

Implementing the Practice Based Coaching Model for Inclusion in Early Childhood Education

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ABSTRACT

A mixed-methods descriptive single-case research design explored the effects of implementing the Practice-Based Coaching (PBC) model at a South Texas Early Head Start Center. Three bilingual coaches used the Practiced-Based Coaching model to provide professional development on emergent biliteracy instruction for three bilingual teachers of 2- to 3-year-olds. Coaches and teachers used reflexive journals, focus groups, pre- and post-observation checklists, and surveys to share their views and experiences with the Practice-Based Coaching model. Results showed the Practice Based Coaching model is effective teacher and coach training. The model's ripple effect fostered a coach-teacher collaboration via social learning, boosting teachers' emergent biliteracy skills and inclusive practices. Teachers changed their practices and performance because of this knowledge, leading to more engaged students. This research suggests that teacher educators employ Practice-Based Coaching in professional development to cultivate social learning and expand teachers' knowledge and skills in inclusive emergent biliteracy.

KEYWORDS

Head Start, English Language Learners, Emergent Biliteracy, Practice-Based Coaching Model, Professional Development

Early childhood education builds a solid foundation that fosters the growth and development of children and establishes a sound educational foundation for academic success (Shughnessy & Kleyn, 2012). Although early education often begins at home, Head Start (HS) and Early Head Start (EHS) were created to provide qualifying children with early learning experiences to prepare them to begin school "ready to learn." These programs provide a robust introduction to the basic skills that are needed for entry into school and aim to provide an effective "early head start" for children.

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They provide quality early learning experiences to children whose parents cannot afford to pay for formal early education (United States Department of Health and Human Services, 1992). HS is a comprehensive program for children between 3 and 5 years old from families living at poverty level. EHS serves infants, toddlers and children who turn 3 years old. Academic readiness is their principal aim. The Office of Head Start uses the Head Start Early Learning Outcomes Framework (ELOF) to describe the skills, behaviors, and knowledge that both programs and teachers must foster in all children. The framework has five broad areas of early learning, referred to as central domains, about what young children should know and be able to do to succeed in school (Interactive Head Start Early Learning Outcomes Framework: Ages Birth to Five, 2018). Teachers in the HS and EHS programs use ELOF to provide effective learning experiences that support early learning outcomes for children and the five central domains of development.

Statement of the Problem

The cultural and linguistic diversity in HS communities across America exploded in the twenty-first century. The National Center on Culturally and Linguistic Responsiveness (2017) reported, "one third of children enrolled in HS and EHS are growing up with more than one language." In 2015, "English Language Learners (ELLs) comprised about one-third of children enrolled in HS programs, with over 320,000 of the one million enrolled children speaking a language other than English at home" (McNamara, 2016). By 2025, one out of four children in classrooms across the nation will be an ELL student (National Education Association, 2020). There is an increasing number of ELLs in the location of this research, the Rio Grande Valley (RGV), a geographic area in the southernmost tip of Texas. It lies along the northern bank of the Rio Grande River that separates Mexico from the United States. Local school districts have high percentages of Hispanics and ELLs in their schools. The participating school district for this study was the Borderland School District with 99% of Hispanic students, 91% economically disadvantaged, and 43% of students were considered ELLs, with Spanish being the language spoken at home (Texas

Tribute, 2024).

The problem in the area is the lack of professional development about emergent biliteracy instruction in the local EHS program for the increased diverse ELL. Teachers lack pedagogical understanding, knowledge, skills, and resources about emerging biliteracy instruction in classrooms with children that are simultaneously developing two languages. The population of ELLs is rapidly growing, thus emphasizing the importance of professional development for teachers to address the unique needs of these children is crucial. McNamara (2016) suggested improving professional development for teachers with targeted training on home language and appropriate teaching practices to meet the developmentally, culturally, linguistically appropriate learning experiences in language and biliteracy using both languages.

