

The K-12 public school district in this study is a major suburban district in Texas. Throughout this research study, the pseudonym 'Lake Crest ISD' will refer to the district. Lake Crest ISD serves over 23,000 students, with 21 elementary, 7 middle, 4 high schools, and 1 career and technology school.

The focus of this study is on the Pre-K program housed on the elementary campuses. There are 18 regular Pre-K teachers, 10 bilingual Pre-K teachers, and 9 Preschool Program for Children with Disabilities (PPCD) teachers (Figure 1). During the 2019-2020 school year, half-day Pre-K

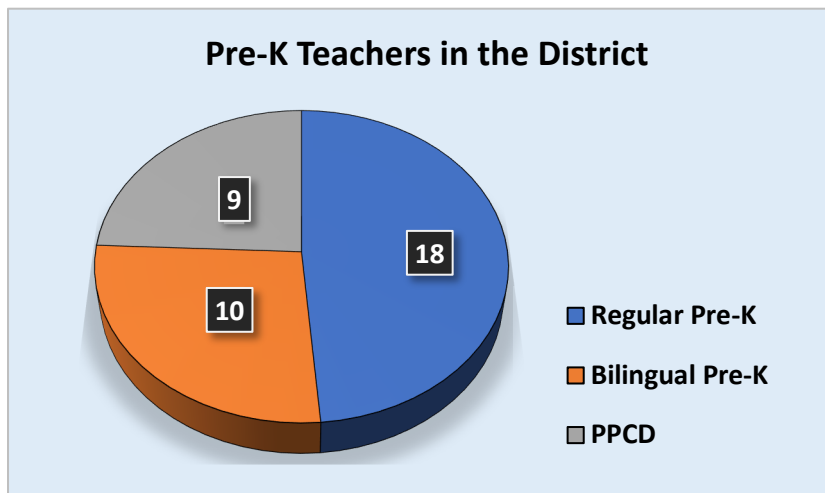


Figure 1: Graphic representation of Lake Crest ISD's Pre-K Teacher Data for 2019-2020

was housed on 17 of the 21 campuses, along with PPCD and bilingual Pre-K programs. The PPCD programs were housed on the same campuses with regular Pre-K, so the PPCD and regular Pre-K children can interact and share learning opportunities.

In 2019 - 2020, Lake Crest ISD provided half-day Pre-K to approximately 140 three-year-old and 700 four-year-old children. However, with the passing of House Bill 3, Lake Crest ISD will no longer offer Pre-K to three-year-old children since it needs to make room for full-day Pre-K for the four-year-old children who meet the eligibility criteria. Although House Bill 3 went into effect in 2019, many LEAs did not have the personnel, resources, or facilities to offer full-day Pre-K. To address this issue, TEA offered exemptions, as long as LEAs were working towards meeting the full-day Pre-K requirements for eligible four-year-olds (Appendix A). Lake Crest ISD applied and received an exemption, so for the 2020 - 2021 school year, twelve campuses have full-day Pre-K for four-year-olds, while the other campuses still have half-day Pre-K for four-

year-olds. By the 2022 - 2023 school year, Lake Crest ISD will transition the remaining half-day Pre-K to full-day Pre-K.

As mentioned earlier, Lake Crest ISD selected option 7, which requires 30-hours of PD in early childhood education (ECE), in which 15 of those hours need to be in a mentoring/coaching relationship, for a total of 150-hours in five years, starting in the 2020-2021 school year (Figure 2) (Texas Education Agency, 2019).

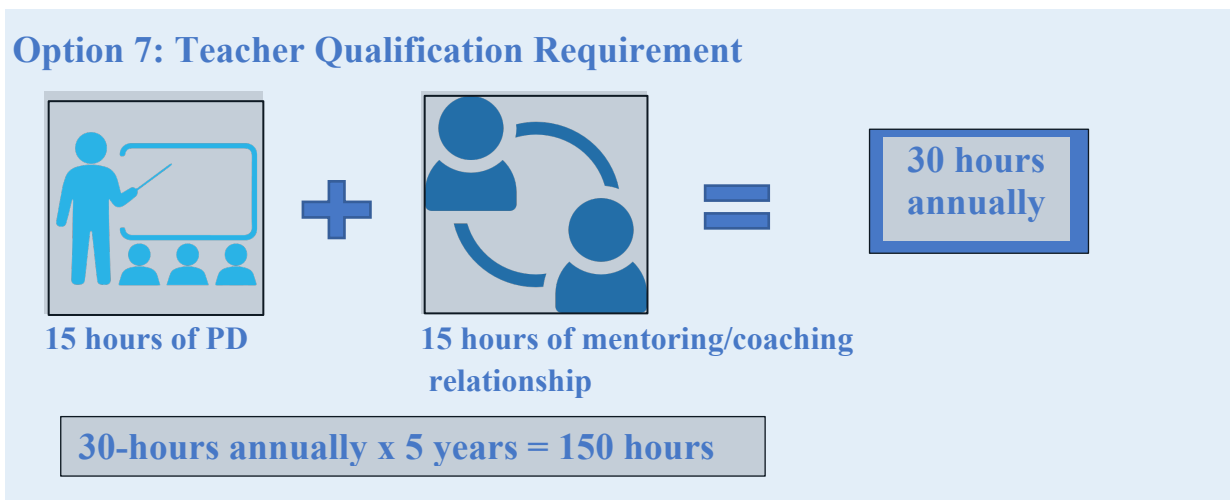


Figure 2: Graphic representation of the Pre-K teacher qualification requirement collected from the Texas Education Agency (2019). High-Quality Pre-K Components.

Although K - 5th grade teachers on a five-year renewal certification are required to complete 150-hours of PD every five years, they do not have the annual 15-hours of mentoring/coaching relationship requirement, which is unique to Pre-K. This capstone project will identify PD and coaching needs based on the Pre-K survey results and interviews and make recommendations for PD and coaching plans that meet House Bill 3 requirements and support teachers' growth and improve student outcomes.

During the data collection phase of this capstone project, the COVID-19 pandemic occurred and changed the landscape of schools and our world. In Texas, the governor issued a disaster declaration in response to COVID-19 and mandated that schools stay closed for the remainder of the 2019-2020 school year. A plan was immediately put into action by the leadership team

at Lake Crest ISD, and they distributed laptops to students so that learning could continue in a virtual platform. Teachers received training and technology support to provide instruction for their students while working remotely from home. Paper packets were also available for students and families who chose a non-technology format. The leaders, teachers, staff, children, and parents were all learning and managing 'school' while dealing with the challenges brought on by the COVID-19 pandemic.

CONCEPTUAL FRAMEWORK & RESEARCH QUESTIONS

The conceptual framework for this capstone project will focus on Vygotsky's sociocultural theory and how "...social interaction is the basis of learning and development" (Shabini, 2016, p. 2). Although Vygotsky's zone of proximal development (ZPD)³ is often used to describe how children learn, in this paper, the ZPD will be applied to how it helps adult learners (Warford, 2011). The coaching model fits nicely with the ZPD in which both the teacher and the coach "... contributes something to and takes something away from the interaction" (Lantolf & Pavlenko, 1995, p. 116). In the ZPD, the more experienced or knowledgeable teacher in a particular area would be what Vygotsky referred to as the 'capable peer.' The roles would be interchangeable since the 'capable peer' can change based on the situation. This type of coaching relationship "...is considered a key lever for improving teachers' classroom instruction and for translating knowledge into new classroom practices" (Kraft, Blazar, & Hogan, 2018, p. 551).

The Pre-K coach can work collaboratively with the Pre-K teachers to help implement strategies gained from PD. The peer coaches can also serve as learning partners to facilitate growth. When coaching and PD are aligned, instructional practices improve, which will impact student achievement (Kraft et al., 2018). But to accomplish this, the Pre-K coach and peer coaches will need to model and scaffold instruction to meet each teacher's ZPD, which is "...the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer[s]" (Vygotsky, 1978, p. 86) (Figure 3).

³ Vygotsky's Zone of Proximal Development is the distance between what a child (learner) can do with and without help.

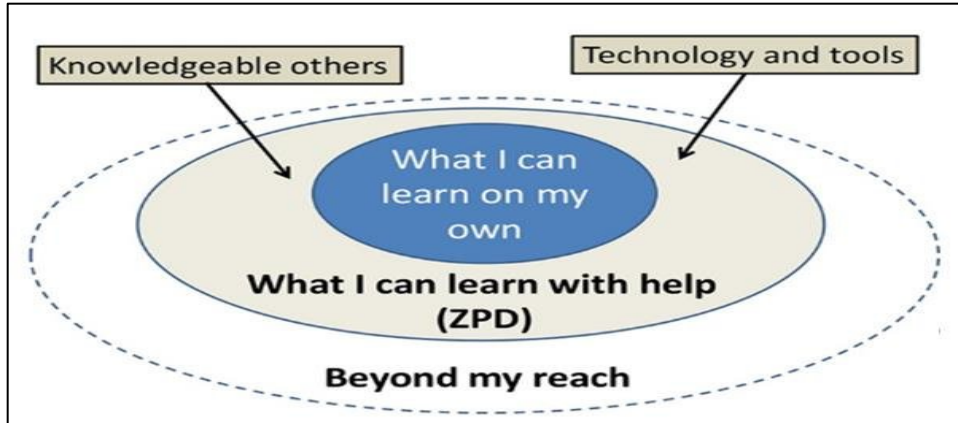


Figure 3: Source: McLeod, S. (2018). *Vygotsky-Simply Psychology*. Retrieved from <https://www.simplypsychology.org/vygotsky.html>

It is important to note that the research on the effectiveness of instructional coaching and the impact on teacher performance and student outcomes are mixed due to the various ways instructional coaches are utilized on campus, or even how coaching is defined. Some instructional coaches are used more as an administrator than a resource for teachers. Findings from Bean, Draper, Vandermolen, & Zigmond (2010) found that an increase in student achievement was directly tied to teachers working with an instructional coach. Therefore, clear expectations on the role of the instructional coach need to be communicated to the campus leaders since “[p]rincipals who described coaching as valuable positively influenced the amount of time that coaches spent observing and providing feedback to teachers” (Kane & Rosenquist, 2019, p. 1720).

Lave and Wenger’s (1991) community of practice (CoP), which views learning as a social phenomenon, will help situate the benefits of collaboration in fostering an environment for teachers to learn and grow. When teachers are part of a CoP, given PD choices, and the PD has most of the seven components of effective professional learning, as identified by Darling-Hammond, Hyler & Gardner, 2017, they are likely to grow. The seven components of effective professional learning are that the PD is relevant, engages learners, supports collaboration, models good instructional strategies, provides coaching and feedback, provides time to reflect, and offers adequate time to practice what has been learned (Darling-Hammond et al., 2017).

Although every PD may not have all of the seven components, the goal would be to design PD that incorporates many components to make learning meaningful and applicable.

Lake Crest ISD intentionally housed the PPCD teachers on the same campuses with regular Pre-K teachers to encourage collaboration. Wenger, McDermott & Snyder (2002) define CoPs as “...groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). Although there are differences between PPCD, regular Pre-K, and bilingual Pre-K in terms of curriculum and pacing, there are commonalities such as ways to engage students, create interactive stations, manage behavior, differentiate instruction, and build a home-school connection. The regular Pre-K, PPCD, and bilingual Pre-K teachers would benefit by sharing, supporting, and learning from one another in a CoP through those commonalities.

The regular Pre-K, PPCD, bilingual Pre-K, and the Pre-K coach will be “...an integral and inseparable aspect of social practice” (Lave & Wenger, 1991, p. 31), in which learning is shared and experienced through participation in the CoP. The collaboration between the regular Pre-K and PPCD teachers and regular Pre-K and bilingual Pre-K will open up more opportunities for students to engage, interact, and share the same classroom space to further enrich their learning experiences. Campuses with a limited number of Pre-K teachers can include the kindergarten teachers as part of their CoP. In the interviews, several Pre-K teachers mentioned that they often reach out to the kindergarten team to support idea-sharing, which they find valuable.

The three required components in a CoP are domain, community, and practice (Wenger, 1998) (Figure 4). The domain refers to a shared interest, which would be Pre-K and other early childhood teachers. The community is the relationship between the Pre-K teachers and the Pre-K coach through collaboration and partnership. The practice is what sets the CoP apart from other communities. The CoP members are practitioners, and the knowledge gained

through sharing and learning can be applied directly to their classrooms to improve student outcomes.

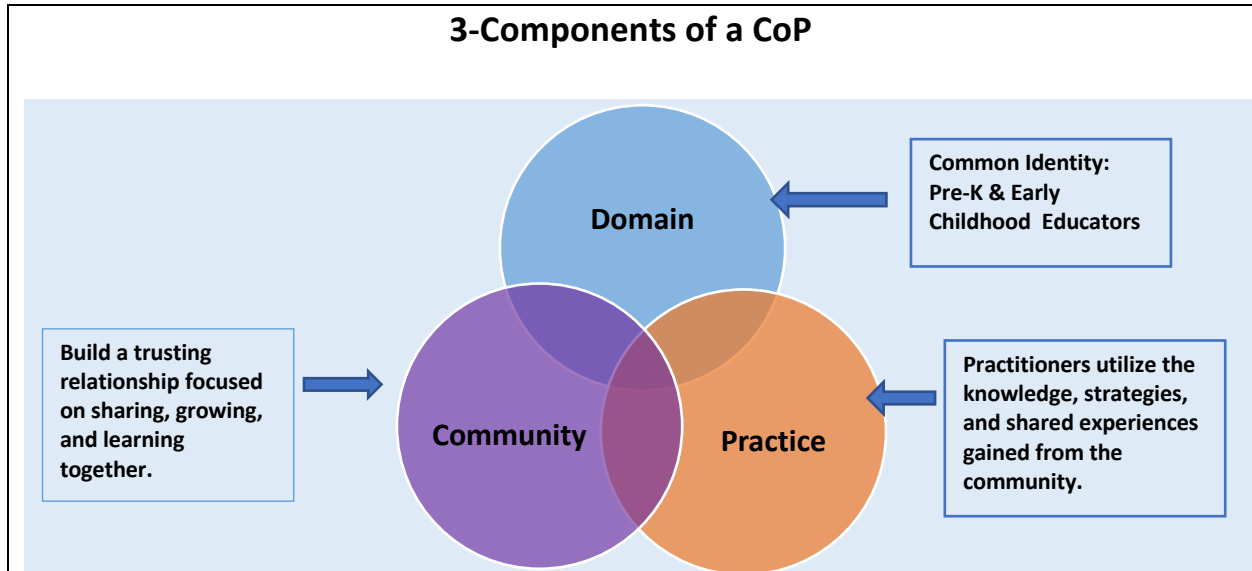


Figure 4: Graphic representation of Wenger's three components of a CoP from Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press

The capstone project will also be grounded in Bandura's social cognitive theory of teacher efficacy, which he defined as "...beliefs in one's capabilities to organize and execute the courses of action required producing given attainment" (Bandura, 1997, p. 3). According to research by Buskey (1988) and Stein & Wang (1988), strong teacher efficacy results in teachers taking more risks as learners and willing to try new strategies they have learned in PD and be responsive to the needs of the students in the classroom. Gavora (2010) states that "...teacher self-efficacy is a strong self-regulatory characteristic that enables teachers to use their potentials to enhance pupils' learning... the stronger the self-efficacy, the greater the perseverance--and the greater the perseverance, the greater the likelihood that the teaching behaviors will be successful" (p.2).

It isn't enough for teachers to be knowledgeable in their content since teacher efficacy is directly tied to how teachers perceive they can directly impact student learning. To help teachers develop teacher efficacy, the Pre-K coach will need to work collaboratively on creating experiences at the right ZPD. Hence, teachers feel a sense of purpose and accomplishment,

leading to positive student outcomes. The Pre-K coach and peer coaches can also incorporate feedback and reflection time in each coaching session since it is a critical part of how teachers grow as practitioners (Darling-Hammond et al., 2017). Unless teachers believe they are making a difference and impacting student learning, they will not develop teacher efficacy.