Purpose of Research

Recent literature on professional development has suggested that coaching, consultation, mentoring, and communities of practice help promote change in teacher knowledge, skills, and performance (Hsieh et al., 2009; Sheridan et al., 2009; Winton, 2006). These studies support the importance of implementing the Practice-Based Coaching (PBC) model for providing professional development to develop the pedagogical knowledge base of teachers and the knowledge dynamics in teaching emerging biliteracy to emerging bilingual students. The PBC model is a cyclical coaching model supported by the Office of Head Start and the National Center on Quality Teaching and Learning to support teachers as they implement effective practices (Godfrey-Hurrell, 2015; Howard et al., 2013; Joyce & Showers, 2002; Snyder, Hemmeter et al., 2012). The PBC model components include 1) planning goals and action steps; 2) engaging in focused observations; 3) reflecting on and sharing feedback about teaching practices. The PBC occurs within the context of a collaborative partnership between an expert coach and a teacher (Snyder et al., 2012).

This research was rooted in Vygotsky's sociocultural theory and concept of internalization (Vygotsky, 1978) to explore the cognitive development of three coaches and teachers using the PBC

model to strengthen their knowledge, skills, and pedagogical understanding of emerging bilingual learning in classrooms where students were immersed in simultaneous language learning environments. Research emphasizes the importance to provide teachers with intensive and focused professional development to help them gain better content, pedagogical, skill and knowledge to create a high-quality learning environment to meet their student's needs in emergent biliteracy development (Delbridge & Helman, 2016; Reyes, 2012; Reyes & Azuara, 2008). This research adds to the research of Godfrey-Hurrell (2015), Howard et al. (2013), and Hsieh et al. (2009) in implementing the PBC model in providing professional development to support teachers implement effective emergent biliteracy practices for positive student outcomes. The significance of this research to the early childhood preparation workforce is to support the use of the PBC model to provide professional development to teachers on how to implement effective emergent biliteracy practices for emerging bilinguals, thus, participating in continuous, collaborative learning and reflecting to inform practice that supports inclusion.

Research Questions

The overarching question addressed in this study is: What effects does the PBC model have in the practice of three coaches and three EHS teachers concerning knowledge and pedagogy of emergent biliteracy instruction? Sub-questions are:

1. What are the perceptions of three coaches concerning the effectiveness and feasibility of the PBC model in their teachers' implementation of emergent biliteracy instruction?
2. What are the perceptions of three EHS teachers concerning the effectiveness and feasibility of the PBC model in their implementation of emergent biliteracy instruction?
3. How do teachers grow in implementation of emergent biliteracy practices because of the PBC model?

Literature Review

Early childhood education literature strongly supports emergent biliteracy instruction. To foster students' developing biliteracy, teachers require sufficient preparation, resources, and subject knowledge. However, research on teachers of children (ages birth to three) simultaneously learning two languages is lacking. Most research centers on children in public education, five and older, who have developed their first language and are acquiring a second. Therefore, teachers require further professional development to process, evaluate, and update their knowledge base for improved practice.

According to the research of Godfrey-Hurrell (2015), Howard et al. (2013), and Hsieh et al. (2009), the PBC model was effective in providing professional development to support teachers as they implemented effective practices that led to positive student outcomes. Professional development is best defined by Freiman-Nemser (2001), "professional development means transformations in teacher's knowledge, understanding, skills and commitments, in that they know what they are able to do in their individual practice as well as in their shared responsibilities" (p. 1038). This study aimed to expand the literature to determine if the effects of implementing the PBC model are in fact beneficial in strengthening the bilingual teacher's skills of emergent biliteracy instruction. Recent literature suggests coaching, consultation, mentoring, and communities of practice can help promote change in teacher knowledge, skills, and performance (Hsieh et al., 2009; Sheridan et al., 2009; Winton, 2006). The PBC model aligns with these factors of professional development to develop the emergent biliteracy pedagogical knowledge base of teachers.

The PBC model is a collaborative coaching partnership between experts in education and teachers to improve teacher quality. This study used the PBC model to improve teachers' emergent biliteracy instruction for emerging bilinguals. Each component relied on continual support for teachers to reflect and receive performance feedback to improve their instructional practices. The first component was creating a goal and action steps based on the teacher's self-assessment needs. The coaching partnership helped teachers set goals and action plans by providing cognitive apprenticeship and scaffolding.

The second PBC model component was focused on observations. Coaches completed observations to gather and record information about teachers implementing teaching practices during ongoing classroom activities based on the goal and action plan steps described during component number one.

The third PBC model component reflected on and sharing feedback about implemented teaching practices. It used the information gathered during focused observations to identify successes, challenges, and areas for additional improvement. This occurred in debriefing conversations between teachers and coaches in a nonthreatening atmosphere. Together, the teacher and coach determined if the goal was achieved or not. Goals were refined and new ones were developed following the PBC model cycle again. It was through this successive cycle that internalization took effect as teachers gave meaning to their experiences, observations, performance, and reflections to provoke change in their instructional practices.

Reyes and Azuara's (2008) research findings suggested adopting an Ecological Model for Emergent Biliteracy to guide coaches in helping teachers provide appropriate and effective emerging biliteracy instruction. This model constitutes that children's emergent biliteracy development is situated and influenced by peer and adult interactions. It is a complex process that can be achieved when children are provided with opportunities to use both emerging languages in different genres and for different functions while speaking, thinking, writing, and reading. This research used Reyes et al.'s (2008) Ecological Model for Emergent Biliteracy to guide coaches in supporting teachers' effective biliteracy instruction. The initial step involved fully integrating emergent bilinguals into social settings. Meaningful and authentic biliteracy contexts comprised the second component. The third part involved incorporating early literacy activities like phonological awareness, print concepts, letter recognition, oral language growth, and writing skills. These emergent biliteracy components, working together, aided the biliteracy development of young Spanish and English emergent bilinguals.

Theoretical Framework

The theoretical framework for this study was rooted in Vygotsky's sociocultural theory and concept of internalization (Vygotsky, 1978) to influence cognitive development for teacher's professional development. Teachers constructed their knowledge of emergent biliteracy practices and instruction through social interactions with their coaches. In this context, the coaches were the more knowledgeable others (MKO) that scaffolded and provided support to teachers to move within their zone of proximal development (ZPD) (Vygotsky, 1978) throughout the PBC model components. This theoretical framework paved the way for learning constructivism for coaches and their teachers as they collaborated through social interactions to develop their learning. The concept of internalization was fundamental in the process of expert coaching assisting teachers with initial support in implementing effective practices that lead to independent practices without coach support.

The professional development design for this research was conducted following the elements of a Vygotskian framework; social development, mediated learning experiences, scaffolding with MKO and ZPD, guided participation, collaborative learning, and cognitive apprenticeship through constant dialog, reflection, and the concept of internalization. Professional development was guided by social collaboration and interactions between and from the expert coaches and teachers through self-assessments, reflections, feedback, and dialogue. Teachers' participation and collaboration were placed at the heart of this research to ensure learning was meaningful and socially constructed.

Research Method

This study integrated a mixed method research design to document the perspectives and personal experiences of six participants with the PBC model through observations, interviews and surveys that were computed, transcribed, and analyzed. See the appendices for the observation checklist, interview, and survey questions. This study integrated a descriptive single case study to obtain data of three EHS teachers of young children ages 2-3 and three

coaches to describe details about the teacher's performance, participation, and experiences with the PBC model to determine its effects on their emergent biliteracy instruction performance. A naturalistic qualitative paradigm was used because it aligns with Vygotsky's sociocultural theory (1978) and concept of internalization through coaches' guidance and continuous social interactions, discussions, and dialogue with teachers in their natural settings without manipulating the phenomenon being studied (Nieswiadomy, 2012).

The research site for this study was an EHS center selected based on its implementation of the PBC model, the bilingual proficiency of the coaches and the teachers, and the high enrollment of emergent bilingual students who are learning two languages simultaneously. According to the U.S. Census Bureau (2020), the estimated population in Hidalgo County was recorded at 870,781 with 92% of the population being Hispanic and 30% people were living below poverty level. Approximately 8.9% of the population is under five years of age compared to the entire state of Texas with only 7.1%. The student body of the Borderland ISD is 99.0% Hispanic with an 88% being economically disadvantaged. With the district's proximity to Mexico, 44% of the students are considered ELLs, with Spanish being the language spoken at home.