The following research questions will guide the capstone project:

Research Question 1: What are the perceptions and beliefs of Pre-K teachers regarding their ability to impact students' academic and social development?

Research Question 2: To what extent do Pre-K teachers engage and collaborate with colleagues?

Research Question 3: What are the professional development needs of Pre-K teachers?

Research Question 4: How can coaching increase Pre-K teachers' efficacy and improve student outcomes?

METHODS

In order to answer the research questions, a mixed-method approach using quantitative and qualitative method was used to collect the data. The mixed-method approach helped gain a better perspective of the research problem, strengthen the data collected, and gave a comprehensive view of what was being studied (Ayiro, 2012). It also helped increase the validity of the findings. The qualitative added the context and “...voices of participants [that] are not directly heard in quantitative research” (Ayiro, 212, p. 498), while the quantitative data limited personal interpretation and researcher bias (Bryman, 2007).

QUANTITATIVE

A survey invitation was emailed to 37 Pre-K teachers in Lake Crest ISD via school email (Appendix B). 14 teachers participated in the survey within the first 7 days of the survey window, but then the COVID-19 pandemic occurred, and the Texas governor ordered schools to be shut down. Schools switched from in-person to a virtual setting to prevent the spread of COVID-19. A survey invitation reminder was sent to the teachers via email a few more times,

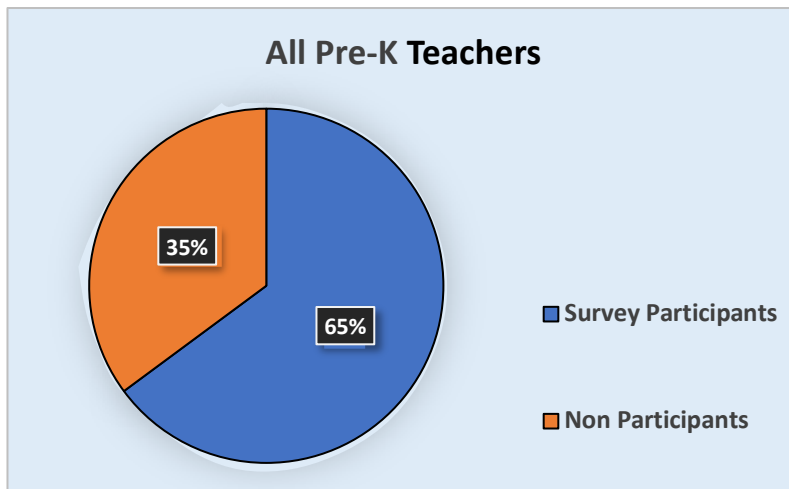


Figure 5: Data representation of survey participants

and the survey window was extended to allow more time to complete the survey. During this time, 10 more teachers participated in the survey for a total of 24 Pre-K teachers out of 37 Pre-K Teachers, representing a 65% participation rate (Figure 5).

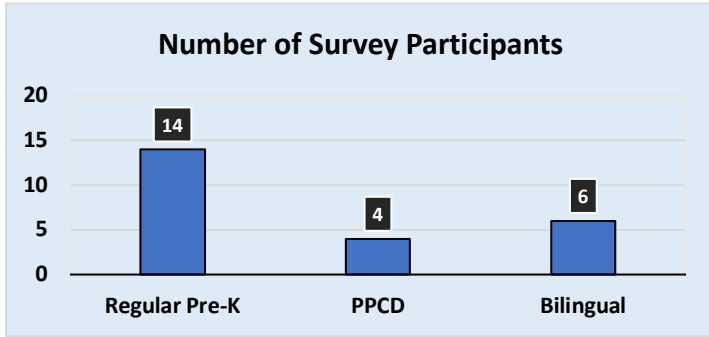


Figure 6: Data representation of the number of survey participants

The 24 Pre-K teachers who participated in the survey consisted of 14 regular, 4 PPCD, and 6 bilingual Pre-K teachers (Figure 6). To gain a better perspective of each participant's response rate from regular, PPCD, and

Bilingual Pre-K, the chart below shows the survey participation rate (Figure 7). 14 out of 18 regular Pre-K teachers responded, representing a response rate of 78%, 4 out of 9 PPCD, representing a response rate of 44%, and 6 out of 10 bilingual Pre-K, representing a response rate of 60% (Figure 7). The lower participation rate among bilingual and PPCD teachers could be due to past experiences with surveys that may not have been relevant, discomfort taking surveys, lack of time, COVID-19, or just choosing not to participate in the study.

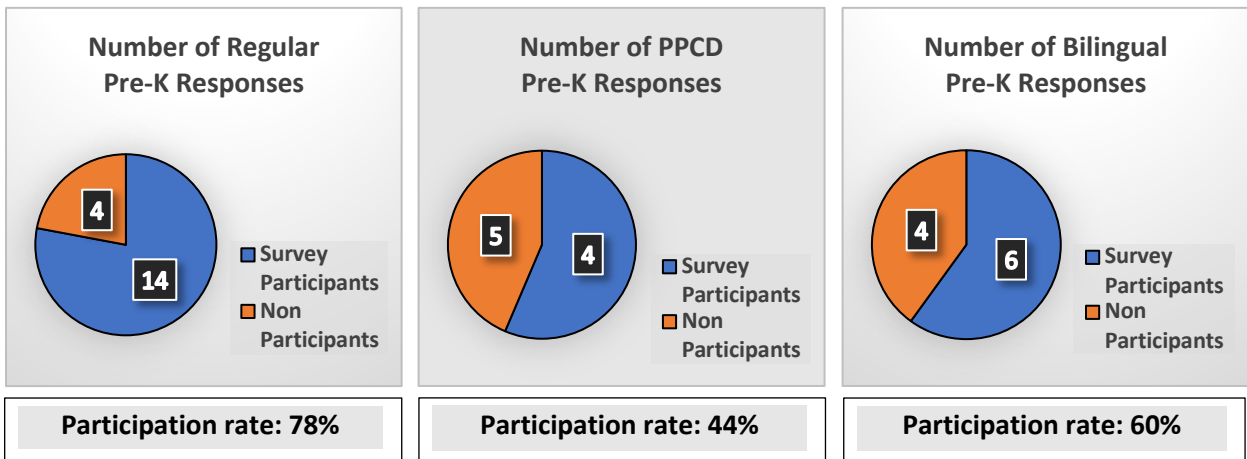


Figure 7: Data representation of the different Pre-K teachers and survey participation rates.

The quantitative data included a two-part survey. The first part of the survey was on *Teachers' Sense of Efficacy Scale* developed by Megan Tschannen-Moran from the College of William and Mary and Anita Woolfolk Hoy from Ohio State University (2001). The short version of the *Teachers' Sense of Efficacy Scale* survey with 12-questions was used to collect the data on teacher efficacy regarding student engagement, instructional strategies, and classroom management. The 12-questions were rated on a scale from 1 (None at All) to

9 (A Great Deal) (Appendix C). The 12-questions were grouped by student engagement, instructional strategies, and classroom management (Table 1). The decision to use the short version with 12-questions rather than the long version with 24-questions was made since the reliability data reported by Tschannen-Moran & Woolfolk Hoy (2001) showed that both the long and the short survey showed a high alpha coefficient⁴ of reliability.

Short Survey Form: <i>Teachers' Sense of Efficacy Scale</i>	Item Number
Student Engagement	2, 4, 7, 11
Instructional Strategies	5, 9, 10, 12
Classroom Management	1, 3, 6, 8

Table 1: Tsuchannen-Moran & Woolfolk Hoy (2001). Survey questions grouped by category. Data retrieved from <https://wmpeople.wm.edu/site/page/mxtsch/researchtools>

The alpha coefficient ranged from .87 to .90 on the long survey, and the alpha coefficient ranged from .81 to .86 on the short survey. Since an alpha coefficient of .70 or higher is considered acceptable in social science research (Bruin, 2006), both the long and short surveys were deemed reliable (Table 2). Another reason why the short survey on *Teachers' Sense of Efficacy Scale* was used was to increase the likelihood of teacher response rates due to the shorter length of time to complete the survey, especially since teachers were faced with the unpredictability of the COVID-19 pandemic.

	Long Survey Form			Short Survey Form		
	Mean	SD	Alpha	Mean	SD	alpha
TSES	7.1	.94	.94	7.1	.98	.90
Engagement	7.3	1.1	.87	7.2	1.2	.81
Instruction	7.3	1.1	.91	7.3	1.2	.86
Management	6.7	1.1	.90	6.7	1.2	.86

Table 2: Tsuchannen-Moran & Woolfolk Hoy (2001), Reliability report findings for the long form and the short form of the Teachers' Sense of Efficacy Scale.

⁴ Alpha Coefficient also known as Cronbach's alpha is a way to measure the internal reliability of a test or survey. The higher the alpha coefficient, the higher the reliability of the test that is measured.

The second part of the survey was designed to better understand the PD needs for professional growth. The questions were specific to the Pre-K teachers' experiences in Lake Crest ISD. 12-questions were asked with question 8 having an additional subset of questions. The first five questions were on a scale from 1 (None at All) to 9 (A Great Deal). The questions measured the Pre-K teacher's perceptions on the value of coaching, the relevance of PDs offered, and professional growth opportunities. The next two questions were free-response questions, which asked the teachers to list their PD needs and identify the PD that was the most beneficial to them as a practitioner. The last question asked teachers to rank the five PD delivery methods typical to Lake Crest ISD on a scale of 1 (best) to 5 (least) to gain a sense of PD delivery preferences (Appendix D).

QUALITATIVE

An invitation to participate in an interview was sent to the 37 Pre-K teachers via school email (Appendix E). The teachers could sign up for a time convenient for them or request any weekend or evening hours. Flexibility and understanding were vital since the teachers were

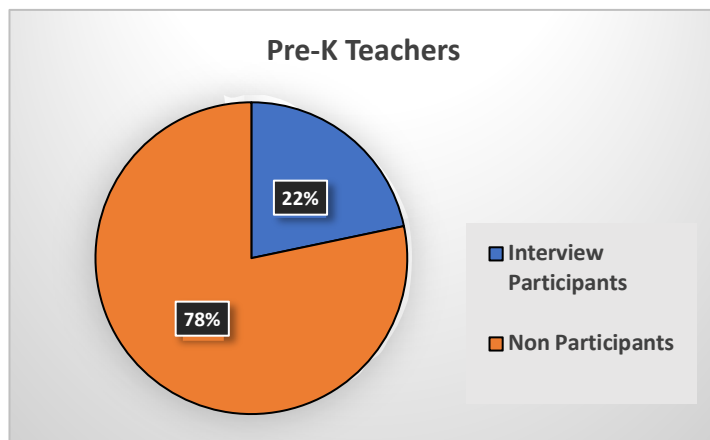


Figure 8: Data representation of the percentage of the interview participants

overwhelmed with the challenges in preparing lessons for the online platform, scheduling zoom sessions with their students, and creating an engaging learning environment for students. Although the interview window was open through the beginning of June 2020, the last

interview occurred in mid-May. There were 8 Pre-K teachers out of the 37 Pre-K teachers who participated in the interview, representing a 22% participation rate (Figure 8). These 8 Pre-K teachers also participated in the survey. There could be several reasons for the low response rate, which will be discussed in the limitation section of this capstone project.

The chart shows the breakdown of the number of Pre-K teachers who participated in the interview by their specialization (Figure 9). The experience level of the teachers ranged from 1 to over 15 (Table 3).

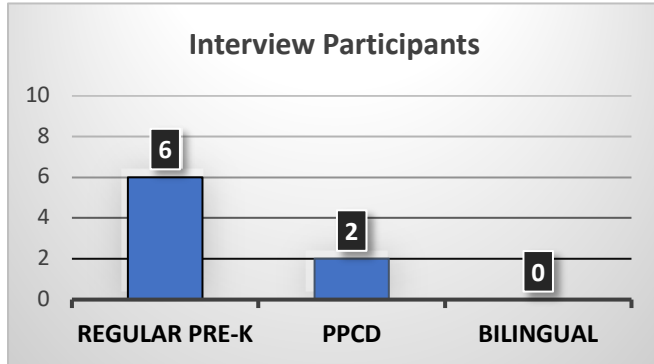


Figure 9: Data representation of the number of interview participants

Years of Teaching Experience	Number of Teachers
1 - 5	3
6 - 10	2
11 - 15	1
15+	2

Table 3: Experience Level of Interview Participants

When analyzing the response rates, 6 out of 18 regular Pre-K teachers participated in the interviews, representing a response rate of 33%, and 2 out of 9 PPCD teachers participated in the interviews, representing a response rate of 22%. None of the bilingual Pre-K teachers participated in the interviews (Figure 10).

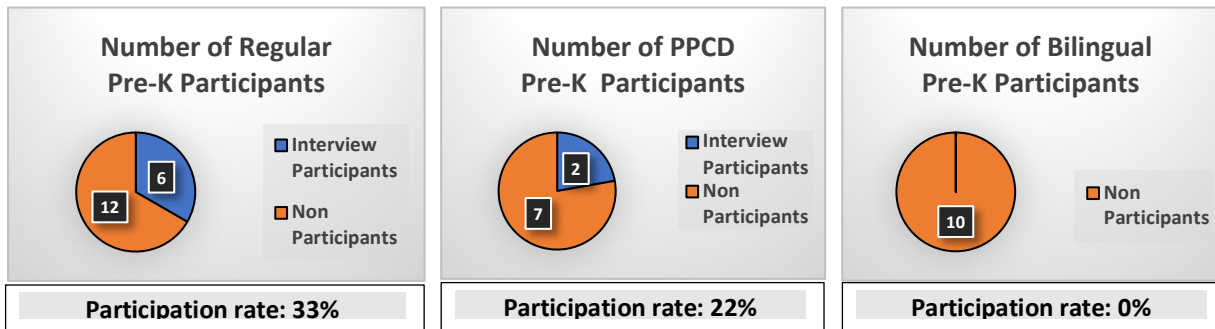


Figure 10: Data representation of the different Pre-K teachers and interview participation rates.

Due to the school closures, the interviews were done on zoom, and each interview session was recorded with the teacher’s permission. The interviews took 20 - 30 minutes, depending on the additional questions teachers had before and at the end of the interview. Prior to each interview session, care was taken to ensure the well-being of each teacher and establish relationships. Some of the questions used to establish relationships were the following:

Thank you for your time today. How are you doing?

Thank you for participating in the interview. How is your day going?

Thank you for taking the time to meet with me today. How are you and your students doing?

The interview consisted of 20 questions (Appendix F). The purpose of the interview was to capture the candid experiences and insights of the 8 Pre-K teachers by creating an environment between the interviewer and interviewee that flowed more like a conversation about teacher perception and experiences, collaboration opportunities, and PD and coaching need. Since the interviews were recorded with each participant's approval, a transcript was created, and the interview responses were coded to look for "...a common thread that runs through the data...[and seeing which data] keep[s] "emerging," although their forms may not always be identical" (Richards & Morse, 2007, p. 135). Despite the interviews taking place during the COVID-19 pandemic, the teachers who participated were very generous in giving their time and answering the interview questions with much thought and detail.

The Pre-K Coordinator and Early Childhood Coordinator will be used interchangeably throughout this capstone project. The Early Childhood Coordinator (EC Coordinator) supports the Pre-K teachers by offering curriculum support, planning and delivering PD, and providing learning opportunities for teacher growth. The EC Coordinator's experience is extensive as an educator. Her early childhood knowledge is evident in the vision she shared regarding the Pre-K program during phone conversations, email exchanges, and interviews. The EC coordinator's interview consisted of 20-questions specific to her role as a leader (Appendix G). The questions focused on the impact of House Bill 3 on the Pre-K program, the district's plan on addressing the House Bill 3 requirements, especially the 15-hours of PD and 15-hours of coaching requirement in Pre-K. Despite her busy schedule and additional duties during the COVID-19 pandemic, the EC Coordinator was generous in giving her time to the interview and being available for any questions.

FINDINGS

RESEARCH QUESTION 1

The first research question aimed to find how teachers perceived themselves in their ability to impact students' academic and social growth.

Finding 1: Pre-K teachers have a high sense of efficacy and believe that they make a positive difference in their students' academic and social development.

The findings from the short version of the *Teachers' Sense of Efficacy Scale* created by Tschannen-Moran & Woolfolk Hoy (2001) identifying teachers' sense of efficacy on student engagement, instructional strategies, and classroom management will help answer the first research question.

The percentage rates for each question on student engagement are shown with the number of Pre-K teachers represented in parenthesis (Table 4). The highest percentages for each question are highlighted in green. On student engagement, most of the 24 teachers who participated in the survey chose a range from 7 to 9, which indicates that they believe they impact their students' learning and development. The question with the broadest range was question 11, with responses ranging from 3 to 9. This was the only question related to a home-school

Section 1 of the Survey: Teachers' Sense of Efficacy										
Student Engagement										
Question Number	Question	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
2	How much can you do to motivate students who show low interest in school work?	0	0	0	0	0	8% (2)	21% (5)	42% (10)	29% (7)
4	How much can you do to help your students value learning?	0	0	0	0	0	8% (2)	4% (1)	42% (10)	46% (11)
7	How much can you do to get students to believe they can do well in school work?	0	0	0	0	0	0	8% (2)	38% (9)	54% (13)
11	How much can you assist families in helping their children do well in school?	0	0	4% (1)	0	4% (1)	8% (2)	25% (6)	33% (8)	25% (6)

Table 4: Results compiled on student engagement from the Teachers' Sense of Efficacy survey

connection and whether the teachers felt they could support the Pre-K families in helping their children succeed in school. Although family engagement is an integral part of a successful Pre-K experience, teachers who participated in the interview also expressed that involving families in the educational experiences was a challenge since some families do not feel comfortable or confident in supporting learning at home, while others rely on the school to provide most of the learning experiences.

On instructional strategies, most of the Pre-K teachers chose the range from 7 to 9 (Table 5). Overall, the teachers' sense of efficacy regarding instructional strategy showed that the teachers were confident in their ability to address their students' different instructional needs and provide a good learning experience.

<i>Section 1 of the Survey: Teachers' Sense of Efficacy</i>										
<i>Instructional Strategies</i>										
Question Number	Question	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
5	To what extent can you craft good questions for your students?	0	0	0	0	8% (2)	8% (2)	13% (3)	29% (7)	42% (10)
9	To what extent can you provide an alternative explanation or example when students are confused?	0	0	0	0	0	17% (4)	21% (5)	29% (7)	33% (8)
10	To what extent can you provide an alternative explanation or example when students are confused?	0	0	0	0	0	13% (3)	13% (3)	42% (10)	33% (8)
12	How well can you implement alternative teaching strategies in your classroom?	0	0	0	0	0	8% (2)	17% (4)	25% (6)	50% (12)

Table 5: Results compiled on instructional strategies from the Teachers' Sense of Efficacy survey

On classroom management, most Pre-K teachers selected the range from 7 to 9, which indicated that many Pre-K teachers felt they had good classroom management. But some teachers selected the range from 4 to 6, which indicated that these teachers felt that they only had some degree of classroom management (Table 6).

Section 1 of the Survey: Teachers' Sense of Efficacy Classroom Management										
Question Number	Question	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
1	How much can you do to control disruptive behavior in your classroom?	0	0	0	0	4% (1)	8% (2)	29% (7)	38% (9)	21% (5)
3	How much can you do to calm a student who is disruptive or noisy?	0	0	0	4% (1)	0	8% (2)	21% (5)	42% (10)	25% (6)
6	How much can you do to get children to follow classroom rules?	0	0	0	0	0	0	13% (3)	46% (11)	42% (10)
8	How well can you establish a classroom management system with each group of students?	0	0	0	0	0	0	25% (6)	33% (8)	42% (10)

Table 6: Results compiled on classroom management from the Teachers' Sense of Efficacy survey

Overall the findings from the *Teachers' Sense of Efficacy Scale Survey* showed that the 24 Pre-K teachers who participated in the survey felt confident in their ability to engage students, provide instructional strategies, and maintain good classroom management.

The teachers were very passionate about their work, and many referred to their work as 'a true calling. Throughout the interview, the Pre-K teachers stated that they were not afraid to try new strategies and adjust their instruction when things did not work well. As Bray-Clark & Bates (2003) reiterate, teachers who have a strong sense of efficacy are willing to try new strategies and take more risks in their classrooms, just as these Pre-K teachers reveal. Not only is teacher efficacy important in improving teacher capacity, but "...[t]eacher efficacy also plays a role in shaping students' attitudes toward school..." (Tschannen-Moran, M., Hoy, A. W., Hoy, W. K., 1998, p. 215). Students are more likely to learn when they have a positive attitude towards school and their teachers since students who like their teachers are more engaged in the classroom (Connor & McCartney, 2007).

A single factor ANOVA was done with the survey findings on teachers' sense of efficacy on student engagement (SE), instructional strategies (IS), and classroom management (CM). The single factor ANOVA test revealed that the means of SE, IS, and CM was not statistically

significant (Table 7). This suggests that teachers' sense of efficacy across all three areas positively impacts their student's growth.

ANOVA Single Factor					
SUMMARY					
Groups	Count	Sum	Average	Variance	
SE Total	96	771	8.03	1.15	
IS Total	96	763	7.95	1.21	
CM Total	96	763	7.95	0.98	

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.44	2	0.22	0.20	0.82	3.03
Within Groups	316.39	285	1.11			
Total	316.83	287				

Table 7: Results from the ANOVA test between the groups

Note: SS=Sum of Squares, Df=Degrees of Freedom, MS=Mean of Squares, F=F value, and F crit=F critical value

Due to the small number of interview participants, the findings only reflect those who chose to participate. The common theme revealed in the interviews showed that teachers found joy in their work, which was apparent in many of their statements. As one Pre-K teacher responded, "I love going to work. I love helping families and working with them." Another Pre-K teacher echoed a similar statement, "I love teaching Pre-K because you can really see the growth in the kids from the beginning of the year to the end of the year." The passion for teaching was evident in statements such as "I love what I do, and the kids are the most precious gift."

The teachers' sense of efficacy on students' social and academic development was also evident in the insights the Pre-K teachers shared in the interviews. When asked about their strengths as a teacher, one Pre-K teacher responded, "I'm good with classroom management and with challenging behavior. I have a good way of connecting with the kids, and they enjoy being in my class." Another responded, "I'm good with building relationships and helping the students get excited about learning." These statements illustrated the teachers' confidence in building relationships with their students and creating a warm and inviting classroom environment.

Another Pre-K teacher responded by saying, "I can teach in a variety of ways to make sure they're learning and understanding," which shows the confidence the teacher has in ensuring the students learn. Another Pre-K teacher stated, "I know how to help the struggling kids become more independent. I like showing kids that they can do a lot of things on their own." This statement indicates that the teacher values helping students develop self-confidence, self-esteem, and a sense of accomplishment by learning to do things independently. This goes back to Vygotsky's ZPD, in which the teacher provides just enough support for the student to be successful and releases the support as the student can do more on their own.

RESEARCH QUESTION 2

The second research question sought to find how often and how much Pre-K teachers collaborated with their peers.

Finding 2: Pre-K teachers’ desire to collaborate was evident, but the collaboration did not occur regularly since collaboration opportunities varied across campuses.

The second section of the survey consisted of 12-questions which examined the Pre-K teachers’ opportunities for collaboration, feedback, coaching, and PD needs. The questions were crafted to understand the PD and coaching needs of Pre-K teachers and the best PD delivery methods to improve learning. Questions 1-5 were on a scale from 1 (None at all) to 9 (A Great Deal), questions 6 and 7 were free-response, and question 8 asked the Pre-K teachers to rank the five PD delivery methods from best to least. The questions were grouped as collaboration, feedback, and coaching or PD (Table 8).

Section 2 of the Survey: Professional Development	Question Number
Collaboration, Feedback, & Coaching	1, 3, 4
Professional Development Perception	2, 5, 6 (Question 6 is free response)
Professional Development Needs	7, 8 (Quest. 7 is free response, Quest. 8 has 5 items that are ranked)

Table 8: Results compiled from section 2 of the PD survey

The findings for collaboration had responses that ranged from 1 to 9 (Table 9). The wide range of responses may reflect the differences in collaboration opportunities across campuses. Some campuses may have a professional learning community (PLC) structure in place, or the principal may provide collaboration opportunities, while other campuses do not.

<i>Section 2 of the Survey: Professional Development:</i>										
Question Number	Question related to Collaboration, Feedback & Coaching	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
1	How often do you get to collaborate and work with other colleagues?	4% (1)	4% (1)	4% (1)	13% (3)	8% (2)	13% (3)	8% (2)	13% (3)	33% (8)
3	How often do you receive feedback?	0	8% (2)	4% (1)	8% (2)	13% (3)	21% (5)	13% (3)	13% (3)	21% (5)
4	If given the opportunity, how likely are you to utilize a coach?	4% (1)	0	0	0	13% (3)	25% (6)	21% (5)	17% (4)	21% (5)

Table 9: Results of questions related to collaboration, feedback, and coaching from section 2 of the Professional Development survey.

A single factor ANOVA was done with the survey findings on collaboration, feedback, and coaching. The single factor ANOVA test indicated that the difference between the three means was not statistically significant (Table 10). This suggests that collaboration, feedback, and coaching are equally important for all teachers in the survey.

ANOVA Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
collaboration	24	156	6.50	6.26
feedback	24	150	6.25	4.80
coaching	24	164	6.83	3.36

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	4.11	2	2.06	0.43	0.65	3.13
Within Groups	331.83	69	4.81			
Total	335.94	71				

Table 10: Data from the survey results on questions 1, 3, and 4.

Note: SS=Sum of Squares, Df=Degrees of Freedom, MS=Mean of Squares, F=F value, and F crit=F critical value

The interview responses also indicated the difference in collaboration opportunities within campuses. Some campuses had a culture of collaboration, which was evident in one Pre-K teacher's response, who stated, "I like getting ideas, sharing ideas, and asking opinions or even things I'm dealing with like parent issues or discipline problems." Another response from another Pre-K teacher with a similar experience stated, "It's important to build that relationship with your peers. You have to build that support network." These Pre-K teachers felt they had opportunities to collaborate with their colleagues and valued the time.

Although all 8 of the Pre-K teachers reiterated the strong desire for more time to collaborate with colleagues, especially with other Pre-K teachers, the majority of the Pre-K teachers indicated that they did not have the time to collaborate. One Pre-K teacher stated, "I like collaborating, but it rarely happens. We all get busy, and it's hard to find the time to meet up after school or visit each other". The Pre-K teachers found value in collaboration but finding the time to collaborate seemed to be the challenge. One Pre-K teacher reiterated, "You learn and grow so much more through that experience, but it's just really hard to get the time to collaborate." Another Pre-K echoed, "I sometimes get time to collaborate, but it's mostly to ask questions, share tips, and ideas." The challenge seemed to be finding the time to collaborate regularly within the school day.

The recurring theme throughout the interview was that Pre-K teachers wanted more opportunities to collaborate with their peers, but not all campuses had a structure in place for collaboration to take place regularly. Also, since each campus may house only one regular Pre-K, one PPCD, or one bilingual Pre-K, if a PPCD teacher wanted to collaborate with another PPCD teacher, they would often need to reach out to PPCD teachers on other campuses and schedule a time to meet.

During the interview, the EC Coordinator also addressed the need for more collaboration time among Pre-K teachers. She shared that her plan included some half-day planning sessions with Pre-K teachers in small groups, which will also count towards the 15-hour PD requirement. The

EC Coordinator discussed that she might also reach out to the multilingual department for bilingual support for her bilingual Pre-K teachers.

RESEARCH QUESTION 3

The third research question sought to find the PD needs of Pre-K teachers.

Finding 3: Overall, the Pre-K teachers found the PD in the district relevant to their needs but prefer modeling or small group as the PD delivery method to support their learning.

The findings from the second section of the survey on PD for questions 2 and 5 had a wide range of responses (Table 11). Question 2 asked about PD relevance and the responses ranged from 2 to 9, with 81% of the responses ranging from 5 to 9. Due to teachers' different experience levels and needs, a PD that meets all of the Pre-K teachers' needs may be difficult unless the PD offers choices. Question 5 asked about the ease of PD implementation. The responses ranged from 3 to 9, with 59% of the responses ranging from 7 to 9, indicating that they could implement the PD strategies in their classroom with relative ease.

Section 2 of the Survey: Professional Development										
Question Number	Questions related to Professional Development Perception	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
2	Is the PD that you receive relevant and useful to your work?	0	8% (2)	4% (1)	8% (2)	13% (3)	21% (5)	13% (3)	13% (3)	21% (5)
5	After any PD, are you able to implement or practice the strategies in your classroom?	0	0	4% (1)	8% (2)	17% (4)	13% (3)	13% (3)	25% (6)	21% (5)

Table 11: Results of questions related to PD perception from section 2 of the PD survey.

A single factor ANOVA was done with the survey findings on PD relevance and the ease of PD implementation. The single factor ANOVA test indicated that the difference between the two means was not statistically significant (Table 12).

ANOVA Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
PD Relevance	24	150	6.25	4.80
PD implementation	24	163	6.79	3.39

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.52	1	3.52	0.86	0.36	4.05
Within Groups	188.46	46	4.10			
Total	191.98	47				

Table 12: Data from the survey results on questions 2 and 5.
 Note: SS=Sum of Squares, Df=Degrees of Freedom, MS=Mean of Squares, F=F value, and F crit=F critical value

The Pre-K teachers ranked the PD delivery methods in order from 1 (best) to 5 (least). The findings showed that 62% ranked *modeling by presenter and demonstration videos* as a 1 or 2 on the scale (Table 13). 58% ranked *small group (group activities & discussions)* and *rotating groups (different activities at each station)* as 1 or 2 on the scale. The PD delivery method that was the least favorite among Pre-K teachers was the *whole group 'sit & get,'* in which 17% ranked it as 4, and 25% ranked it as 5. *Becoming an expert (jigsaw activity and gallery walk)* had almost the same percentage ranking it either 1 or 2 or as their last choice.

Section 2 of the Survey: Professional Development						
Question Number	What PD delivery method best meets your learning style?	Best		3	4	Least
		1	2			5
8.1	Whole Group 'Sit & Get'	8% (2)	21% (5)	29% (7)	17% (4)	25% (6)
8.2	Small Group (group activities & discussions)	4% (1)	54% (13)	21% (5)	17% (4)	4% (1)
		58%				
8.3	Modeling by Presenter & Demonstration Videos	33% (8)	29% (7)	13% (3)	21% (5)	4% (1)
		62%				
8.4	Rotating Groups (different activities at each station)	33% (8)	25% (6)	21% (5)	13% (3)	8% (2)
		58%				
8.5	Becoming an Expert (jigsaw activity & gallery walk)	21% (5)	17% (4)	17% (4)	13% (3)	33% (8)

Table 13: Results of questions related to PD delivery method in section 2 of the PD survey.

The interview results regarding Pre-K teachers' PD needs also revealed that the Pre-K teachers preferred small group hands-on PD, allowing more time to interact with peers. Pre-K teachers emphasized that having PD choices was essential. Also, the PD should be relevant, practical, and can easily be implemented in the classroom. The one difference between the survey results and interview responses was with social-emotional learning. The survey indicated that only 8% of teachers selected social-emotional learning as a need, but all of the interview participants emphasized that social-emotional learning was critical for their students' success. This may be due to the survey being completed near the beginning of the COVID-19 pandemic, whereas the interviews occurred a month after school closure. Perhaps, the teachers felt the need for social and emotional well-being training to help students deal with school closures and COVID-19 and support their social-emotional health during this unprecedented time.