The EHS center served 284 infants and tod-

dlers with over 100 bilingual teachers (Child Plus, 2019) at the time of the study. A high percentage of families receiving services in this center were Spanish speaking (Child Plus, 2019). Each classroom's enrollment included eight children with two bilingual teachers working as a team to ensure the highest quality of care and education. Teacher A spoke Spanish all day and teacher B spoke English all day, thus implementing the Simultaneously Language Development Model (Medrano et al., 2015).

Participants

This study used purposive sampling to seek participants based on a selected criterion related to the study's purpose (Mack et al., 2005). Three bilingual early childhood education coaches volunteered to participate. They were employed by the local higher education institution, had a master's degree in early childhood education, had at least three years of teaching experience, were familiarized with Head Start Performance Standards and observed early childhood education classrooms. Pseudonyms were used to protect their identity. Table 1 demonstrates the demographic data of the coaches. The program director assigned them to their mentee. Coaches met with their teachers for two hours for each component of the PBC model totaling five hours for four weeks.

Table 1

Demographic Data of Coaches

Coach	Age	Language(s) Spoken	Ethnicity	Education	Years with Children
Karla	49	English Spanish	Hispanic	Master's Degree in Early Childhood Education	31
Stephanie	31	English Spanish	Latino/Asian	Master's Degree in Early Childhood Education	13
Jennifer	30	English Spanish	Latino	Master's Degree in Early Childhood Education	8

Note. This data demonstrates the demographic information from the coaches' survey.

This study used purposive sampling to seek three early childhood bilingual teachers employed by the Borderland ISD, taught emergent bilinguals ages 2-3 at the EHS center and were fluent bilinguals in Spanish and English (Mack et al., 2005). Pseudonyms were used to protect their identity. Table 2 demonstrates the demographic data of teachers.

Data Collection Procedures

The data sources for this research were: teachers' and coaches' self-assessment of the PBC model surveys (see Appendix A & B), pre and post observation checklist of indicators of emergent biliteracy teaching practices (see Appendix D), observations of fidelity to the PBC model procedures (see Appendix C), participants' reflexive journals (see Appendix E), and focus group structured interview (see Appendix F & G). The duration of data collection was four weeks. During the first week of research, participants completed the demographic survey and a ten-question self-assessment survey of the PBC model to assess their knowledge of the model and its components prior to implementing it. The education director trained the coaches on how to use the PBC model for three hours and the Ecological Model for Emergent Biliteracy (Reyes & Azuara, 2008). Next, I completed a pre-observation using a checklist of indicators of emergent biliteracy teaching practices in the teacher's classrooms during the language and literacy block for an hour. From week one to four, coaches implemented the

PBC model by completing its three components with their assigned teacher. To control procedural fidelity, coaches used a fidelity checklist to ensure they implemented each component of the PBC model, and their teachers experienced each component as intended. Every participant completed a weekly reflexive journal after participating in each coaching session to record their thoughts, feelings, and experiences. During week four, I completed the post observation using the same checklist and process as in the pre-observation of indicators of emergent biliteracy teaching practices. Teachers and coaches also participated in an audio recorded 30-minute interview. Last, they completed the post self-assessment of the PBC model survey and reflexive journals.

Data Analysis

This study used data reduction, constant comparison analysis, grounded theory stages of coding, and statistical analysis techniques (Corbin & Strauss, 2015). Data sources were collected, observed, transcribed, and analyzed to identify central categories, themes, and results to answer the research questions. Known as data reduction, the data was brought into manageable chunks to facilitate constant comparison analysis and grounded theory interpretations.

The pre and post teacher and coach self-assessment survey and the pre and post observation checklists were inputted into the Statistical Package for the Social Sciences (SPSS) software to calculate the means.

Table 2

Demographic Data of Teachers

Teacher	Age	Language(s) Spoken	Ethnicity	Education	Years with Children
Maria	27	English Spanish	Latino	Some college (2-year)	5
Teresa	40	English Spanish	Latino	Master's degree in Spanish	15
Marta	40	English Spanish	Hispanic	Some college (2-year)	3

Note. This data demonstrates the demographic information from the teacher's survey.

IMPLEMENTING THE PRACTICE BASED COACHING MODEL

A paired sample t-test was used to determine whether there was a significant difference between the means of the two surveys to determine the effects of the PBC model on teacher's performance (Field, 2015). The participant's reflexive journals and interviews were read for each participant and went through the grounded theory analysis coding stages of open, axial, and selective coding (Corbin & Strauss, 2015).

To ensure research integrity, participants were presented with a copy of their transcribed interview for adequacy of data by checking and correcting errors and providing clarification. They retracted and added comments to clarify their statements. This contributed to credibility by member checking (Shenton, 2004). I was also aware of my preexistence expectations for the positive effects of the PBC model based on my experiences implementing it with other teachers. A step to restrict bias was to rely on ground theory and let the data speak for itself. Renner and Taylor-Powell (2003) encouraged to "focus on the individual's own or unique responses and experiences" (p. 9) to provide understanding from the respondent's perspectives and

lived experiences. Last, dependability was achieved with the triangulation of different data sources to answer the research questions.

Findings

The procedural fidelity of the research was 100% for all documented sessions for all coaches, thus, showing the PBC model components and steps were implemented. Coaches perceived the PBC model to be easy to use to guide their coaching in helping their teachers develop their emergent biliteracy instruction. Table 3 describes the context of professional development delivery for each teacher and coach. All participants agreed that the components of the model were effective, detailed, and helpful. Together, teachers and coaches worked together to improve their emergent biliteracy knowledge, practice, and confidence in teaching, with an ending result of higher student engagement. The findings are shown in the sections that follow in relation to the research questions.

Table 3

Teachers' Participation Time in the PBC Model

Participants	Emergent Biliteracy Coaching Topic	PBC Model Component 1 Creating Goal and Action Plan	PBC Model Component 2 Focused Observation	PBC Model Component 3 Performance Feedback	Total
Teacher-Maria Coach- Jennifer	Phonological Awareness-Segmenting Syllables	1 hr & 30 min	1 hr	1 hr & 30 min	4 hrs
Teacher-Teresa Coach- Karla	Developmental Writing	1 hr & 30 min	2 hr	1 hr & 30 min	5 hrs
Teacher-Marta Coach-Stephanie	Phonological Awareness-Rhyming	1 hr & 30 min	1 hr	1 hr & 30 min	4 hrs

Note. It depicts the number of hours and minutes of practice-based coaching per teacher during the PBC model's professional development.

Resulting Effects of Enacting the PBC Model

The overarching question in this research was: What effects does the PBC model have in the practice of three coaches and three EHS teachers concerning knowledge and pedagogy of emergent biliteracy instruction?

Four primary themes emerged from the qualitative data collected to determine the effects of enacting the PBC model based on coaches' and teachers' perceptions. They were: (a) the PBC model increased collaboration between coach and teacher; (b) the PBC model increased coaches' and teachers' knowledge of emergent biliteracy practices that lead to a change in practice; (c) the PBC model led teachers and coaches to own their own learning and engage in reflective thinking; and (d) the PBC model enhanced student's engagement in emergent biliteracy learning.

Coaches and teachers perceived the PBC model to be only effective because of the trusting relationship they had with each other to establish a trusting partnership. Teachers felt confident, safe, and motivated to work with their coaches to receive constructive and supportive feedback. This trusting relationship increased their collaboration and ownership of their learning through reflective thinking and dialogue. It also increased their knowledge of emergent biliteracy practices to enhance student engagement.

The quantitative results of a paired sample t-test in the pre and post self-assessment survey showed a significant difference in the coaches' scores

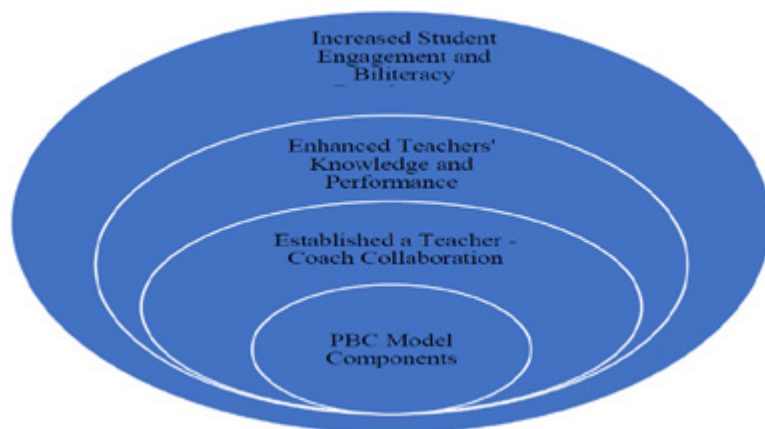
from the pre ($M=4.5000$, $SD=.12500$) to the post ($M=4.8333$, $SD=.19094$) survey; $t(2)=-4.000$, $p=.057$. There was an increase in the means of the coaches' pre and post surveys after the enactment of the PBC model thus suggesting the PBC model had a significant difference in coaches' perceptions of knowledge, confidence, and experiences after they implemented it with their teachers.