There were two free-response questions on the survey. Question 6 asked the Pre-K teachers to list three of their PD needs to support their growth as a teacher. Question 7 asked the Pre-K teachers about the best PD they have received and why it was their best. These questions were asked to gain a better sense of the PD needs and future PD opportunities. When analyzing these results, similar categories emerged, so responses were grouped according to the following categories: small group instructional strategies, opportunities for collaboration, technology, curriculum support, classroom management, social & emotional training, and home & school connection. The findings revealed that the top three PD needs in the survey were small group instructional strategies at 25%, opportunities for collaboration with colleagues at 17%, and technology training at 17% (Table 14). The Pre-K teachers indicated that the best PD they had received was small group (interactive, choice & rotation) activities at 42%, followed by PD training on district program and resources at 33% (Table 14). These results correlate with how the Pre-K teachers ranked the preference of the PD delivery method. 54% of Pre-K teachers ranked small group (group activities & discussions) as their second choice, and 33% ranked rotating groups (different activities at each station) and modeling by presenter and demonstration videos as their first choice (Table 13). The findings show that Pre-K teachers

value PD delivered interactively in small groups, applicable to their work, and incorporates time to connect and collaborate with their colleagues.

PD Needs (Question 6 Free Response)		Best PD Experience (Question 7 Free Response)	
Small Group Instructional Strategies	25% (6)	Small Group (Interactive, choice.& rotation) Activities	42% (10)
Opportunities for Collaboration with Colleagues	17% (4)	District Program PD (Circle, Frog Street, Conscious Discipline, Success Ed)	33% (8)
Technology Training	17% (4)	Collaboration Time with other Pre-K Teachers	17% (4)
Curriculum Support & Training	13% (3)	Pre-K Workshops (out of district)	8% (2)
Classroom Management	13% (3)		
Social & Emotional Training	8% (2)		
Home-School Connection (helping families)	8% (2)		

Table 14: Results of questions related to PD delivery method in section 2 of the PD survey.

During the interview with the EC Coordinator, she shared her vision on how she plans to provide more PD choices for the Pre-K teachers, but she also mentioned that there would be some non-negotiable PD on de-escalation training in early childhood due to an increase in Pre-K behavior referrals. The EC Coordinator indicated the training would provide consistency in handling behavior issues in the Pre-K classroom, “I think the training will be like a baseline so everybody has the same training and will use the same approach in Pre-K. It’ll align with any behavior programs at each campus. The key is that when the teacher has a power struggle with a child, everyone loses so that this training will be beneficial to teachers.”

RESEARCH QUESTION 4

The fourth research question focused on coaching needs and how coaches can support teachers' growth to increase teacher efficacy and student achievement.

Finding 4: Pre-K teachers value the coaching relationship but desire more frequent feedback to grow.

The findings for survey question 3 asked how often Pre-K teachers received feedback. The responses ranged from 2 to 9, with 47% of the responses ranging from 7 to 9 (Table 15). Again, the broad range of responses could indicate the differences in leadership vision among campuses on whether feedback was an integral part of the campus culture.

<i>Section 2 of the Survey: Professional Development:</i>										
Question Number	Question related to Collaboration, Feedback & Coaching	Range from 1 - 9								
		None at all 1	2	Very Little 3	4	Some Degree 5	6	Quite a Bit 7	8	A Great Deal 9
1	How often do you get to collaborate and work with other colleagues?	4% (1)	4% (1)	4% (1)	13% (3)	8% (2)	13% (3)	8% (2)	13% (3)	33% (8)
3	How often do you receive feedback?	0	8% (2)	4% (1)	8% (2)	13% (3)	21% (5)	13% (3)	13% (3)	21% (5)
4	If given the opportunity, how likely are you to utilize a coach?	4% (1)	0	0	0	13% (3)	25% (6)	21% (5)	17% (4)	21% (5)

Table 15: Results of questions related to collaboration, feedback, and coaching from section 2 of the PD survey.

The findings from the interview revealed that teachers welcomed feedback, as one Pre-K teacher reiterated, "I get feedback from different people, and it helps me to grow." The teachers believed that feedback was essential in improving their teaching, which was evident in another Pre-K teacher's response, "I think getting feedback is good and helps me to grow." Many of the teachers repeatedly stated in the interviews how they wanted to be a good teacher, and they were open to learning from colleagues and coaches. The findings also showed that those who did not receive regular feedback desired feedback. As one Pre-K teacher stated, "I don't receive that much feedback, but I wish I did because I want to know how I'm doing." Another Pre-K teacher also shared a similar experience, "I receive formal evaluations and walk-throughs from my principal and assistant principal, but I don't receive any other feedback."

The response for survey question 4 asked whether Pre-K teachers would utilize a coach, and 96% of the responses ranged from 5 to 9, which indicates a willingness to seek support and partner with a coach (Table 15). The interview findings also revealed that teachers were open to working with a coach, and many had positive experiences with a coach. One Pre-K teacher shared her experience, "I work with the coach and ask for her to model lessons, and if I'm

having some trouble with a lesson or a small group, it's nice to get the help." Another Pre-K teacher emphasized the benefits of modeling by the coach in helping her to grow as a teacher, "I learn by watching, so it's better for me to watch someone. It's always nice when the coach models with your kiddos so you can see how it looks like." New teachers or those new to Pre-K seem especially eager to seek support from the coach, as one Pre-K teacher stated, "I'm new to this age group, and I would definitely be reaching out to the coach for help." Another Pre-K teacher shared her positive experience with the coach during a challenging time, "The coach was invaluable when I was having a difficult time with differentiating the learning for my students, and she worked with me, and I'm so grateful." Another Pre-K teacher shared a time when the coach helped her with a lesson, "I was struggling with one guideline, and I wasn't really sure how to do it, and the coach came in and modeled the lesson for me. I realized that I was making it way harder than it was, and after she modeled the lesson, I was able to do it easily."

Some Pre-K teachers indicated that they have not consistently worked with a coach, as one Pre-K teacher shared, "I haven't really worked with the coach. I haven't reached out to the coach at all. I know a coach is available, but I mostly go to the kinder teachers and get tips, but if a Pre-K coach is available, I will probably reach out." Another Pre-K teacher stated that she has not worked with a coach but shared her enthusiasm in anticipation of working with a Pre-K coach, "I'm hoping the coach is someone with a lot of Pre-K experience so they can be like my mentor or even model lessons for me in my classroom." Although these teachers had limited relationships with a coach, they indicated that a coach specializing in Pre-K would help support their learning.

During the interview, the EC Coordinator discussed that the greatest challenge would be to meet the annual 15-hours of PD and 15-hours of coaching requirement for Pre-K teachers since there is only one Pre-K coach to support the full-day Pre-K teachers. 12 campuses will transition to full-day Pre-K for eligible four-year-olds in the 2020-2021 school year, while the rest of the campuses will offer half-day Pre-K for four-year-olds through the 2022-2023 school

year. Although the annual 15-hours of PD and 15-hours of coaching apply only to the full-day Pre-K teachers, the EC Coordinator expressed that she would like all 37 Pre-K teachers to have the coaching experience. To support the Pre-K coach and share some of the coaching load, the EC Coordinator indicated that she would also coach the Pre-K teachers until another Pre-K coach could be hired in the near future.

DISCUSSION AND LIMITATIONS

The COVID-19 pandemic significantly impacted the data collection process. A week after the survey was sent to the teachers via email, news spread of COVID-19, and our world changed. The governor of Texas mandated a stay-at-home order on March 31 and required schools to remain closed through May 4, which was later extended to the rest of the 2019-2020 school year (Texas Tribune, 2020).

Initially, there were only 14 survey responses to the survey request, but 10 more Pre-K teachers responded after multiple requests for a total of 24 survey participants. COVID-19 pandemic created many challenges for schools. Teachers were learning how to conduct classes online using new virtual platforms and connect with their students through Zoom or Microsoft Teams⁵, but this was particularly difficult for young children. Although several interview requests were sent to the 37 Pre-K teachers via email, only 8 teachers responded and graciously agreed to participate in the interview.

The 24 survey and 8 interview results revealed that participants had a high sense of teacher efficacy in student engagement, instructional strategies, and classroom management. The findings for collaboration and feedback varied between the survey results and the interviews. The survey results showed a wide range from 1 to 9, with 33% selecting that they had a great deal of collaboration opportunities. The 8 interview responses revealed that some have frequent opportunities to collaborate, while others did not. However, all of the respondents stated that they wanted more opportunities to collaborate with their peers but finding the time within the school day was challenging. Some teachers shared that collaboration took place either after school or on the weekends. The difference in collaboration opportunities between campuses could be leadership vision and whether campuses had a structure for collaboration.

⁵ Zoom and Microsoft Teams are video conferencing tools used by businesses and schools.

The survey results showed that 97% of the Pre-K teachers would utilize a coach from some degree to a great deal. The interview findings also revealed that most Pre-K teachers found the modeling and planning sessions with the coach helpful. The Pre-K teachers also shared that they would utilize a Pre-K coach, especially one with experience and knowledge in early childhood.

The survey results revealed that 62% of the Pre-K teachers preferred modeling by the presenter or demonstration videos as their first or second choice in how PD is delivered. 58% of the Pre-K teachers preferred PD in small groups with opportunities for discussion or PD in rotating groups with different activities and stations as their first or second choice in how PD is delivered. The interview results also indicated that the Pre-K teachers preferred PD in small groups, expressing that 'hands-on' small group learning that can easily be implemented in their classroom was meaningful. They also emphasized that having choices in PD was essential to their growth as a teacher.

The Pre-K teachers who participated in the interviews were very reflective. Although the teachers' experience level ranged from 1 to more than 15 years, one underlining commonality was that they were passionate about teaching and open to new experiences and learning. Many were excited about transitioning to a full-day Pre-K program. Although a few of the Pre-K teachers expressed that they did not know how the children would adjust from half-day to full-day, they were excited about the prospect of having more time with each student. They were also excited about the partnership of working with a Pre-K coach.

LIMITATIONS

There were 24 out of 37 Pre-K teachers who participated in the survey, representing a response rate of 65%. The survey participation consisted of 78% of regular Pre-K teachers, 44% of PPCD teachers, and 60% of bilingual Pre-K teachers (Figure 7). There were more responses from regular Pre-K teachers than PPCD or bilingual, but there was enough representation from each

of the specialized Pre-K teachers to gain insight on teachers' sense of efficacy and PD and coaching needs.

Due to COVID-19, the interviews were done via Zoom. There were 8 out of 37 Pre-K teachers who participated in the interview representing a 22% participation rate. The interview participants included 33% of regular Pre-K and 22% of PPCD teachers (Figure 10). None of the bilingual Pre-K teachers participated in the interview, so their perspectives and experiences are not represented in the interview responses. Every attempt was made to ask each interviewee all 20-questions, but when the interviewee's response answered multiple questions, as an interviewer, I used my best judgment to refrain from asking repetitive questions.

The other limitation was that the Pre-K teachers who participated in the interview also participated in the survey. This could indicate that the Pre-K teachers who choose to participate in surveys and interviews feel their input matters or could result in meaningful outcomes for the Pre-K program. Another limitation was that when the survey and interviews were conducted, I was an employee of the district. Although I did not work with any Pre-K teachers, they may have been uncomfortable sharing their perspectives or participating in the survey or interviews.

RECOMMENDATIONS

The recommendations are made with the findings derived from the survey and interviews and also addresses the House Bill 3 requirements. These recommendations are also made with an understanding of the current COVID-19 impact on schools.

RECOMMENDATION 1:

Implement a peer coaching model that includes collaboration opportunities and facilitation by the Pre-K coach as needed.

The 15-hours of PD and 15-hours of coaching requirement applies only to the full-day Pre-K teachers; however, the EC Coordinator indicated that her vision was to have all 37 Pre-K teachers participate in the coaching experience. Since there is only one Pre-K coach to support the 37 Pre-K teachers, the EC Coordinator expressed that she would take on some of the coaching load, but with her additional leadership responsibilities, it may be challenging to dedicate the time needed to coach the Pre-K teachers.

Since the Pre-K coach cannot provide quality coaching and meet all 37 Pre-K teachers' needs, a peer coaching model will be implemented so all of the Pre-K teachers can benefit from a coaching experience. To fulfill the House Bill 3 requirement, the Pre-K coach will provide additional support to the 12 Pre-K teachers who have transitioned to a full-day Pre-K program for the 2020 - 2021 school year. All 37 Pre-K teachers will participate in a peer coaching model, which "...encourages teachers to observe, reflect, and problem solve together with the goal of enhancing classroom quality and, ultimately, teaching effectiveness and student outcomes" (Johnson, Finlon, Kobak, & Izard, 2017). Peer coaching is a cost-effective way for teachers to gain and share knowledge and receive frequent feedback to improve instruction and increase student achievement (Johnson, Finlon, Kobak, & Izard, 2017).

The following are three options for tapping into the strengths and creating the space for teachers to collaborate, learn, support, and provide feedback to increase teachers' sense of efficacy, improve teacher practice, and increase student outcomes.

Option 1:

The peer coaching cohort would be grouped by specialization. For instance, the PPCD teachers would form one cohort of 8 teachers. The bilingual Pre-K would form one cohort of 10 teachers. The regular Pre-K teachers would include two cohorts of 9 teachers. Each teacher within a cohort would partner with another teacher in the same cohort and serve as each other's peer coach for six to eight weeks before switching partners. Although the Pre-K coach would facilitate and meet with each cohort, the Pre-K teachers would take a more active role by providing their partner with support and feedback as a peer coach.

Option 2:

The peer coaching cohort would represent a mix of each type of Pre-K teacher. One cohort group may consist of four regular Pre-K, two PPCD, and two bilingual Pre-K. This would ensure that the PPCD and bilingual Pre-K teachers would have another PPCD and bilingual teacher to partner in the cohort. But after the six to eight weeks of the coaching cycle, the PPCD and bilingual Pre-K teacher would partner with a regular Pre-K teacher. The benefit of this grouping would be that the Pre-K teachers would form partnerships with those they may not typically be grouped with, thus providing more opportunities for new learning and growth.

Option 3:

The peer coaching cohort would consist of fewer teachers in each cohort. Rather than having one cohort with 8 to 9 teachers, the cohort size would be between 4 to 6. The PPCD would include two cohorts of 4 PPCD teachers. The bilingual Pre-K would have two cohorts with 4 and 6 teachers in each. The regular Pre-K would have three cohorts

with 6 teachers. There would be two PPCD, two bilingual, and three regular Pre-K cohorts in this option. The teachers would partner with another teacher in the same cohort for six to eight weeks and take on the peer coaching role.

One of the responsibilities of the peer coach is to observe, provide feedback, and engage in reflective conversations. During the six to eight-week coaching cycle, each Pre-K teacher would record 3 - 4 lessons and share these videos with their partner. The partner would record their observations using the peer observation form (Table 16) and provide feedback. The purpose of these observations is to provide meaningful feedback leading to reflective conversations about good instructional practices and ‘next steps.’ The partners would meet virtually at least once a week. The Pre-K coach would also offer support for the peer coaches as needed. Also, the Pre-K coach would meet with the 12 full-day Pre-K teachers in their cohort weekly.

PEER OBSERVATION FORM	
FOCUS AREA	LOOK FORS
WHAT ARE THE STUDENTS DOING?	WHAT IS THE TEACHER DOING?
AREAS FOR REFLECTION	

Table 16: Observation form adapted from the Instructional Partnership Initiative Teacher Guide from the TN Department of Education, 2017.

RECOMMENDATION 2:

Pre-K teachers will create a PD plan that will be used to design and offer choices in PD.

The PD needs of teachers are different, based on their experience and knowledge in the grade level or content area. Typically, the district creates a PD plan and delivers the PD to teachers, but the survey and interview findings revealed that PD content and PD delivery methods were critical to teacher development. Teachers want choices in PD, and they want the PD to be relevant. Having the Pre-K teachers create a PD plan will provide valuable information to the district on each teacher's PD needs. Each Pre-K teacher would include why they are seeking a particular PD, how the PD will be implemented in their classroom, what they expect will occur as a result of the implementation, and how it will benefit their students (Bray-Clark & Bates, 2003).