For teachers, the paired sample t-test result shows there was not a significant difference in the scores of the pre ($M=4.8750$, $SD=.12500$) and post ($M=4.9167$, $SD=.14434$) self-assessment of the PBC model; $t(2)=-1.000$, $p=.423$. However, a comparison of the open-ended survey responses shows there was a change of belief and an increase of knowledge of the PBC model components for teachers.

Overall, the results show the ripple effect the PBC model had, as seen in Figure 1. The components of creating a shared goal and a plan of action, conducting a focused observation, and discussing reflections and feedback based on performance developed a collaborative partnership between the teacher and the coach. It was this collaboration that started a ripple effect by influencing teachers and coaches to own their learning and reflect on it to improve it. For coaches, they owned their learning by reflecting on what and how they would deliver their coaching based on the teacher's goal and needs. Teachers owned their learning by internalizing the professional development their coaches provided and putting it into practice in their classrooms.

Figure 1

The Ripple Effect of the PBC Model



Note. It represents the effects of the PBC model based on the data results of this study.

Coaches guided teachers' learning by providing information, resources, modeling, and side-to-side coaching based on their teacher's goal. Together, they analyzed and learned in-depth information related to what, why, and how implementing emergent biliteracy instruction to spark student's engagement. It was through this social interaction and collaboration that teachers had different epiphanies, gave them an in-depth understanding of their practice and changed their perceptions and performance in the classroom, as described below.

Marta

Marta understood the meaning of phonological awareness. This realization corrected her misconception of what phonological awareness entails and how to teach it to her 3-year-old emergent bilinguals. According to her coach's observation, Marta integrated rhyming activities through read-aloud and singing in English and Spanish with her students. She sang the "5 Little Monkeys" song and encouraged the students to act it out with her. She emphasized rhyming words, repeated them and invited children to repeat them with her. In addition, Marta used Max, the classroom puppet, to show how to hold the finger puppets and say the rhyming words. Her coach noted that Marta asked open-ended questions about the song to involve students in the activity and "expanded" the activity by asking children if their names rhymed with "banana". Marta used Max to call out each child to the center of the carpet and say their names to determine if they rhymed with "banana". Marta continued to use children's names and labeled items in the classroom to expose children to rhyming. This showed Marta increased her knowledge of emergent biliteracy practice and applied it to new contexts and opportunities to enhance children's learning of phonological awareness.

Maria

Maria also understood what phonological awareness is, the need of it for English and Spanish speakers and different ways to teach it in the classroom. She promoted phonological awareness by drawing children's attention to the sounds of language in Spanish and English by segmenting syllables with snapping, clapping and tapping. Based on her coach's observations, Maria's

clapping syllables activity successfully motivated students to segment the syllables of their classmates' names throughout the school day. Maria "expanded" on the activity by segmenting caregiver names and incorporated vocabulary words from the book they were reading. Maria also promoted phonological awareness by incorporating word play naturally, watching and listening to children's spontaneous play with the sounds of language, using literacy learning activities such as using songs, stories, games, rhymes that play with language to promote phonological awareness.

Teresa

Teresa learned how to incorporate developmental writing activities, read-aloud and phonological awareness activities to develop students' emerging biliteracy skills. Her coach shared Teresa encouraged students to talk and explain their writing through dictation by asking open-ended questions that encouraged descriptive responses, provided wait time, repeated and elaborated on student's responses, and used a variety of words to map her actions and students' actions. Teresa also read a variety of books to draw the student's attention to different features of print in books (i.e., point to the pictures, label part of a book, use facial expressions, use varied tones and gestures) and provide a variety of paper and writing tools for children to use as part of their play. Teresa and her coach saw a high level of student engagement and response during these activities as students were eager to participate, responded to questions, "role-played" to read and write during independent centers and shared what they learned with their parents and peers.

The caregiver experiences in this study confirm the findings of Howard et al. (2013) and Guerriero (2014), demonstrating that the PBC model leads to improvements in teacher practice by enhancing their abilities to implement new biliteracy practices that engage students' interest and motivation to learn. Figure 1 illustrates how the PBC model's components create a teacher-coach collaboration that improves teacher skills, student engagement, and emergent biliteracy.

Resulting Perceptions and Growth of Teachers

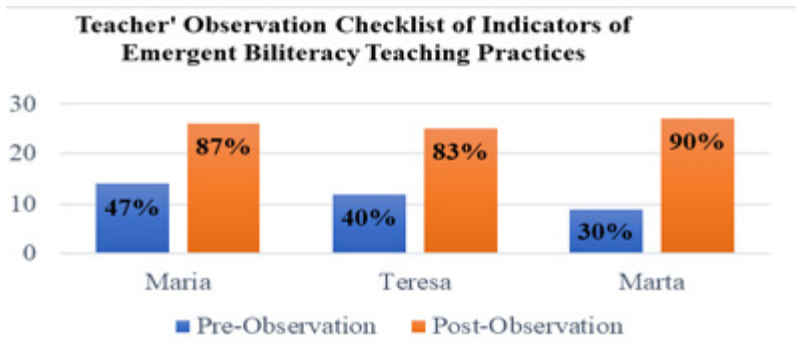
The results of a paired sample t-test of the pre and post observation checklist showed there was a significant difference in the scores of the pre ($M=.3867$, $SD=.08083$) and post ($M=.8633$, $SD=.03512$) observation checklist of indicators of emergent biliteracy teaching practice conditions; $t(.2)=-74460$, $p=.0174$. The results in Figure 2 also show there was an increase in the means of the pre and post observation checklist after implementing

the PBC model.

Figure 3 shows the difference in percentages of each teacher’s implementation of emerging biliteracy practices before and after they received PD with the PBC model. Both sets of data show implementing the PBC model made a significant difference in the teacher’s emergent biliteracy instruction in their classrooms.

Figure 2

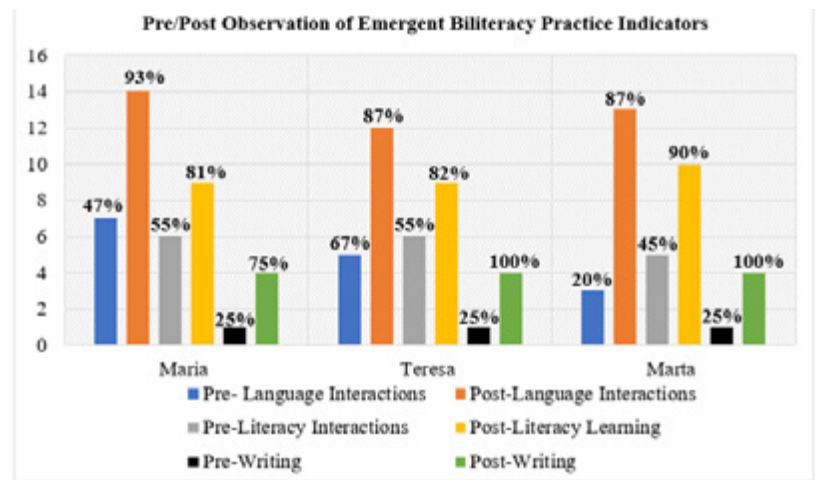
Teachers' Pre and Post Observation Checklist Percentages



Note. It represents the percentages of the teacher’s implementation of emergent biliteracy practices before and after receiving PBC professional development by their mentor coach.

Figure 3

Teachers' Pre and Post Observation Checklist of Indicators



Note. It represents the percentages of teachers’ implementation of language interactions, literacy learning and writing practices before and after receiving PBC mode professional development.