When teachers design their PD plan and reflect on what training they need and why they will shape their development path. The PD plan will guide and help the district design PD pertinent to the teacher's needs. As the district plans and designs PD based on teacher input, it is essential to ensure that the seven components of effective PD are incorporated into the PD design (Darling-Hammond et al., 2017). The seven effective PD components are that PD is relevant, engaging, allows for collaboration, models effective practices, provides coaching and support, provides feedback and reflection time, and is sustained over time (Darling-Hammond et al., 2017).

The other component of PD that is critical to the growth of teachers is job-embedded coaching. Although PD can provide additional knowledge and support good instructional practices, the best outcomes for teacher growth and student achievement are when PD and coaching are aligned, and coaching becomes an extension of PD. Otherwise, PD becomes a 'check the box' activity without improving teacher practice or improving student outcomes. Since House Bill 3 requires 15-hours of PD and 15-hours of coaching, it provides a great opportunity for "...in-service dosage [to be]...distributed over [time]" (p. 214). The additional time may give

teachers more opportunities to practice and apply what they have learned before getting the next dose of PD. The extra time will also allow teachers to see whether PD and coaching have a measurable impact on student outcomes.

RECOMMENDATION 3:

The Pre-K Coach will offer virtual coaching and feedback sessions to meet the needs of the Pre-K teachers.

The COVID-19 pandemic created many obstacles for educators since schools were closed, and teachers were struggling to create engaging online learning experiences for their students. Although the pandemic brought many problems to the surface, such as educational inequity, the pandemic's greatest benefit was that it brought the world closer and provided the space to connect easily with other educators. The online space created unlimited opportunities to connect with other educators from around the country in the virtual landscape. Before COVID-19, instructional coaches visited campuses once or twice a week. If a teacher missed the opportunity to work with the coach, the teacher would need to wait until the following week for the coach to return. Virtual coaching would allow Pre-K teachers to access the Pre-K coach from multiple campuses.

Coaching and feedback sessions will be available by appointment and would include the feedback from the video observations. The Pre-K teachers would video themselves teaching a lesson and send the video to the Pre-K coach for feedback. For instance, the teacher could ask the Pre-K coach to provide specific feedback on student engagement or her questioning strategies in the lesson. The Pre-K coach would give feedback on those particular areas during the coaching and feedback session. This allows the Pre-K coach to take the time to be thoughtful in her feedback and pose questions for future learning. The other option would be for the Pre-K coach and the teacher to watch the video together so the Pre-K coach could provide 'live feedback.' During each coaching and feedback session, the Pre-K coach and the teacher would review and set new goals together, based on the reflective conversations. In Bandura's (1997) work on the social cognitive theory of teacher efficacy, he states that people

change their goals based on self-reflection and progress towards those goals, which would be the focus during the coaching and feedback sessions. The Pre-K coach would also offer informal 'come and go' sessions to address questions and allow for 'on the spot' coaching support.

Since coaching is a partnership built on trust, the Pre-K coach needs to be more of a 'learning partner' than an 'expert.' To facilitate learning, the Pre-K coach would need to create a safe environment so the Pre-K teachers can take risks as a learner (Fazel, 2013). The other benefit of virtual coaching is that time would not be lost traveling from campus to campus. The Pre-K coach could meet with a cohort of Pre-K teachers and facilitate a coaching and feedback session or meet individually for specific feedback. The number of coaching sessions is less important than the quality of coaching (Kraft et al., 2018).

The sample schedule illustrates the current situation with COVID-19 (Table 17). Once schools return to normal, the Pre-K coach could replace some virtual coaching with in-person coaching, providing a hybrid model. Video observations can also be replaced with some in-person observations. The sample schedule illustrates how the Pre-K coach and the 12 full-day Pre-K teachers would meet the annual 15-hours of coaching requirement. Since a few hours a

Pre-K Coach's Coaching Schedule to Meet the 15-hours/Annual Coaching Requirement									
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May
Cohort A									
Teacher 1	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 2	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 3	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 4	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 5	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 6	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Cohort B									
Teacher 7	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 8	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 9	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 10	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 11	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Teacher 12	2 hrs.	2 hrs.	2 hrs.	1 hr.	2 hrs.	2 hrs.	1 hr.	2 hrs.	1 hr.
Total Hours of Coaching by the Pre-K Coach	24 hours	24 hours	24 hours	12 hours	24 hours	24 hours	12 hours	24 hours	12 hours

Table 17: Monthly Coaching schedule to meet the 15 hour/annual requirement for full-day Pre-K teachers.

month of coaching may not be enough to impact student outcomes, the peer coaching model would benefit the Pre-K teachers by creating a collaborative space for cohorts to learn, receive feedback, and become a CoP since “[t]eacher learning in a community can be a source of efficacy and confidence in the process of adopting new practices” (Darling-Hammond et al., 2017, p. 18).

The peer coaching model would provide all of the Pre-K teachers to benefit from a coaching relationship. Although the Pre-K coach would meet with the 12 full-day Pre-K teachers more frequently, it would still allow the Pre-K coach sufficient time to support and facilitate sessions with each cohort. The sample monthly cohort schedule illustrates how the Pre-K coach would meet with each cohort and provide additional support and coaching (Table 18).

MONTHLY COHORT SCHEDULE (SAMPLE)					
	Mon.	Tues.	Wed.	Thurs.	Fri.
Week 1	Cohort A: Teacher 1 & 2	Cohort A: Teacher 3 & 4	Cohort A: Teacher 5 & 6	Cohort C: Teacher 1 & 2	Cohort C: Teacher 3 & 4
Week 2	Cohort B: Teacher 1 & 2	Cohort B: Teacher 3 & 4	Cohort B: Teacher 5 & 6	Cohort C: Teacher 5 & 6	Cohort D: Teacher 1 & 2
Week 3	Cohort D: Teacher 3 & 4	Cohort D: Teacher 5 & 6	Cohort E: Teacher 1 & 2	Cohort E: Teacher 3 & 4	Cohort E: Teacher 5 & 6
Week 4	Cohort F: Teacher 1 & 2	Cohort F: Teacher 3 & 4	Cohort F: Teacher 5 & 6	Cohort F: Teacher 7	

Table 18: Sample of the Monthly Cohort Coaching Schedule.

Full-Day Pre-K Teachers		Half-day Pre-K Teachers			
Cohort A	Cohort B	Cohort C	Cohort D	Cohort E	Cohort F
6 Teachers	6 Teachers	6 Teachers	6 Teachers	6 Teachers	7 Teachers

Table 19: Number of Teachers in the Cohort.

Cohort A and B are the full-day Pre-K teachers, and cohorts C - F are the half-day Pre-K teachers who will transition to a full-day Pre-K program by 2022 - 2023 (Table 19). Although the half-day Pre-K teachers are not required to meet the 15-hours of annual coaching requirement until they transition to a full-day Pre-K program, the EC Coordinator wanted all of the Pre-K teachers

to benefit from the coaching experience. The following is a sample weekly coaching schedule illustrating a typical week for the Pre-K coach (Figure 20).

PRE-K COACH'S WEEKLY SCHEDULE (SAMPLE)				
Monday	Tuesday	Wednesday	Thursday	Friday
Cohort A: Teacher 1 & 2 (1 hour of virtual coaching with each teacher). Total: 2 hours	Cohort A: Teacher 3 & 4 (1 hour of virtual coaching with each teacher). Total: 2 hours	Cohort A: Teacher 5 & 6 (1 hour of virtual coaching with each teacher). Total: 2 hours	Cohort C: Teacher 1 & 2 (1 hour of virtual coaching with each teacher). Total: 2 hours	Cohort C: Teacher 3 & 4 (1 hour of virtual coaching with each teacher). Total: 2 hours
Check email (read, respond), and keep a log of coaching activities for the day. Total: 1 hour	Check email (read, respond), and keep a log of coaching activities for the day. Total: 1 hour	Check email (read, respond), and keep a log of coaching activities for the day. Total: 1 hour	Check email (read, respond), and keep a log of coaching activities for the day. Total: 1 hour	Check email (read, respond), and keep a log of coaching activities for the day. Total: 1 hour
Video coaching (teacher submits a recording of the lesson; coach observes and provides recorded feedback on the goal selected) Total: 1 hour	Video coaching (teacher submits a recording of the lesson; coach observes and provides recorded feedback on the goal selected) Total: 1 hour	Video coaching (teacher submits a recording of the lesson; coach observes and provides recorded feedback on the goal selected) Total: 1 hour	Video coaching (teacher submits a recording of the lesson; coach observes and provides recorded feedback on the goal selected) Total: 1 hour	Video coaching (teacher submits a recording of the lesson; coach observes and provides recorded feedback on the goal selected) Total: 1 hour
Virtual coaching (come and go sessions) for teachers to ask questions re: curriculum, instructional strategies, or any other issues. Total: 30 min.	Virtual coaching (come and go sessions) for teachers to ask questions re: curriculum, instructional strategies, or any other issues. Total: 30 min.	Virtual coaching (come and go sessions) for teachers to ask questions re: curriculum, instructional strategies, or any other issues. Total: 30 min.	Virtual coaching (come and go sessions) for teachers to ask questions re: curriculum, instructional strategies, or any other issues. Total: 30 min.	Virtual coaching (come and go sessions) for teachers to ask questions re: curriculum, instructional strategies, or any other issues. Total: 30 min.
Additional coaching sessions set by appointments. Total: 1 hour	Additional coaching sessions set by appointments. Total: 1 hour	Additional coaching sessions set by appointments. Total: 1 hour	Additional coaching sessions set by appointments. Total: 1 hour	Additional coaching sessions set by appointments. Total: 1 hour
Researching and creating resources to support teachers. Total: 1 hour	Researching and creating resources to support teachers. Total: 1 hour	Researching and creating resources to support teachers. Total: 1 hour	Researching and creating resources to support teachers. Total: 1 hour	Researching and creating resources to support teachers. Total: 1 hour
Virtually meet with instructional coaches for questions, support, and reflection. Total: 30 min.	Virtually meet with ESL specialists to support teachers and their language learners in their classroom. Total: 30 min.	Virtually meet with other instructional coaches for questions, support, and reflection. Total: 30 min.	Virtually meet with ESL specialist to support teachers and their language learners in their classroom. Total: 30 min.	Additional time to plan for coaching Total: 1 hour 30 min.
Planning for coaching Total: 1 hour	Planning for coaching Total: 1 hour	Planning for coaching Total: 1 hour	Planning for coaching Total: 1 hour	
8 hours	8 hours	8 hours	8 hours	8 hours

Table 20: Sample of the Weekly Coaching Schedule.

CONCLUSION

This capstone project began as a way to meet House Bill 3 requirements in Pre-K, which required the Pre-K program to transition from half-day to full-day Pre-K for eligible four-year-olds. House Bill 3 also required Pre-K teachers to receive 15-hours of PD and 15-hours of coaching annually. The purpose of transitioning to full-day Pre-K and supporting teacher development was to create the best learning environment for Pre-K students to be kinder ready. Much of the research on early literacy skills point that students who are already behind in kindergarten rarely catch up to their grade-level peers. The goal of the new Pre-K requirements is to prevent achievement gaps and support the students who are most at risk of underperforming in schools.

Although the impact of House Bill 3 on the Pre-K landscape may take time, with quality PD and effective coaching, teachers' sense of self-efficacy would increase, along with good instructional practices, thus improving student outcomes. The peer coaching model would "...create a collective force for improved instruction and serve as a support group for each other's work on their practice..." (Darling-Hammond et al., 2017, p. 10). Coaching, whether it is done in person or remote, has been shown to improve student achievement (Darling-Hammond et al., 2017). The virtual coaching and feedback sessions with the Pre-K coach would allow Pre-K teachers to reflect on their practice, set goals, and take risks as learners. I hope that these coaching practices will foster a culture of collaboration and growth, which will increase teacher efficacy and improve student learning.

REFERENCES

- Ackerman, D. J. (2005). Getting teachers from here to there: Examining issues related to an early care and education teacher policy. *Early Childhood Research & Practice, 7*(1), 1–17.
- Ayiro, L. P. (2012). *A functional approach to educational research methods and statistics: Qualitative, quantitative, and mixed methods approaches*. Edwin Mellen Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman & Company.
- Bray-Clark, N. & Bates, R. (2003). Self-Efficacy beliefs and teacher effectiveness: Implications for professional development. *The Professional Educator 26*(1), 13-22.
- Bean, R. M., Draper, J. A., Hall, V., Vandermolten, J., & Zigmond, N. (2010). Coaches and coaching in Reading First schools: A reality check. *Elementary School Journal, 111*, 87-114.
- Bruin, J. (2006). *Newtest: Command to compute new test*. UCLA: Statistical Consulting Group. Retrieved from <https://stats.idre.ucla.edu/stata/ado/analysis/>.
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research, 1*(1), 8- 22.
- Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-analysis of the effects of early education interventions on cognitive and social development. *The Teachers College Record, 112*, 579-620; Wong, V. C., Cook, T. D., Barnett, W. S., & Jung, K. (2008). An effectiveness-based evaluation of five state prekindergarten programs. *Journal of Policy Analysis and Management, 27*, 122-154.
- Center on the Developing Child at Harvard University (2007), *A science-based framework for early childhood policy: Using evidence to improve outcomes in learning, behavior, and health for vulnerable children*. Cambridge, MS: Harvard University.
- Darling-Hammond, L., Hyler, & M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palto Alto, CA: Learning Policy Institute.
- Dunst, C. J. (2015). Improving the design and implementation of in-service professional development in early childhood intervention. *Infants & Young Children 29*(3), 210-219.
- Fazel, P. (2013). Learning theories within coaching process. *International Scholarly and Scientific Research & Innovation 7*(8), 2343-2349.

- Gallucci, C., Van Lare, M. D., Yoon, I. H., & Boatright, B. (2010). Instructional Coaching: Building theory about the role and organizational support for professional learning. *American Educational Research Journal*, 47(4), 919–963. Retrieved from https://doi.org/10.3102/0002_831210371497
- Gavora, P. (2010). Slovak pre-service teacher self-efficacy: Theoretical and research considerations. *The New Educational Review*, 21(2), 17-30.
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 4(1), 63-69.
- Israel, M., Carnahan, C. R., Snyder, K. K., & Williamson, P. (2013). Supporting new teachers of students with significant disabilities through virtual coaching: A proposed model. *Remedial and Special Education*, 34(4), 195–204.
- Johnson, S. R., Finlon, K. J., Kobak, R., & Izard, C. E. (2017). Promoting student-teacher interactions: Exploring a peer coaching model for teachers in a preschool setting. *Early Childhood Education Journal* 45, 461-470.
- Hanover Research (2014). *Coaching Models in the K-12 Context*. Washington, DC. Retrieved from www.gssaweb.org/wp-content/uploads/2015/04/Instructional-Coaching-Models-in-the-K-12-Context-1.pdf.
- Kane, B. D., & Rosenquist, B. (2019). Relationships between instructional coaches' time use and district-and school-leadership policies and expectations. *American Education Research Journal*, 56(5), 1718-1768.
- Knight, D. S. (2012). Assessing the cost of instructional coaching. *Journal of Education Finance*, 38(1), 52-80.
- Knight, J., & Van Nieuwerburgh, C. (2012). Instructional coaching: A focus on practice. *Coaching: An International Journal of Theory, Research and Practice*, 5(2), 100–112. Retrieved from <https://doi.org/10.1080/17521882.2012.707668>
- Lantolf, J. P., & Pavlenko, A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.
- Lave, J., and Wenger, E (1991). *Situated Learning : Legitimate Peripheral Participation*. Cambridge [England]: Cambridge University Press.
- Manning, M., Garvis, S., Fleming, C., & Wong, G. T. W. (2017). The relationship between teacher qualification and the quality of the early childhood education and care environment. *Campbell Systematic Reviews*, 13(1), 1–82. Retrieved from <https://doi.org/10.4073/csr.2017.1>

- National Institute for Early Education Research. (2019). *Rutgers Today – New PreK report finds state policy for young dual language learners needs improvement*. Retrieved from <https://news.rutgers.edu/new-pre-k-report-finds-state-policy-young-dual-language-learners-needs-improvement/20180418#.XbvJ9yV7mhc>
- O'Connor, E. & McCartney, K. (2007). Examining teacher-child relationships and achievement as part of an ecological model of development. *American Educational Research Journal*, 44(2), 340-369.
- Protheroe, N. (2008). Teacher efficacy: What is it and does it matter? *Principal* 87(5), 42-45.
- Richards, L. & Morse, J. M. (2007). *Readme first for a user's guide to qualitative methods*. 2nd ed. Thousand Oaks: Sage Publications.
- Son, S.-H. C., Kwon, K.-A., Jeon, H.-J., & Hong, S.-Y. (2013). Head Start Classrooms and Children's School Readiness Benefit from Teachers' Qualifications and Ongoing Training. *Child & Youth Care Forum*, 42(6), 525–553. <https://doi.org/10.1007/s10566-013-9213-2>
- Stein, M. K. & Wang, M. C. (1988). Teacher development and school improvement: The process of teacher change. *American Education Research Journal*, 4(2), 171 - 187.
- Svitek, P. (2020). Corona virus in Texas. *Texas Tribune*. Retrieved from <https://www.texastribune.org/2020/03/31/greg-abbott-texas-executive-order-closures/>
- Texas Education Agency. (2018). Funding for impact: Equitable funding for students who need it the most. *Texas Commission on Public School Finance Final Report*. Retrieved from https://tea.texas.gov/Finance_and_Grants/State_Funding/Additional_Finance_Resources/Texas_Commission_on_Public_School_Finance
- Texas Education Agency. (2019). High-Quality prekindergarten components: Teacher qualifications. Retrieved from <https://tea.texas.gov/earlychildhoodeducation.aspx>
- Texas Education Agency. (n.d.). Government relationships & legal: House Bill 3 (HB 3) summary. Retrieved from https://tea.texas.gov/About_TEA/Government_Relations_and_Legal/Government_Relations/House_Bill_3
- Tschannen-Moran, M., Hoy, A. W., Hoy, W. K. (1998). Teacher efficacy: It's meaning and measure. *Review of Educational Research*, 68(2), 202-248.
- Tyler, J., Papay, J., Laski, M., Carranza, J., Pharo, R., Redden, K., Taylor, E. (2017). *Instructional partnership initiative teacher guidebook*. Tennessee Department of Education
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

- Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and Teacher Education, 27*, 252-258.
- Wenger, E., McDermott, R., and Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press
- Wenger, E. (1998). Communities of practice: Learning as a social system. *System Thinker, 9*(5), 1-5.
- Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, Ludwig, J., Gormley, W. T, Magnuson, K. A., Phillips, D., & Zaslow, M. J. (2013). Investing in our future: The evidence base on preschool education. *Society for Research in Child Development*.

Appendix A
TEA’s Exemption Options for Full-day Pre-K

FULL-DAY PREKINDERGARTEN | SUMMARY OF EXEMPTION OPTIONS

YEAR	ONE-YEAR EXEMPTION (2019-2020)	TWO-YEAR EXEMPTION (2019-2020 AND 2020-2021)	THREE-YEAR EXEMPTION (2019-2020, 2020-2021, AND 2021-2022)
2019-2020 SCHOOL YEAR	Gather data to inform method of providing full-day prekindergarten. Solicit and consider proposals at a public meeting for partnerships with eligible early learning centers. After receiving and considering partnership proposals, make decision to: <ul style="list-style-type: none"> o Establish partnerships with eligible early learning centers and/or o Construct, repurpose, or lease new space, or issue bonds to construct or repurpose space. 	Gather data to inform method of providing full-day prekindergarten. Solicit and consider proposals at a public meeting for partnerships with eligible early learning centers. After receiving and considering partnership proposals, make decision to: <ul style="list-style-type: none"> o Establish partnerships with eligible early learning centers and/or o Construct, repurpose, or lease new space, or issue bonds to construct or repurpose space. 	Gather data to inform method of providing full-day prekindergarten. Solicit and consider proposals at a public meeting for partnerships with eligible early learning centers. After receiving and considering partnership proposals, make decision to: <ul style="list-style-type: none"> o Establish partnerships with eligible early learning centers and/or o Construct, repurpose, or lease new space, or issue bonds to construct or repurpose space.
2020-2021 SCHOOL YEAR	Begin offering full-day prekindergarten for all eligible four-year-old students or apply for exemption renewal.	If necessary, hold an additional public meeting to solicit partnerships with eligible early learning centers. Begin offering full-day prekindergarten for some eligible four-year-old students through: <ul style="list-style-type: none"> o At least one partnership with an early learning center, and/or o At least one constructed, repurposed, or leased classroom(s) 	If necessary, hold an additional public meeting to solicit partnerships with eligible early learning centers. Begin offering full-day prekindergarten for some eligible four-year-old students through: <ul style="list-style-type: none"> o At least one partnership with an early learning center, and/or o At least one constructed, repurposed, or leased classroom(s)
2021-2022 SCHOOL YEAR		Begin offering full-day prekindergarten for all eligible four-year old students or apply for exemption renewal.	If necessary, hold an additional public meeting for partnerships with eligible early learning centers. Increase full-day prekindergarten opportunities for eligible four-year old students through: <ul style="list-style-type: none"> o At least one additional partnership with an early learning center, and/or o At least one additional constructed, repurposed, or leased classroom(s)
2022-2023 SCHOOL YEAR			Begin offering full-day prekindergarten for all eligible four-year old students or apply for exemption renewal.

Source: House Bill 3 Pre-K Exemptions (2019). Retrieved from <https://tea.texas.gov/about-tea/news-and-multimedia/correspondence/taa-letters/house-bill-3-pre-k>

Appendix B

Survey Invitation for Pre-K Teachers

PreK Teachers,

You are invited to participate in a research project that examine the challenges PreK teachers face, teacher and the type of professional development and coaching that will best support the PreK teachers in the district. The data collected will help determine and plan for coaching.

The online survey should take approximately 10 minutes to complete. Participation is voluntary, and responses will be kept anonymous to the degree permitted by the technology being used.

If you have any questions about the research, please contact the principal investigator, Anne Yamashita, via email at anne.r.yamashita@vanderbilt.edu or the faculty advisor, Dr. Marisa Cannata at marisa.cannata@vanderbilt.edu . If you have any questions regarding your rights as a research subject, contact the Vanderbilt Institutional Review Board (IRB) at (615) 322-2918.

Please print or save a copy of this page for your records.

I have read the above information and agree to participate in this research project.

Please click on the survey link below to enter the survey. Thank you for your participation.

Appendix C
 Survey Section 1: Teachers' Sense of Efficacy

TEACHER BELIEFS

This questionnaire is designed to help gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

		None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
1.	How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
2.	How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
3.	How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
4.	How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
5.	To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
6.	How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
7.	How much can you do to get students to believe they can do well in school work?	1	2	3	4	5	6	7	8	9
8.	How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
9.	To what extent can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
10.	To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
11.	How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
12.	How well can you implement alternative teaching strategies in your classroom?	1	2	3	4	5	6	7	8	9

The above 12-question survey on Teachers' Sense of Efficacy has been developed by Megan Tschannen-Moran, College of William and Mary and Anita Woolfolk Hoy, Ohio State University. These tools are available for free for educators and educational scholars at <https://wmpeople.wm.edu/site/page/mxtsch/researchtools>

Appendix D

Survey Section 2: Professional Development Needs

PROFESSIONAL DEVELOPMENT (PD) <i>This questionnaire is designed to help gain a better understanding of the PD needs for professional growth. Your answers are confidential.</i>										
<p>Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.</p> <p>Please rate the importance of each PD topic as it relates to your own personal needs for professional growth.</p>										
		None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
1.	How often do you get to collaborate and work with other colleagues?	1	2	3	4	5	6	7	8	9
2.	Is the PD that you receive relevant and useful to your work?	1	2	3	4	5	6	7	8	9
3.	How often do you receive feedback?	1	2	3	4	5	6	7	8	9
4.	If given the opportunity, how likely are you to utilize a coach?	1	2	3	4	5	6	7	8	9
5.	After any PD, are you able to implement or practice the strategies in your classroom?	1	2	3	4	5	6	7	8	9
6.	What would be the three PD needs to support your professional growth? (Please type your responses on the line)	<hr/> <hr/> <hr/>								
7.	What was the best PD that you received? What made it the best? (Please type your responses on the line)	<hr/> <hr/> <hr/>								
8.	What PD delivery method best met your learning style? Please number in ranking order from 1(best) to 5 (least). <i>Whole Group 'Sit & Get' _____</i> <i>Small Group (group activities & discussion) _____</i> <i>Modeling by Presenter & Demonstration Videos _____</i> <i>Rotating Groups (different activities at each station) _____</i> <i>Becoming an Expert (jigsaw activity & gallery walk) _____</i>									

Appendix E

Interview Invitation for Pre-K Teachers

PreK Teachers,

You are invited to participate in a follow-up interview that further examines the challenges PreK teachers face, teacher and the type of professional development and coaching that will best support the PreK teachers in the district. The data collected will help determine and plan for coaching and professional development.

Participation is voluntary, but those who participate will be placed in a raffle to win children's books. The link below is a form to indicate whether you will participate in the interview (which will take place at a later time).

If you have any questions about the research, please contact the principal investigator, Anne Yamashita, via email at anne.r.yamashita@vanderbilt.edu or the faculty advisor, Dr. Marisa Cannata at marisa.cannata@vanderbilt.edu. If you have any questions regarding your rights as a research subject, contact the Vanderbilt Institutional Review Board (IRB) at (615) 322-2918.

Please print or save a copy of this page for your records.

I have read the above information and agree to participate in this research project.

Please click the link below to indicate your whether you will like to participate in the follow-up interview. The form will take 1-minute to complete.

Appendix F

Interview Questions for Pre-K Teachers

1. How many years have you been teaching?
2. How many of those years have been in Pre-K?
3. What PD do you find most useful to your development as a teacher?
4. What PD is most needed for your professional growth?
5. What opportunities have you had to collaborate with colleagues?
6. When you do collaborate, what do you find most useful?
7. What type of support would you need, as you transition to full-day Pre-K?
8. What role do you think the Pre-K coach will play in your growth as a teacher?
9. What is your experience working with a coach? If you have worked with a coach, how often and what did you work on?
10. Have you observed other colleagues teach? Have they observed you?
11. How often do you receive feedback? From who?
12. What do you think would be most beneficial in helping you to grow as a teacher?
13. How do you learn best?
14. What do you feel is most important when working with PreK students?
15. How do you improve your teaching practice?
16. What has been the most rewarding experience for you as a teacher?
17. Can you give me an example of when you reflected on your teaching? What happened as a result?
18. What are your strengths?
19. What is an area that you would like to grow in?
20. Is there anything else you would like me to know?

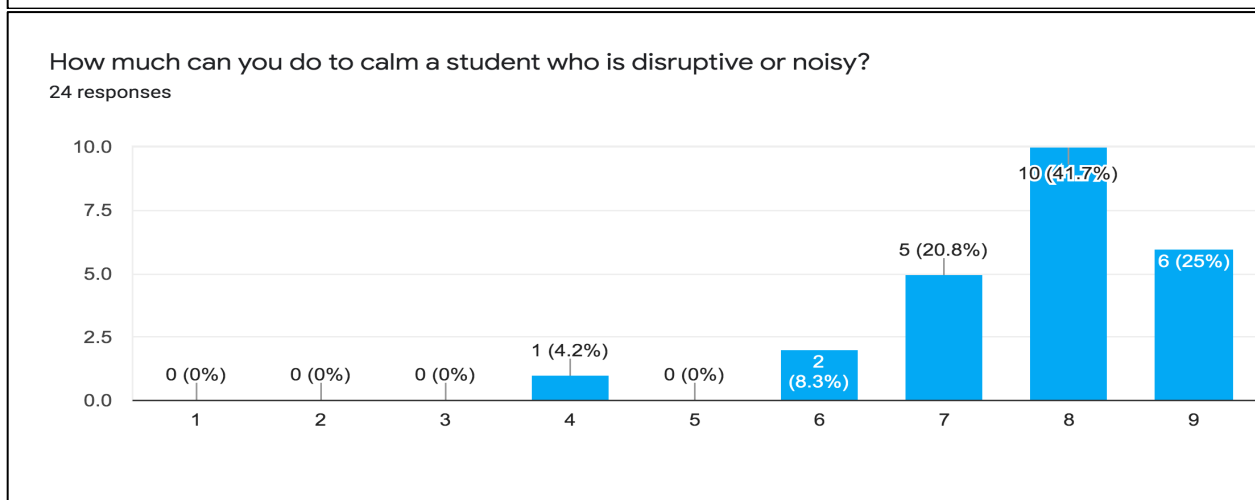
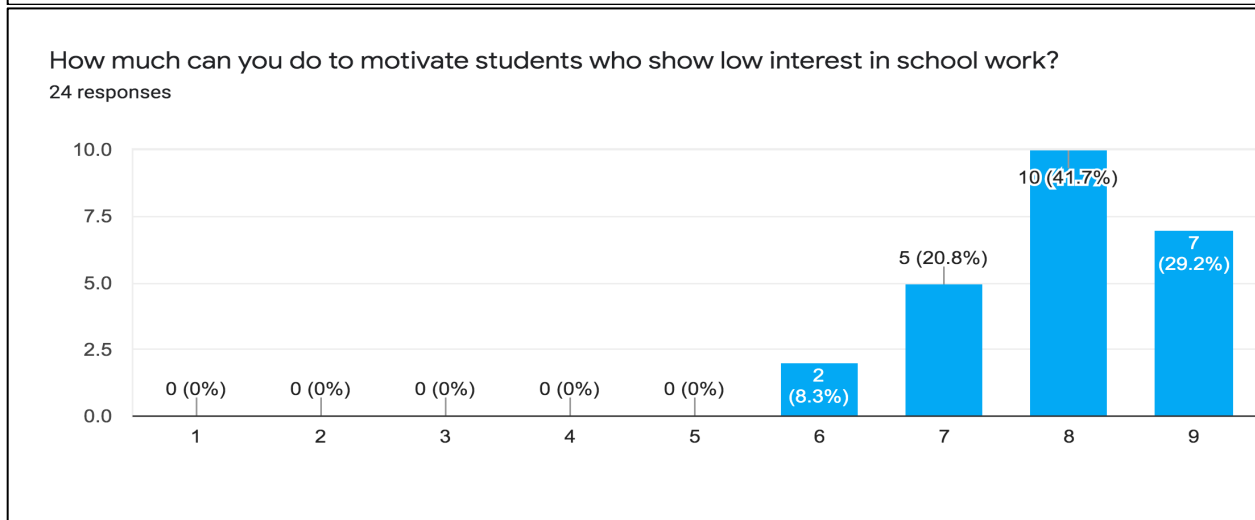
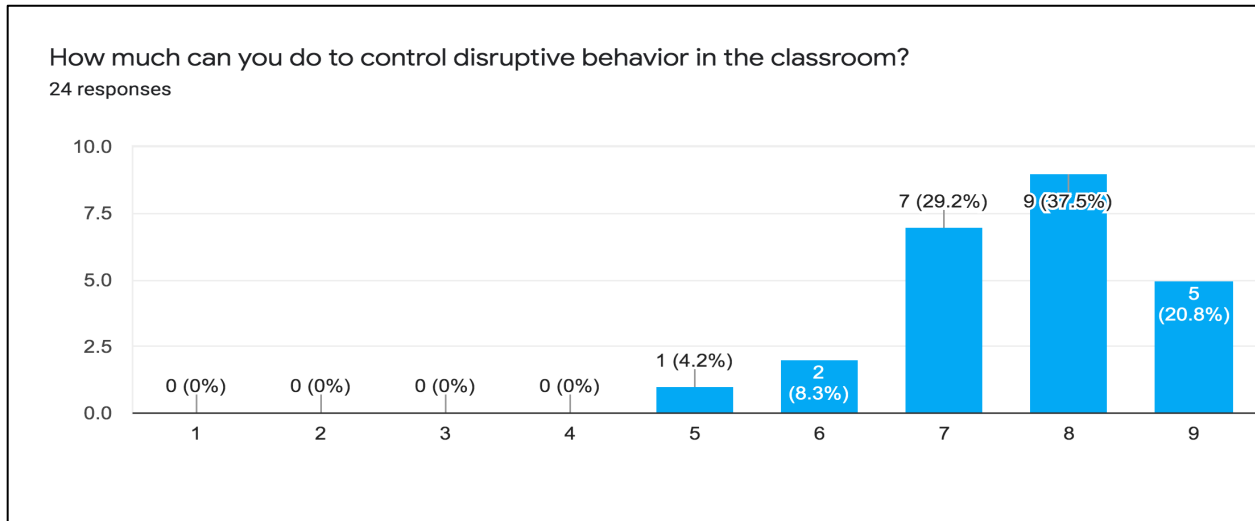
Appendix G