Discussion

The research findings from the various data sources have theoretical, literature, and professional development implications. First, the PBC model validates Vygotsky's sociocultural theory and the concept of internalization (Vygotsky, 1978). Coaches and teachers collaborated through social interactions to develop their cognitive development and learning through professional development guided by the PBC model. The coaches were the More Knowledgeable Others with a higher level of expertise in emergent biliteracy practices. They scaffolded and supported their teachers to move within their Zone of Proximal Development and gain the needed skills and knowledge to effectively and independently teach emergent biliteracy practices (Vygotsky, 1978). This supports the growing research identifying the overall positive effects of coaching on teaching by increasing teacher's knowledge and confidence in teaching emergent biliteracy instruction that leads to higher performance and children's outcomes (Neuman et al., 2009; Powell et al., 2010; Reyes, 2006; Reyes et al., 2008).

Second, the PBC model equipped teachers to implement effective emergent biliteracy practices to enhance student engagement and learning, as shown in the observations. This correlates with Godfrey-Hurrell's (2015) research findings that when teachers are provided with practice-based coaching, they learn how to provide children with language and literacy opportunities to prompt them to engage and extend language and literacy skills and experiences. Teachers in this research provided opportunities for students to engage in literacy and language experiences (i.e., segmenting syllables, writing activities, and rhyming activities) that motivated them to interact with language and literacy activities.

Third, the implications for practice are to use the PBC model and integrate the following factors; (a) individual needs of the teachers; (b) emergent biliteracy practices that align with developmentally appropriate early childhood practices; (c) rapid guidance, feedback, and evaluation of practices implemented; (d) high intensity and duration of guidance based on the need of the teacher; and (e) cooperative participation between teachers and coaches (Hsieh et al., 2009; Sheridan et al., 2009;

Winton, 2006). Together, the PBC model with these factors supports teachers in learning new skills and knowledge to implement appropriate and evidence-based emergent biliteracy practices to support their emerging bilingual students.

Last, this research also recommends integrating the Reyes & Azuara's (2008) Ecological Model of Emergent Biliteracy to help teachers provide effective instruction related to the precursors for emerging biliteracy development such as concepts of print, phonological awareness, alphabet knowledge, oral language and writing in both languages. Teachers need to immerse s

tudents in social interactions with adults and peers to create meaningful and authentic biliteracy contexts in both languages to develop the precursors of print. Together, these emergent biliteracy components support the biliteracy process as part of the natural development of young Spanish and English emergent bilinguals.

Conclusion

Despite the positive outcomes of this study, I must note several limitations and future research recommendations. First, I conducted the study at the same EHS campus with teachers of similar demographic backgrounds and languages. This limits the generalizability and transferability of the results to the general population. Future research should replicate the study with teachers from diverse backgrounds and languages who work in different programs. Second, the small sample does not represent the general population of coaches and teachers in other EHS programs, which limits the generalizability and transferability of the results to the general populations. Future research must promote the study for an extended period through face-to-face recruitment. Third, the short duration of the study was four weeks, therefore long-term teacher performance reports were not collected. Future research needs a longer durability of research to collect data from student reports measuring teacher performance.

The significance of this research to the early childhood preparation and workforce development is to use the PBC model to provide professional development for teachers to meet professional standards and competencies for children's learning. Standard four of the NAEYC's

Professional Development Standards is to integrate developmentally, culturally, and linguistically appropriate teaching practices for diverse learners and standard six is to adhere to professionalism as an early childhood educator (NAEYC, 2021). The PBC model engages teachers in continuous, collaborative learning to inform practice, develop and sustain the habit of reflective and intentional practice through coaching. This research suggests integrating the PBC model along with the Ecological Model of Emergent Biliteracy (Reyes et al., 2008) to develop and facilitate language and biliteracy learning in both languages for emerging bilingual students. Both models are rooted in Vygotsky's sociocultural theory and the concept of internalization by immersing students and teachers in meaningful and authentic biliteracy contexts and activities through a variety of social interactions. Children's bilingual development is dynamic, therefore, advancing teacher's understanding of this and training them "how" to best engage students in biliteracy development can be achieved by implementing the PBC model.

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