Interview Questions for the Early Childhood Coordinator

1. How many Pre-K teachers do you currently have in the district?
2. Will you need to hire additional Pre-K teachers to meet the House Bill 3 requirement? If so, how many do you anticipate?
3. What do you think are the three big challenges in Pre-K, due to House Bill 3?
4. What are your (district's) plan on meeting those challenges?
5. In terms of the annual 15-hour professional development requirement for all Pre-K teachers, what is your (district's) plan on meeting the requirement?
6. Will some of the professional development training be non-negotiable for the district? If so, what would that be?
7. Will Pre-K teachers also have options in choosing their own professional development based on their needs?
8. Will the professional development be provided by the district? Or will the Pre-K teachers have options to receive training in and out of the district?
9. What professional development do you believe would be most beneficial to Pre-K teachers?
10. How will you roll out the professional development plan?
11. What is the plan for meeting the annual 15-hour coaching requirement? Will additional district coaches be hired to support the Pre-K teachers in meeting this requirement?
12. What is your vision of the coaching role?
13. What do you think will be the best way to utilize the coaches to support good instruction in Pre-K classrooms?
14. How can coaches support the growth of Pre-K teachers and increase teacher efficacy?
15. What are the instructional programs currently implemented by the Pre-K teachers?
16. Since the Pre-K will transition from half-day to full day, will there be changes to the instructional program? If so, what changes will occur?
17. What responses have you received from the teachers regarding the annual professional development and coaching requirement?
18. What is your plan on how the district support the coaches' role in working with Pre-K teachers to support growth?
19. How will the new coaching requirement be communicated to the Pre-K teachers?
20. How will the impact of coaching and professional development be measured?

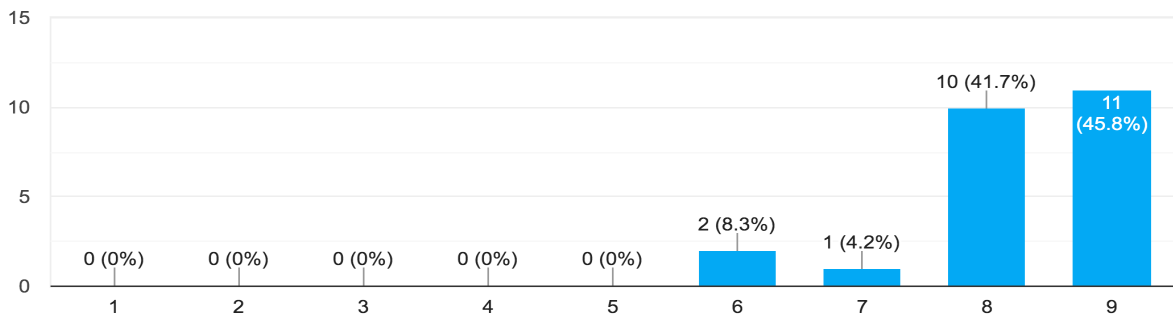
Appendix H

Survey Section 1 Results: Teachers' Sense of Efficacy (Questions 1 - 12 in order)



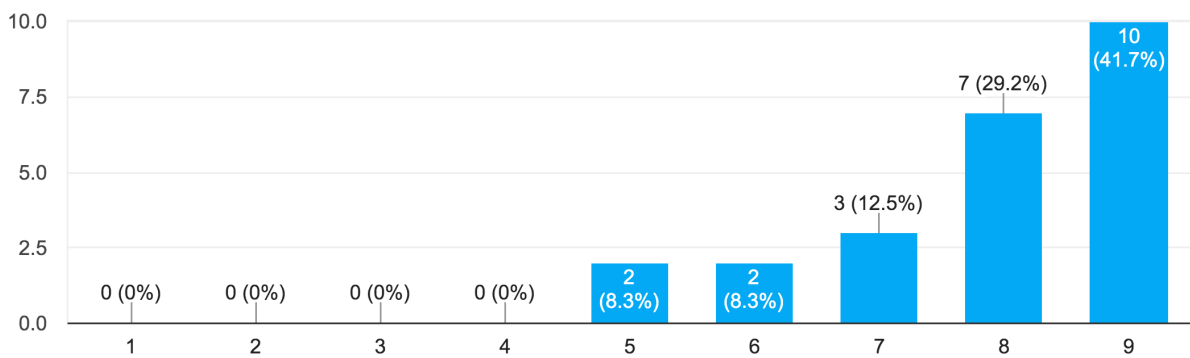
How much can you do to help your students value learning?

24 responses



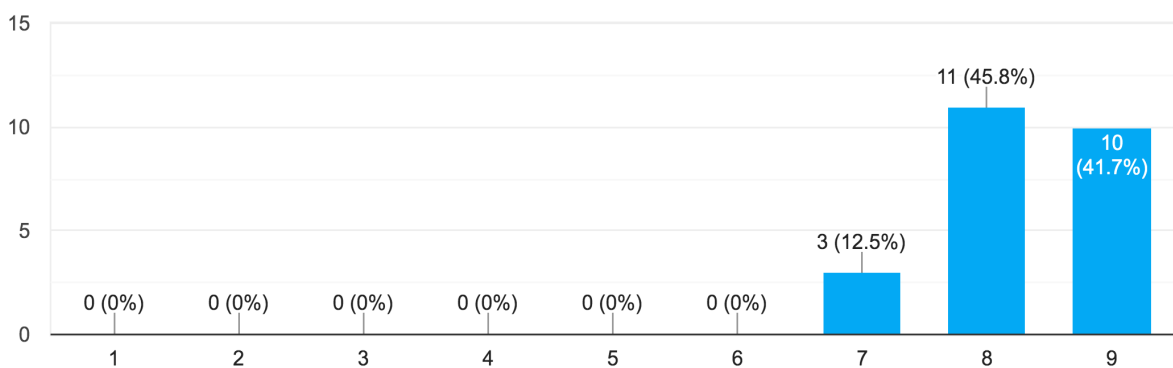
To what extent can you craft good questions for your students?

24 responses



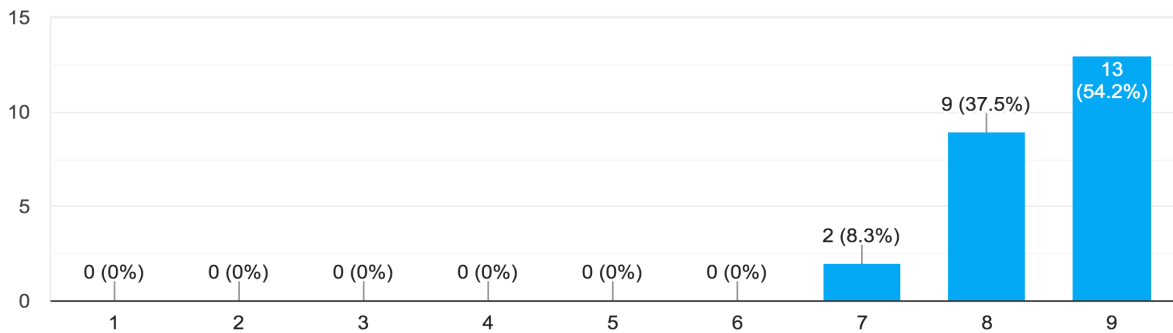
How much can you do to get children to follow classroom rules?

24 responses



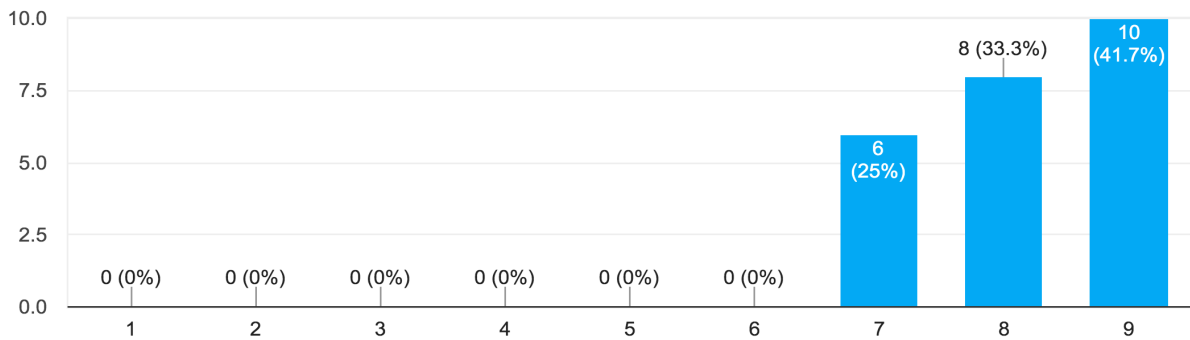
How much can you do to get students to believe they can do well in school work?

24 responses



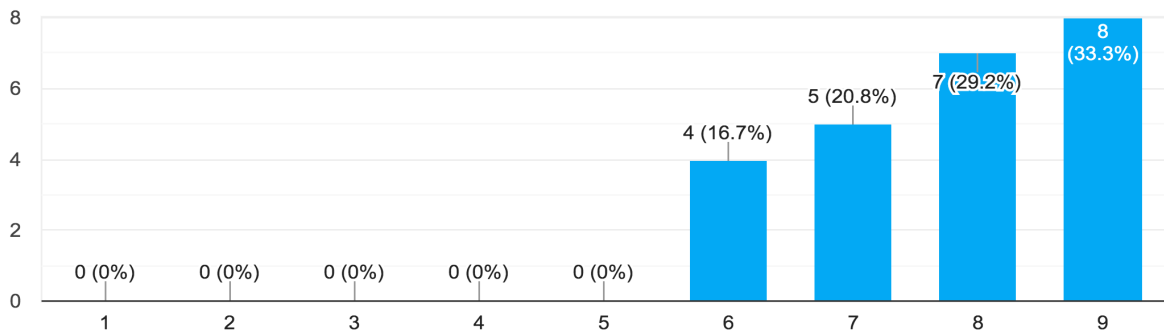
How well can you establish a classroom management system with each group of students?

24 responses



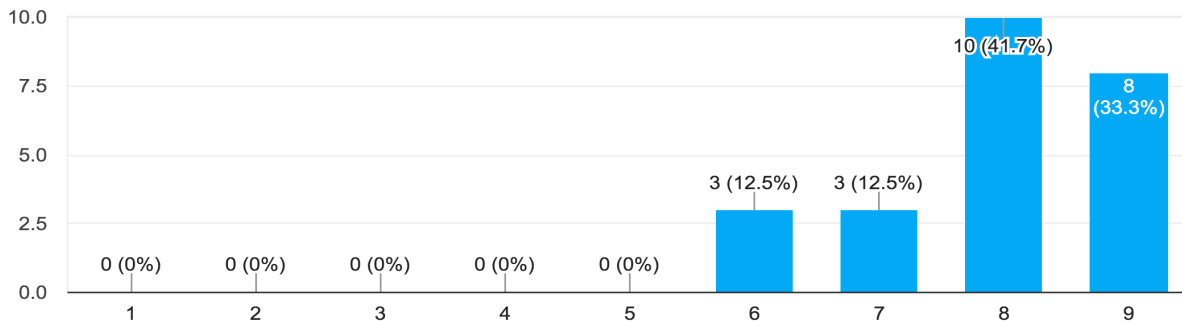
To what extent can you use a variety of assessment strategies?

24 responses



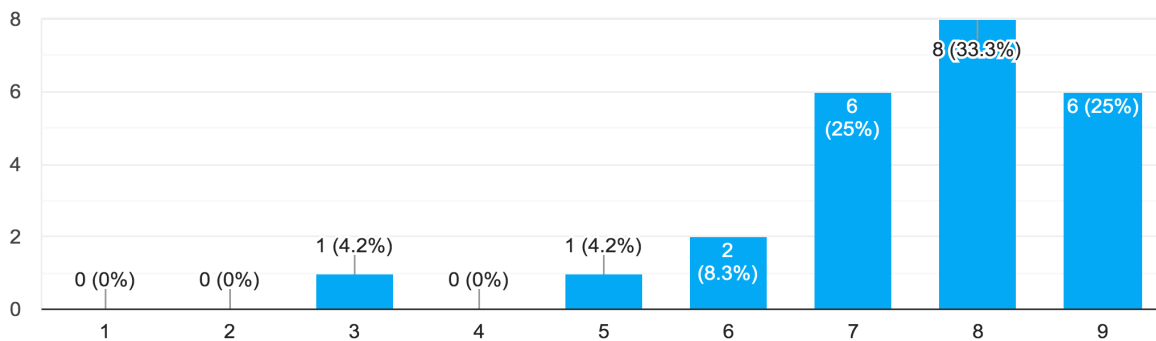
To what extent can you provide an alternative explanation or example when students are confused?

24 responses



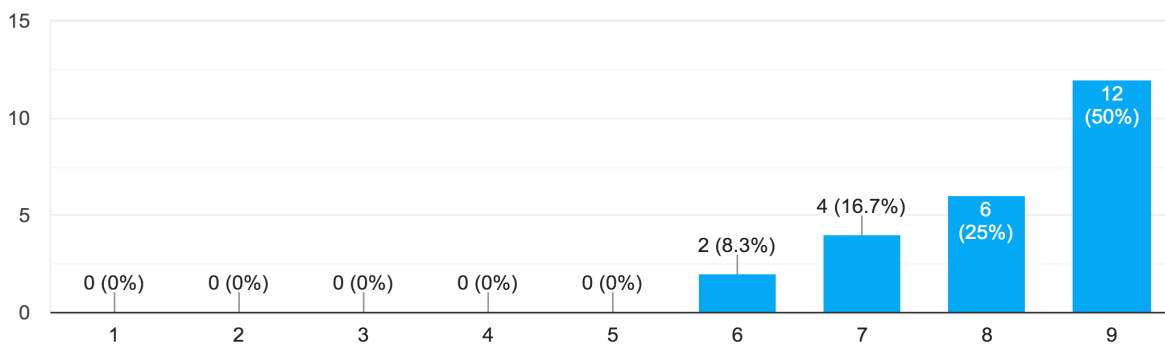
How much can you assist families in helping their children do well in school?

24 responses

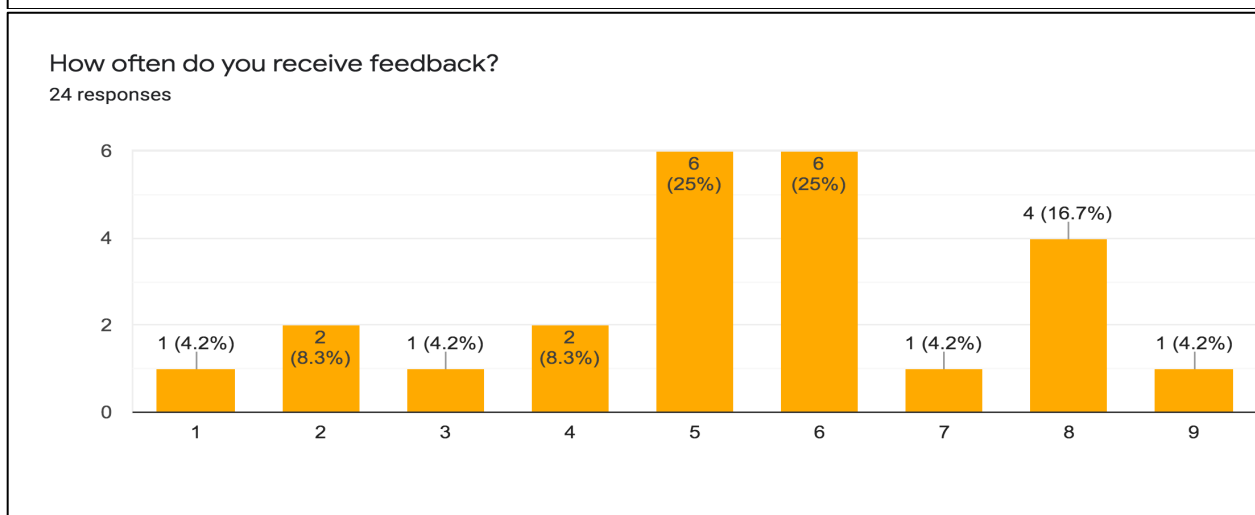
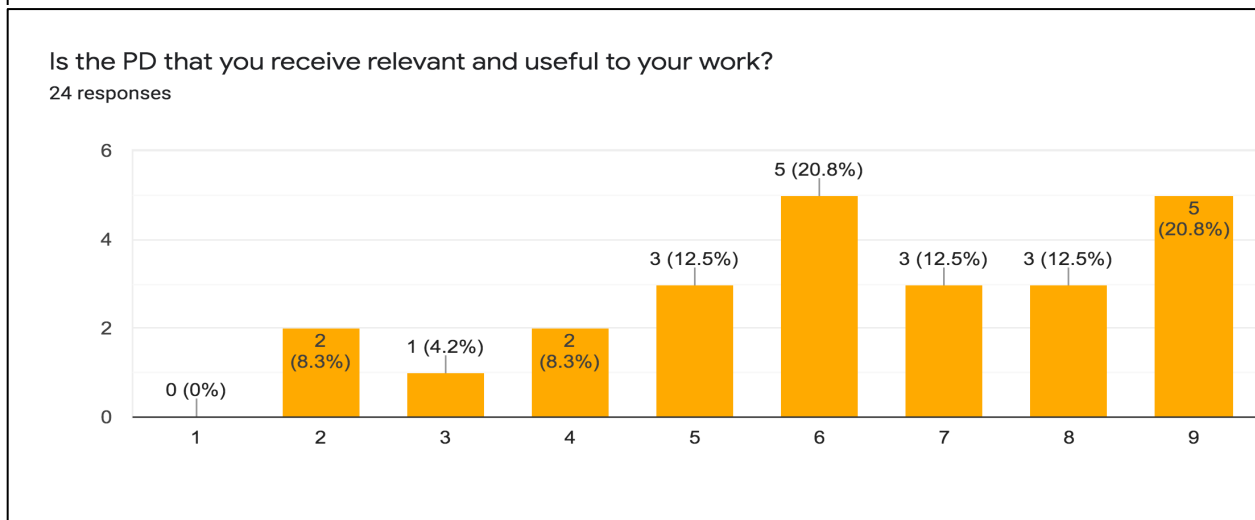
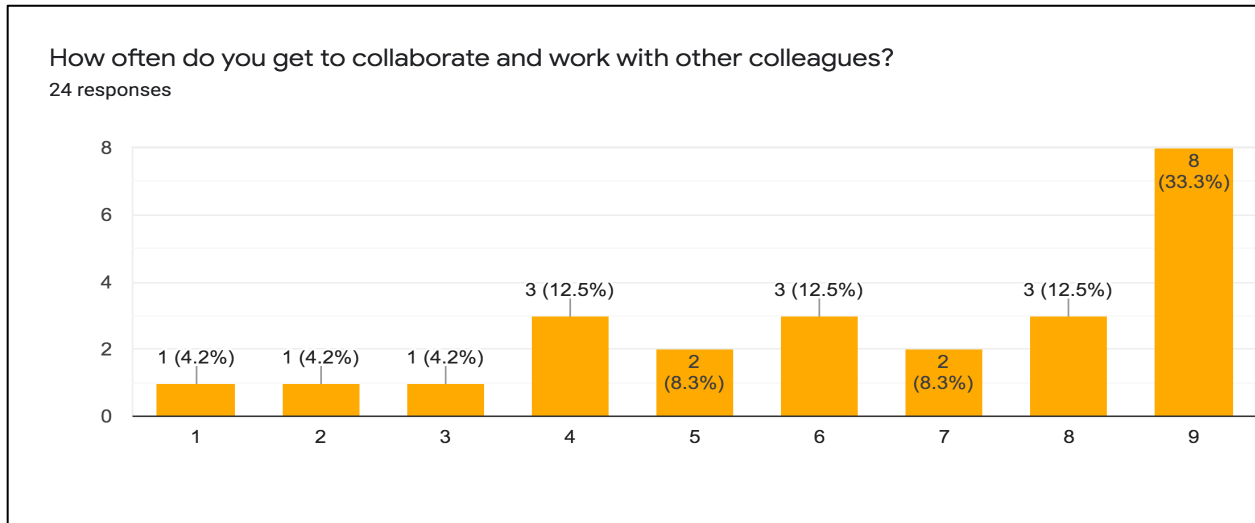


How well can you implement alternative teaching strategies in your classroom?

24 responses

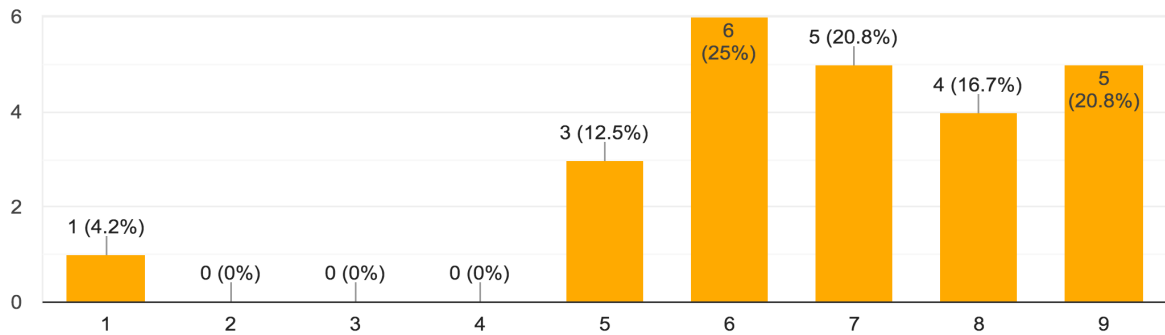


Appendix I
Survey Section 2 Results: Professional Development Needs



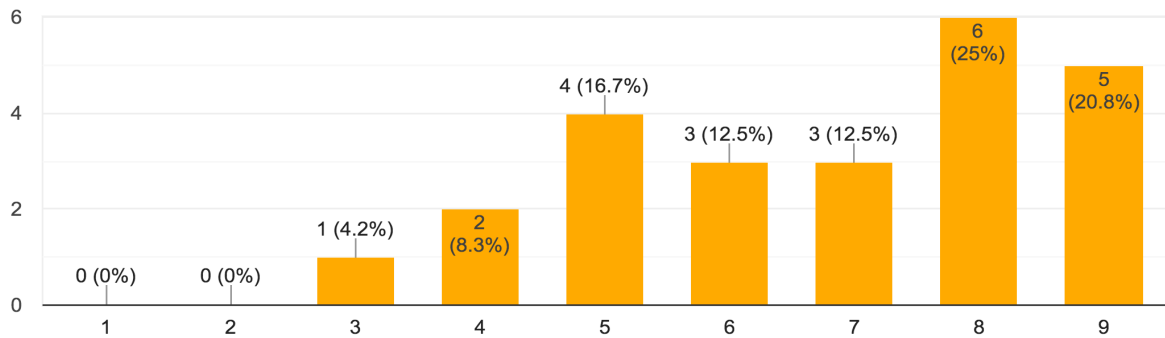
If given the opportunity, how likely are you to utilize a coach?

24 responses



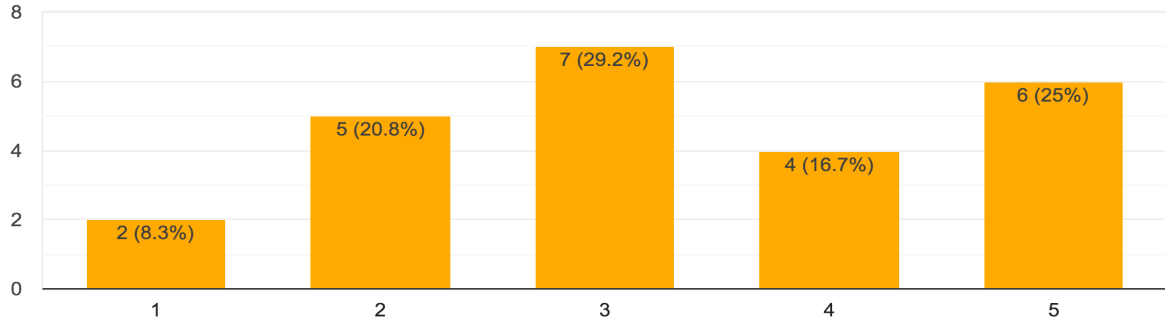
After any PD, are you able to implement or practice the strategies in your classroom?

24 responses



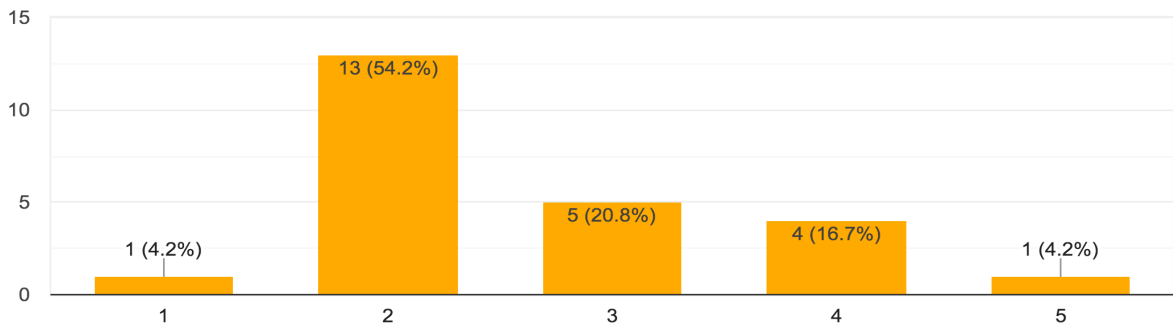
What PD delivery method best met your learning style? Please rate from 1 (best) to 5 (least): Whole Group 'Sit and Get'

24 responses



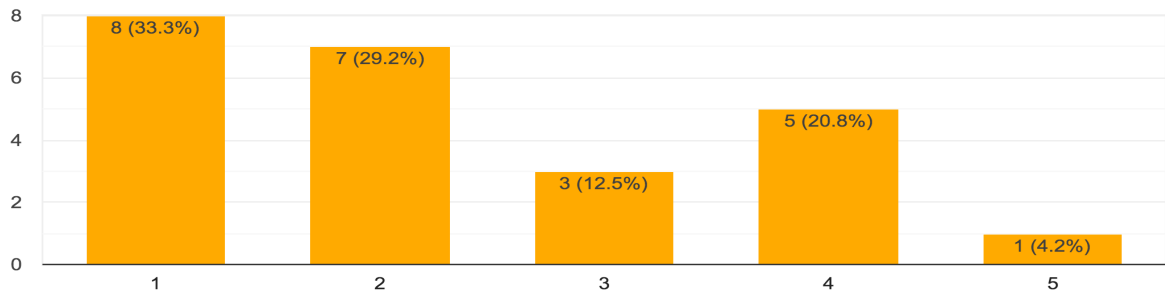
What PD delivery method best met your learning style? Please rate from 1 (best) to 5 (least): Small Group (group activities and discussions)

24 responses



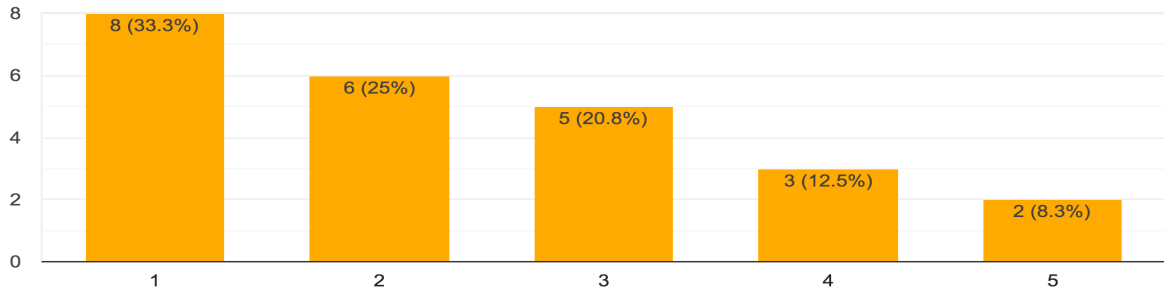
What PD delivery method best met your learning style? Please rate from 1 (best) to 5 (least): Modeling by Presenter and Demonstration Videos

24 responses



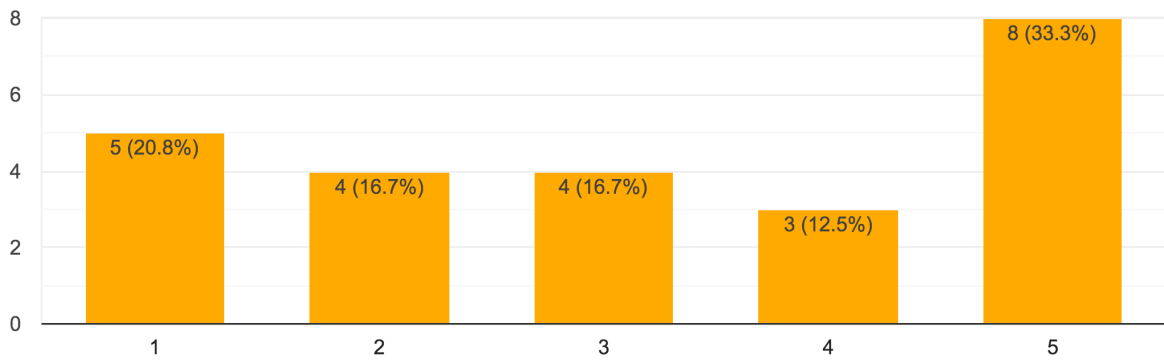
What PD delivery method best met your learning style? Please rate from 1 (best) to 5 (least):
 Rotating Groups (different activities at each station)

24 responses



What PD delivery method best met your learning style? Please rate from 1 (best) to 5 (least):
 Becoming an Expert (jigsaw activity and gallery walk)

24 responses



Appendix J

IRB Approval Document

YAMASHAR01172020115359

IRB #192388

PI: Yamashita, Anne R

Last updated: 1/23/2020

Coaching and Professional Development Plan in PreK to Increase Teacher Efficacy and Improve Student Outcome

Study Type and Performance Site Information

Type of study:

- Standard or Expedited
 Exempt
 Umbrella Review for funds release
 Comparative Effectiveness Research
 Non-Human Subject Determination
 Quality Improvement/Non-Research Determination
 Request review by another IRB
 Coordinating Center ONLY

Please indicate which Committee is most appropriate to review your project:

- Social and Behavioral Sciences**
 Health Sciences

Are there any international sites involved in this study in which the PI is responsible?

- Yes
 No

Is this project cancer-related?

- Yes
 No

Date of IRB Approval: 01/27/2020

Institutional Review Board



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